



Australian Government
Productivity Commission

Mental Health

Productivity Commission
Inquiry Report
Supporting material (Appendices B-K)

No. 95, 30 June 2020



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The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).

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Supporting material (on-line only)

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B Public consultations

This appendix describes the stakeholder consultation process undertaken for the Inquiry and lists the organisations and individuals who have participated.

Consultations

The Productivity Commission convened the following consultations processes.

- 6 roundtables: Consumers and Carers; Early Childhood Services; Aboriginal and Torres Strait Islander People in Urban Areas; Mental Health Modelling; Education System; and Workplace Mental Health (table B.5).
- 13 days of public hearings Adelaide (5 February 2020); Brisbane (3 December 2019); Broken Hill (28 November 2019); Canberra (15 November 2019); Darwin (27 February 2020); Geraldton (20 November 2019); Launceston (9 December 2019); Melbourne (18-19 November 2019); Perth (21 November 2019); Sydney (25-26 November 2019) and Rockhampton (2 December 2019) (table B.4).
- Hearings were advertised in *The Australian* on 24 October 2019; the *Midwest Times* on 13 November for Geraldton hearing and *Barrier Daily Truth* 16 November 2019 for Broken Hill and through Facebook and Twitter; through a flyer that was emailed to key stakeholders for distribution and additional information distributed to Inquiry registered participants.
- 278 meetings with individual stakeholders across Australia (B.3).

The Productivity Commission received 1244 public submission during the Inquiry — 564 prior to the Draft Report and 680 in response to the Draft Report (table B.1). All public submissions are available on the Inquiry website.

The Productivity Commission also provided facilities on the Inquiry website for interested stakeholders to lodge a brief comment (table B.2). A total of 488 comments were received — 191 comments prior to the Draft Report and 297 in response to the Draft Report.

Table B.1 Public submissions received

<i>Participant</i>	<i>Submission no.</i>
Aaron Fornarino	17
Abdul Moos	984
Aboriginal Health and Medical Research Council (AH&MRC)	206
Aboriginal Medical Services Alliance NT (AMSANT)	434, 1190
Aborigines Advancement League (AAL)	151
Accoras	135
ACON	381
ACT Disability Aged and Carer Advocacy Services (ADACAS)	493
ACT Government	210, 1241
ACT Mental Health Consumer Network	297
Actuaries Institute	257, 938
Adam Carmody	1096
Adam Clarke	973
Adam Finkelstein	891
Adelaide Psychological Services	519, 603
ADHD Australia	295
Adrian Barkus	1159
Advocacy for Inclusion (AFI)	935
Aftercare	480, 835
Agatin Abbott	993
AIA Australia (AIAA)	472
Akiko Wood	1027
Alcohol and Drug Foundation	288, 775
Alex Wernelarg	1143
Alexander Robertson	996
Alicia Badran	1025
Alicia Halls	138
Allan Fels	303
Allianz Australia	213
Allied Health Professions Australia (AHPA)	834
Allison Axford	1020, 1053
Almondale	735
Amanda Beats	999
AMAZE	201, 825
Amy Wilson	467
Andralee V	1173
Andrew Fairlie	1048
Andrew Macdonald	965
Andrew Morgan	588
Andrew Wenborn	1098
Andris Markovs	589
Angel Tseng	1168

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<i>Participant</i>	<i>Submission no.</i>
Angelo Virgona	296
Anglicare Australia	376, 1206
Anglicare NT	53
Anglicare Sydney	190
Anglicare Victoria	312
Anna Curnuck	1082
Anna Vale	1155
Anne Barbara	910
Anne Farrelly	963
Anne Mill	348
Anne-Marie Elias	119
Annette Valentine Eriksen	150
Anonymous Parent	399
Anonymously	740
Anthony Jorm	45, 612
Anthony Smith	896
ANU College of Health and Medicine	669
Asia Pacific Centre for Work Health and Safety	289
Association of Australian Medical Research Institutes (AAMRI)	27
Association of Counselling Psychologists (ACP)	522, 763
Association of Heads of Independent Schools of Australia (AHISA)	734
AusPsy	460
Australasian College for Emergency Medicine (ACEM)	516, 926
Australasian Sleep Association (ASA)	96, 672
Australian Services Union (ASU)	791
Australian Allied Health Leadership Forum (AAHLF)	923
Australian and New Zealand Academy for Eating Disorders Inc (ANZAED)	60
Australian Antidepressants Awareness	743
Australian Association of Psychologists Inc (AAPi)	292, 909
Australian Association of Social Workers (AASW)	432, 848
Australian BPD Foundation	267
Australian Catholic Bishops Conference (ACBC)	913
Australian Chamber of Commerce and Industry (ACCI)	365, 1202
Australian Childcare Alliance (ACA)	867
Australian Childcare Alliance (ACA), Monash Partners and SPHERE; National Voice for our Children (SNAICC)	868
Australian Children's Education and Care Quality Authority (ACECQA)	673
Australian Chronic Disease Prevention Alliance (ACDPA) and Quit Victoria	140
Australian City Mental Health Alliance	471
Australian Clinical Psychology Association (ACPA)	359, 727
Australian College of Mental Health Nurses (ACMHN)	501, 852
Australian College of Midwives (ACM)	1230
Australian College of Nursing (ACN)	914

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<i>Participant</i>	<i>Submission no.</i>
Australian Council of Social Service (ACOSS)	270, 1208
Australian Council of Trade Unions (ACTU)	452, 1214
Australian Counselling Association	1115
Australian Education Union (AEU) NSW Teachers Federation	305
Australian Government Department of Communications and the Arts	82
Australian Government Department of Health (DoH)	556
Australian Government Department of Jobs and Small Business (DJSB)	302
Australian Healthcare and Hospitals Association (AHHA)	884
Australian Housing and Urban Research Institute (AHURI)	885
Australian Human Rights Commission (AHRC)	491, 679
Australian Industry Group (Ai Group)	208, 819
Australian Institute of Family Studies (AIFS)	753
Australian Institute of Health and Welfare (AIHW)	370
Australian Kookaburra Kids Foundation (AKKF)	421
Australian Library and Information Association (ALIA)	185
Australian Longitudinal Study on Women's Health	218
Australian Medical Association – Victoria (AMA Victoria)	925
Australian Medical Association (AMA)	387, 633
Australian Museums and Galleries Association (AMaGA)	113
Australian Music Therapy Association (AMTA)	301, 789
Australian National Office of the Citizens Commission On Human Rights	290, 941
Australian Nursing and Midwifery Federation (ANMF)	317, 1187
Australian Private Hospitals Association (APHA)	320
Australian Psychological Society (APS)	543, 853
Australian Psychologists and Counsellors in Schools (APACS)	419, 906
Australian Red Cross Society	490
Australian Register of Counsellors and Psychotherapists (ARCAP)	337
Australian Rehabilitation Providers Association (ARPA)	527
Australian Rural Health Education Network (ARHEN) Mental Health Academy Network	444
Australian Salaried Medical Officers' Federation (ASMOF)	233
Australian Services Union (ASU)	177
Australian Small Business and Family Enterprise Ombudsman	375
Australian Unity	110
Australian Universities Anti-Bullying Research Alliance (AUARA)	431
Australians for Mental Health (AFMH)	374, 1195
Australians for Safe Medicines	313
Autism Aspergers Advocacy Australia	561
B Nettle	1144
Baiyu Chen	1161
Balancing of Life	582, 610
Barbara Harland	694
batyr	334, 907

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<i>Participant</i>	<i>Submission no.</i>
Bec Mihaliz	1162
Becoming Us	132
Being	918
Belinda Willis	1070
Benjamin Whitely	1211
Bernard Lowenstein	1041
Berry Street	366
Better Place Australia	127
Beyond a Joke Ltd	335
Beyond Blue	275, 877
Big League Pty Ltd	971
Bipolar Australia	781
Black Dog Institute	306, 1207
Blue Knot Foundation	47, 613
Bob and Barnaby Eden	3
Bob Napier	583
Bob Riessen	373, 639, 1116, 1234
Bonnie Reid	980
Boroondara Health and Wellness Medical Centre	787
BPD Community	74, 622
BrainDx-Australia	805
BrainStorm Mid North Coast	309, 803
Brave Therapy	174
Bravehearts Foundation	823
breakthru	112
Bree Wyeth	579
Brenda Shinn	1099
Brian Haisman	92
Brian Johnston	1032
Brian Shevlane	147
Brigid Jordan	830
Brin Grenyer and Ely Marceau	26
Metro North Hospital and Health Service (MNHHS); Brisbane North Primary Health Network (PHN); Metro South Hospital and Health Services (MSHHS); Brisbane South PHN	874
Bronwyn Hartnett	367
Brotherhood of St Laurence (BSL)	394
Bruce Levers	1147
Bullied Teachers Support Network	55
Bupa	485, 1191
Business SA	459
Butterfly Foundation	424
Cabrini Outreach	464

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<i>Participant</i>	<i>Submission no.</i>
Call to Mind	499
Canberra Mental Health Forum	62, 687
Cancer Council Australia and the National Heart Foundation of Australia	702
Carers Australia	372, 911
Carers NSW	183, 808
Carers Tasmania	660
Carers Victoria	461, 664
Caring Fairly	427, 765
Caroline Dowling	437
Carolyn Davis	192
Carolyn Milner	369
Catholic Health Australia (CHA)	463
Catholic Social Services Australia (CSSA)	202
Cathy Fox	598
Cathy Grist	1063
Catriona Ross	1166
Celine Taylor	1055
Central Australian Aboriginal Congress	336
Centre for Disability Research and Policy	308
Centre for Emotional Health	384
Centre for Excellence in Child and Family Welfare	211, 862
Centre for Mental Health Research (CMHR)	148
Centre for Multicultural Youth (CMY) and Multicultural Youth Advocacy Network (MYAN)	446
Centre for Rural and Remote Mental Health (CRRMH)	465
Centre for Social Impact Swinburne (CSIS)	509, 716
Centre of Best Practice in Aboriginal and Torres Strait Islander Suicide Prevention (CBPATSIISP) and National Aboriginal and Torres Strait Islander Leadership in Mental Health (NATSILMH)	1217
Chamber of Minerals and Energy of WA (CME)	415, 1210
Council of Australian Postgraduate Associations (CAPA)	241
Charlotte Thorpe	969
Chaynee Wills	1088
Cherie Ceberano	1042
Child and Adolescent Health Service (CAHS)	255
Children and Young People with Disability Australia (CYDA)	779
Chris Beeny	1124
Christel Duffy	1073
Christian Dawson	1074
Christine Newton	454, 1183
Christine Wade	435
Churlya Wuerfel	1064
City of Port Phillip	540

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<i>Participant</i>	<i>Submission no.</i>
Clare	1138
Clare Trafford	1165
Clive Kempson	84
cohealth	231, 846
Colin Jevons	520
Collective Conscious	533
Colleen Hunt	426
College of Sport and Exercise Psychologists	273
Commission for Children and Young People (Victoria)	278
Commissioner for Children and Young People (SA)	736
Commissioner for Children and Young People (WA)	311, 640
Community Life Batemans Bay Inc (CLBB)	146
Community Mental Health Australia (CMHA)	449, 851
Community Services Industry Alliance (CSIA)	199, 915
Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM)	75
Connect Health and Community	94
ConNetica Consulting	450
Consortium of Australian Psychiatrists and Psychologists	260, 882
Consult Australia	238, 688
Consumer Participation Group (CPG)	865
Consumers Health Forum of Australia (CHF)	496, 646
Being and Consumers of Mental Health WA	928
COORDINARE	1194
Coronial Reform Group (CRG)	39
Council of Deans of Nursing and Midwifery (CDNM)	663
Council of International Students Australia (CISA)	893
Council of Small Business Organisations Australia (COSBOA)	537
Council to Homeless Persons (CHP)	145
Criminal Bar Association of Victoria	322
Curtin Student Guild	234
Cyber Values.org	572, 604
Dal Karra Galga	566
Dan Kearns	594
Danielle B	249
Danielle Gamble	797
Danielle Malone	1121
Darren Jiggins	61
David and Karolyn Bromwell	620, 1006
David Bell	526
David Clark	205, 809
David Coghill, Jemimah Ride and Kim Dalziel	236
David Guthrey	902

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<i>Participant</i>	<i>Submission no.</i>
David Hillman	586
David Miller	998
Deakin Health Economics, Institute for Health Transformation	156
Dean Harvey	137
Deana Durisic	1040
Deborah Barit	686
Deborah Cobb-Clark, Sarah Dahmann, Nicolas Salamanca and Anna Zhu	57
Deborah Garden	349
Deepti Alurkar	1066
Department of Developmental Disability Neuropsychiatry	105
Diana Anderson	1179
Diane Atcheson	1009
Dianne Wynaden and Karen Heslop	1
Dietitians Association of Australia (DAA)	232, 766
Diversity Council Australia (DCA)	70
Dobsen Wuerfel	987
Doctors Against Violence Towards Women	514
Doctors Reform Society	746
Doron Samuell	720
Douglas McIver	181
drummond street services	532, 718
EACH	227, 875
Early- and Mid-Career Researcher (EMCR) Forum and Australian Brain Alliance EMCR Network	451
Early Childhood Australia (ECA)	221, 616
East Metropolitan Health Service (EMHS)	152
Eastern Health – Murnong Adult Mental Health	187
Eastern Mental Health Service Coordination Alliance (EMHSCA)	578
Eating Disorders Victoria (EDV)	54, 329, 892
Eclectic Consumers Collective	625
Effie Zafirakis	368
EFT Australia Pty Ltd	89
Elana Saks	1052
Eleanor Simpson	1023
Elizabeth Ducasse	1029
Ellena Bromwell	1024
Elucidate	755
e-Mental Health In Practice (eMHPrac)	602
Emerging Minds	455, 944
Emily Liu	1125
EML	117
Emma Downey	1105
Emma Spinks	573

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<i>Participant</i>	<i>Submission no.</i>
Emma-Kate Muir	338
Employee Assistance Professionals Association of Australasia (EAPAA)	411, 668
English Australia	905
Equally Well Australia	833
Ernest and Young (EY)	1232
Eva Lenz	599
Eva Vaszolyi Psychology Service	693
Evan Duffy	1153
Ewen Kloas	567
Exercise and Sports Science Australia (ESSA)	91, 881
Families and Friends for Drug Law Reform (ACT)	413, 701
Family Life	316
Fay Pollard	1132
Fei	1137
Fergus Gartlan	1034
Fighters Against Child Abuse Australia (FACAA)	244
Financial Services Council (FSC)	535, 863
First Step	557
Flourish Australia	330, 729
FND Australia Support Services Inc	253
Food and Mood Centre	243
Forum of Australian Services for Survivors for Torture and Trauma (FASSTT)	293, 838
Foster Care Association of Victoria (FCAV)	114
Foundation for Alcohol Research and Education (FARE)	269, 878
Foundation for Rural and Regional Renewal (FRRR)	195
FracArt	780
Freya	1178
Friends for Good Inc	115
Friends of Callan Park (FOCP)	198, 758
Future Generation	1118
Gary Croton	940
Gateway Health	42
Gavin Keon	1156
Gaye Morrow	975
Gaye Tindall	1100
Gaylene Fraser	1016
General Practice Mental Health Standards Collaboration (GPMHSC)	395, 769
GenIMPACT Centre for Economic Impacts of Genomic Medicine	542
Gennaro Langella	1170
Geoff Kewley	652
Geoff Smith and Theresa Williams	1229
Geoffrey Dawson	966

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<i>Participant</i>	<i>Submission no.</i>
Geoffrey White	961
Gidget Foundation Australia	709
Glen Barnett	964
Glenn Floyd	595
Glenn Morrow	168
Glenys Nall	1004
Godwin Grech	534
Grant Family Charitable Trust (GFCT)	76
Grant Jefford	843
Grattan Institute	816, 1223
Greg Franklin	287
Grief Journeys Ltd	817
Grow Australia	194, 847
Guy Taylor	1126
GV Development Clinic	428
Hannah Bloomfield	955
Harrison Banacek	1139
Harry Crawford	1060
Hayley Wuerfel	989
HCF	299
Heads of Department and Schools of Psychology Association (HODSPA)	362
headspace – National Youth Mental Health Foundation	947
headspace Armadale WA	724
headspace Bundaberg	813
headspace Geraldton	617
headspace Hobart	631
Healing Foundation	193
Health and Community Services Union (HACSU)	784
Health Justice Australia	749
Health Services Union (HSU)	237
HealthWise	750
Healthy Minds Education and Training	298, 619
Heart Support Australia (HS-A)	332
Helen Bassett	1036
Helen Cameron	988
Helen Lingard and James Harley	827
HelpingMinds	470
Hobsons Bay City Council	176
Hope Community Services Ltd	30
Hospital Benefit Fund (HBF)	1215
Hristina Piltz	946
Hunter Leonard	1008

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<i>Participant</i>	<i>Submission no.</i>
Hunter New England Central Coast Primary Health Network	641
Hunter Rise Associates	439
Ian and Rhonda McNees	505
Ian Jones	1171
Ian Stewart	1076
Ian Webster	626
Ikhwi Rita Syahni	1163
Inala Primary Care	325
Independent Higher Education Australia (IHEA)	555
Independent Private Psychiatrists Group	473, 742
Ingrid Ozols	73, 80
Inner South Family and Friends	129
Innervate Pain Management	402
InnoWell Pty Ltd	153
Institute for Urban and Indigenous Health (IUIH)	1108
Institute of Clinical Psychologists (ICP)	447
Institute of Private Practising Psychologists (IPPP)	389
Institute of Public Accountants	284
Insurance Council of Australia	861
Iona Kentwell	697
Isabella Curnuck	977
ISANA	932
Jacques Doucas	1084
Jade Weary	436
James Alexander	160
James Davey	658
James Hill	634
Jan Lester	1058
Jane Bradbear	215
Jane Jervis	593
Jane Peart	565
Jane Philip	1049
Jasmine Middleton	1167
Jasmine Stone	1059
Jason Toth	665
Jayne Wells	219
Jeff Borland and Yi-Ping Tseng	792
Jeffrey Beats	1051
Jennifer Annoki-Chan	1175
Jennifer Costello	1160
Jenny Corran	388
Jessica Houston	21

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<i>Participant</i>	<i>Submission no.</i>
Jessica Klausen Psychological Services	401
Jesuit Social Services	441, 1186
Jigsaw Queensland Inc	29
Jillian Reid	597
Jo Farmer	715
Joanne Enticott, Anton Isaacs, Sebastian Rosenberg, Frances Shawyer, Brett Inder and Graham Meadows	836
Jobs Australia (JA)	398
Jodie Gale	83
Joe Azzopardi	1169
Joe Calleja	422
Jon Jureidini and Melissa Raven	945
John Herbert	51
John Miller	1061
John Mills	43
John Pink	48
John Pullman	453
Johnson & Johnson Australia	448
Jo Steen	1062
Josephine Beats	1050
Josephine Reid	635
Joyce Noronha-Barrett	518
Julian McNally	870
Julian Turner	1001
Julianne Anderson	1102
Julie Couzens	559
Julie Stephens	1177
Juliette Ryland	921
Just Reinvest NSW	440
JusTas Inc	346
Justice Action	307, 929
Justice Health Unit – University of Melbourne	339,1237
Justin Kenardy	6
Kanda Quinlan	1157
Karen Adams-Leask	689
Karen Donnelly	90
Karen Hancock	379
Karen Holmes	142
Karitane	324
Karola Mostafanejad	570
Kate Ceberano	1087
Kate Gee	1092

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<i>Participant</i>	<i>Submission no.</i>
Kate Ives	529
Kate McCloskey	776
Katherine Vavasour	162
Katrina Grant	1086
Kay Seabrook	1047
Keiko Shimizu	982
Ken Barnard	924
Kerry Logan	824
Keven Coleman	839
Kids Giving Back	739
Kim Bloomberg	1056
Kim Devlin	158
Kim Fitzgerald	1069, 1146
Kimberlie Dean	235
Kingsford Legal Centre (KLC)	469
Kristy Mounsey	615
Krystyna Delaney	1013
Kuo-chen Lo	1135
KYDS Youth Development Service (KYDS)	166
Kylia Steele	968
Latrobe Health Advocate	364
Launch Housing	250, 764
Lauren Jarvis	958
Laurence West	541
Law Council of Australia	492, 1204
Leah Hutching	1080
Leanne Hansen	1031
Leanne McGregor, Vikki Prior and Camille Fitzgerald	481
Lee Rogers	995
Legal Aid ACT	363
Legal Aid NSW	111
Leigh Price	1123
Leonard Collen	979
Leonie Segal and Jackie Amos	468
Let Sleep Happen	607
Lidia Di Lembo	354
Life After Scams Ltd	319
Life Engineering TM	69
Life Insurance Industry	821
Lifeline Australia	87
Linda Appleford	1078
Linda Fenton	629

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<i>Participant</i>	<i>Submission no.</i>
Linda Mulquin	277
Linda Munn	1129
Lisa Kamaralli	1007
Listen Up Music	899
Lived Experience Australia	721
Lived Experience Leadership Roundtable (Queensland)	799
LivingWorks	796
Liz Grogan	1091
Local Government Association of SA (LGASA)	242
Loddon Mallee Mental Health Carers Network (LMMHCN)	52
Loretta Woolston	525
Lorna MacKellar	406
Lorna-Jean Bradley	978
Lorraine Liberson	1011
Lou Brown, Carlie Lidonnici and Christine Jordan	506
Lyndall Warren	778
Lynette Smith	1002
Madeliene Jones	972
Manfred Schirnhofer	1017
Marathon Health	88, 828
Marcia Reid	1149
Maria Di Iello	1090
Maria Lohan	515
Maria Silva	1054
Marjolein Collins	1176
Mark Broadly	568
Mark Mahanetrs	1035
Mark Porter	331
Marnie Jones	605
Maroondah City Council	747
Martha Henderson	65
Martin Whitely	1198
Massage and Myotherapy Australia	696
Mates in Construction (MIC)	786
Matilda Centre for Research in Mental Health and Substance Use	280, 880
Maree Teesson and Alan	226
Matthew Fitzpatrick	358, 936
Matthew Macfarlane	2
Maurice Blackburn Lawyers	239
Melbourne Children's Campus	191, 927
Melbourne Disability Institute	144
Medibank	700

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<i>Participant</i>	<i>Submission no.</i>
Medical Consumers Association	19, 675, 1117, 1233
Mental Health at Work	171
Mental Health Australia	407, 538, 544, 864
Mental Health Australia, Federation of Ethnic Communities' Councils of Australia (FECCA) and National Ethnic Disability Alliance (NEDA)	524, 1113
Mental Health Carers ARAFMI Illawarra	161
Mental Health Carers Australia (MHCA)	489, 898
Mental Health Carers NSW (MHCN)	245, 1231
Mental Health Coalition of South Australia (MHCSA)	794
Mental Health Coalition of South Australia (MHCSA) and the Lived Experience Leadership and Advocacy Network (LELAN)	360, 771
Mental Health Commission of New South Wales	486, 948
Mental Health Community Coalition of the ACT (MHCC ACT)	517, 950
Mental Health Complaints Commissioner (Victoria)	321, 916
Mental Health Coordinating Council (MHCC)	214, 920
Mental Health Council of Tasmania (MHCT)	314, 869
Mental Health Families and Friends Tasmania (MHFFTas)	391, 648
Mental Health First Aid Australia	224
Mental Health for the Young and their Families (Victorian Group) (MHYF Vic)	628
Mental Health Legal Centre (MHLC)	315, 1222
Mental Health Professionals Network (MHPN)	304
Mental Health Victoria (MHV)	479, 580, 942
Mental Health Victoria (MHV) and Victorian Healthcare Association (VHA)	1184
Mental Illness Fellowship of Australia (MIFA)	343, 897
Mentally Healthy Workplace Alliance	209, 876
Merri Health	120, 855
Merridee & Nicholas de Jong	34
MetLife Insurance Limited (MetLife)	443
Michael Carman Consulting	93
Michael Dempsey	1075
Michael Derrick	528
Michael Epstein	656
Michael Gane	1240
Michael O'Donnell	20
Michael Stone	1104
Michael Troy	5
Michael Watson	1033
Michelle Hickman	347
Michelle Smith	126
Mid-North Coast Community College Ltd	574
Mike Daube	606
Mind Australia	380
Mind Australia; Neami National; Wellways and SANE Australia	1212

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<i>Participant</i>	<i>Submission no.</i>
Mind Medicine Australia Limited	1106
Mindgardens Neuroscience Network	64
Mindseye Training and Consulting	217
MindSpot	178, 666
Mission Australia	487, 684
Mitchell Wright	967
Monash University	698
Montelukast (Singulair) Side Effects Support and Discussion Group	197
Moonee Valley City Council	106, 670
Movember Foundation	930
Initially No	608
Multicultural Youth Advocacy Network (MYAN)	683
Murrumbidgee Primary Health Network	1199
Museum of Contemporary Art Australia	154
MyDNA	1219
Name withheld	7
Name withheld	8
Name withheld	9
Name withheld	10
Name withheld	13
Name withheld	16
Name withheld	23
Name withheld	24
Name withheld	31
Name withheld	32
Name withheld	38
Name withheld	41
Name withheld	58
Name withheld	63
Name withheld	66
Name withheld	67
Name withheld	79
Name withheld	81
Name withheld	98
Name withheld	104
Name withheld	109
Name withheld	122
Name withheld	136
Name withheld	163
Name withheld	180
Name withheld	207
Name withheld	285

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Table B.1 (continued)

<i>Participant</i>	<i>Submission no.</i>
Name withheld	371
Name withheld	355
Name withheld	357
Name withheld	392
Name withheld	397
Name withheld	425
Name withheld	466
Name withheld	482
Name withheld	510
Name withheld	513
Name withheld	521
Name withheld	562
Name withheld	563
Name withheld	564
Name withheld	575
Name withheld	581
Name withheld	587
Name withheld	592
Name withheld	600
Name withheld	627
Name withheld	630
Name withheld	802
Name withheld	908
Name withheld	1012
Name withheld	1107
Name withheld	1109
Name withheld	1180
Name withheld	1181
Name withheld	1182
Name withheld	1224
Name withheld	1239
National Aboriginal and Torres Strait Islander Leadership in Mental Health (NATSILMH), Indigenous Allied Health Australia (IAHA) and Australian Indigenous Psychologists Association (AIPA)	418
National Aboriginal Community Controlled Health Organisation (NACCHO)	507, 1226
National Association of Practising Psychiatrists (NAPP)	495
National Centre for Epidemiology and Population Health (NCEPH)	157
National Disability Services (NDS)	252, 777
National LGBTI Health Alliance	494, 888
National Mental Health Commission (NMHC)	118, 949
National Mental Health Consumer and Carer Forum (NMHCCF)	476, 708
National Rural Health Alliance	353, 1192
National Rural Health Commissioner	1185

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Table B.1 (continued)

<i>Participant</i>	<i>Submission no.</i>
National Social Security Rights Network (NSSRN)	283
National, State and Territory Mental Health Commissions	731
Navitas	212
Neami National	254
Neighbourhood Houses Victoria	203
NeuralDx Ltd	536, 546
Neville Hills	886
Newman Harris	638
Niall McLaren	44
Nicolas Broadhurst	981
Nicolas Costello	1145
Nicole Leonard	976
Nina Fairlie	986
Noona Hinterland Psychology	350
Norman O'Leary	1068
Northern Community Legal Centre (NCLC)	279
Northern Territory Mental Health Coalition	430, 741
Northern Territory Primary Health Network (NT PHN)	457, 1213
NorthWest Area Mental Health Services	22
NovoPsych Pty Ltd	423, 645
NPS MedicineWise	175
NSW Council for Civil Liberties (CCL)	484
NSW Council of Social Service (NCOSS)	143, 659
NSW Government	551, 1243
NSW Mental Health Review Tribunal	409
NSW Nurses and Midwives' Association (NSWNMA)	246
NSW Small Business Commissioner (NSWSBC)	405
NSW Young Lawyers Human Rights Committee	456
NT Community Visitor Program (CVP)	1209
NT Council of Social Service (NTCOSS)	408
NT Government	1220
NT Legal Aid Commission (NTLAC)	410
NT Shelter	333, 879
Nunkuwarrin Yunti of South Australia	798
Nursing and Midwifery Board of Australia (NMBA), Australian Nursing and Midwifery Accreditation Council (ANMAC) and Australian Health Practitioner Regulation Agency (Ahpra)	800
Occupational Therapy Australia (OTA)	141, 706
Olav Nielssen	37
Oliver Shead	1236
Olivia Rackham	751
On the Line	258
One Door Mental Health	108, 856

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Table B.1 (continued)

<i>Participant</i>	<i>Submission no.</i>
Open Minds Australia	900
Orygen	1110
Orygen, The National Centre for Excellence in Youth Mental Health and headspace, National Youth Mental Health Foundation (Joint submission)	204
Outback Futures	107
OzHelp Foundation	294
P Barkus	1164
Pain NT	189
Painaustralia	172, 680
Pamela Bird	576
Parents Living with Suicide Australia (PLWSA)	609
Parks Clinics	263
Patricia Baird	188
Patricia Sutton	173
Patrick Jarvis	1030
Patrick O'Connor	497
Paul Chapman	1094
Paul Gray	86
Paul Haber and Katherine Conigrave	655
Paul Raftery	962, 1019
Paul Reid	990
Paul Salsano	545
Paul Shiel	1077
Paul Vittles	262
Paula McLennan	1101
Pauline Maszlagi	994
Peer Participation in Mental Health Services Network (PPIMS)	179, 699
Penelope Knoff	28
Penington Institute	264, 703
Peninsula Health	822
People Power International Pty Ltd	690
Perinatal Anxiety & Depression Australia (PANDA)	344
Perinatal Wellbeing Centre	752
Perth Clinic	618
Peter Altmeier-Mort	1079
Peter Baker	1022
Peter Blackwell	167
Peter Clement	974, 1003
Peter Davies	1046
Peter Griffiths	621
Peter Heggie	72
Peter Kearns	632
Peter Kent	352

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Table B.1 (continued)

<i>Participant</i>	<i>Submission no.</i>
Peter Miranda	1045
Peter Morris	774
Peter Shead	956
Peter Tregear	169
Peter Viney	149
Petra van den Berg	286
PH Counselling and Hypnotherapy	590
Pharhyn Edwards	1134
Piers Gooding and Yvette Maker	933
Pippa Ross	340
Play Australia	624
Plumtree Children's Services	300
Police Federation of Australian (PFA)	248, 761
Port Macquarie Community College	4
Positive Life NSW	271
Prevention United	134, 768
Primary Health Networks Cooperative (PHNs)	377, 850
Primary Health Tasmania	887
Private Healthcare Australia (PHA)	222, 815
Private Mental Health Consumer Carer Network (Australia)	49, 547, 550
ProCare Mental Health Services	1244
Progressive Public Health Alliance	723
Psychology CAFFE	1221
Psychotherapy and Counselling Federation of Australia (PACFA)	883
Public Advocate and Children and Young People Commission (PACYPC)	291
Public Health Association of Australia (PHAA)	272, 1119
Public Interest Advocacy Centre (PIAC)	801
Quattro Investment Pty Ltd	539
Queensland Aboriginal and Islander Health Council (QAIHC)	1235
Queensland Advocacy Incorporated (QAI)	116, 889
Queensland Alliance for Mental Health (QAMH)	247, 714
Queensland Catholic Education Commission (QCEC)	711
Queensland Council for LGBTI Health	681
Queensland Family and Child Commission (QFCC)	85
Queensland Mental Health Commission (QMHC)	228, 712
Queensland Network of Alcohol and Other Drug Agencies (QNADA)	845
Queensland Nurses and Midwives' Union (QNMU)	229, 760
Queensland University of Technology (QUT) Faculty of Health	826
Queenslanders with Disability Network (QDN)	662
R U OK?	274
Rachel Jacomb	959
Raise Foundation	782

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Table B.1 (continued)

<i>Participant</i>	<i>Submission no.</i>
Ramnaree Chimvaren	1127
Ramsay Health Care	548
Ray Wills	983
ReachOut Australia	220, 804
Rebecca Sferco	560, 1111
Recovery Matters	649
Reg Evans	970
Rehabilitation Counselling Association of Australasia (RCAA)	732
Relationships Australia (National)	103, 831
Relationships Australia South Australia (RASA)	420
Relationships Australia Victoria (RAV)	326, 1197
Renate Barton	1142
Reremonan Rongo	1128
Research Australia	754
Restart Health Services	705
Rhiannen Clarke	1150
Ria Elmagic	901
Richard Burnell	504, 757
Richard Fletcher	674
Richard Quinlan	1174
Richard Salisbury	1103
Richard Taylor	71
Richard Wright	1037
Ritu Bhatia	985
Rob and Health Firth	678
Robert Campbell	960
Robert Davis	133, 772
Robert Jaensch	261
Robert Kamaralli	1120
Robert Meister	1038
Robert Parker	12
Robyn Monro Miller	745
Robyn Moore	1148
Rochelle Macredie	623
Rogan McNeil	1131
Ron Grunstein and Rick Wassing	717
Roger Gurr	40
Ron Munn	1130
Ron Spielman	18
Ronald Duncan	68
Ros Robins	1071
Rosalyn Havard	728

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Table B.1 (continued)

<i>Participant</i>	<i>Submission no.</i>
Rose Evans	637
Rosemary Lemon	1010
Roses in the Ocean	710
Royal Australasian College of Physicians (RACP)	488, 1225
Royal Australian and New Zealand College of Psychiatrists (RANZCP)	385, 1200
Royal Australian College of General Practitioners (RACGP)	386, 858
Royal Far West (RFW)	323, 770
Royal Flying Doctor Service (RFDS)	361, 685
Royce Dunn	953
Rural and Remote Mental Health (RRMH)	97
Rural Doctors Association of Australia (RDAA)	475, 1218
Ryan Bysshe	1072
S Cann	1152
Svetlana Zahakova	1140
SA Mental Health Commission (SAMHC)	477, 691
Safe Motherhood for All Inc	165
Safe Work Australia (SWA)	256
Safer Care Victoria	707
Sally Garden	811
Samaritans Foundation	121, 785
SANE Australia	130
Sarah Billington	1021
Sarah Cullen	1043
Sarah McCartin	569
Sarah Sutton	508, 737
Sascha Wuerfel	1065
Sax Institute	46
School Nurses Australia	866
School of Psychology – University of Wollongong	832
Sean Workman	1095
Settlement Services International (SSI)	795
Shane Beats	1000
Shannon Szabo	1141
Shared Value Project	812
Sharon Blake	584
Sharon Hulin	462
Shelter Tasmania	196
Shelter WA	200
Sheree Webber	951
Shona Tudge	356
Shorne Morris	1154
Siblings Australia	124

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Table B.1 (continued)

<i>Participant</i>	<i>Submission no.</i>
Simon Vale	1151
Sinead Cullen	1122
Sisters Inside	1196
Sjon Kraan	667
Slater and Gordon Lawyers	857
Sleep Health Foundation	767
SleeplessNoMore – (Eyrie Pty Ltd)	100
Smiling Mind	783
SNAICC - National Voice for our Children (SNAICC)	123
Social Alchemy	282
Social Ventures Australia (SVA)	125
Society for Industrial and Organisational Psychology Australia (SIOPA)	429
South Australian Government	692
South Australian School Nurses Association	661
Southern NSW Local Health District	762
Speech Pathology Australia	184, 790
Spiritual Health Association	553
St John of God Health Care and Community Services	77
St Vincent de Paul Society National Council of Australia	1216
St Vincent's Mental Health Family and Carer Reference Committee	1193
Star Health Group Ltd	182
State and Territory Alcohol and Other Drug Peaks Network	59
Stefanie Roth	164, 841
Stephen Bradley	1026
Stephen Brown	33, 442, 503
Stephen Fagan	1081
Stephen Gladwin	837
Stepping Stone Clubhouse Inc	647
Steve Hansen	657
Stop Organised Rape and Torture of Children	400
Streamliners NZ (SNZ)	820
Stroke Foundation	281
Stronger Brains	591
Stuart Brasted	903
Stuart Gamble	730
Stuart Lee Riley	713
Sue Chung	1089
Suicide Prevention Australia	523, 1189
SuperFriend	216, 873
Supportive Residents and Carers Action Group Inc	11
Susan Kopitke	596
Susan Vaughan	1133

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Table B.1 (continued)

<i>Participant</i>	<i>Submission no.</i>
Sydney Treatment Alternatives Advocacy Group	170
Sydney Youth Orchestras (SYO)	327
TAL Life Limited	643
Tammy Kiggins	814
Tandem	502, 854
Tania Budimir	601, 651
Tanya Goddard	957
Tarne Dirai	1158
Tasmanian Branch – Australian Association for Infant Mental Health	677
Tasmanian Government	498, 1242
Tasmanian State Labor Party	644
Teal Els	1083
Telethon Kids Institute	793
Terry Deacon	35
The Bouverie Centre – La Trobe University	719
The Epicentre Counselling Services	725
The Florey Institute of Neuroscience and Mental Health	101
The Future of Work Institute	342
The Help Centre Psychology	512
The Mitchell Institute	744
The Office of the Public Advocate Queensland	806
The Painter – The Writer Gallery	139
The Pharmaceutical Society of Australia	810
The Pharmacy Guild of Australia	414, 939
The Salvation Army	871
Theo Tsourdalakis	650
Thirrili Ltd	549
Thomas Grimshaw	614
Thomas Reid	1136
Thorne Harbour Health and Rainbow Health Victoria	265, 695
Tim Bell	1044
Tim Heffernan	552, 872
Timothy Cameron	997
Timothy Shipman	1057
Tony Wilmot	1188
Top End Association of Mental Health (TeamHEALTH)	155, 756
Top End Women's Legal Service Inc (TEWLS)	328, 912
Total Health Thermal Imaging	904
Transforming Australia's Mental Health Service Systems (TAMHSS)	919
Trevor Wilkinson	1097
Trinity Ryan	159
Triple P International	859

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Table B.1 (continued)

<i>Participant</i>	<i>Submission no.</i>
Unions NSW	382
United Synergies Ltd	682, 733
Uniting Vic.Tas	95, 931
UnitingSA	807
Universities Australia	251, 943
University of New South Wales	860
Priority Research Centre Brain and Mental Health Research (PRCBHM) – University of Newcastle and Society for Mental Health Research	759
University of Sydney Disability Action Plan Committee	276
University of Technology Sydney	474
Valentina Smith	1018
Valerie Hansen	1093
Vanessa Walker	992
Vanguard Laundry Services	458
Vegan Australia	223
VicHealth and Partners	131
Victor Boyd	653
Victoria Hughes	571
Victoria Legal Aid (VLA)	500, 818
Victorian Aboriginal Children and Young People's Alliance	240
Victorian Aboriginal Community Controlled Health Organisation (VACCHO)	1201
Victorian Aboriginal Community Services Association Limited (VACSAL)	225
Victorian Alcohol and Drug Association (VAADA)	403
Victorian and Tasmanian PHN Alliance	849, 1238
Victorian Council of Social Service (VCOSS)	478
Victorian Disability Services Commissioner	268
Victorian Drug and Alcohol Association (VAADA)	1205
Victorian Government	483, 1228
Victorian Institute of Forensic Mental Health	890
Victorian Mental Health Tribunal	748
Victorian Mental Illness Awareness Council	844
Victorian Small Business Commission (VSBC)	230
Vikein Mouradian	15
Vikki Prior	351
Villoni Wuerfel	1067
Volunteering and Contact ACT (VCA)	417
Volunteering Australia	412
WA Primary Health Alliance	722
Warwick Smith	937
WayAhead Mental Health Association NSW Ltd	310, 704
Wayne C Utting	1172
Wei-Chia Tseng	341

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Table B.1 (continued)

<i>Participant</i>	<i>Submission no.</i>
Wellbeing in Schools Australia	829
Wellways Australia	396
Wenda Moore	1085
Wendy Gersh	585
Wendy Laupu	50
WentWest Limited	445, 788
WeParent	554
Wesley Mission	383, 840
Western Australian Association for Mental Health (WAAMH)	416, 1112
Western Australian Department of Local Government, Sport and Cultural Industries (DLGSC)	78
Western Australian Government	1227
Western Australian Chief Mental Health Advocate	934
Western Australian Mental Health Commission	259
Western Australian Network of Alcohol and Other Drug Agencies (WANADA)	102
Western Sydney Community Forum (WSCF)	842
William Archer-Blackwood	922
Windana	56, 738
WISE Employment	186, 1114
Woden Community Service	25
Women's Health Victoria (WHV)	318, 773
Woodville Alliance	1203
Working Well Together	266
Worklink Group Ltd	611, 676
yourtown	511, 917
Youth Health Forum (Consumers Health Forum of Australia)	404
Youth Law Australia (YLA)	433
Youth Mental Health, North Metropolitan Health Service	99, 895
Yvette Litchfield	642
Zero Suicide Institute of Australasia	671
Zina Coraci	1039
Zsolt Szabo	1028

Table B.2 Emailed comments received

<i>Type of respondent</i>	<i>Pre-draft</i>	<i>Post-draft</i>
User or consumer of mental health services or supports	64	44
Carers or family members	34	31
Mental health workers and providers	40	32
Other interest persons	53	58
Single focus on early childhood development		77

Table B.3 Consultations

Aaron Frost
Aboriginal Health Council of Western Australia
Aboriginal Housing Office
ACT Public Service
ACT Chief Minister, Treasury and Economic Development Directorate
ACT Health Directorate
ACT Corrective Services Directorate
ACT Human Rights Commission
ACT Education Directorate
ACT Community Services Directorate
Adult Community Mental Health Services (Parkside)
Alan England
Alan Woodward
Albury Wodonga Aboriginal Health Service
Alison Jones
Allan Fels
Andrew Robb
Anthony Jorm
Apunipima Cape York Health Council
ARAFMI Illawarra
Arie Frieberg
Australian Bureau of Statistics
Australian Clinical Trials Alliance
Australian College of Mental Health Nurses
Australian Council of Social Services
Australian Council of Trade Union
Australian Counselling Association
Australian Federal Police Association
Australian Government Department of Education
Australian Government Department of Education, Skills and Employment
Australian Government Department of Employment, Skills, Small and Family Business
Australian Government Department of Finance

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Table B.3 (continued)

Australian Government Department of Health
Australian Government Department of Human Services
Australian Government Department of Jobs and Small Business
Australian Government Department of Prime Minister and Cabinet
Australian Government Department of Prime Minister and Cabinet – Indigenous Affairs
Australian Government Treasury
Australian Government Department of Social Services
Australian Housing and Urban Research Institute
Australian Industry Group
Australian Institute of Criminology
Australian Institute of Family Studies
Australian Institute of Health and Welfare
Australian Institute for Teaching and School Leadership
Australian Medical Association
Australian Mental Health Outcomes and Classification Network
Australian Psychological Society
Australian Secondary Principals Association (Andrew Pierpoint)
Bendigo Community Health Services
Bendigo Health
Beyond Blue
Bill Buckingham
Black Dog Institute
Bonny Parkinson
Brain and Mind Centre
Brisbane North Primary Health Network
Brotherhood of St Laurence
BUPA
Business SA
Butterfly Foundation
Call to Mind
Carers Australia
Caroline Johnson
Carolyn Davis
Cathy Mihalopoulos
Central Australia Health Services
Central Australian Aboriginal Congress
Centre for Community Child Health, The Royal Children's Hospital
Centre for Mental Health – Melbourne School of Population and Global Health, University of Melbourne
Chief Psychiatrist for Tasmania
Child and Adolescent Mental Health Services Tasmania (North West)
Clinical Research Unit for Anxiety and Depression
Colony47
Consumers Health Forum of Australia
Coordinare (South Eastern Primary Health Network)

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Table B.3 (continued)

Darling Downs and West Moreton Primary Health Network
Darren Coppin
David Butt
Delmont Private Psychiatric Hospital
Directors of Student Services of Australia and New Zealand
Disability Advocacy Service
Edward Koch Foundation
Eileen Baldry
Emma Donaldson
Education First Youth Foyer
Eoin Killackey
eOrygen
Evaluate Consulting Pty Ltd
Everymind
Faculty of Education and Arts, University of Newcastle
Forensicare
Foyer Oxford
Gateway Health
Gelnunga International High School (Wendy Johnson)
Genia Janover
Geoff Waghorn
Gippsland Primary Health Network
Grand Pacific Health
Grant Sara
Grattan Institute
HC Innovations
headspace
headspace Toowoomba
headspace Wollongong
Healing Foundation
Helen Milroy
Henry Cutler
Illawarra Shoalhaven Local Health District
Independent Higher Education Australia
Independent Hospital Pricing Authority
Institute of Clinical Psychologists
Intensive Family Parenting Services
Jacinta Hawgood – Australian Institute for Suicide Research and Prevention
James Ibrahim
James Ogloff
Jane Gunn
Jane Pirkis
Jenny Campbell
Jennifer Taylor

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Table B.3 (continued)

Jenny George – Converge International
Jesuit Social Services
Joe Coyne
Julian McNally
Justice Action
Justice Health Unit – Melbourne School of Population and Global Health, University of Melbourne
Latrobe Health Advocate
Leonie Segal
Lesley Russell
Lifeline Central Australia
Lindsay Schofield
Lisa Paul
Lisa Wood - School of Population and Global Health, University of Western Australia
Liz Schroeder
Liza Brock
Loddon Mallee Mental Health Carers Network
Luis Salvador-Carulla – Australian National University
Lynette Pierce
Kevin Allan – Mental Health Commissioner of New Zealand
Marathon Health
Martin Hensher
Margaret Grigg
Marilyn Campbell
Martin Knapp – Department of Health Policy, The London School of Economics and Political Science
Maureen Dollard
Matt Tyler
MBS Review Taskforce
Melbourne Graduate School of Education (Jim Wattereston)
Mental Health Association of Central Australia
Mental Health Australia
Mental Health Australia Policy Network
Mental Health Australia's CALD Mental Health Consumer and Carer Group
Mental Health Families and Friends Tasmania (MHFFTas)
Mental Health Complaints Commissioner
Mental Health Coordinating Council
Mental Health Council of Tasmania
Mental Health Information Strategy Standing Committee
Mental Health Legal Centre
Mental Health Victoria Mentally Healthy Workplace Alliance - CEO Steering Group
Mental Illness Fellowship of Australia (MIFA)
Michael Woods
Millbrook Rise
Mind Australia
MindSpot

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Table B.3 (continued)

Mission Australia
Murdoch Children's Research Institute, The Royal Children's Hospital
Murray Primary Health Network
Murrumbidgee Local Health District
Murrumbidgee Primary Health Network
National Aboriginal Community Controlled Health Organisation
National Disability Insurance Agency
National Employment Services Association
National Health Practitioner Ombudsman and Privacy Commissioner
National Indigenous Australians Agency
National Mental Health Commission
National Mental Health Consumer and Carer Forum (NMHCCF)
National Social Security Rights Network
National Suicide Prevention Project Reference Group
National Suicide Prevention Taskforce
National Workforce Centre for Child Mental Health
Neami Wollongong
Nicola Reavley
Nolan House (Albury Wodonga Health)
North West Melbourne Primary Health Network
Northern Queensland Primary Health Network
NovoPsych
NPY Women's Council
NSW Department of Premier and Cabinet
NSW Education Standards Authority
NSW Family and Community Services
NSW Health
NSW Mental Health Commission
NSW Police Mental Health Intervention Team
NT Aboriginal Medical Services Alliance
NT Association of Alcohol and Other Drug Agencies
NT Council of Social Services
NT Department of Chief Minister
NT Department of Education
NT Department of Health
NT Department of the Attorney-General and Justice
NT Mental Health Coalition
NT Mental Illness Fellowship of Australia
NT Primary Health Network
Office for Mental Health and Wellbeing
One Door Sydney
One Door Wagga Wagga
Orygen
Outback Futures

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Table B.3 (continued)

OzHelp
Pandsi
Peer Participation in Mental Health Service Network
Peggy Brown
Philip Burgess
Primary Health Network Tasmania
Qantas
QBE Insurance
Queensland Alliance for Mental Health
Queensland Centre for Mental Health Research
Queensland Department Communities, Disability Services and Seniors
Queensland Department of Housing and Public Works
Queensland Health
Queensland Mental Health Commission
Queensland Office of the Chief Psychiatrist
Recovery Camp
Regional and Rural Mental Health Services
Regional Australia Institute
Relationships Australia
Relationships Australia South Australia
Review of the Clinical Governance of Public Mental Health Services in Western Australia Panel
Richardson and Lyons
Rivendell Clinic (North West Private Hospital)
Rod Astbury
Rosebud Secondary College (Clorinda Semienowcz)
Roses in the Ocean
Rowena Jacobs
Roy Fagan Centre
Royal Australian and New Zealand College of Psychiatrists
Royal Australian College of General Practitioners
Royal North Shore Hospital
Rural & Remote Mental Health
Rural Health Tasmania
Ryde Community Centre
Safe Work Australia
SA Department of Education
SA Department of Health
SA Mental Health CALD Community Conversation
SA Mental Health Commission
SA Mental Health Commission's Youth Advisory Group
SA Office of the Chief Psychiatrist
Sally Sinclair
SA Office of the Public Advocate
School of Education and Professional Studies – Griffith University

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Table B.3 (continued)

School of Public Health – University of Queensland
Sebastian Rosenberg
South Adelaide Local Health Network
South East Melbourne Primary Health Network
Specialist Aboriginal Mental Health Service
St. Charles Borromeo Primary School
Steps Employment
Suicide Prevention Australia
Superfriend
Tandem
Tangentyere Council
Tasmanian Department of Health and Human Services
Tasmania Suicide Prevention Community Network
Telethon Kids Institute
Tertiary Education Quality and Standards Authority
Tim Heffernan
The Bouverie Centre
The Haven Foundation
The Royal Commission into Victoria's Mental Health System
Their Futures Matter – NSW Government
Therapeutic Goods Administration
Timothy Marney
Universities Australia
Vanguard Laundry Services
Victoria Legal Aid
Victoria Magistrates Court
Victorian Automobile Chamber of Commerce
Victorian Department of Education and Training
Victorian Department of Health and Human Services
Victorian Mental Health Complaints Commissioner - Advisory Council
Western Australian Association for Mental Health
Western Australian Child and Adolescent Health Service
Western Australian Department of Communities
Western Australian Department of Health – Mental Health Unit
Western Australian Department of Premier and Cabinet
Western Australian Magistrate
Western Australian Mental Health Commission
Western Australian Primary Health Alliance
Wellways
WISE Employment
Youth Insearch

Table B.4 **Public Hearings**

Canberra — 15 November 2019

Mental Health Australia
Mental Health Carers Australia (MHCA)
Consumers' Health Forum of Australia
Early Childhood Australia
Perinatal Wellbeing Centre
Diana Rendell
Colin Hales
ACT Disability, Aged and Carer Advocacy Service (ADACAS)
batyr
Mental Health Community Coalition ACT
Families and Friends for Drug Law Reform
Develop Daily
Terry De Luca
Julianne Christie
Fox Fromholtz
Jane Jervis
Mary Cormick
David Lovegrove
Julianne Christie
Joan Lipscombe

Melbourne Day 1 — 18 November 2019

Ben Goodfellow and Campbell Paul
Centre for Social Impact, Swinburne
Australian Nursing and Midwifery Federation (Victorian Branch)
Australasian Sleep Association
Victoria Legal Aid
Mind Australia
Restart Health Services
Launch Housing
Eating Disorders Victoria
Ann Moir-Bussy
Michael Blair
Tandem
Consortium of Psychiatrists
Monash University
Andrew Morgan
First Step
Health and Community Services Union
David Clark
Tess Reilly-Browne
Donna Hansen-Vella
Borderline Personality Disorder Community

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Table B.4 (continued)

Melbourne Day 2 — 19 November 2019

People Power International
Mental Health Victoria
Beyond Blue
Prevention United
Vikein Mouradian
Victorian Mental Illness Awareness Council
Mental Health Legal Centre
CyberValues.org
Australia Music Therapy Association
Debra Scott
Royal Australian and New Zealand College of Psychiatrists, Victoria
Australians for Mental Health
Independent Private Psychiatrists Group
The ACT of Living
Prue Lynch

Geraldton — 20 November 2019

HelpingMinds
Headspace, Geraldton
Elucidate
Cathy Fox
Geraldton Regional Aboriginal Medical Service

Perth — 21 November 2019

Consumers of Mental Health Western Australia
HBF Health
St Bartholomew's House Inc
Mr Sjon Kraan
Beyond Words Counselling
Patricia Owen
Mike Anderson
Commissioner for Children and Young People Western Australia
WA Primary Health Alliance
John Dallimore
Western Australian Association for Mental Health (WAAMH)
Jay Anderson
David Napoli
David Hillman
Joseph Naimo
Michael Finn
Jenne Fitzhardinge
Hannah McGlade
Andris Markovs
Pamela Scott-Gale
Rebecca James

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Table B.4 (continued)

Sydney Day 1 — 25 November 2019

Patricia and Andrew Anderson
Suicide Prevention Australia
Royal Australian and New Zealand College of Psychiatrists, Sydney
Marie Butler-Cole
MetLife and Financial Services Council
Being
Wisa Wellbeing in Schools Australia
Better Health Generation
Australian Services Union
University of Sydney and the Woolcock Institute of Mental Research
School Nurses Australia
Orygen
New South Wales Council of Social Service
Headspace Sunshine
Vicious Cycle PMDD.
Mental Health Carers NSW (MHCN)
Community Mental Health Australia (CMHA)
Emma Spinks and Ian Thompson
National LGBTI Health Alliance
Matthew Fitzpatrick

Sydney Day 2 — 26 November 2019

Jeni Diekman
Mitchell Peacock
Ron Spielman
Scarlett Franks
Mental Health Coordinating Council
Alicia Boyd
Roger Gurr
Grief Journeys
Gita Irwin
Grassroots Approach Programs
Citizens Commission on Human Rights
Andrew Pryor
Libby Ducasse
Deborah Barit

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Table B.4 (continued)

Broken Hill — 28 November 2019

Jan Hayman – Lifeline Connect
Marisa Pickett and Len White (Board Member) – Lifeline
Joanie Sanderson
Maxine Hinton
Glenda Beeston
Peter Gough – Maari Ma Aboriginal health Corporation
Vanessa Smith – Broken Hill Community Mental Health, Drug and Alcohol Service
Jode Callegher – Catholic Care
Christy McManus – Far West Local Health District
Les Jones – Murdi Paaki Regional Assembly, Maari Ma Health, Murdi Paaki Regional Housing Corporation
Vanessa Latham and Emma Osman – Royal Flying Doctor Service
Kayelene Crossing – Warra Warra Legal Service
Famu Nachiappan – General Practitioner
Jo-Anne Cole

Rockhampton — 2 December 2019

Queensland Alliance for Mental Health
John Pink
Headspace, Bundaberg
Rise Above Aces Group
Anglicare Central Queensland
Eating Disorders Queensland
Triple P International
Robert Wellman
Anonymous

Brisbane — 3 December 2019

Grow Australia
Helena Williams
Mental Illness Fellowship of Australia (MIFA)
Geoffrey Waghorn
Royal Australian and New Zealand College of Psychiatrists
Christine Newton
Tania Murdock
Qld Nurses and Midwives Union
Qld Council for LGBTI Health
Beryl-Ann Anderson
Qld Seafood Industry Council
Kay Cogan
Arafmi
Niall McLaren
Qld PHNs (North Brisbane, South Brisbane and Western Qld)
Stefanie Roth
Melissa Costin

(continued next page)

Table B.4 (continued)

Launceston — 9 December 2019

Sleep Health Foundation
Australian Psychological Society
Psychology Caffé
Pippa Ross
Balancing of Life Counsellors
Diane Kube
David Asten
Tasmanian Life Counselling
Australian College of Mental Health Nurses
Mental Health Council of Tasmania
Psychotherapy and Counselling Federation of Australia
Caring Fairly
Mental Health Families and Friends Tasmania (MHFFTas)
Royal Flying Doctor Service Tasmania
Victims of Psychiatrists
Abolish Psychiatry Party

Adelaide — 5 February 2020

Australian Counselling Association
Bob Riessen
Skylight Mental health
Medical Consumers Association
Aaron Fornarino
GP Mental Health Standards Collaboration
Leanne Longfellow
Sally Tregenza
Patricia Sutton
Danielle Malone
Lived Experience Leadership and Advocacy Network
Mental Health Coalition South Australia
UnitingSA
Melissa Raven
Royal Australian College of General Practitioners
J Michael Innes
Salvation Army Ingle Farm
Emerging Minds
Lucy Trethewey

(continued next page)

Table B.4 (continued)

Darwin — 24 February 2020

Bob Napier
Rosemary Clancy
Linda Spencer
Jos Van Der Sman
Philip Benjamin
Top End Women's Legal Service
Hristina Piltz
Warwick Smith
myDNA
Tanya Kretschmann
Northern Territory Mental Health Coalition
Mental Health Association of Central Australia
Trinity Ryan
Aboriginal Medical Services Alliance Northern Territory
Saltbush Social Enterprises
Australian Association for Infant Mental Health
TeamHealth

Table B.5 Roundtables

4 February 2020 — Consumers and Carers

Andris Banders
 Anne Barbara
 Belinda Ryan
 Camilo Guaqueta
 Carmen H
 Cecil Camilleri
 Dannielle Post
 Darren Hunt
 Ellie Hodges
 Enaam Oudih
 Graham Deakin
 Jodus Madrid
 Keryn Robelin
 Leanne Galpin
 Lyn English
 Paola Mason
 Patricia Sutton
 Sarah Sutton
 Tanya Hunter

11 February 2020 — Workplace Mental Health

Allianz	Mark Pittman
Australian Chamber of Commerce and Industry	Jennifer Low
Australian Council of Trade Unions	Liam O'Brien
Australian Industry Group	Tracey Browne
Beyond Blue	Greg Jennings
Beyond Blue	Jason Davies-Kildea
Carolyn Davis	
Chamber of Minerals and Energy WA	Elysha Millard
Comcare	Natalie Bekis
Converge International	Jenny George
Corporate Mental Health Alliance	Kate Connors
EAP Professionals Association of Australia	Lana Schwartz
Insurance Council of Australia	Tom Lunn
Mentally Healthy Workplace Alliance	Lucy Brogden
icare NSW	Chris Harnett
Superfriend	Margo Lydon
Workcover Qld	Matt Bannon

Table B.5 (continued)

11 February 2020 — Mental Health Modelling

ANU College of Health and Medicine; Melbourne Institute	Peter Butterworth
Bill Buckingham	
Centre for Health Economics, Monash University	David Johnston
Deakin Health Economics, Deakin University	Cathy Mihalopoulous
Department of Health	Jian Wang
Economic Modelling Group, KPMG	Chris Schilling
Royal Commission into Victoria's Mental Health System	Phuong Nguyen
Treasury	Phil Harslett
Victoria Institute of Strategic Economic Studies, Victoria University	Kim Sweeney

13 February 2020 — Aboriginal and Torres Strait Islander People in Urban Areas

Aboriginal Affairs NSW	Lillian Gordon
Aboriginal Affairs NSW	Anthony Seiver
Aboriginal Affairs NSW	Renee Thomson
Aboriginal Counselling	Craig Brown
Aboriginal Medical Service (Redfern)	LaVerne Belleair
InCulture	William Trewlynn
Karabena Consulting	Kerry Arabena
Lowitja Institute	Sanchia Shibasaki
Marrin Weejali Aboriginal Corporation	Cheryl Jackson
Ngaoara Ltd	Ngiare Brown
NSW Health	Tom Brideson
Ozchild	Dea Delaney-Thiele
Tharawal Aboriginal Corporation	Darryl Wright
Thirrili	Adele Cox
University of Western Australia	Helen Milroy

17 February 2020 — Early Childhood Services

Ann Kennedy	
Australian Children's Education and Care Quality Authority	Jason Mason
Australian Government Department of Education	Joanna Harrison
Early Childhood Australia	Samantha Page
Emerging Minds	Brad Morgan
Goodstart Early Learning	Penny Markham
Maternal, Child and Family Health Nurses Australia	Jan Finlayson
Murdoch Children's Research Institute	Frank Oberklaid
Murdoch Children's Research Institute	Brigid Jordan
Parenting Research Centre	Warren Cann
Victorian Department of Education	Susan McDonald

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Table B.5 (continued)

17 February 2020 — Education System

Australian Government Department of Education	Michelle Clewett
Australian Heads of Independent Schools	Beth Blackwood
Australian Institute for Teaching and School Leadership	Daniel Pinchas
Australian Primary Principals Association	Michael Nutall
Australian Psychologists and Counsellors in Schools	Marylin Campbell
Australian Secondary Principals Association	Andrew Pierpoint
Be You	Jason Davies-Kildea
Beyond Blue	Louisa Ellum
Catholic Education Melbourne	Dennis Torpy
Headspace Schools	Kristen Douglas
La Trobe University	Joanna Barbousas
Melbourne Graduate School of Education	Jim Watterston
Murdoch Children's Research Institute	Frank Oberklaid
NSW Education Standards Authority	Lyn Kirkby
Qld Department of Education	Hayley Stevenson
Rosebud Secondary College	Clorinda Siemenowicz
SA Department of Education	Katerina Eleutheriou
St Charles Borromeo Primary School	Sue Cahill
Victorian Department of Education	Justin McDonnell

C Income and employment support

This appendix provides further detail on:

- the current income and employment support system — including key payments (Disability Support Pension (DSP), JobSeeker Payment, Youth Allowance) and key employment programs (jobactive, Disability Employment Services (DES), Community Development Program (CDP))
- mechanisms that stream income support recipients into employment support programs (Job Seeker Classification Instrument (JSCI) and Employment Services Assessment (ESAt))
- the Individual Placement and Support (IPS) model of employment support
- employment support program mutual obligation requirements (MORs)
- temporary changes to the income and employment support system in response to the COVID-19 pandemic.

C.1 The income and employment support system

Income support payments

Income support payments have different sized cohorts, payment rates and eligibility criteria (table C.1). Temporary changes were made to payments as part of the Australian Government response to the COVID-19 pandemic (section C.5).

Table C.1 Comparison of key income support payments
June 2019

	<i>Newstart Allowance^a</i>	<i>Youth Allowance (job seeker)</i>	<i>Disability Support Pension</i>
Cohort of interest ^b	181 700	9 200	258 600
Estimated cost for cohort of interest ^c	\$2.6 billion	\$98 million	\$5.8 billion
Productivity Commission estimate of cohort of interest ^d	291 600	24 400	486 500
Estimated cost for Productivity Commission estimate of cohort of interest	\$4.1 billion	\$259 million	\$10.9 billion
Total recipients	686 800	82 800	745 700
Payment rate ^e	\$565.70	\$462.50	\$860.60 (if aged over 21 years)
Eligibility criteria	<ul style="list-style-type: none"> • Aged 22–66 years • Unemployed and looking for full-time work • Willing to complete activity requirements • Income and assets tests (individual and partner) • Meet residency criteria 	<ul style="list-style-type: none"> • Aged 16–21 years • Unemployed and looking for full-time work • Willing to complete activity requirements • Income and assets tests (individual, partner and parent) • Meet residency criteria 	<ul style="list-style-type: none"> • Aged 16–66 years • Have a permanent disability that reduces potential work capacity to less than 15 hours a week over at least the next 2 years (box C.1) • Willing to complete activity requirements (if aged under 35 years) • Income and assets test (individual and partner) • Meet residency criteria

^a The JobSeeker Payment replaced the Newstart Allowance and some other payments in March 2020. ^b As determined by administrative data from the Department of Education, Skills and Employment and Department of Social Services. Newstart Allowance and Youth Allowance cohorts are recipients deemed to have a mental illness and the Disability Support Pension cohort is recipients with a primary psychological or psychiatric disability. ^c Productivity Commission cost estimates based on the total cost of provision apportioned to the relevant proportion of recipients for 2018-19. ^d Productivity Commission estimates of the proportion of separate payment recipients with any mental illness from the National Health Survey 2014-15, apportioned to the number of total recipients in June 2019. ^e Payment rate for people who are single, aged over 18 years, with no children and no other income source.

Source: ABS (*Microdata: National Health Survey 2014-15*, Cat. no. 4364.0.55.001); Australian Government (2019b); DESE (unpublished); DJSB (2019); DSS (2018a, 2019a, unpublished); Parliamentary Library (2017); Services Australia (2020b, 2020e, 2020h).

Disability Support Pension

The DSP is an income support payment for people whose ability to work is impaired by a permanent physical, intellectual or psychiatric condition. Applicants with a manifest condition (for example, permanent blindness or terminal illness) are generally eligible if they meet age, residency and income and asset requirements (box C.1). All other applicants must have their eligibility determined through a range of criteria (as well as meeting the same age, residency and income and asset requirements as manifest applicants).

Box C.1 **Disability Support Pension eligibility criteria**

The Disability Support Pension application process gathers information about disability permanence, functional impairment caused by a disability and the impact of this functional impairment on an applicant's employment prospects. Recipients must be aged between 16–66 years (those aged over 66 years receive the Age Pension) and income and asset limits also apply.

Applicants must:

- have their condition assessed as 'fully diagnosed, treated and stabilised' by a Job Capacity Assessor;
- be scored over 20 points across the Impairment Tables (discussed below) by a Job Capacity Assessor (who assesses functional capacity);
- complete an 18-month Program of Support (this requirement is void if the applicant scores at least 20 points on a single impairment table); and
- complete a Disability Medical Assessment by a government contracted doctor.

Impairment Table Five is used to assess the functional capacity of applicants with a mental illness (self-care and independent living, interpersonal relationships and concentration and task completion, among others (table C.2)).

Source: ANAO (2017b); Services Australia (2019).

Impairment tables

Job Capacity Assessors assess the functional capacity of DSP applicants using 'Impairment Tables'. Applicants must score at least 20 points across the impairment tables to be eligible for the payment. Applicants who score 20 points or more over multiple tables but do not score at least 20 points on a single table are deemed to not have a severe impairment. These applicants must complete a Program of Support — 18 months of participation in an employment support program (such as jobactive or DES), before becoming eligible for the DSP. This is not a requirement for those who score over 20 on a single table.

Of particular relevance is Impairment Table Five, which assesses the impact of a psychological or psychiatric condition on an applicant's functional impairment (table C.2).

Table C.2 Summary of Impairment Table Five

<i>Activity</i>	<i>None (0 points)</i>	<i>Moderate (10 points)</i>	<i>Severe (20 points)</i>	<i>Extreme (30 points)</i>
Self-care and independent living	The person lives independently and attends to all self-care needs without support.	The person needs some support to live independently and maintain adequate hygiene and nutrition.	The person needs regular support to live independently.	The person needs continual support with daily activities and self-care and/or is unable to live on their own and lives with family or supported residential or secure facility.
Social/recreational activities and travel	The person goes to social or recreational events regularly without support and/or travels alone to new environments.	The person goes out alone infrequently and/or will often refuse to travel alone to new environments.	The person travels alone only in familiar areas.	The person is unable to travel away from own residence without a support person.
Interpersonal relationships	The person has no difficulty forming and sustaining relationships.	The person has difficulty making and keeping friends or sustaining relationships.	The person has very limited social contacts/involvement unless organised for them and/or often has difficulty interacting with other people and may need assistance/support to socialise.	The person has extreme difficulty interacting with other people and is socially isolated.
Concentration and task completion	The person has no difficulties concentrating on most tasks and/or is able to complete a training or educational course or qualification in the normal timeframe.	The person finds it very difficult to concentrate on longer tasks for more than 30 minutes and/or finds it difficult to follow complex instructions.	The person has difficulty concentrating on any task or conversation for more than 10 minutes and/or has slowed movements or reaction time due to psychiatric illness or treatment effects.	The person has extreme difficulty in concentrating on any productive task for more than a few minutes and/or has extreme difficulty in completing tasks or following instructions.
Behaviour, planning and decision making	There is no evidence of significant difficulties in behaviour, planning or decision-making.	The person has difficulty coping with situations involving stress, pressure or performance demands, has occasional behavioural or mood difficulties.	The person's behaviour, thoughts and conversation are significantly and frequently disturbed.	The person has severely disturbed behaviour which may include self-harm, suicide attempts, unprovoked aggression towards others or manic excitement.
Work/training capacity	The person is able to cope with the normal demands of a job which is consistent with their education and training.	The person often has interpersonal conflicts at work, education or training that require intervention or changes in placement or groupings.	The person is unable to attend work, education or training on a regular basis over a lengthy period due to ongoing mental illness.	The person is unable to attend work, education or training sessions other than for short periods of time.

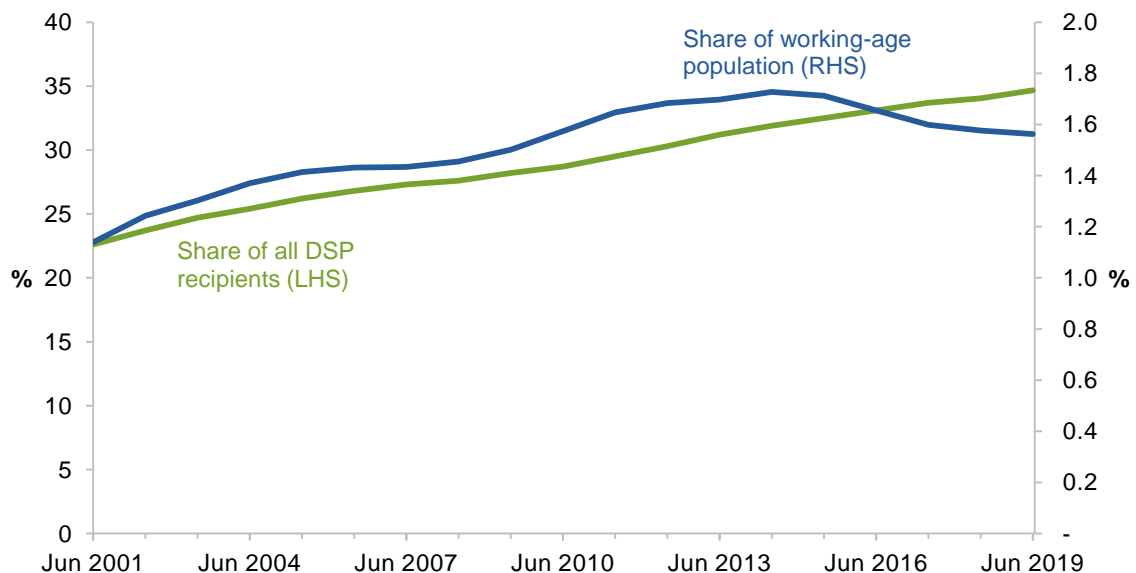
Source: Social Security (Tables for the Assessment of Work-related Impairment for Disability Support Pension) Determination 2011.

Disability Support Pension population and trends

A growing share of DSP recipients live with mental ill-health. The share of the working-age population receiving the DSP for mental health-related conditions increased from 1.1% to 1.7% between 2001 and 2015, but declined to less than 1.6% by 2019 (figure C.1). And between 2001 and 2019, the share of DSP recipients with a primary psychological or psychiatric condition increased from 23% to 35%. This reflects both an increase in the number of recipients with a mental illness-related condition and a fall in the number of recipients with a musculoskeletal impairment, which was previously the most common impairment type (figure C.2).

Figure C.1 Mental illness-related Disability Support Pension recipients

Share of working-age population and share of all DSP recipients who receive the DSP due to psychological or psychiatric disability



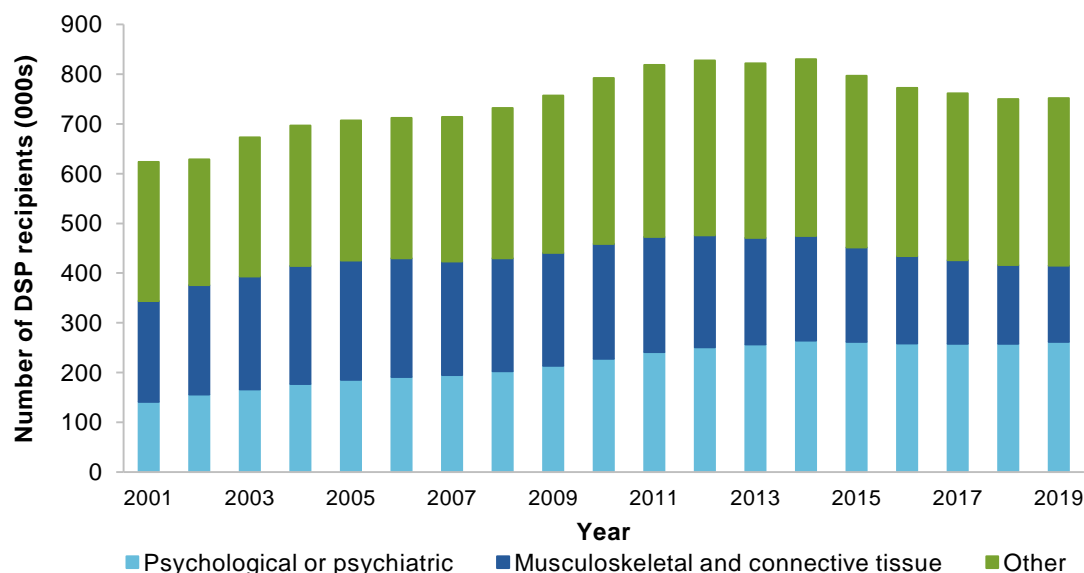
Source: Productivity Commission estimates using ABS (*Australian Demography Statistics*, June 2019, Cat. no. 3101.1) and DSS (2013, 2016, various years).

The increase in DSP recipients with primary psychological or psychiatric impairments mirrors international trends, as mental illness represents a growing share of new disability benefit claims in many OECD nations. The OECD suggests these trends are caused by:

- a greater awareness of mental health, which has led to shifts in diagnosed causes of the incapacity to work (with mental illness now more likely to be the root cause of work issues for people with comorbidities in particular)
- work becoming more psychologically demanding, which reduces the ability of people with mental illness to remain in work.

Figure C.2 Disability Support Pension recipients by major condition

Number and share of recipients by common impairment types, 2001-2019



Source: DSS (2013, 2016, various years).

Payment rates

The rate at which the DSP is paid depends on participant characteristics (table C.3).

Table C.3 Disability Support Pension fortnightly payment rates

As at March 2020

<i>Individual characteristics</i>	<i>Maximum payment rate</i>
<i>Under 21 years with no children</i>	
Single, under 18 years, live at parent/guardian's home	\$385.10
Single, under 18 years, independent	\$594.40
Single, aged 18–20 years, live at parent/guardian's home	\$436.50
Single, aged 18–20 years and independent	\$594.49
A member of a couple, aged or under 20 years	\$594.40
<i>21 years or over, with/without children, or under 21 years with children</i>	
Single	\$860.60
Couple (each)	\$648.70
Couple (each, separated due to ill-health)	\$860.60

Source: Services Australia (2020b).

JobSeeker Payment

The JobSeeker Payment is the general payment for working-age income support recipients. It is available for people between the ages of 22 and 66 years who are looking for work, cannot work or study due to sickness or injury, or have recently lost their partner (Services Australia 2020e). This payment replaced the Newstart Allowance (which specifically targeted people looking for work), Sickness Allowance, Wife Pension, Widow B Pension and Bereavement Allowance in March 2020.

The rate at which the JobSeeker Payment is paid depends on participant characteristics (table C.4). As part of the Australian Government response to the COVID-19 pandemic, JobSeeker Payment recipients also received the Coronavirus Supplement (section C.5).

Table C.4 JobSeeker Payment fortnightly payment rates
As at March 2020

<i>Individual characteristics</i>	<i>Maximum payment rate</i>
Single, no children	\$565.70
Single, with a dependent child/children	\$612.00
Single, aged 60 years or over, after 9 continuous months on payment	\$612.00
Partnered (each)	\$510.80
Single principal carer granted an exemption due to carer commitments ^a	\$790.10

^a Including foster caring, non-parent relative caring under a court order, home schooling, distance education or large family.

Source: Services Australia (2020e).

Youth Allowance

The Youth Allowance is income support for students and job seekers.

- *Student* recipients must meet any one of the following criteria:
 - aged 18–24 years and studying full-time
 - aged 16–24 years and undertaking a full-time Australian Apprenticeship
 - aged 16–17 years and independent or required to live away from home to study (Services Australia 2020j).
- *Job seeker* recipients must be aged 16–21 years and looking for full-time work (Services Australia 2020i).

The rate at which the Youth Allowance is paid depends on participant characteristics (table C.5). As part of the Australian Government response to the COVID-19 pandemic, Youth Allowance recipients also received the Coronavirus Supplement (section C.5).

Table C.5 Youth Allowance fortnightly payment rates

As at March 2020

<i>Recipient characteristics</i>	<i>Maximum payment rate</i>
Single, no children, under 18 years, live at parent/guardian's home	\$253.20
Single, no children, under 18 years, need to live away from parent/guardian's home	\$462.50
Single, no children, over 18 years, live at parent/guardian's home	\$304.60
Single, no children, over 18 years, need to live away from parent/guardian's home	\$462.50
Single with children	\$606.00
Partnered, no children	\$462.50
Partnered, with children	\$507.90
Single, job seeker, principal carer and exempt from activity requirements ^a	\$790.10

^a Including foster caring, home schooling, distance education or large family.

Source: Services Australia (2020h, 2020k).

Employment support

The Australian Government's main employment support programs are:

- jobactive — the general employment support program
- DES — employment support for people whose main barrier to employment is a disability
- CDP — employment support for people in remote areas (table C.6).

Participation in these programs is compulsory for job seekers who receive income support payments and have been assessed as able to actively look for work (that is, most JobSeeker Payment and Youth Allowance recipients, and some DSP recipients aged under 35 years) (ANAO 2017b).

Table C.6 Comparison of key employment support programs
June 2019

	<i>jobactive</i>	<i>Disability Employment Services</i>	<i>Community Development Program</i>
Cohort of interest ^a	85 100	95 690	3 780
Estimated cost for cohort of interest ^a	\$139 million ^b	\$328 million ^c	\$53 million ^d
Total number of participants	614 200	238 300	30 000
Program streams	A (12%), B (37%) and C (50%)	Disability Management Services (43%) and Employment Support Services (57%)	No streams

^a jobactive and Community Development Program cohorts are participants deemed to have a mental illness and the Disability Employment Services cohort is participants with a primary psychological or psychiatric disability. ^b Estimated from the total cost of provision and the proportion of recipients with a mental illness for 2018-19. ^c This estimate was supplied by the Department of Education, Skills and Employment and is equivalent to the value of payments supplied to jobactive providers supporting job seekers deemed to have a mental illness. ^d May include other non-DES disability employment services (valued at approximately \$35 million). ^e Estimate based on 2017-18 cost data.

Source: ANAO (2017a); DESE (unpublished); DJSB (2019); DSS (2019a, 2019b, unpublished); National Indigenous Australians Agency (unpublished).

In addition, there are various specialised employment support programs (box C.2).

Box C.2 Specialised employment support programs

Transition to Work is a work readiness program for young people aged 15–21 years that bridges the transition between education and employment. Participants are supported to find apprenticeships, traineeships or pathways to tertiary education. The program also organises 'youth bonus wage subsidies' of up to \$10 000 over six months for some participating employers (DESE 2020a).

Time to Work is a national voluntary in-prison employment support program targeted at adult sentenced Aboriginal and Torres Strait Islander prisoners. This program aims to better prepare participants for employment and community re-integration after prison. The service provides employment barrier assessments, transition plans and links participants to an external employment support provider when their sentence ends (DESE 2020c).

ParentsNext is a support program to help parents set study and work goals and access community services. Participants are eligible if they are parents with children aged under six years and have received the Parenting Payment and not earned income in the past six months (Services Australia 2020f).

The Department of Education, Skills and Employment is currently piloting a new online employment support program that is intended to replace jobactive from 2022. Current trials are located in South Australia and New South Wales. As described below, Stream A participants received the new program first (July 2019), with Stream B and C starting the trial in November 2019 (DESE 2020b).

The current streams of jobactive will remain intact. Stream A (renamed Digital First) participants will complete all activity requirements and reporting obligations online and will not attend face-to-face provider appointments. Participants will have access to a contact centre via phone or online (DESE 2020b).

Stream B (Digital Plus) participants will complete activity requirements online and will receive face-to-face skills development or training through a contact centre. They may also receive support to pay for transport- or employment-related costs, be connected with an employment support provider and participate in complementary services (for example, Career Transition Assistance or PaTH Internships) (DESE 2020b).

Stream C (Enhanced Services) participants are assessed to face multiple barriers to employment. These participants will have access to the online platform but will receive individualised support from an employment support provider. Services include connecting a participant with training and education or work experience, career mentoring, counselling, job placement and post-placement support (DESE 2020b).

A key development in the new program is the establishment of a new points-based activity requirement system. This will give participants more choice and flexibility around the activities completed to register obligation requirements. More intensive activities (for example, job interviews and job search) receive more points, but other approved work focused activities will also contribute to meeting fortnightly targets (NSSRN 2019). Financial penalties will remain in place for participants who fail to meet their mutual obligation requirements and participants will be notified of these via their online dashboard (DESE 2020b).

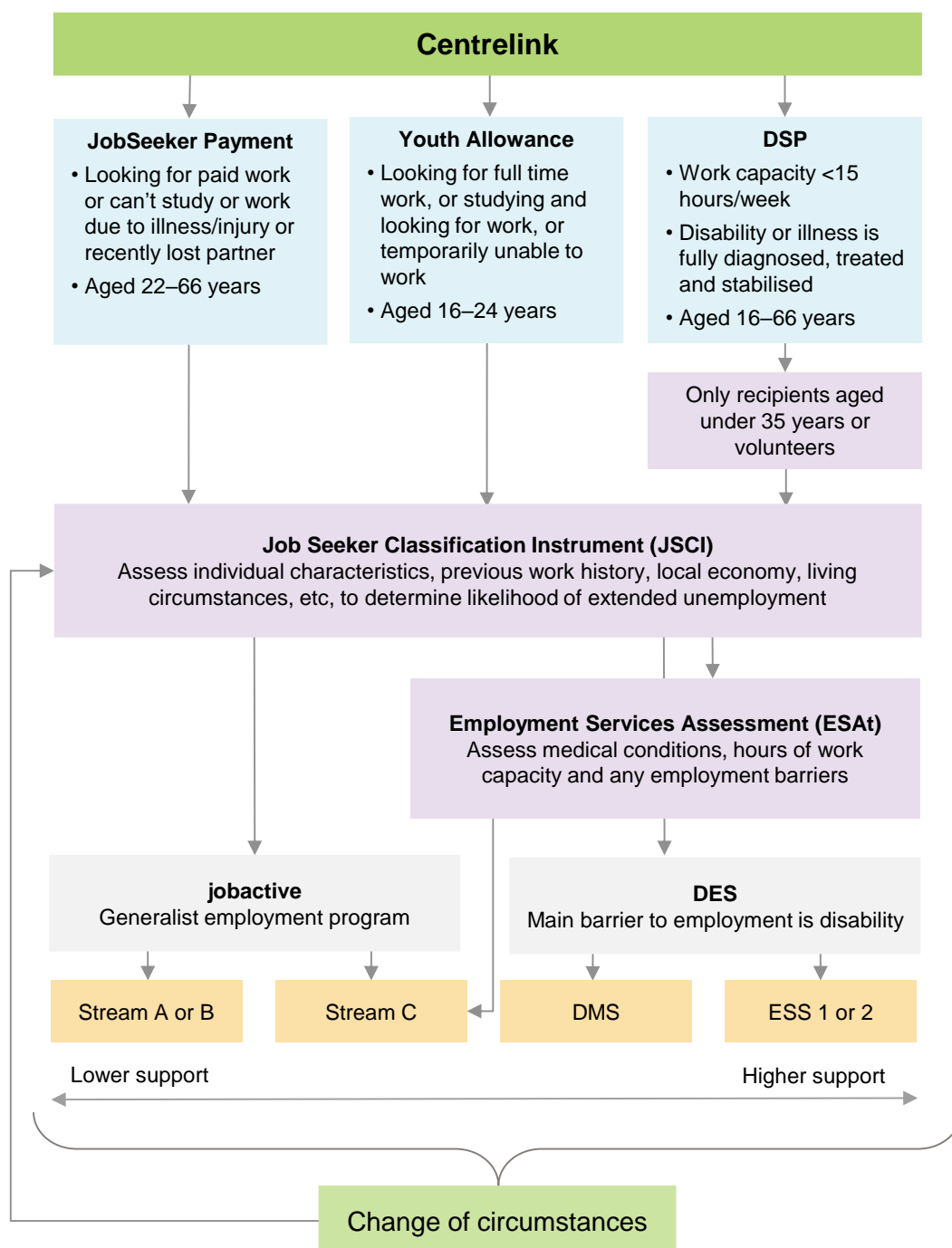
C.2 Mechanisms that stream income support recipients into employment support programs

Services Australia (branded as Centrelink) applies the JSCI and the (ESAt) to stream JobSeeker Payment and Youth Allowance recipients between jobactive and DES employment support programs (figure C.3).

There are also streams within jobactive and DES (figure C.3). Participants considered to have a low risk of remaining unemployed over the long term are referred to Stream A or B of jobactive, while participants who need more assistance are referred to Stream C. If the ESAt determines a disability to be an individual's main barrier to employment, they are referred to DES. Of these participants, those who need only job search support are placed in Disability Management Services and those who are likely to require ongoing support after finding employment are referred to Employment Support Services levels 1 or 2.

Participants can be reassessed to ensure their level of support remains appropriate if they experience a change of circumstances (for example, worsening or improving health, moving to a town with different employment opportunities or becoming homeless).

Figure C.3 Employment and income support pathways^{a,b}



^a Participants considered to have a low risk of remaining unemployed over the long term are referred to Stream A or B of jobactive, while participants who need more assistance are referred to Stream C. ^b DES participants are split between Disability Management Services (DMS) and two levels of Employment Support Services (ESS). DMS provides job search support only, while ESS provides job search support and ongoing assistance after a participant finds employment (with ESS level 2 participants receiving more support than ESS level 1 participants).

Source: ANAO (2018); Australian Government (2019a); DSS (2018b); Services Australia (2020a, 2020c, 2020g).

The Job Seeker Classification Instrument

The JSCI is a brief assessment that aims to assess an income support recipient's risk of long-term unemployment by considering their age, work and education history, English proficiency, access to transport, Indigenous status and any disability or medical conditions (Australian Government 2019a). The JSCI does not contain diagnostic questions about mental illness, but does offer participants a chance to disclose a mental illness with the following questions:

- *Do you have any disabilities or medical conditions that affect the hours you are able to work?*
- *Do you have any disabilities or medical conditions that affect the type of work you can do?*

If a participant discloses any disability/illness, they will be asked a follow-up question (or questions):

- *Do you think you need additional support to help you at work as a result of your condition(s)?*
- *What is the most number of hours a week you think you are able to work?*
- *How long will your condition(s) affect your ability to work?*
- *What is/are the condition(s)?¹*

This assessment places participants with no or low risk of long-term unemployment into jobactive Stream A or B services, and refers those deemed to have moderate or high risk of long-term unemployment for further assessment via the ESAt.

The Employment Services Assessment

The ESAt is a more thorough assessment process for participants deemed to have multiple or severe barriers to employment. Allied health professionals undertake ESAts which, in about 80% of cases are face-to-face (OECD 2015). This assessment determines whether a participant should receive services from Stream C of jobactive or be placed in Disability Employment Services (in either Disability Management Support or Employment Support Services), based on an assessment of their barriers to work (related to disability, injury or illness, among others) and their work capacity in hour bandwidths (0–7, 8–14, 15–29 hours) (Australian Government 2019a). Those for whom a disability is deemed to be their main barrier to employment are placed in Disability Employment Services and other participants are placed into Stream C of jobactive.

¹ Not all participants who disclose a medical condition or disability will be asked what the condition is. For example, they will not be asked what the condition is if they do not answer 'yes' or 'don't know/unsure' to whether they have a condition that affects the type of work they can do (as opposed to the amount they can work), or to whether their condition will affect their ability to work for less than three months, they will not be asked what the condition is.

C.3 Individual Placement and Support

The IPS model of employment support was developed to assist people with severe mental illness find and maintain employment. It comes in two broad forms — the theoretical ideal form as conceptualised by the model’s designers and the real world models that have been implemented. The success of the IPS model (and the capacity to evaluate it rigorously) has been attributed to the extent to which its implementation in the real world reflects relatively high fidelity versions of the original ideal model (Kim et al. 2015).

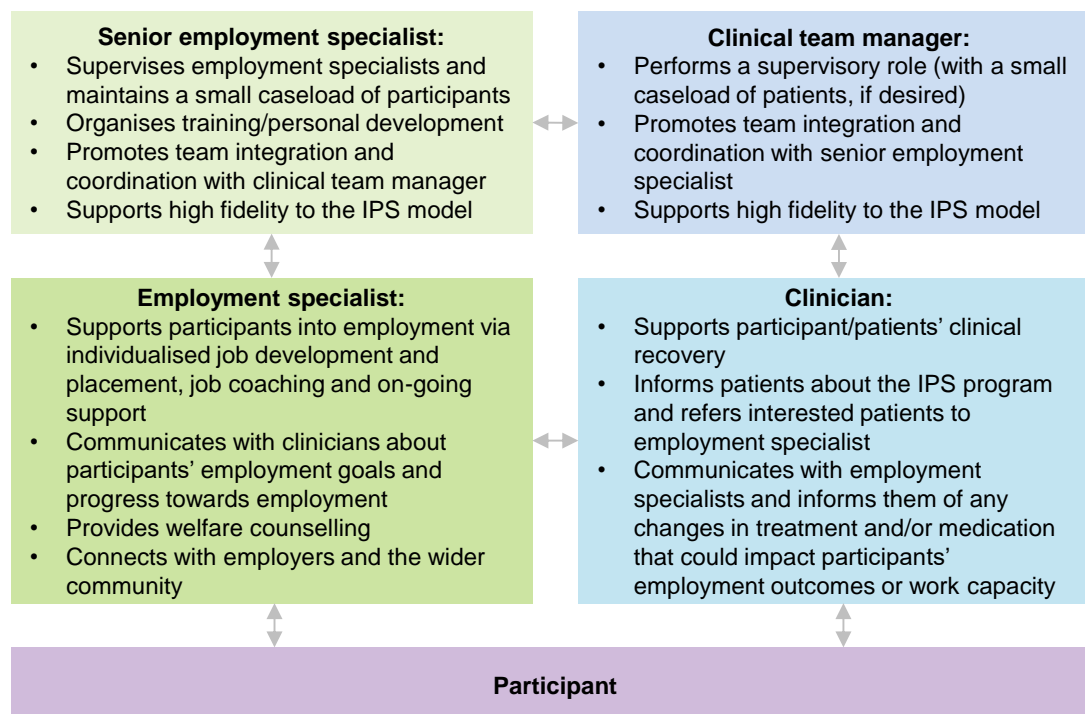
IPS provides hands on, personalised and ongoing support to participants. Caseloads are small (prescribed at 20 in the ideal model) and IPS specialists spend most of their time (65% in the ideal model) engaging with the community or employers (which can include meeting with participants outside their office). Specialists are expected to develop a strong understanding of participant’s work capacity and workplace requirements, prioritise participants’ work preferences, take on the majority of the burden of job search and counsel participants about the impacts of work on the income support payments that they receive. Once in a job, participants continue to receive support from their IPS specialist (for example, job coaching, career development or help negotiating pay rises (Becker et al. 2015)).

IPS prioritises employment over training (known as a ‘place–train’ focus). This means that participants do not complete training programs during their job search, but focus their efforts on finding employment. If needed, they can complete training in the workplace.

IPS is also tightly integrated with participants’ clinical care. The roles of the IPS specialist and other providers are outlined in figure C.4.

Fidelity scales measure how closely IPS programs follow the ideal IPS model by assessing a program’s staffing, organisation and service provision (table C.7). Each assessment criteria is ranked on a scale of 1 to 5, with a higher score representing more fidelity to the model. A score of 74 or above out of 125 is necessary to ‘pass’ and be labelled an IPS program. Baseline fidelity reviews are conducted six to nine months after a program starts and the frequency of future reviews is determined by the baseline review’s score (Becker et al. 2015).

Figure C.4 Roles and responsibilities under the Individual Placement and Support model^a



^a Grey arrows represent lines of communication.

Source: Becker et al. (2015); Gilbert and Papworth (2017); Rinaldi et al. (2008).

Table C.7 Summary of IPS fidelity assessment criteria^a

Staffing	Organisation	Services
<ul style="list-style-type: none"> Caseload size Employment support staff only provide employment services Employment support staff are vocational generalists 	<ul style="list-style-type: none"> Integration of rehabilitation with mental health treatment through team assignment Integration of rehabilitation with mental health treatment through frequent team member contact Collaboration between IPS and government employment and income support staff Vocational unit is comprised of two full-time employment specialists and a team leader IPS unit is led by a IPS team leader All eligible people expressing interest become participants ('zero exclusion criteria') Executive team support for IPS 	<ul style="list-style-type: none"> Work incentives planning Assist participants with illness disclosure Ongoing, work-based vocational assessment Rapid job search for competitive jobs Frequent, high quality employer contact Diverse job types and employers Individualised job search Time unlimited, individualised follow-along support Assertive community engagement and outreach

^a As per Supported Employment Fidelity Scale (Australia and New Zealand Version 2.0 (2011)).

Source: Becker et al. (2015); Waghorn and Lintott (2011).

C.4 Mutual Obligation Requirements

What are Mutual Obligation Requirements?

Jobseeker Payment and Youth Allowance recipients participating in employment support programs are required to complete Mutual Obligation Requirements (MORs). Employment support providers determine participants' MORs and are required to consider participants' personal circumstances (including whether they have a mental illness) and the local labour market when doing so. MORs come in two forms:

- Job search activities (capped at 20 jobs per month).
- Annual activity requirements (usually participation in Work for the Dole). jobactive participants take on annual activity requirements after receiving income support for more than 12 months, while CDP participants usually acquire annual activity requirements at the outset.

Participants must also attend appointments with Services Australia and their employment support provider and attend or act upon any job interviews or job referrals from providers (Australian Government 2017, 2019b).

Under the New Employment Services, it is anticipated that MORs will transition to a points-based system. More intensive activities (for example, job interviews and job search) will receive more points than less intensive activities (DESE 2020b).

Complaints against Mutual Obligation Requirements and compliance frameworks

Some participants to this Inquiry raised concerns about potentially negative impacts of MORs, provider interactions and the Targeted Compliance Framework on participants.

With the crippling anxiety I was experiencing appointments with the [jobactive] provider sent it into overdrive. (ACOSS, sub. 270, p. 2)

Employment agency and Centrelink requirements continue to be the number one reason in forcing me to stop work/study/volunteer work ... due to Mutual Obligation requirements and dramatically contribute to deterioration of Mental well-being. (CHF, sub. 496, p. 41)

Members [have indicated] that the TCF [Targeted Compliance Framework] can engender a greater level of stress for these jobseekers, detracting from their well-being and stability, generating barriers to employment. (JA, sub. 398, p. 8)

It is frustrating to see governments talk about improving mental health on one hand, and then introduce harsh penalties for vulnerable people on welfare, without seeming to recognise the barriers to employment for many with mental health problems. Cashless welfare cards, robo-debt policies and harsh measures against welfare recipients are likely to impact most specifically on those experiencing mental illness. (AMA, sub. 387, p. 6)

The last 15 years have seen increasingly punitive and inflexible requirements placed on recipients of income support payments ... harsh sanctions regimes, unreasonable job search requirements, and proposals for random drug testing, all demonise and stigmatise people, and cause significant stress. (cohealth, sub. 231, p. 10)

I have been penalised a few times with suspensions and only on one of these occasions was it my own doing ... When the sms comes at 4.55pm that your payments have been suspended, not knowing what for, it makes for high anxiety, especially when you know you've done nothing wrong. 99% of my suspensions have been an error on my agencies behalf. So, we live our lives daily with the unknown threat of non compliance. (Ewen Kloas, sub. 567, p. 2)

C.5 Temporary changes to income and employment support in response to the COVID-19 pandemic

As part of the Australian Government's response to the COVID-19 pandemic, temporary changes have been made to income support payments and associated employment support programs. These include:

- introducing the Coronavirus Supplement, a fortnightly payment of \$550 to non-pension income support recipients (including all JobSeeker Payment and Youth Allowance recipients) (Services Australia 2020b)
- introducing the First Economic Support Payment, a one-off payment of \$750 in March 2020 to pension and non-pension income support recipients (Services Australia 2020c)
- introducing the Second Economic Support Payment, a one-off payment of \$750 planned for July 2020 to pension and non-pension income support recipients who are not eligible for the Coronavirus Supplement (Services Australia 2020c)
- granting an exemption from MORs for participants isolated at home due to COVID-19 (Services Australia 2020b)
- allowing some employment support participants with caring responsibilities to be exempt from MORs (for example, a parent caring for a child whose school has been closed due to COVID-19) (Services Australia 2020b)
- expanding the eligibility criteria for the JobSeeker Payment and Youth Allowance to include sole traders, self-employed people, permanent employees who have lost their jobs, and people caring for someone with or isolated because of COVID-19 (DSS 2020)
- waiving assets tests and waiting periods for some payments and removing the requirement for proof of unemployment, rental arrangements and relationship status (Services Australia 2020a)
- reducing the maximum number of job searches that employment support participants must complete from 20 to 4 per month (Services Australia 2020d).

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D Employment and mental health

Mental ill-health affects participation in employment in two major ways. For individuals in employment, mental ill-health can affect their productivity, whereas for individuals outside the workforce, it often acts as a barrier to gaining and maintaining employment.

D.1 The role of employment in mental health

It is widely recognised that employment has a positive impact on an individual's mental health and there has been considerable research in this area (Modini et al. 2016; Waddell and Burton 2006; Waghorn and Lloyd 2005; Woodside, Schell and Allison-Hedges 2006).

In addition to income, employment provides a sense of identity and purpose, and a sense of structure and social connectedness. Being in employment is associated with better mental wellbeing, with lower rates of depression and anxiety (Harvey et al. 2012). Employment is also considered to play a key role in recovery from mental illness, and providing a pathway to employment can be critical to an individual's recovery (FCDC 2012).

A report prepared for the World Health Organisation and the International Labour Organisation pointed to five key positive aspects of employment in relation to health:

- time structure (an absence of time structure can have a negative psychological impact)
- social contact
- collective effort and purpose (employment offers a social context outside the home and family)
- social identity (employment being important for defining oneself)
- regular activity (organising daily life) (Harnois and Gabriel 2000).

In contrast, unemployment typically has a negative effect on an individual's mental health. The negative effects associated with unemployment include lower self-esteem, reduced social contact and poverty. There are strong links between unemployment and mental ill-health that are often exacerbated due to the related problems of social exclusion and poverty resulting from unemployment (Walsh and Tickle 2013).

The relationship between employment and mental health

There appears to be a bi-lateral relationship between employment and mental health. Bubonya, Cobb-Clark and Ribar (2017) in an analysis of the relationship between depressive symptoms and employment found that mental health problems are both a cause and, to a lesser extent, a consequence of unemployment. The more severe the depressive symptoms, the less likely an individual was to be in the labour force. The prevalence of depressive symptoms was higher the longer a person was out of the workforce.

This suggests that the loss of a job is likely to have a negative effect on mental health. While research has found the effects on mental health from the loss of employment were considered to be small to medium, these effects were often moderated by age, gender, occupation and the immediate economic environment (local unemployment rates, welfare system and demand for particular occupations). Men's mental health tended to deteriorate as they exited employment whereas for women the deterioration typically occurred after they had been out of the workforce for a period of time (Bubonya, Cobb-Clark and Ribar 2017). For men, their role in the household may be a factor in the immediate deterioration in mental health following the loss of employment, particularly where they are the primary income earner in the household (Artazcoz et al. 2004; Kuhn, Lalive and Zweimüller 2009).

There is some evidence that unemployment is associated with worsening mental health for young people who are wanting to, but cannot enter the workforce (Buffel, van de Straat and Bracke 2015). People who are middle-aged may have higher expenses, increasing the financial stress caused by unemployment, exacerbating the negative effect on mental health. Older people may be less affected by job loss the closer they are to retirement.

The threat of impending job loss and the social and economic context in which the job loss occurs can also have a significant effect on mental health. Those facing job losses through closures of large manufacturing enterprises (such as car manufacturing or steel industries) in areas with pre-existing socio-economic disadvantage, where re-employment prospects were limited, were more likely to experience adverse psychological outcomes (Myles et al. 2017).

In further work on the relationship between depressive symptoms and employment, Bubonya, Cobb-Clark and Ribar (2019) found strong evidence that depressive symptoms were a cause of employment problems. However, the study found no evidence for men and only limited evidence for women that unemployment and non-participation in the labour force raised the risk of severe depressive symptoms.

Given the complex relationship between employment and mental health, Bubonya, Cobb-Clark and Ribar (2019) considered that reducing the economic costs of mental illness is a challenge that needs to be addressed from both sides — improving mental health by improving employment outcomes and reducing barriers to employment for those with mental illness.

Importantly, having a common mental disorder (such as anxiety or depression) does not stop people being employed, and, as noted by the OECD, the vast majority of those with mild or moderate mental illness work (Bubonya, Cobb-Clark and Ribar 2017). However, the more

severe the mental illness, the less likely an individual is to work. Fritjers, Johnston and Shields (2014) in a study of Australians with mental ill-health found that declines in mental health were associated with further declines in employment and those with more severe conditions were less likely to seek work.

Although employment is associated with better mental health than unemployment and shifting from unemployment to employment improves mental health, there is some evidence that jobs with poorly designed work and a poor work environment can exacerbate mental ill-health (Harvey et al. 2014). A study by Butterworth et al. (2011) found that moving from unemployment to a job characterised by low job control, high job demands, poor security and the perception of unfair pay could result in a decline in mental health compared to unemployment. The issues around mental health in the workplace are discussed in chapter 7.

D.2 Employment outcomes for those with mental illness

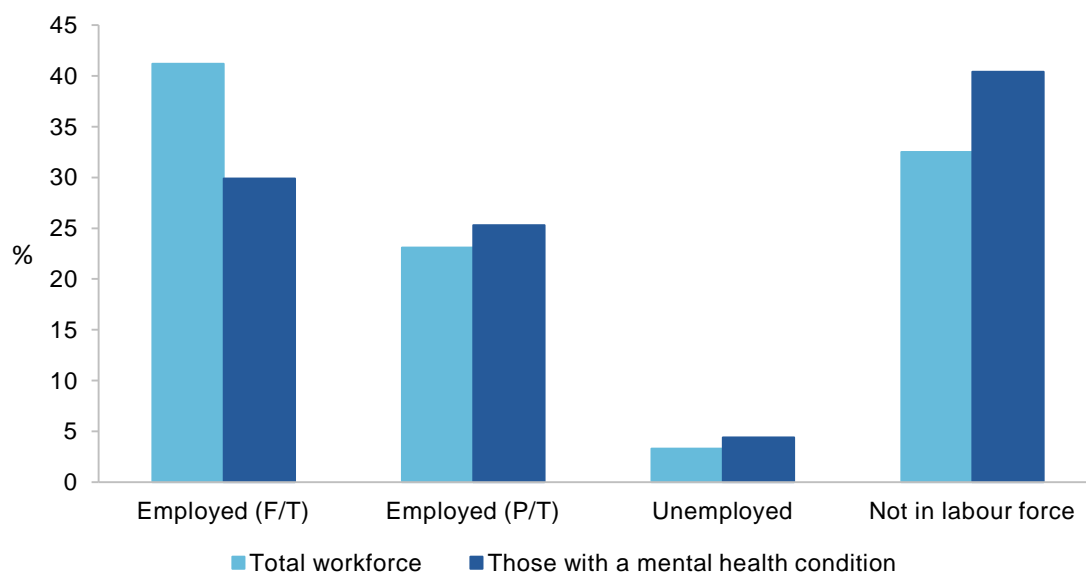
Employment outcomes for people with mental illness are worse than for the wider population. In 2017-18, 55% of working age Australians with mental illness were employed, compared with 64% of all working age Australians (ABS 2019). This is reflected in the share of people with mental illness not in the labour force or unemployed being higher than that of the wider working age population. In regard to part-time employment, the share of people with mental illness employed on this basis was slightly above that of the wider working age population (figure D.1).

The unemployment rate for people with moderate mental illness in Australia is about two and half times that for those without mental illness (figure D.2). For people with severe mental illness, it is more than five times the rate of those without mental illness. Switzerland and the Netherlands have the smallest differences in the rate of unemployment between people with severe or moderate mental illness and those without mental illness. In all countries, unemployment rates were higher for people with severe mental illness (figure D.2).

In comparing employment outcomes based on type of disability, unemployment rates for those with a psychological disability are higher than for those with an intellectual disability or physical disability, but slightly below those with a sensory and speech disability (figure D.3).

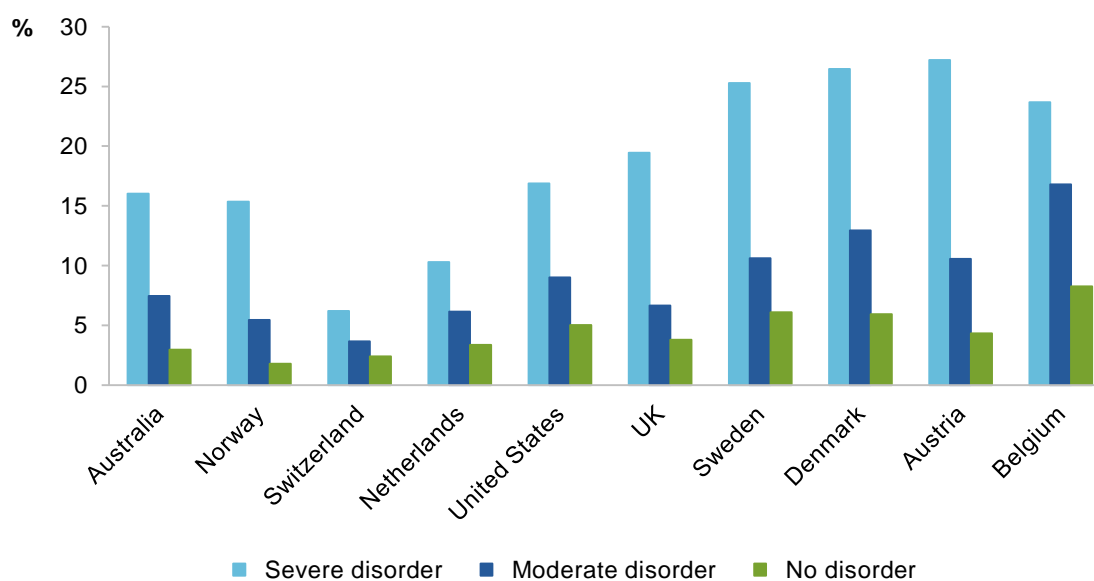
Figure D.1 Labour force status for people with mental illness and the Australian population

Persons aged 16 to 64 years, 2017-18



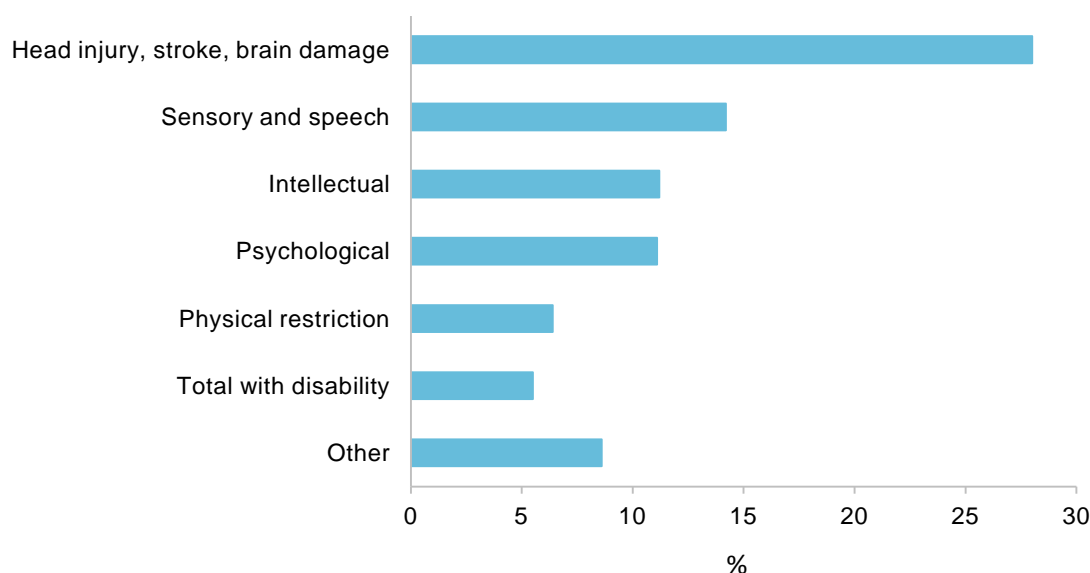
Source: ABS (Microdata: National Health Survey, 2017-18, Cat. no. 4324.0.55.001).

Figure D.2 Unemployment rates by severity of mental disorder, selected OECD countries, 2015



Source: OECD (2015).

Figure D.3 Unemployment rate by disability type
2012



Source: ABS (*Disability and Labour Force Participation*, 2012, Cat. no. 44433.0.55.006).

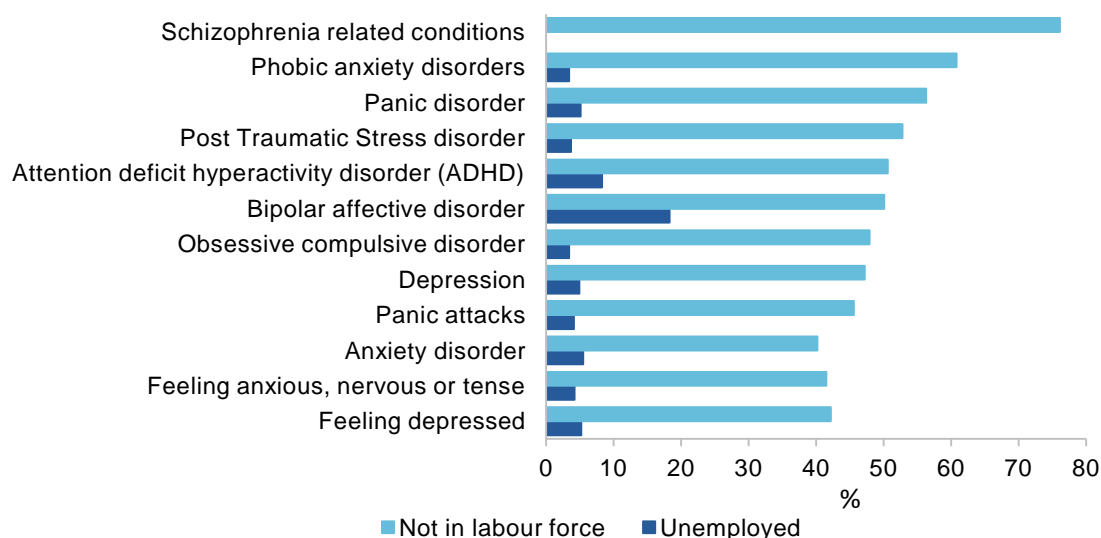
There is also considerable variation in employment outcomes for those of working age with different reported mental health conditions (figure D.4). For example, a higher proportion of people with schizophrenia related conditions (76%) are not in the labour force compared with people with most other mental health conditions (between 40% and 50%).

In regard to unemployment rates (unemployment being defined as actively seeking work), those with bipolar disorder experienced unemployment rates significantly higher than those with other mental health conditions. For most reported mental disorders, the rate of unemployment was between 4% and 5%, except for attention deficit hyperactivity disorder (ADHD) where the rate was 8% (figure D.4).

The use of mental health services provided through the Medicare Benefit Schedule (MBS) and mental health medication provided through the Pharmaceutical Benefits Scheme (PBS) by labour force status highlights the poorer labour market outcomes for those with mental illness. In examining the use of MBS-rebated mental health services and PBS mental health medication, part-time workers and unemployed people use mental health services and medications at a higher rate than full-time workers. For those not in the labour market, the use of PBS mental health medications is more than 2.5 times the rate of the rest of the population (figure D.5).

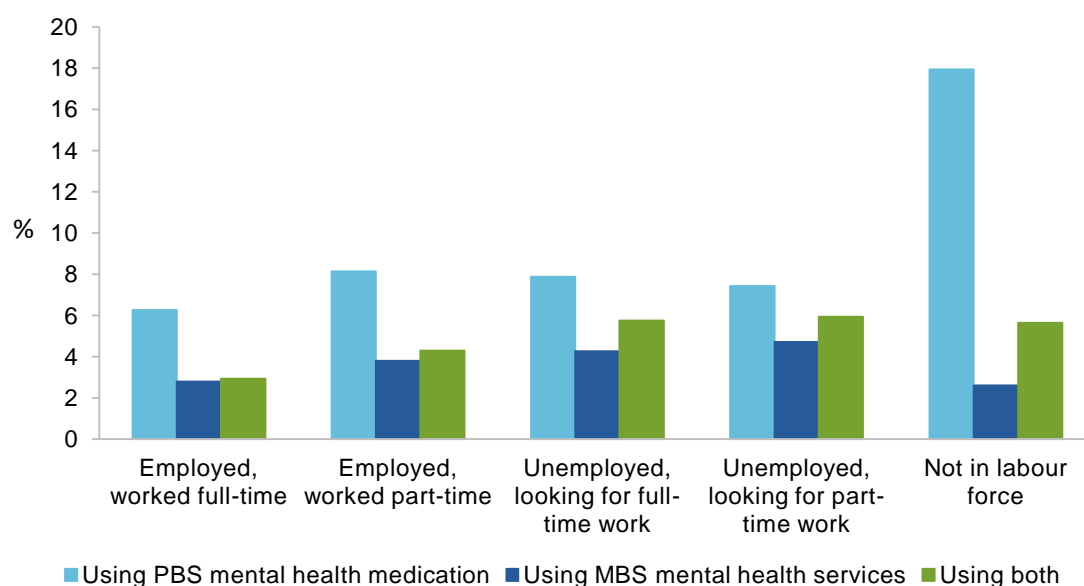
Figure D.4 Unemployment and not in the labour force rates by type of mental illness

Persons with selected conditions, aged 16 to 64 years, 2017-18



Source: ABS (Microdata: National Health Survey, 2017-18, Cat. no. 4324.0.55.001).

Figure D.5 Labour force status by use of MBS-rebated mental health services and PBS mental health medication



Source: Productivity Commission estimates based on ABS (Microdata: Multi-Agency Data Integration Project, Australia, Cat. no. 1700.0)

The barriers to employment facing people with mental illness

The poorer employment outcomes for people with mental illness are often considered to be due to the employment barriers facing them. Most people with mild to moderate mental illness manage their health without experiencing negative employment outcomes (chapter 19). Others, particularly those with severe mental illness, face a number of barriers to gaining and retaining a job. These barriers relate either to the individual, to the community or to the mental health system (figure D.6).

Individual barriers

Many of the symptoms of mental illness and the medication to treat mental illness can impact on an individual's ability to work. For example, mental illness can affect cognitive, perceptual, affective and interpersonal abilities. Depression can result in a loss of energy, motivation and self-confidence, and schizophrenia can result in fatigue and poor attention and concentration. This means that hours of consecutive work can be limited (FCDC 2012).

Medication may also produce side effects that limit an individual's capacity to work, such as sedative effects. The episodic nature of mental illness can act as a barrier to people both gaining and retaining employment given that there are likely to be periods when treatment and support will require work demands to be reduced (FCDC 2012).

People with mental illness may also face educational disadvantage, poor physical health and homelessness, providing further barriers to employment.

Figure D.6 **Barriers to employment**



Source: Derived from FCDC (2012).

Community barriers

There are also those barriers to employment that relate to how the community, such as employers, family, friends and healthcare professionals, view people with mental illness.

The stigma associated with mental illness is considered to be a significant barrier to both obtaining and maintaining employment for people with mental illness. VicHealth and Partners (sub. 131, p. 10) noted:

While some of these negative employment outcomes result from the impact of the condition or treatment, much is also driven by stigma, discrimination and a lack of support, which results in a lack of opportunity.

As a result, when seeking employment, people with mental illness are reluctant to disclose their mental illness to employers (One Door Mental Health, sub. 108; Jobs Australia, sub. 398).

Evidence provided to a Victorian Parliamentary inquiry into the workforce participation of people with mental illness noted that many employers in the selection process would overlook a potential candidate if they knew the applicant has mental illness as the perception was that they would be taking on an unreliable employee and possibly a liability (FCDC 2012). Employers expect workers with mental ill-health to have lower productivity and higher absenteeism than other workers, and will either fail to hire, or fail to promote those with mental ill-health (Cook 2006).

Moreover, for people in employment with mental illness, there is also a reluctance to disclose due to fears of discrimination and a lack of employer support. Research undertaken by SANE Australia found that 38% of those surveyed did not disclose their mental illness at work (Mentally Healthy Workplace Alliance, sub. 209).

There also may be concerns expressed by family, friends or carers to dissuade those with mental illness from seeking employment due to concerns that the stress of work may exacerbate their mental illness (FCDC 2012; Rinaldi et al. 2008).

When mental health professionals, employers and people themselves have low expectations, this can discourage those with mental ill-health from seeking out employment. A self-fulfilling prophecy may exist: clinicians (who often see people when they are most unwell) expect the person will struggle with the demands of a workplace, people with mental illness are not encouraged to join the workforce, and those who do, are more likely to leave the workforce (Rinaldi et al. 2008). This perpetuates the idea that those with mental ill-health are unlikely to succeed in the workforce.

System-wide issues

People with mental illness can also face barriers to employment due to a lack of coordination between clinical and employment services. There may also be issues as to the appropriateness and effectiveness of various employment services on offer.

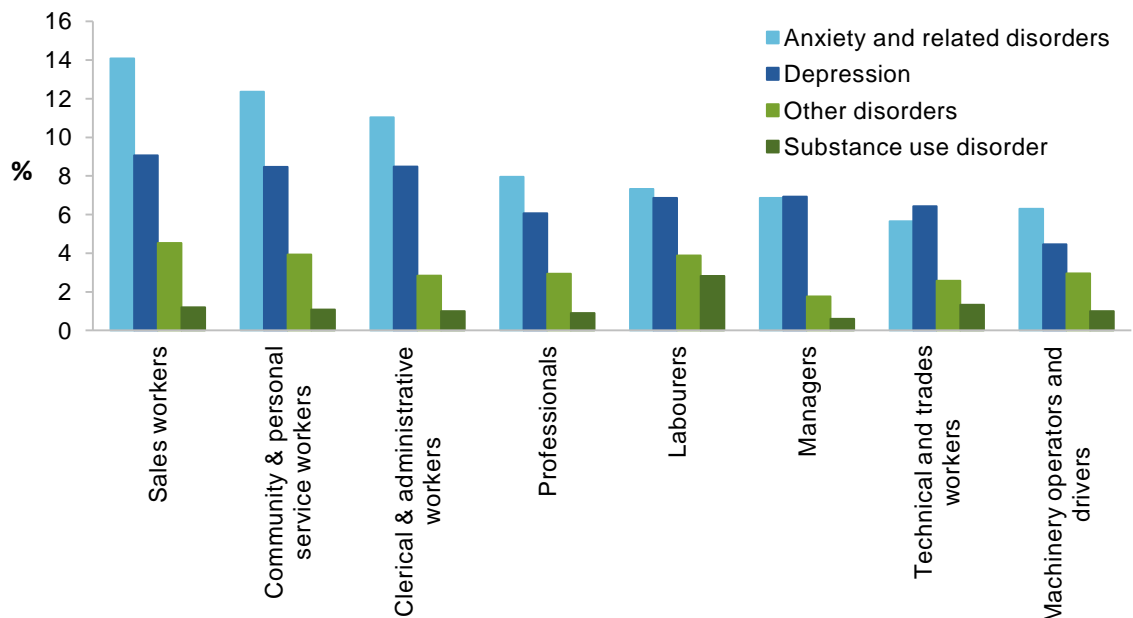
Chapter 19 examines in detail the barriers facing people with mental illness and makes a number of recommendations to improve the effectiveness of employment support available to them.

D.3 The mental health of those in the workforce

The mental health of those in employment and the impacts of the workplace on their mental health is discussed in chapter 7.

Mental illness tends to be more prevalent in certain occupations and industries. By occupation, those working in sales and community and personal services are more likely to have had or have a mental health condition (figure D.7). However, these occupational categories do not separate out those high risk occupations such as police, emergency service workers and correctional officers, who are relatively more likely to develop a work-related mental illness or psychological injury (as discussed in chapter 7).

Figure D.7 Prevalence of mental illness by occupation^a



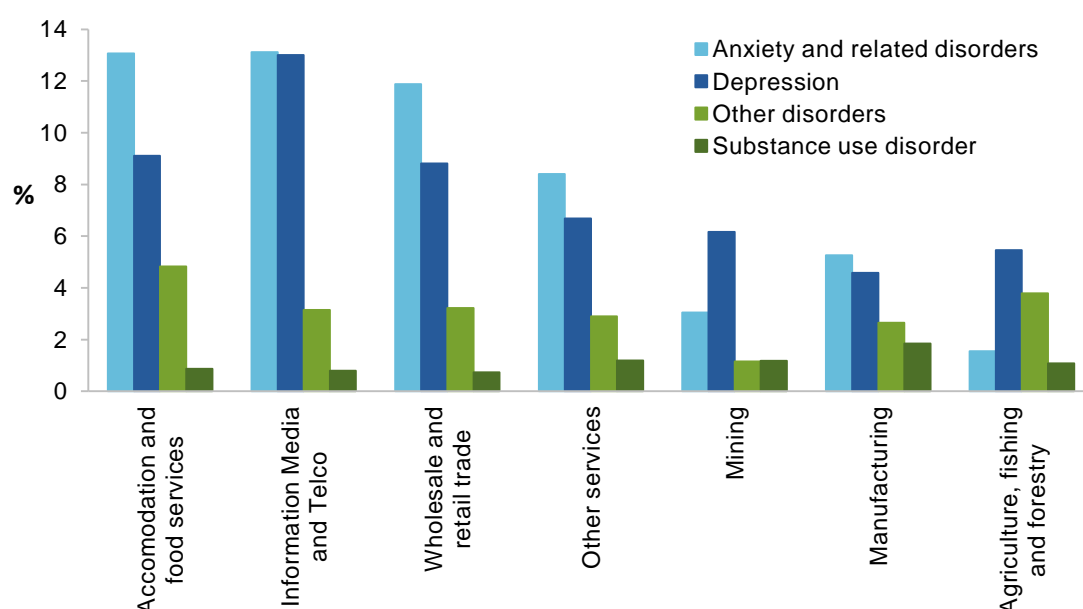
^a Share of people employed in each sector who have had or have various mental conditions.

Source: ABS (Microdata: National Health Survey, 2017-18, Cat. no. 4324.0.55.001).

For example, a survey conducted by Beyond Blue found that 8% of ambulance employees, 9% of fire and rescue employees and 11% of police employees have probable post-traumatic stress disorder (PTSD) compared to 4% of adult Australians and 8% of the Australian Defence Force. About 40% of emergency service employees and 33% of emergency service volunteers reported having been diagnosed with a mental health condition at some stage of their life compared to 20% of adult Australians (Beyond Blue 2018).

By industry sector, those workers who have had or have a mental health condition are lowest in agriculture, fishing and forestry and highest in accommodation and food services (figure D.8).

Figure D.8 Prevalence of mental health conditions by industry sector^a



^a Share of people employed in each sector who have had or have various mental conditions.

Source: ABS (Microdata: National Health Survey, 2017-18, Cat. no. 4324.0.55.001).

Are there differences between full-time and non-full-time employment?

The growth in flexible work such as part-time, casual and fixed term contract employment in Australia has been well documented (Gilfillan 2019; Laß and Wooden 2019). However, the impact of different employment arrangements — full-time, part-time casual, fixed term contract — on mental health has not received the same attention as the impact of employment more broadly on mental health.

Some qualitative work on the impacts of casual employment on employees, households and communities undertaken in Australia found that casual work was detrimental to mental health due to uncertainty in employment and income, insecurity, often being an outsider in

the workplace and a lack of training opportunities for skill development and advancement (Pocock, Prosser and Bridge 2004).

International studies have found a higher prevalence of mental illness in non-permanent employment compared to permanent employees, although this varied by occupation (Virtanen et al. 2005). Quantitative research on temporary agency work in Europe indicated that temporary agency work is not consistently related to lower job satisfaction or mental health impairments, although job insecurity and poor working conditions could have adverse effects (Hunefeld, Gerstenberg and Huffmeier 2019). Results from an econometric study as to whether temporary employment was a cause or a consequence of poor mental health in the United Kingdom indicated that while those in temporary employment tended to have poorer mental health than those in permanent employment, those permanent workers with poorer mental health tended to shift into temporary employment (Dawson et al. 2015).

Comparing the usage of PBS mental health medication and MBS-rebated mental health services indicates very little difference between full-time and part-time workers. The share of part-time workers using PBS mental health medication is only 2% higher than for full-time workers and only slightly higher (1%) in relation to the use of MBS mental health services (figure D.5).

An Australian study by Richardson, Lester and Zhang (2012) using quantitative analysis found no evidence that casual or fixed-term contract employment was harmful to people's mental health. In concluding, the study noted that their findings did not indicate that no one was harmed by being employed on a casual or fixed-term contract. However, there was no systemic relationship between harm to mental health and these working arrangements and for many people they were a preferred form of employment. It also considered that the protections and pay loadings provided to casual and contract workers acted to ameliorate any harmful effects (Richardson, Lester and Zhang 2012).

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E Bullying and mental health

Bullying can have adverse impacts on physical and mental health, both in the short term and later in life. It can lead to physical injury, social problems, psychological injury and mental illness and in extreme cases, death. Victims of bullying are at an increased risk of developing mental health problems and for people who are bullied when younger, the adverse impacts can continue into adult life.

Bullying is generally defined as aggressive behavior intended to harm or disturb that occurs repeatedly over time. It is based on an imbalance of power — where the more powerful person or group attacks the less powerful one (Gruber and Finernan 2008). Bullying comes in many forms. For example, verbal bullying (denigrating and demeaning remarks or threatening physical harm), physical bullying (hitting, kicking and pushing), social bullying (spreading rumors, excluding people and embarrassing people in public) and cyberbullying (using social media platforms to denigrate and demean someone). Bullying can occur in a range of situations, but is typically associated with school and the workplace. This appendix focuses on bullying in those environments.

E.1 School bullying as a public health issue

Bullying is a significant issue for Australian schools: 27% of students in year 4 to year 9 report frequent bullying and 20% of young people aged under 18 years experience online bullying (or cyberbullying) in any given year (AUARA, sub. 431). While cyberbullying tends to peak in adolescence, it can also affect older students. A survey of university students has found that 14.5% had been victims of cyberbullying.

All forms of bullying — face-to-face, physical, verbal or cyberbullying — can be a trigger for mental illness in adolescence and later in life. This applies to victims, bullies and people who witness bullying. People who are affected by cyberbullying may be at greater risk of depression and suicide ideation compared with victims of other types of bullying (AUARA, sub. 431).

The strong link between bullying and mental illness has changed the way it is perceived by students, schools and policy makers:

Historically bullying has not been seen as a problem that needed attention, but rather has been accepted as a fundamental and normal part of childhood ... however, this view has changed and schoolyard bullying is seen as a serious problem that warrants attention. Bullying is an age-old societal problem, beginning in the schoolyard and often progressing to the boardroom. (Campbell 2005, p. 2)

Bullying imposes an economic cost, both during the school years and after students leave school. Estimates of the cost of bullying for one cohort of students during their 13 years of compulsory education reach \$525 million, mainly in the form of the time spent by school staff to address bullying behaviour. Long-term costs, however, are far higher, estimated at \$1.8 billion over the 20 years after completing school. These costs are due to:

- reduced income potential of bullying victims, arising from the effects of bullying on their academic outcomes
- chronic mental illnesses, which impose substantial costs on individuals and the mental health systems
- continued bullying behaviour by perpetrators. For example, research has shown that bullying perpetrators are far more likely to instigate domestic violence, which in itself leads to substantial health (including mental health) costs (PwC 2018).

Addressing bullying in schools

Governments have made substantial efforts to tackle bullying behaviour among young people. These include national policy initiatives as well as school-based policies.

National policy initiatives

The Safe and Supportive School Communities (SSSC) Working Group brings together the Australian and State and Territory Governments and representatives of independent and Catholic schools. The group manages an online portal to assist schools in developing anti-bullying policies and provides additional resources for children and their parents. The group also coordinates a National Day of Action against Bullying and Violence, which in 2019 involved more than 5700 schools nationally (SSSC 2019).

In 2015, the Australian Government established the Office of the eSafety Commissioner, to improve the safety of children online and reduce cyberbullying (Department of Communications 2014). Since then, the role of the commissioner has expanded to assist Australians of all ages that encounter anti-social behaviour online. In 2017-18, the Office of the eSafety commissioner received about 400 complaints of serious cyberbullying from young people under the age of 18 years. The office works with social media services to remove cyberbullying material posted online. It also collaborates with schools to resolve complaints and accredits external providers of cyberbullying awareness programs delivered in schools (Office of the eSafety Commissioner 2018).

School-based interventions

Research has shown that both proactive and reactive interventions are important and effective in reducing bullying in schools. Proactive interventions include various practices engaging with students to promote positive behaviour and peer-support schemes that improve the overall school climate; and promoting social and emotional learning (SEL)

programs. Reactive interventions include sanctions imposed on the perpetrators of bullying; supporting victims of bullying; mediation and various approaches to restorative practices. Such practices can be helpful in tackling both face-to-face bullying and cyberbullying, however, they need to be tailored to the specific incidents and the school community (Rigby and Griffiths 2018). The most successful bullying reduction tends to require significant investments of time and resources, as well as effective teacher training and leadership (Pearce et al. 2011).

Australian schools have implemented a mix of these approaches, with an increased priority on proactive approaches (Rigby and Griffiths 2018). SEL programs are part of the Australian curriculum and implemented in all schools. Chapter 5 discusses in detail the quality of these programs, the barriers to their success and the ways they can be tackled.

Despite significant policy efforts, it appears that more can be done to strengthen school-based bullying prevention. A survey of schools in New South Wales, Victoria, Queensland, South Australia and Western Australia, found that, although all had explicit policies to tackle bullying, only half of students were aware that it existed.

Some educational leaders showed no surprise that so many students were unaware of the policy. They suggested that schools are currently required to have so many policies that producing anti-bullying policies tends to be regarded as an act of compliance. The policies themselves, according to one educational leader, are not user-friendly, out of date or contain minimal information. (Rigby and Johnson 2016, p. 67)

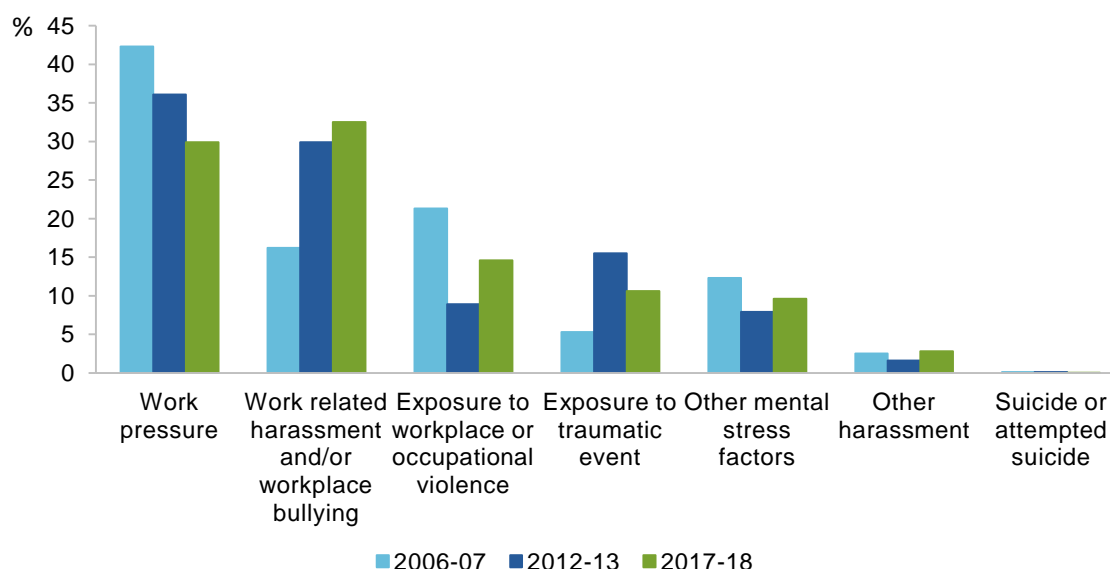
Only about 38% of children surveyed who were bullied reported the behaviour to the school. When bullied children did report the behaviour to teachers, they generally felt the school was helpful in addressing the issue. Some of the teachers surveyed raised concerns about their ability to deal with bullying, and responses reflected the need for additional pre-service training. Chapter 5 discusses the issues of education policies and teacher training in detail.

E.2 Workplace bullying

Bullying in the workplace — as well as in other situations and through social media platforms — has become a widely acknowledged cause of mental ill-health. It has also been increasing as a cause of work-related mental stress (figure E.1). Workplace bullying can have negative effects on mental health through depression, anxiety, stress and suicide (headspace 2012). Some studies have indicated that the prevalence of bullying in the workplace has increased, and this is supported by the increase in serious workers compensation claims resulting from workplace bullying (figure E.1).

Figure E.1 Accepted workers compensation claims, by type of mental stress

Share of total accepted serious claims in Australia, selected years^a



^a Serious claims are those accepted claims that resulted in absence from work of a single working week or more. Data does not include Victoria and is provisional for 2017-18.

Source: Safe Work Australia's National Data-Set for Compensation-based Statistics.

How prevalent is workplace bullying?

There has been wide variation in the estimates of the prevalence of bullying in Australian workplaces, due to inconsistencies in the definition of bullying, varying survey questions, different time frames for reporting bullying and different measurement methods such as self-labelling of bullying experiences or by measurement of behavioural experience. These prevalence rates differ across different industries and occupations.

For example, over 95% of 2529 school employees (68% of whom were teachers) had experienced one of the 42 bullying workplace behaviours identified by the researchers in surveys conducted in 2005, 2007 and 2009. This research noted that while perceptions of bullying were extremely wide ranging, where an individual believed or perceived they were being bullied, their actions would reflect that belief (Riley, Duncan and Edwards 2012). In a 2018 survey of public school teachers in New South Wales, 20% reported that they had been subject to bullying in their workplace in the past 12 months (NSW Public Service Commission 2018). In response to a similar survey question, 13% of respondents to the 2019 Australian Public Service Census indicated that they had been subject to harassment or bullying in their workplace in the past 12 months (Australian Public Service Commission 2019). A 2015 online survey of members of the Royal Australian College of

Surgeons, found that 39% of respondents reported having been subject to bullying behaviour in the workplace (Crebbin et al. 2015).

Prevalence can potentially be overestimated if the term ‘bullying’ captures other behaviours that may not actually be considered as bullying or underestimated if employees are reluctant to report bullying behaviour.

Safe Work Australia (2012) considers the most reliable estimate comes from the Australian Workplace Barometer study. The national prevalence rate for workplace bullying (based on population) drawing on the Australian Workplace Barometer project indicated that nearly one in 10 people (9.4%) surveyed reported being bullied in the workplace in 2014-15 (Potter, Dollard and Tuckey 2016). This was based on the definition of bullying set out in Workplace Health and Safety (WHS) regulations (repeated and unreasonable behaviour directed towards a worker or group of workers that creates a risk to health and safety).

The Australian Workplace Barometer Project indicated that these prevalence rates were higher than in the previous period between 2009 and 2011 where only 7% of workers reported that they had been bullied in the workplace. The growing awareness and media campaigns around the effects of workplace bullying may have resulted in increased prevalence rates as people have become more readily able to recognise bullying (Potter, Dollard and Tuckey 2016). There has also been an increasing focus on bullying in the workplace by WHS agencies. Safe Work Australia and State and Territory WHS agencies have produced guidelines to assist employers to determine what does and does not constitute workplace bullying. This is to separate out reasonable management action taken in a reasonable way to address workplace performance from bullying behaviour that creates a risk to health and safety (box E.1).

Bullying across different industries

By industry, workplace bullying and harassment (as a share of all serious claims caused by mental stress) was most significant in the manufacturing, financial and insurance services and professional, scientific and technical services industries (figure E.2).

Workplace bullying is found in all workplaces. For example, the Law Council of Australia (sub. 492, p. 29) drew on a survey of the Victorian Bar that asked, ‘How could your quality of working life be improved?’ and the most widely recorded response was, ‘better judicial behaviour’, referring to the prevalence of judicial bullying, including denigration and humiliation of counsel.

The Victorian Auditor General’s report on bullying and harassment in the Victorian health sector found that while its prevalence was not conclusively known, a recent survey suggested it was widespread in the sector. For example, a 2013 Victorian Public Sector Commission survey reported 25% of health agency employees reported experiencing bullying (VAGO 2016).

Box E.1 **What is and what is not workplace bullying?**

What is workplace bullying?

Workplace bullying is repeated and unreasonable behaviour directed towards a worker or a group of workers that creates a risk to health and safety. Repeated behaviour refers to the persistent nature of the behaviour and can involve a range of behaviours over time. Unreasonable behaviour means behaviour that a reasonable person, having considered the circumstances, would see as unreasonable, including behaviour that is victimising, humiliating, intimidating or threatening.

Examples of behaviour, whether intentional or unintentional, that may be workplace bullying if they are repeated, unreasonable and create a risk to health and safety include but are not limited to: abusive, insulting or offensive language or comment; aggressive and intimidating conduct; belittling or humiliating comments; victimisation; practical jokes or initiation; unjustified criticism or complaints; setting tasks that are unreasonably below or beyond a person's skill level; and spreading misinformation or malicious rumours.

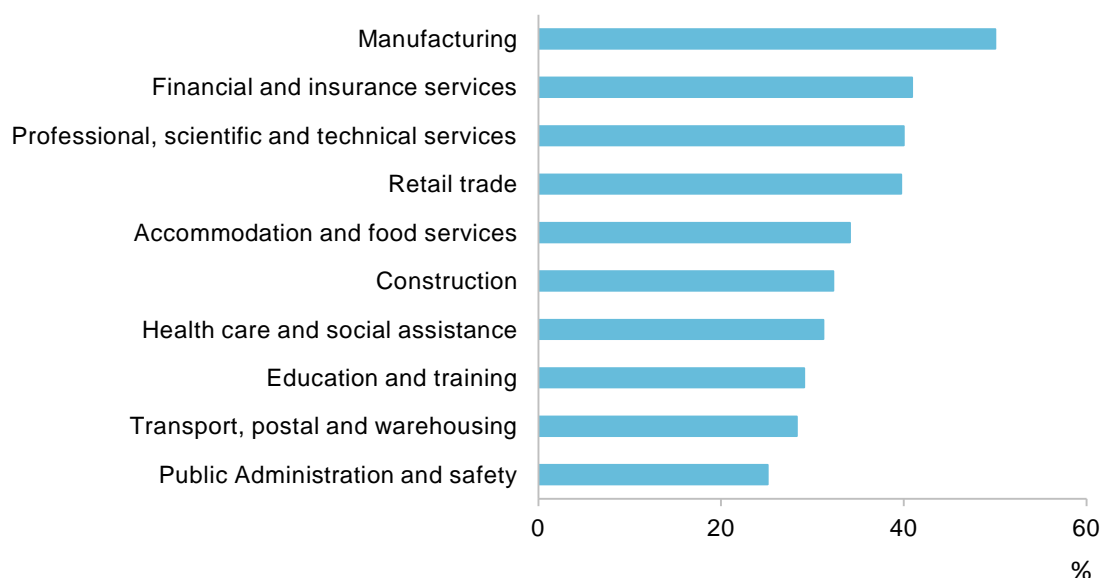
What is not workplace bullying?

Safe Work Australia points out that a single incident of unreasonable behaviour is not workplace bullying nor is reasonable management action taken to effectively direct and control the way work is carried out. It is reasonable for managers and supervisors to allocate work and give feedback on a worker's performance. These actions are not workplace bullying if they are carried out in a lawful and reasonable way, taking the particular circumstances into account.

A manager exercising their legitimate authority at work may result in some discomfort for a worker. The question of whether management action is reasonable is determined by considering the actual management action rather than a worker's perception of it, and where management action involves a significant departure from established policies or procedures and whether the departure was reasonable in the circumstances. The exception or defence based on reasonable management action being undertaken in a reasonable manner in regard to workers compensation claims for psychological injuries is discussed further in chapter 7.

Differences of opinion and disagreements are generally not workplace bullying. People can have differences or disagreements in the workplace without engaging in repeated, unreasonable behaviour that creates a risk to health and safety. Some people may also take offence at action taken by management, but that does not mean that the management action in itself was unreasonable. However, in some cases conflict that is not managed may escalate to the point where it becomes workplace bullying.

Figure E.2 Workplace harassment/bullying as share of all serious claims caused by mental stress, selected industries 2017-18^{a,b}



^a Data for 2017-18 is provisional and does not include claims data from Victoria. ^b Serious claims are those that resulted in a least a week's absence from work.

Source: Safe Work Australia's National Data-Set for Compensation-based Statistics.

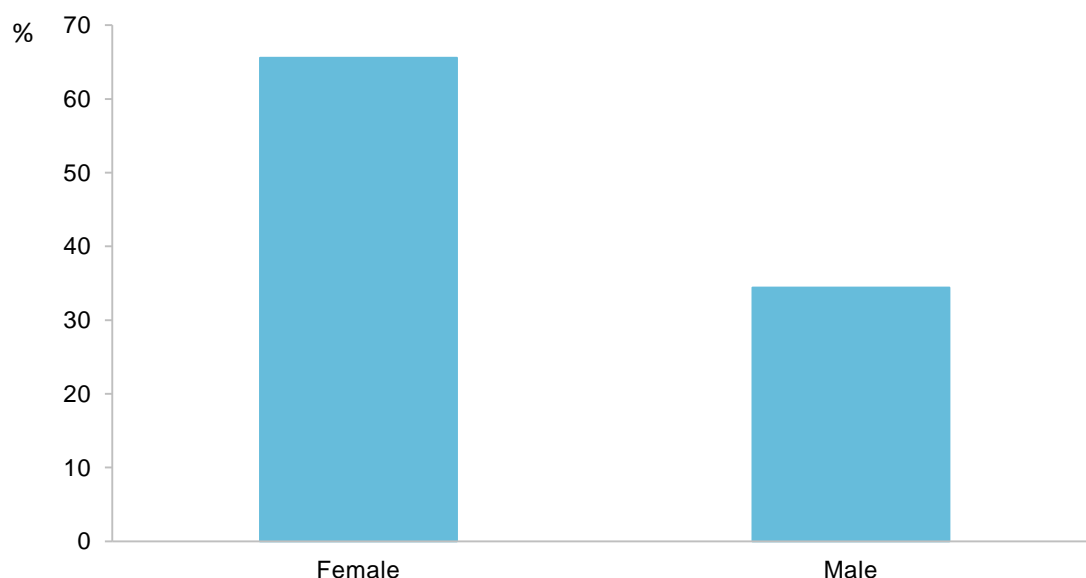
Bullying across jurisdictions

By jurisdiction, accepted workers compensations claims for bullying and harassment as share of all mental health-related claims vary. Of the jurisdictions that provided data to the Productivity Commission, these claims as a share of all accepted mental health claims ranged from just over 18% to 40%.

Workers compensation claims for bullying are likely to be rejected

As noted in chapter 7, mental health-related workers compensation claims are more likely to be rejected than non-mental health-related claims, with about 25% to 60% of claims rejected depending on the jurisdiction (figure 7.4). For workers compensation claims relating to bullying and harassment, rejection rates ranged from 30% to nearly 80%, for those jurisdictions where data was provided. Women accounted for a higher proportion of accepted work-related mental health claims between 2012-13 and 2016-17 compared with men (chapter 7; figure E.3).

Figure E.3 Serious workers compensation claims for bullying, by gender, selected jurisdictions^a
(Five year average from 2014-15 to 2018-19)



^a Does not include Victoria.

Source: Data provided by State and Territory workers compensation agencies and Comcare.

What drives workplace bullying?

There are a number of reasons why workplace bullying occurs. A lack of managerial regard for the psychological health of their employees or a poor psychosocial safety climate has been associated with bullying (chapter 7). Other causes include the use of bullying to increase the productivity of the workforce, or as a means of maintaining power and status within a workplace. Poor quality work with poorly designed jobs and tasks, with high levels of demand, but low levels of control are also considered to give rise to bullying in the workplace (Potter, Dollard and Tuckey 2016).

The Productivity Commission heard personal stories of workplace bullying (for example, Jane Jervis, sub. 593; Joyce Noronha-Barrett, sub. 518). In some cases, people have felt that being good at a job is a risk factor for bullying, as it may cause envy among co-workers (confidential personal communication).

Bullying versus harassment

While often mentioned in tandem, bullying is considered to be different from harassment. Bullying involves repeated unreasonable behaviour whereas harassment can be inferred from a single incident. Safe Work Australia defines harassment as unwelcome behaviour

that intimidates, offends or humiliates a person and may involve sexual harassment or unlawful discrimination (whereby an individual or group of people are treated unfairly or less favourably based on a particular characteristic or due to belonging to a particular group of people) (Safe Work Australia 2016). It is also described as unwanted behaviour that offends, humiliates or intimidates a person and targets them on the basis of a characteristic such as race, gender or ethnicity. While the terms are often used interchangeably and share similar antecedents, bullying is viewed by some as being more severe than harassment (Potter, Dollard and Tuckey 2016).

Harassment is typically addressed through anti-discrimination legislation (such as the *Sex Discrimination Act 1984* (Cth), *Racial Discrimination Act 1975* (Cth) and the *Disability Discrimination Act 1992* (Cth)) rather than WHS and enables a victim of harassment to make a complaint to an external agency and, in effect, launch legal proceedings against the employer (Power 2017).

Anti-discrimination legislation provides for a prohibition of certain behaviour whereas WHS imposes a positive obligation to prevent harm. Enforcement under anti-discrimination legislation is mainly through an individual making a complaint followed by a private confidential conciliation process with the remedies granted primarily in the form of compensation to the complainant. With anti-discrimination legislation, enforcement rights are with the individual and, unlike with WHS regimes, there is no government agency in place to identify and prosecute any breaches (Smith, Schleiger and Elphick 2020).

The estimated costs of bullying

The costs of bullying in the workplace are estimates. In 2010, the Productivity Commission reported an estimated cost to business of between \$17 billion and \$36 billion — this estimate was founded on work by Sheehan et al. (2001) using an estimated prevalence rate of 15% (based on the approximate mid-point of two international estimates). Applying a more conservative international prevalence rate of 3.5%, produced an estimated annual cost to business of between \$6 billion and \$13 billion (PC 2010).

The \$36 billion figure (the upper estimate at the higher prevalence rate) has since often been referred to as the annual cost of workplace bullying in Australia. More recent estimates undertaken by the Productivity Commission for this Inquiry using the same methodology, but with a prevalence rate of 9.4% (as estimated by the Australian Workplace Barometer study) and adjusting for population growth and inflation, produced an estimated cost of between \$22 billion and \$47.4 billion with a midpoint estimate of \$34.7 billion in 2018.

These costs include loss of productivity, absenteeism, legal and compensation costs and redundancy and early retirement payouts. There are also the costs to management in dealing with bullying claims, investigating these claims, and workplace support measures and services provided to workers, such as though counselling.

Where bullying cases enter into the public domain there is also the risk of damage to the brand and goodwill of a business. There are also significant costs imposed on the victims of bullying, including isolation and withdrawal, fear of dismissal, stress and anxiety, low self-esteem and any related physical symptoms. Wider costs to the community can include any health and medical costs required to treat a victim of bullying, income support and other government benefits provided to victims of bullying who become unemployed.

In addition to the psychological harm that workplace bullying can cause, it can also impact on the physical health of the victim resulting in further costs due to their inability to participate and be productive. There is also the potential impact on bystanders who have observed the behaviour who may then withdraw themselves to avoid becoming a victim or suffer vicariously, whereas other bystanders may align themselves with the perpetrator or perpetrators to protect themselves (Working Well Together, sub. 266).

WHS and workplace bullying

The responsibility to prevent workplace bullying is contained in WHS legislation through the duty of care held by employers to provide a healthy and safe working environment for their workers. Workers also have the duty to ensure their actions, including their behaviour towards others, do not constitute a risk to the health and safety of themselves or other people in the workplace. While there is no explicit prohibition of bullying in WHS legislation, there is an implied duty of care, Safe Work Australia noted:

All work health and safety laws in Australia recognise workplace bullying as work health and safety issue with the responsibility to prevent workplace bullying covered by the primary duty of care held by employers (House of Representatives Standing Committee on Education and Employment 2012).

However, bullying is a difficult issue in the workplace. Employers and WHS inspectors find bullying type claims to be more resource intensive, complex and difficult to resolve in comparison to WHS issues related to physical safety. Previous work by the Productivity Commission highlighted the difficulties surrounding cases of bullying as they were often emotive, and involved a range of different individual interpretations of events, making it more difficult to substantiate a claim.

A study of state and territory government WHS inspectors across different jurisdictions and their involvement with psychosocial hazards in the workplace highlighted that bullying cases were often linked to the performance of the complainant. It was often difficult for the inspector to resolve and or verify if the issues of performance were genuine or manufactured to delegitimise the complaint and how to balance competing claims when there often appeared to be fault on both sides. Moreover, as claims of bullying almost always involve criticism of co-workers or managers, there is a risk that investigation could involve further victimisation, particularly as people accused of bullying in being able to effectively respond to the allegation would need to be informed of the identity of the complainant (Johnstone,

Quinlan and McNamara 2008). A Victorian Government WHS inspector, in an interview for the study, highlighted the difficulties in dealing with cases of workplace bullying:

... it is such a grey area and it is so emotive and so personal to people and it's a he-said, she-said, that you cannot investigate, that you cannot validate, that you cannot verify and people who put in the complaint, are generally wounded people for some other reason other than what has gone on with the scenario. (Johnstone, Quinlan and McNamara 2008)

Worksafe Western Australia commented that in its experience, alleged cases of workplace bullying are often confused with other issues such as discrimination or equal opportunity issues, a one off event of workplace conflict or aggression, legitimate management decisions or managing staff performance. It said:

A not uncommon scenario is where a worker is treated in a manner they consider to be inappropriate from which they then form the view that they are the subject of bullying. That worker can then develop selective attention and only focus on those behaviours by the alleged bully that fit their perception, At the same time if the original trigger was a performance issue, this performance issue continues, attracting more attention, thus further reinforcing a perception of bullying (Department of Commerce (Western Australia) and Worksafe Western Australia 2012, p. 11).

In a study of bullying of teachers in Catholic schools, the most significant form of bullying based on teachers responses was the targeting of negative comments about their work and the withholding of praise or recognition. The authors of the study noted that this finding could be partially explained as that poorly performing teachers viewed attempts by the principal or executive staff to improve performance as bullying and this in turn raised the issue of how senior staff should deal with performance issues. An alternative explanation was that teaching culture did not encourage the acknowledgement of professional achievement (Duncan and Riley 2005)

The Australian Industry Group (sub. 208) commented that in the industries it represented, psychological claims (including bullying) often occur when an employee has been subject to performance management, disciplinary action or an investigation due to a complaint about their behaviour.

WHS and workers compensation legislation makes it clear that reasonable management action undertaken in a reasonable manner does not constitute workplace bullying. For example, the *Fair Work Act 2009* (Cth) points out that reasonable management action carried out in a reasonable manner provides a qualification as to the definition of workplace bullying. Similarly, workers compensation legislation provides a defence or an exception for the provision of compensation for psychological injuries (such as from workplace bullying) resulting from reasonable management action carried out in a reasonable manner or reasonable way. Reasonable management action typically relates to performance appraisals, ongoing meetings to deal with underperformance, counselling or disciplining an employee for misconduct, modifying an employees' duties, dismissal of an employee and denying an employee a benefit in relation to their employment. Whether or not these actions were undertaken in a reasonable manner or reasonable way will depend on the type of action taken by management, the facts and the circumstances surrounding the action, the impact on the

worker and any other relevant matters. This is typically determined on the basis of whether or not the established policies and procedures of the employer were followed, whether the employer breached any of its own guidelines, whether the employer adopted procedural fairness in dealing with the matter and whether any investigations were carried out in a timely manner (Fair Work Commission 2018; Reilly 2010; Workplace Law 2017).

From another perspective, accusations of bullying, particularly when unfounded, can have detrimental effects on the alleged perpetrator and can amount to bullying itself.

Workplace conflicts and allegations of bullying in the workplace are often addressed by the employer contracting third parties to provide an independent and impartial investigation. This in turn has led to scepticism from some sources as to the quality and independence of these investigations (Bornstein 2014). For example, while these external investigations are usually conducted by people from a human resources or legal background there is no required minimum standard for such investigators. Also, there is the risk that the employer will exercise control over the process to engineer the desired outcome and there is a commercial incentive for the investigator to produce a report that meets the need of the employer. Depending on the findings, this can give the impression to the complainant that the process and outcome of the investigation has been manipulated by the employer, further damaging the mental health of the complainant (Bornstein 2014).

Other approaches to deal with workplace bullying

The Victorian Government in 2011 amended the *Crimes Act 1958* (Vic) to alter the crime of stalking to include behaviour that is typically characterised as bullying. This is commonly known as ‘Brodie’s Law’. This followed the suicide of a waitress who was subject to recurring verbal and physical acts of bullying. While the employer and a number of co-workers were fined under the existing WHS legislation, a public campaign followed to have Victorian legislation changed so that acts of bullying in the workplace and in other situations could be punished by terms of imprisonment of up to 10 years.

In the following five years since its introduction, 58 offenders were charged by Victorian Police (Victoria Police 2016). Similar legislation has not yet been introduced outside of Victoria, although there has been some discussion in some other jurisdictions.

Following the introduction of the Victorian legislation, the Australian Government announced a House of Representatives inquiry into workplace bullying (House of Representatives Standing Committee on Education and Employment 2012). The report made a number of recommendations including the development of a national definition of workplace bullying and for Safe Work Australia to develop a code of practice to manage the risk of workplace bullying and provide advice and guidance material for employers. In response to that inquiry, changes were made to the Fair Work Act to enable the Fair Work Commission can make orders to prevent bullying behaviour in the workplace following an application by an employee. These orders could include:

- requiring the individual or group of individuals to stop the specified behavior

-
- monitoring of behavior by an employer or principal
 - complying with an employer's bullying policy
 - providing information, additional support and training to workers
 - reviewing the employer's or principal's bullying policy

However, the Fair Work Commission cannot issue fines or penalties or award compensation. Since the introduction of these powers in 2014 only a handful of orders have been made (Wilson 2018).

The Victorian Auditor-General, in its report on workplace bullying and harassment in the Victorian health sector, recognised the duties the WHS legislation placed on employers to eliminate or minimise health and safety risks in the workplace. It concluded that workplace bullying and harassment were best dealt with by having organisations apply a risk management approach to prevent it from occurring and responding quickly if it does occur. Early intervention was the key given that workplace conflicts and minor inappropriate behaviours could easily escalate. Fundamental to this was the need to create a positive workplace culture where everyone treats each other with respect. However, in the Victorian health sector it noted that the leadership had not given sufficient priority and commitment to reducing bullying and harassment in their organisations. It considered the key steps to reduce the risk of bullying and harassment in these organisations was through:

- identifying the potential for workplace bullying through data and identifying organisational risk factors
- implementing control measures to prevent, minimise and respond to these risks, such as through building a positive, respectful culture and having good management practices and systems including policies, procedures and training
- monitoring and reviewing the effectiveness of these control measures (VAGO 2016).

Workplace bullying is primarily dealt with through the WHS legislative framework. These arrangements, through their risk management approach to psychological harm in the workplace, place the onus on the employer to prevent (as far as reasonably possible) workplace bullying from occurring, as well as requiring employers to appropriately respond to complaints of workplace bullying. The WHS laws also hold individual workers who participate in workplace bullying accountable. Although there are financial penalties provided in WHS legislation, it is still appropriate that serious cases of bullying can be addressed through criminal law. As Safe Work Australia (2012) noted, criminal acts whether committed in the workplace or elsewhere should be penalised under the relevant criminal laws.

Strengthening the focus on psychological risks and harm in the current WHS arrangements is discussed in chapter 7.

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F Mental health and the workers compensation system

The workers compensation system in Australia provides payments to employees who incur a work-related injury or illness. This compensates them for the loss of income while not at work, and also for any medical and rehabilitation expenses. This appendix analyses the trends and features of the workers compensation system in Australia with regard to mental health claims. It draws on data that the Productivity Commission received from the states, territories and Comcare.

F.1 The national picture of mental health claims

To conduct its analysis, the Productivity Commission focused on claims arising from the past five financial years (2014-15 to 2018-19).² This resulted in a dataset containing approximately one million observations across all the states, territories and Comcare. This amount includes all accepted and rejected physical and mental health claims.³ From this, the total number of mental health claims amounted to 70 000. Whilst this figure includes all rejected and accepted mental health claims, it does not include active or pending claims.⁴ Further, rejected claims only include those claims rejected on initial application, and so do not include those rejected claims which were later overturned.

The key trends and features of this data are that:

- the total number of mental health claims has gradually increased between 2014-15 and 2018-19 (figure F.1)
- the increase in mental health claims is reflected in a higher year-on-year percentage increase in mental health claims (compared with physical claims) (figure F.2)
- as a proportion of all claims lodged, mental health claims have been increasing over time (figure F.3)
- while rejection rates for physical health-related claims have been flat, rejection rates for mental health claims have been gradually decreasing over time (figure F.4).

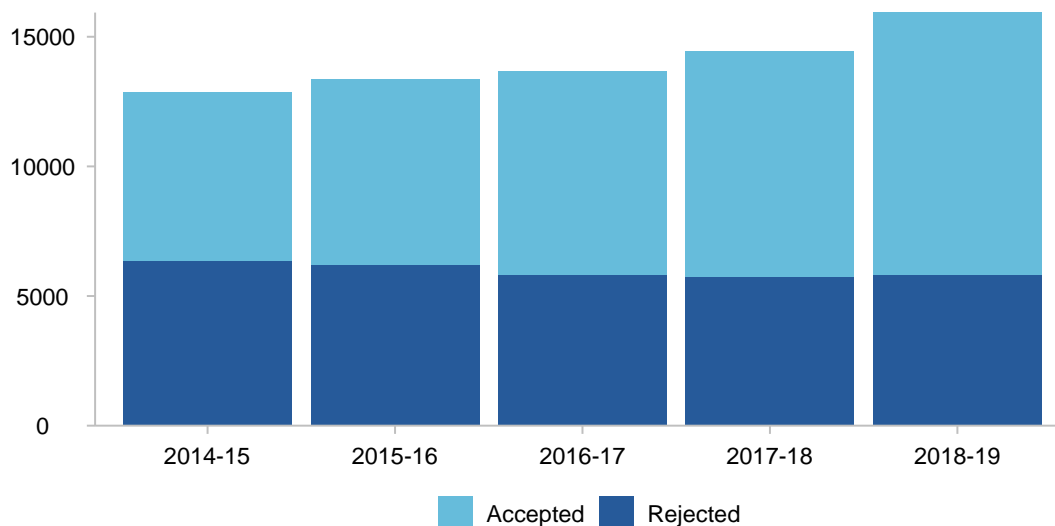
² Some data for the 2018-19 financial year may not have completely matured at time of provision.

³ All jurisdictions provided data on mental health claims. South Australia and Victoria did not provide data on physical claims.

⁴ Consequently, all rejection rates reported below are for those claims which have been decided.

Figure F.1 Mental health claims have been increasing over time^a

Total number of mental health claims

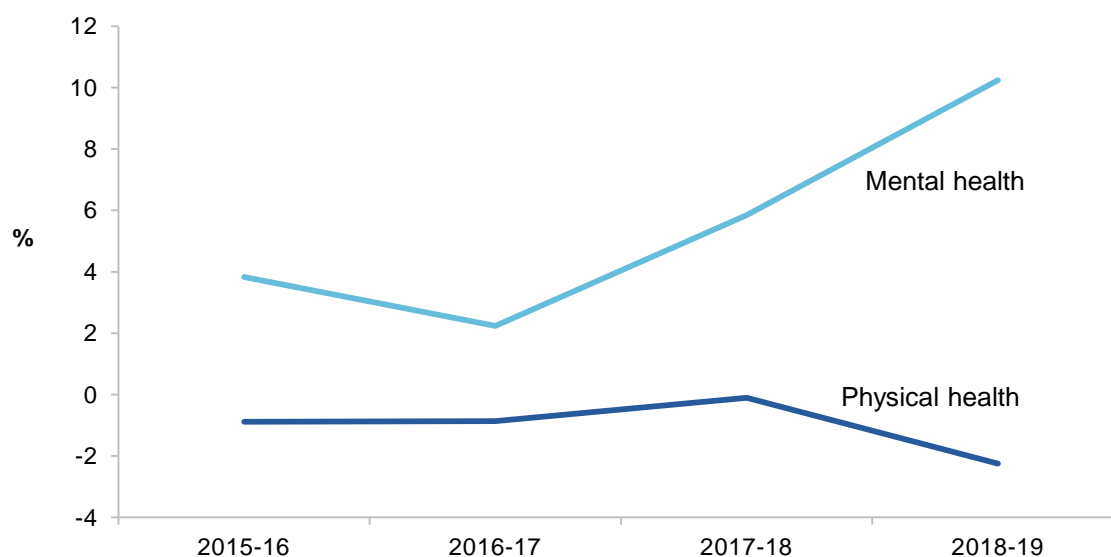


^a Includes all states, territories and Comcare.

Source: Data provided by state and territory workers compensation agencies and Comcare.

Figure F.2 Divergence between claim growth rates^{a,b}

Percentage change in total mental health and physical health claims

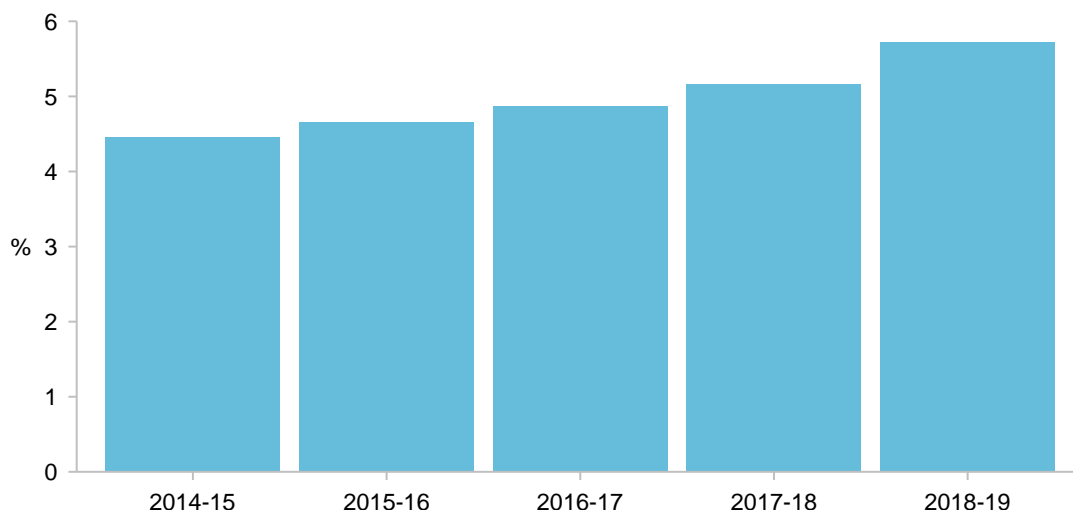


^a The total number of claims includes all accepted and rejected claims and does not include pending claims.

^b Physical claims do not include Victoria or South Australia data.

Source: Data provided by state and territory workers compensation agencies and Comcare.

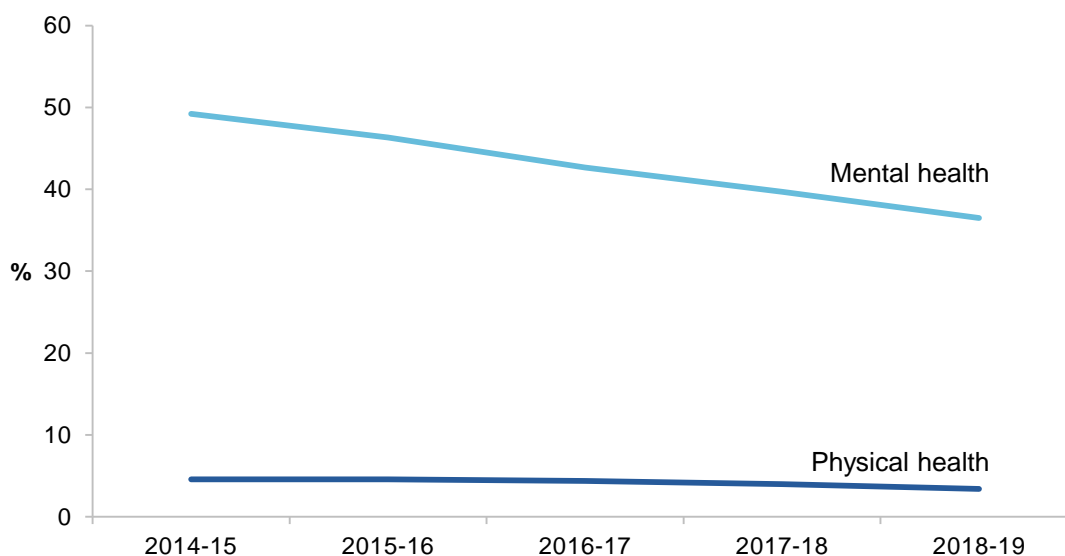
Figure F.3 **Mental health claims are increasing as a proportion of all workers compensation claims^{a,b}**



^a Percentage is calculated by dividing the total number of mental health claims by the sum of the total number of mental health and physical claims and multiplying by 100. The total number of claims includes all accepted and rejected claims. ^b Physical claims do not include Victoria or South Australia.

Source: Data provided by state and territory workers compensation agencies and Comcare.

Figure F.4 **Rejection rates have been decreasing over time^{a,b}**
Mental health-related claims compared with physical health-related claims



^a Percentage is calculated by dividing the total number of rejected claims by the sum of total accepted and rejected claims and multiplying by 100. ^b Physical claims do not include Victoria or South Australia.

Source: Data provided by state and territory workers compensation agencies and Comcare.

F.2 Mental health-related workers claims by gender and income

The Productivity Commission received data on the gender and income of those making a mental health-related workers compensation claim.

By gender

This analysis examined rejection rates and types of mental health claims, by gender. Table F.1 highlights the data collected.

Table F.1 **Total number of claims by gender**

Between 2014-15 and 2018-19

	<i>Mental health claims</i>	<i>Physical claims</i>	<i>Total</i>
Male	29 066	635 756	664 822
Female	40 084	326 834	366 918
Total	69 150	962 590	1 031 740

Source: Data provided by state and territory workers compensation agencies and Comcare.

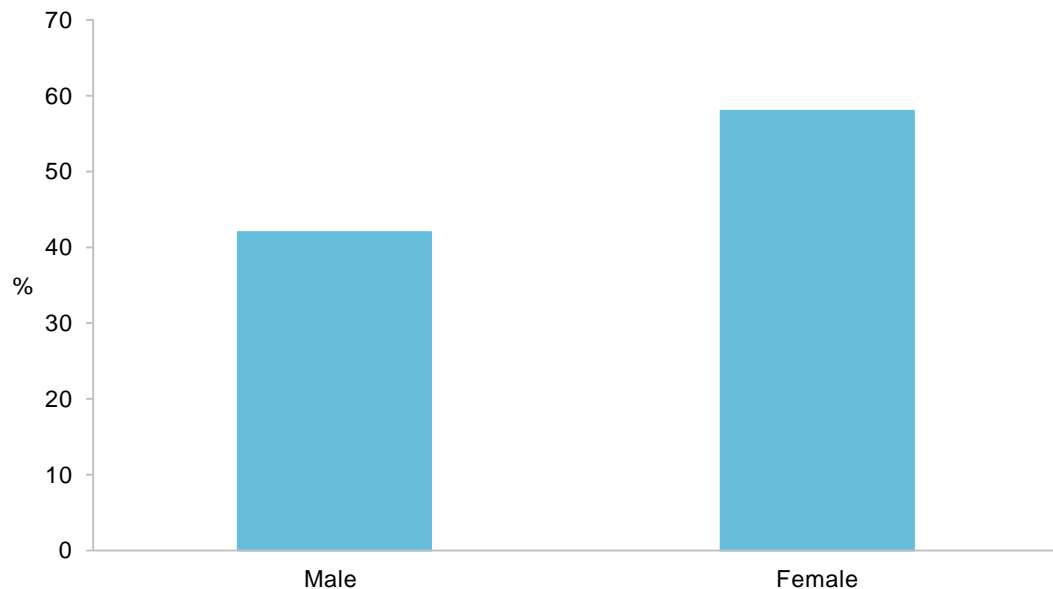
Females are more likely than males to make a mental health-related workers compensation claim (figure F.5). They account for more than half (58%) of the total number of mental health-related workers compensation claims, but form about 47% of the Australian labour force.⁵

Other key features relating to gender from the data include:

- males are more likely to have their claim rejected (figure F.6)
- work pressure was the most frequent claim made by males, and bullying for females (figure F.7). This pattern was consistent across all jurisdictions.

⁵ ABS (*Labour Force, Australia, Apr 2020*, Cat. no. 6202.0)

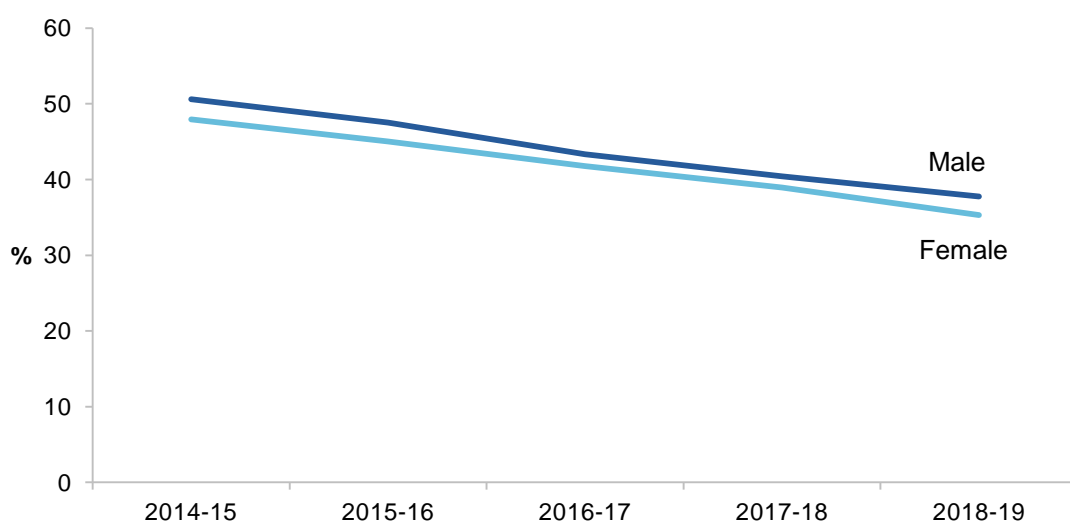
Figure F.5 Females are more likely to make a mental health claim^{a,b}
Mental health claims, by gender



^a Percentage is calculated by dividing the number of total mental health claims (by gender) by the total number of mental health claims and multiplying by 100. The total number of claims includes all accepted and rejected mental health claims. ^b Between 2014-15 and 2018-19.

Source: Data provided by state and territory workers compensation agencies and Comcare.

Figure F.6 Males are more likely to have their mental health claim rejected^a
Rejection rates over time, by gender

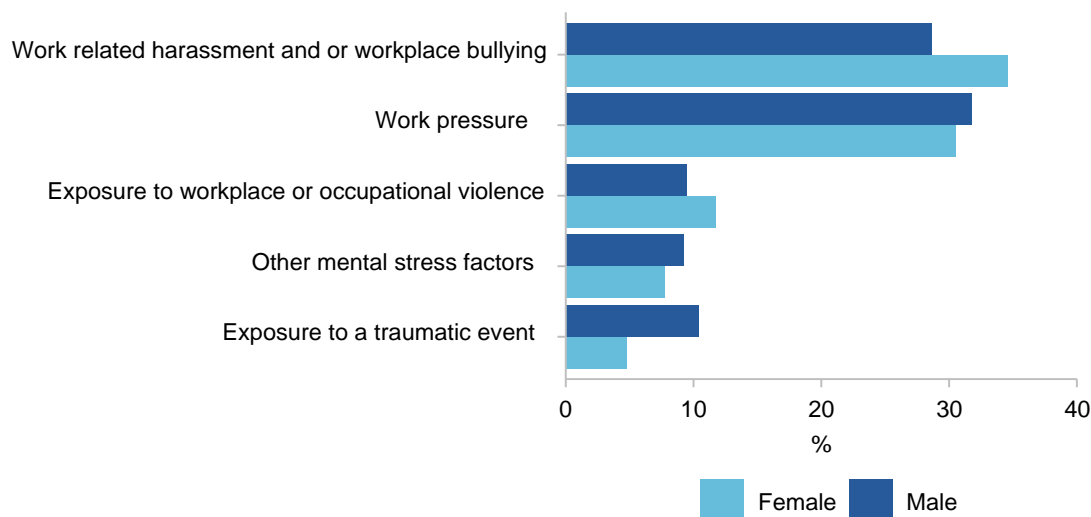


^a Percentage is calculated by dividing total rejected mental health claims by the sum of total accepted and rejected mental health claims and multiplying by 100.

Source: Data provided by state and territory workers compensation agencies and Comcare.

Figure F.7 Top mental health-related claim categories, by gender^{a,b}

Claim mechanism as a proportion of total mental health claims



^a Between 2014-15 and 2018-19. ^b Total claims includes both rejected and accepted claims.

Source: Data provided by state and territory workers compensation agencies and Comcare.

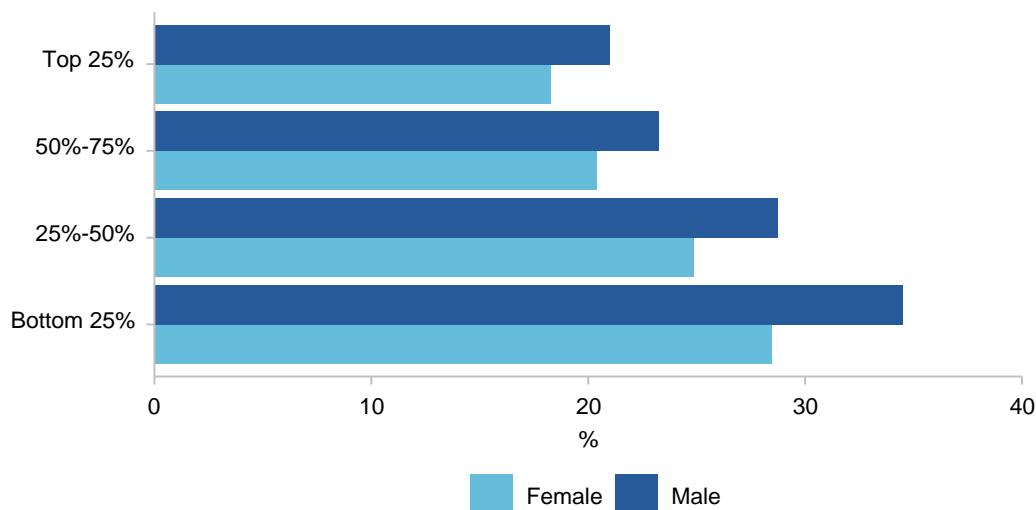
By income

Data on the weekly income of claimants was also provided, which was then broken down into income quartiles and deciles for analysis. This analysis focused on rejection rates and type of mental health claim by level of income. To do this, only those with recorded weekly incomes of at least \$100 were included. From this it appears that:

- higher incomes are associated with lower rejection rates for mental health-related claims (figure F.8)
- males have higher rejection rates across all incomes levels (figure F.8)
- higher incomes are associated with relatively more work pressure claims and fewer bullying claims (figure F.9). These are the two most common mental health claims.

Figure F.8 Males across all income levels face higher rejection rates for mental health claims^{a,b,c,d}

Rejection rates, by income quartile and gender (min weekly income of \$100)

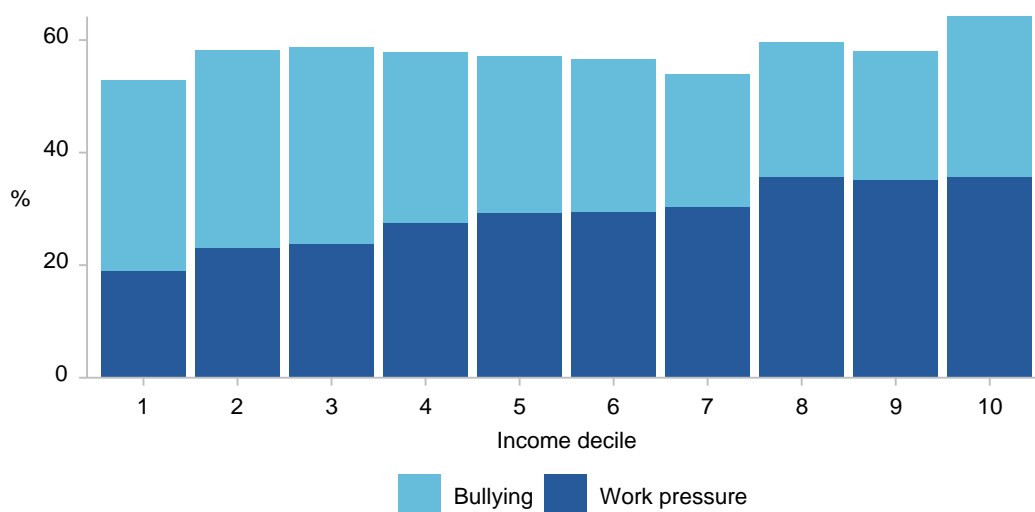


^a Percentage is calculated by dividing the total number of rejected mental health claims by the total number of mental health claims and multiplying by 100. ^b The total number of claims includes all accepted and rejected mental health claims. ^c Between 2014-15 and 2018-19. ^d The rejection rates in this chart differ from those in figures F.4 and F.6 as they only include observations for which weekly income was at least \$100. This means, for example, observations where income was not recorded are not included.

Source: Data provided by state and territory workers compensation agencies and Comcare.

Figure F.9 Bullying and work pressure over income deciles^{a,b,c,d}

As a proportion of serious mental health claims (min weekly income of \$100)



^a Between 2014-15 and 2018-19 ^b Does not include Victoria. ^c Serious mental health claims are those accepted claims resulting in at least one week off work. ^d Income deciles range from 1 (lowest) to 10 (highest).

Source: Data provided by state and territory workers compensation agencies and Comcare.

G Funding and commissioning arrangements: supporting detail

This appendix provides background to the reforms to funding and commissioning arrangements recommended in chapter 23.

- It summarises the evidence from elsewhere in the report that the funding currently allocated to mental healthcare and psychosocial supports is not spent to best meet consumer needs (section G.1)
- It analyses the role of Primary Health Networks (PHNs) in the context of broader primary mental healthcare funding arrangements, focusing on: regional equity in the distribution of funds; incentives arising from the interaction of Medicare Benefits Schedule (MBS) rebates and PHN funds; and the autonomy PHNs have in their commissioning decisions (section G.2)
- It analyses Local Hospital Network (LHN) funding arrangements, focusing on: the incentives arising from the different ways that hospital- and community-based services are funded; and the impacts of Australian Government contributions to LHNs under the National Health Reform Agreement (NHRA) (section G.3)
- It analyses the current approach to managing the federal split in government responsibilities for mental healthcare set out in Priority Area One of the Fifth National Mental Health and Suicide Prevention Plan (section G.4)
- It analyses the feedback to the two options for allocating responsibility for mental healthcare and psychosocial supports ('Renovate' and 'Rebuild') that were presented in the draft report (section G.5)
- It outlines some additional considerations that underpin recommended reforms (section G.6).

Many of the analyses in this appendix examine the extent to which the current arrangements support two normative positions that underpin the reforms outlined in chapter 23: that government agencies, providers and consumers should face *incentives* to take account of the full range of costs and benefits of their decisions; and that decisions should be made by those who have the best access to *information* about costs the benefits of their decisions.⁶ In the

⁶ The focus on *incentives* motivates arrangements either to formally pool funding for mental health services (such as by the creation of Regional Commissioning Authorities), or to create administrative or funding arrangements that mimic such pooling of funding (such as improved PHN–LHN cooperation and integration of the accounting of MBS rebates and PHN funds). The focus on *information* motivates regional decision-making backed by centralised support.

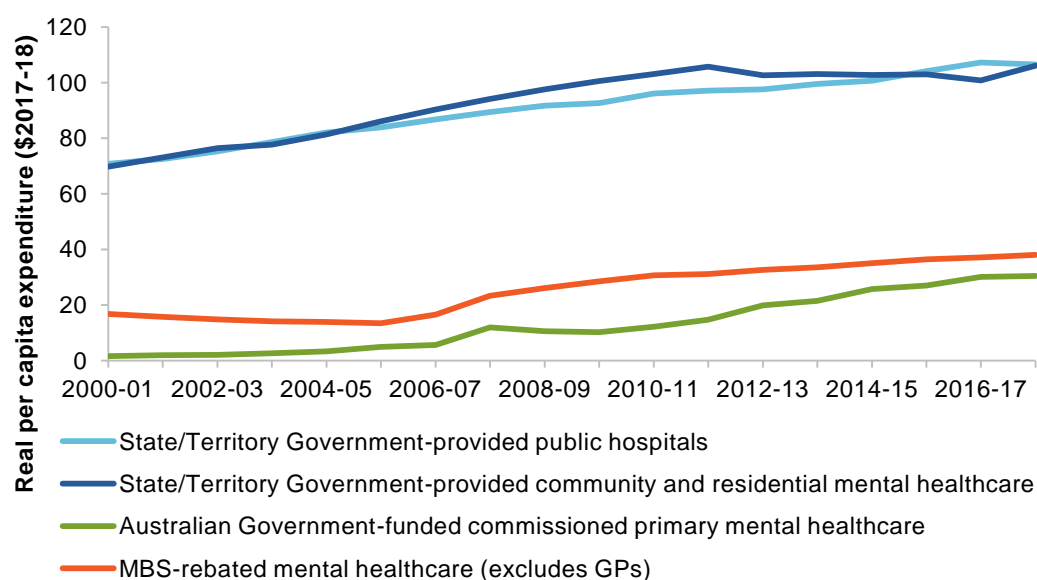
Productivity Commission's view, aligning decision-making with incentives and information is most likely to lead to resources being allocated to best meet consumer needs.

G.1 Resources are not allocated to their best use

This Inquiry report provides evidence that mental health resources are not allocated to best meet consumer needs. Two particular issues stand out — the 'missing middle' and the relative shortage of low intensity mental health services (chapter 12).

Little has been done to meet these shortfalls in clinical services, despite widespread acknowledgement of the problems (chapter 12) and growth in mental healthcare funding for other services. Recent years have seen the Australian Government provide additional funding to primary mental healthcare services and State and Territory Governments increase funding for public hospitals (figure G.1). However, the Australian Government has largely not invested in services that target more acute cohorts (with the exception of private health insurance subsidies), and State and Territory Governments, at best, only appear to be maintaining their funding of community-based care in recent years, with real per capita expenditure on community ambulatory and residential mental healthcare declining between 2011-12 and 2016-17.

Figure G.1 **Expenditure on mental healthcare^{a,b}**
Selected items



^a MBS-rebated mental healthcare comprises MBS rebates for allied mental healthcare and psychiatry. ^b State and Territory Government expenditure is inclusive of Australian Government contributions under the NHRA.

Source: AIHW (2020a).

G.2 Primary mental healthcare funding arrangements

Primary mental healthcare is funded via:

- MBS rebates for GPs, allied mental health professionals, and psychiatrists
- PHN commissioning, drawing from the Mental Health Care Flexible Funding Pool (chapter 12).

Regional inequities in primary mental healthcare funding

The total funding for primary mental healthcare (MBS rebates plus the PHN Mental Health Care Flexible Funding Pool) is not distributed equitably across regions. This is mainly due to the inequitable distribution of MBS rebates for mental healthcare (box G.1; TAMHSS, sub. 919).

Regional equity (the principle of horizontal equity applied to a geographical context) requires the share of all primary mental healthcare funds flowing to each PHN region to reflect its share of the total population weighted by factors that influence service need and provision costs. For example, regional and remote PHN regions should receive higher funding on a per capita basis than others as the cost of supplying services in these regions is higher. Similar variations would reflect the share of Aboriginal and Torres Strait Islander people and people from lower socioeconomic backgrounds (as these groups are more likely to have mental illness, and hence increase demands for services (chapter 2)).

Translating this principle to the distribution of the Mental Health Care Flexible Funding Pool (as opposed to the distribution of *all* primary mental healthcare funding) means also taking account of the existing regional inequities in the distribution of MBS rebates. Hence, the distribution of the Mental Health Care Flexible Funding Pool should be more aggressively weighted toward regions that receive a relative shortfall of MBS rebates than would otherwise be the case.

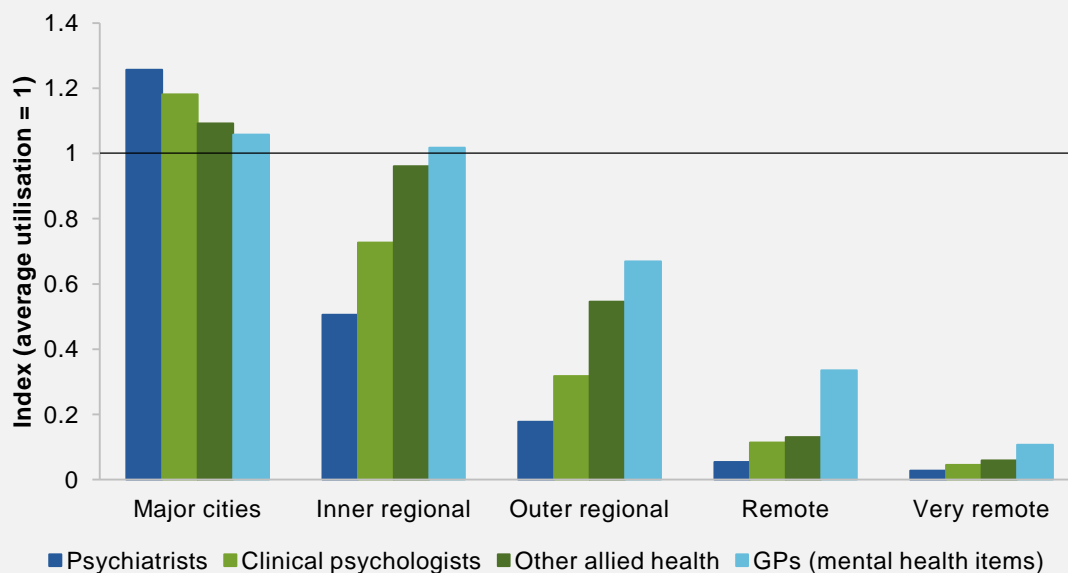
The way that the Mental Health Care Flexible Funding Pool is currently distributed between PHNs goes some way towards achieving regional equity. To demonstrate its impacts, the Productivity Commission has ranked PHN catchment regions by level of need for primary mental health funding (with higher need reflecting higher costs of service delivery and/or higher demand for services) and examined the total amount of primary mental healthcare funding each receives on a per capita basis (figure G.2). Broadly speaking, PHNs whose catchments receive a lower volume of MBS rebates per capita receive a greater share of the Mental Health Care Flexible Funding Pool per capita. Moreover, total primary mental health funding per capita is highest in the PHN catchments with the greatest need.

Box G.1 **Geographic inequities in the distribution of MBS-funded mental health services**

Medicare Benefits Schedule rebates disproportionately benefit consumers who live in urban areas (figure below), as consumer use of all provider types decreases sharply with remoteness. This is driven by the Medicare Benefits Schedule payment model. Clinicians are paid a uniform rebate and are free to choose where to locate and whether to charge out-of-pocket payments to consumers. Hence, clinicians tend to favour locations that allow them to charge higher out-of-pocket payments for their services (typically wealthier areas) or otherwise meet their preferences in relation to amenities and the costs of living and doing business (Allan Fels, sub. 303; Meadows et al. 2015).

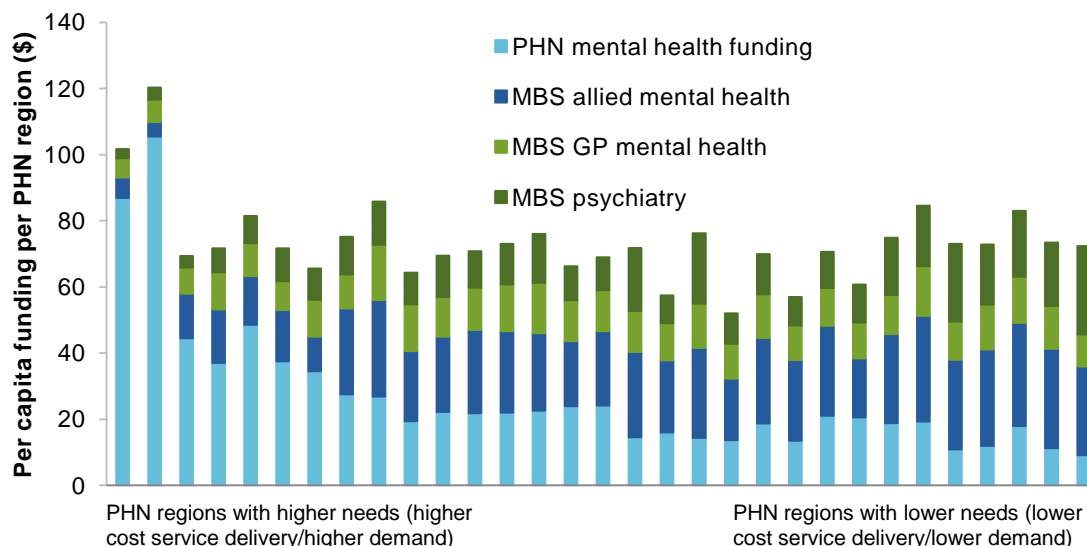
Medicare Benefits Schedule funding disproportionately benefits people living in urban areas

Relative utilisation of MBS rebates by remoteness of consumer for selected healthcare professions, 2007–2011



Source: Productivity Commission estimates based on Meadows et al. (2015, table 2).

Figure G.2 Distribution of mental health funding among PHN regions^{a,b}
Estimated 2018-19 funding, by PHN



^a MBS funds are based on 2017-18 expenditures inflated to match growth in expenditure to 2018-19. ^b PHN needs are ranked using the product of the weights that the Independent Hospital Pricing Authority's national non-admitted activity-based funding prices use for remoteness and Aboriginal and Torres Strait Islander people (indicating higher costs) and weights that account for the prevalence of high or very high psychological distress among Aboriginal and Torres Strait Islander people (indicating higher demand).

Source: Productivity Commission estimates based on ABS (*Australian Demographic Statistics, September 2019*, cat. no. 3101.0), unpublished data supplied by the Australian Government Department of Health; IHPA (2019); and SCRGSP (2020).

Nevertheless, there are shortcomings in the process for allocating the PHN Mental Health Care Flexible Funding Pool that exacerbate these inequities (box G.2).

- Funding for some services (e.g. headspace centres) is allocated outside of standard processes or according to historical arrangements.
- While the distribution formula accounts for several factors that influence the cost of service delivery and/or the prevalence of mental illness in the community (rurality, socioeconomic status of the population, share of the population that are Aboriginal or Torres Strait Islander), the weights attached to these factors are not evidence-based.
- While the distribution formula accounts for the quantum of MBS rebates for allied mental healthcare that a PHN catchment receives, the way that it does so is ad hoc in that it does not consider funds delivered via the MBS and funds delivered via PHN commissioning to be one-to-one substitutes. And it does not account for the distribution of MBS rebates for psychiatry.

Box G.2 **How PHN mental health funds are distributed**

At present, the Primary Health Network Mental Health Care Flexible Funding Pool is allocated in several different ways.

- Quarantined funds for headspace, headspace Early Youth Psychosis services and trials and national projects are allocated according to historical arrangements or on a fixed grant basis.
- Quarantined funds for mental health services for Aboriginal and Torres Strait Islander peoples are allocated on an unweighted per capita basis.
- Funding previously apportioned to the Access to Allied Psychological Services program is allocated as follows:
 - 50% is allocated using a weighted per capita formula with the weights inversely related to fixed historical use of mental health services that attracted Medicare Benefit Schedule rebates
 - 50% is allocated using a weighted per capita formula with weights that provide additional funding the higher the share of the population that are Aboriginal or Torres Strait Islander, the lower the average socioeconomic status of the region, and the more remote the region.
- Other funding is allocated in full according to the second of these two weighting schemes or a similar weighting scheme.

Source: DoH (pers. comm., 9 October 2019).

Interaction of MBS rebates with PHN and State/Territory Government health department commissioning

The interaction between the two different mechanisms for funding primary mental healthcare (MBS rebates and PHN commissioning) creates incentives for funding to be sub-optimally allocated, as does the interaction of MBS rebates with State and Territory Government health department commissioning of mental healthcare from LHNs and other providers.

The MBS is unique among funding instruments for mental health services. Other funding sources (including PHN Mental Health Care Flexible Funding Pool and State and Territory Government health department mental healthcare funding) are capped, and there is active management of the fixed pool of funds by an entity (a PHN or State/Territory Government health department) that contracts with service providers. By contrast, the MBS is uncapped and managed only in a passive way — by supply-side restrictions (limits on which practitioners can provide MBS-rebated services) and some demand-side restrictions, such as limits on the number of MBS-rebated services that each consumer can access.

These features render the MBS suited to expanding access to treatment. Since allied mental healthcare became eligible for MBS rebates with the introduction of the *Better Access* initiative in 2006, access to treatment expanded sharply.

- Rates of referrals to psychologists per depression-related GP contact grew more than threefold for both advantaged and disadvantaged socioeconomic groups and in major and

non-major cities between 2002–2006 and 2006–2011 (Harrison, Britt and Charles 2012).⁷

- Whiteford et al. (2014) estimated that the population treatment rate for mental illness increased from 37% to 46% between 2006-07 and 2009-10, and attributed this rise to the introduction of the Better Access program.

However, the uncapped and passive nature of MBS funding invites cost shifting. Where managers of capped funding sources (PHNs and State/Territory Government health departments) are responsible for funding services that *substitute* for those listed on the MBS (box G.3), they face incentives to allow MBS-rebated services to take the place of the services that they would otherwise fund.

Box G.3 Substitutability of MBS rebated services and commissioned services

Cost shifting to the Medicare Benefit Schedule (MBS) is possible only where MBS-rebated services substitute for services commissioned by Primary Health Networks (PHNs) and State and Territory Government health departments.

Evidence of such substitutability is strongest for MBS-rebated allied mental healthcare.

- From a consumer perspective, PHN-commissioned allied mental healthcare closely resembles some MBS-rebated allied mental healthcare (Bassilios et al. 2016), so it follows that these services are likely to be close substitutes.
- Figure G.3 suggests some substitutability of allied mental healthcare in public mental healthcare (commissioned by State and Territory Government health departments) and MBS-rebated allied mental healthcare.

The evidence of substitutability is somewhat weaker for MBS-rebated psychiatry.

- PHNs do not generally commission mental healthcare from psychiatrists, so there is less reason to assume that services commissioned by PHNs could substitute for the services of MBS-rebated psychiatrists. That said, there is some evidence of substitutability between MBS-rebated allied mental healthcare and psychiatry (Britt and Miller 2009), which — when combined with the conclusion above regarding MBS-rebated allied mental healthcare — indirectly suggests the possibility of substitution between MBS-rebated psychiatry and PHN-commissioned allied mental healthcare.
- Psychiatrists work in LHN-provided community ambulatory mental healthcare care services (commissioned by State and Territory Government health departments) (chapter 12), suggesting that these services could possibly substitute for MBS-rebated psychiatry.

It seems less likely that MBS-rebated general practitioner mental healthcare substitutes for commissioned mental healthcare given the unique gatekeeper role that general practitioners play in the mental health system (chapter 10).

⁷ That said, the expansion in access was greater in major cities. Chapter 24 proposes funding mechanisms that should bring about more equitable access to treatment.

Our concern is that these dynamics may create a service mix that is dominated by MBS-rebated treatments because of funding biases rather than because these treatments best meet consumer needs. There is some evidence of this at both the PHN and State/Territory Government levels.

At the PHN level, there is a substantial shortfall in the supply of low intensity treatments (section G.1), which are mostly commissioned by PHNs rather than funded via MBS rebates. Moreover, there is a tendency for PHN-commissioned services to leverage MBS rebates as much as possible.

- At the public hearings for this Inquiry, the Australian Counselling Association (Adelaide transcript, pp. 11–12) explained that it is common practice for PHNs to require that contracted clinicians be eligible for MBS rebates so that they can be commissioned to provide a small amount of care and bill the remainder to the MBS. This effectively locks out service providers, such as registered counsellors, who are not eligible for MBS rebates.
- In 2017-18, headspace centres (which receive PHN funding to cover infrastructure, community awareness and engagement programs, and some salaried staff) received 44% of their funding from MBS rebates (headspace, pers. comm., 2 August 2019). Indeed, an evaluation of headspace noted that the model was ‘designed to leverage from the MBS’ (Hilferty et al. 2015, p. 107). Provided that there is adequate oversight of headspace centres, it would be preferable for headspace to be able to provide services in a way that best meets consumer needs, rather than in a way that meets the MBS billing requirements.

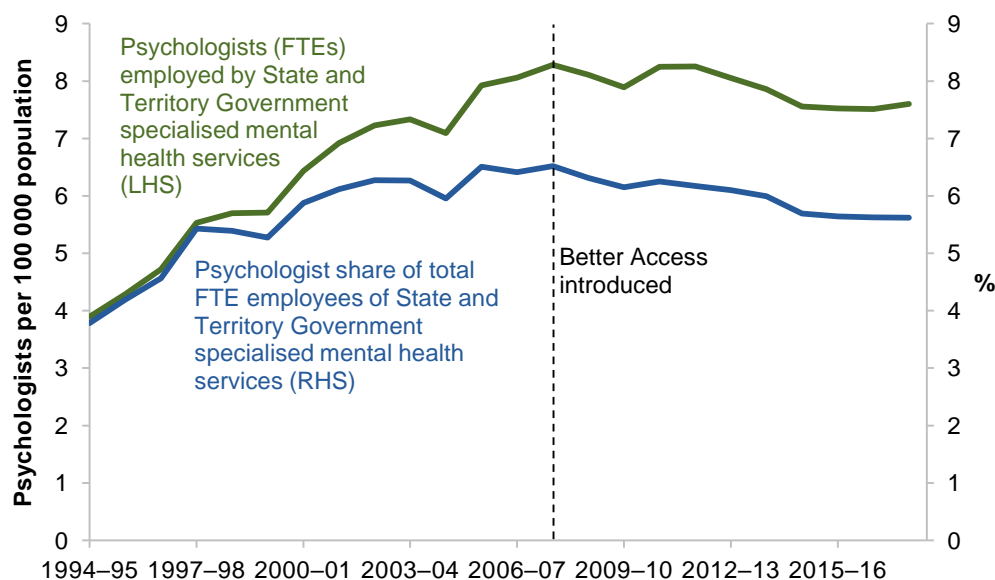
At the State/Territory Government level, there also appears to be cost shifting. The employment of psychologists by State and Territory Government specialised mental health services has been in relative decline since the introduction of Better Access (figure G.3).

While it appears that there is cost shifting to the MBS, there are restrictions in place that prevent ‘double dipping’ (clinicians receiving MBS rebates and other government funding when providing services), which serve to prevent particularly egregious forms of cost shifting. Section 19.2 of the *Health Insurance Act 1973* (Cth) prevents the payment of MBS rebates ‘in respect of a professional service that has been rendered by, or on behalf of, or under an arrangement with’ the Australian, State and Territory or local Governments or an authority established by these governments. These restrictions serve to prevent PHNs from co-funding an MBS-rebated session rather than commissioning a provider in full.

However, the restrictions are somewhat arbitrary. For example, they do not allow a PHN-commissioned service provider to co-fund the MBS rebates that a clinician might receive, but do not appear to prevent that service provider from charging below ‘market rates’ for the clinician’s tenancy and/or administrative support — an effective subsidy that could be used to attract the clinician.

Moreover, some aspects of the restrictions are undesirable. They limit the flexibility of PHNs and State and Territory Governments to pursue more innovative funding models that blend MBS rebates with contributions from the PHN Mental Health Care Flexible Funding Pool.

Figure G.3 Employment of psychologists by State and Territory Government specialised mental health services



Source: AIHW (2020b).

Autonomy granted to Primary Health Networks

The expansion of regional decision making is a mostly positive aspect of mental health reform over the past several years (box G.4). However, some decisions about the use of the PHN Mental Health Care Flexible Funding Pool have been devolved to PHNs and some remain made centrally by the Australian Government Department of Health.

PHNs are afforded a large degree of choice over the types of services that they commission using most (about 60%) of the Mental Health Care Flexible Funding Pool. While the Australian Government Department of Health issues guidance documents that outline the various priority areas for PHN commissioning (DoH 2019c), PHNs determine the share of the Mental Health Care Flexible Funding Pool they allocate to services to meet each priority area, and have significant discretion about the types of services that they commission.

Box G.4 Regional decision making and mental health services

In recent years, both levels of government have devolved more decision making about mental health service provision to the regional level. The Australian Government tasked PHNs with commissioning programs that were previously administered centrally in response to the National Mental Health Commission's 2014 review (DoH 2015), and the 2011 National Health Reform Agreement required State and Territory Governments to establish LHNs to manage public mental healthcare (COAG 2011).

Devolving mental health decision making and purchasing activities to the regional level is generally desirable, as it is consistent with the principle of subsidiarity. The Productivity Commission has previously argued strongly for a regionally governed healthcare system (PC 2017b), and these same arguments apply with equal force for mental health services. Australia is a large and diverse country, with regional variations in population density, socioeconomic status and culture. For these reasons, the needs of one area are unlikely to mirror those of another. Moreover, local people and agencies are generally better placed to take local context into account than distantly located bureaucrats, as they have more or better information at their disposal. This was pointed out by WentWest Limited (sub. 445, p. 53):

The focus of mental health service planning, implementation and monitoring must move to regions. The diversity of our regions, even across the Sydney metro area, requires [LHN] and PHN integrated planning to be continuous and adaptive to rapidly changing community needs.

However, there are some circumstances where devolution is not appropriate.

- Activities that can be more efficiently performed at scale are unsuited to devolution. For example:
 - it would be prohibitively costly for each region to design its own activity-based funding classification for remunerating hospitals
 - some services, such as online treatments (chapter 11), may require little (if any) adaptation to local contexts, but may benefit from considerable cost savings if deployed over a large population base.
- Decisions that require a high degree of specialised expertise are unsuited to devolution as not all regions will have such capacity.
- Devolution is also unsuitable where there are sufficiently large positive or negative 'spillover' effects of one region's decision making on other regions. A central decision maker faces incentives to take these spillover effects into consideration, whereas a regional decision maker does not.

Meanwhile, the Australian Government Department of Health controls how other parts of the Mental Health Care Flexible Funding Pool are spent:

- About one third of the Mental Health Care Flexible Funding Pool is committed to headspace services (including the headspace youth early psychosis program) (PHN Advisory Panel 2018). The quarantining of funds for headspace was originally a transitional arrangement, but seems to have become permanent. The Australian Government's response to the National Mental Health Commission's 2014 review said that PHNs would be provided with a 'flexible' funding pool, and made no mention of a quarantining funding for particular purposes (DoH 2015). And the Department of Health's subsequent guidance to PHNs on child and youth mental health services stated

that PHNs would be required to maintain the existing headspace network only until 30 June 2018 as ‘[i]n the longer term, PHNs will have greater flexibility in meeting the needs of local young people with, or at risk of, mild to moderate mental illness’ (DoH 2017, p. 3). However, the Australian Government has since announced additional hypothecated funding to PHNs until 2025-26 for existing headspace services and 30 new headspace centres (Australian Government 2019).

- A further 8% of the PHN Mental Health Care Flexible Funding Pool is hypothecated to mental health services for Aboriginal and Torres Strait Islander people. This hypothecation is different from that which applies to headspace — in the headspace case, funding is hypothecated to a particular provider, whereas in this case funding is hypothecated to ensure that PHNs commission services targeted at Aboriginal and Torres Strait Islander people.

Hypothecation of funding to headspace

Some arguments have been presented that support hypothecating PHN funding for headspace.

One is that the decision to commission a headspace centre in one region generates positive spillover benefits for other regions by reinforcing headspace’s national brand. If these spillovers were sufficiently strong, this could justify hypothecating funding to headspace, but their magnitude is uncertain and difficult to measure (box G.5).

Another is that the services provided by headspace centres are sufficiently effective to provide confidence that PHN funding for headspace centres could not better be spent elsewhere. The PHN Advisory Panel on Mental Health suggested that requirements on PHNs to commission headspace centres are justified as the ‘evidence base is strong’ (PHN Advisory Panel on Mental Health 2018, p. 9). Unfortunately, on our review, the evidence underpinning headspace’s effectiveness is not overwhelmingly strong (chapter 12), and certainly not sufficiently strong to discount the possibility that the funding allocated to headspace could be better spent on other services that PHNs commission.

Box G.5 **Positive spillovers from headspace centres?**

Requiring Primary Health Networks (PHNs) to commission headspace centres would be justified if the presence of a headspace centre in one PHN's region generated sufficient benefits to consumers residing in another PHN's region (known as 'spillover' benefits — box G.4). headspace centres could generate positive spillovers by reinforcing headspace's national brand. For example, suppose that a young person with a mental illness hears that a friend living in a different PHN region had a positive experience with headspace, and consequently decides to seek help at a local headspace centre.

Mental Health Victoria and the Victorian Healthcare Association (sub. 1184, p. 24) supported maintaining the existing hypothecation of funding to headspace on these grounds.

Relaxing requirements for PHNs to direct funds to headspace centres will result in further fragmentation of the service system, with access to headspace available in some regions and not others. We fear that this will provide a confusing message to the public and will be counter to efforts to encourage help-seeking.

There is some evidence that headspace's value to young people partially derives from its national brand. As noted by a recent academic paper:

Having a strong and consistent national brand that clearly identifies and promotes headspace centres is crucial, and something that is quite unique for a mental health service. The national brand and communication strategies, including national media, position headspace as the peak organization for youth mental healthcare across Australia. The brand has become a trusted and credible source of information and support that is highly visible and valued by young people, families and communities throughout Australia. (Rickwood et al. 2019, p. 164)

headspace — National Youth Mental Health Foundation (sub. 947) also pointed to the value of its national brand:

headspace is a nationally trusted brand, with 77% of young Australians recognising headspace as a youth-specific mental health organisation. (p. iii)

Our brand tracking data and community impact research tell us that young people and their parents have high trust and confidence in headspace. Independent analysis by Deloitte Access Economics placed a value of \$54 million on the headspace brand, defining this as the incremental operating benefit generated by the brand for the headspace network. (p. iii)

Young people access headspace because it minimises uncertainty for them — it is a national platform and a brand they recognise and trust. (p. 25)

And, at a meeting with the Productivity Commission, headspace's Youth National Reference Group highlighted that headspace's national brand signalled a youth friendly gateway into mental healthcare.

While the evidence presented above suggests that headspace's national brand does enhance its value to young people, the magnitude of the effect is less clear. Moreover, the extent to which these benefits result from the activities of headspace National versus the incremental contributions of individual headspace centres is also not clear. The key issue for the Productivity Commission is that there should be bespoke services that best meet local needs.

Other arguments suggest that headspace funding should not be hypothecated.

- Setting aside the potential for headspace centres to generate positive spillovers to other regions, the criteria laid out in box G.4 suggest that headspace funding should not be hypothecated.

-
- Decisions about funding headspace seem unlikely to realise economies of scale, as they must take into account regional context (which demands case-by-case decision making).
 - Decisions about funding headspace can be made locally on the basis of local evidence so long as the Australian Government Department of Health provides better guidance on the evidence base underpinning headspace and alternatives (recommendation 23).
 - Several participants suggested that the Australian Government Department of Health’s decisions about hypothecating PHN funding are motivated by politics rather than evidence (Martin Whitely, sub. 1198; TAMHSS, sub. 919).

On balance, these arguments suggest that, at least in the longer term, funding to headspace should not be hypothecated. Rather, like any commissioned service, headspace should be required to show how its services are meeting local needs in order to receive ongoing funding (chapter 23).

Hypothecation of funding to Aboriginal and Torres Strait Islander mental health services

As noted above, the hypothecation of funding to Aboriginal and Torres Strait Islander mental health services differs from that which applies to headspace. The question that arises in this context is whether the competitive procurement processes that PHNs use are appropriate for Aboriginal and Torres Strait Islander mental health services. PHNs are required to engage with Aboriginal and Torres Strait Islander communities and Aboriginal Community Controlled Health Services (ACCHSs) (DoH 2016b), but are free to contract any organisation to provide Aboriginal and Torres Strait Islander mental health services, whether an ACCHS or not (DoH 2019a).

Some participants contended that these processes, in effect, contribute to unmet need in a large proportion of Aboriginal and Torres Strait Islander communities.⁸ The National Aboriginal and Torres Strait Islander Leadership in Mental Health, Indigenous Allied Health Australia and Australian Indigenous Psychologists Association (sub. 418) argued that:

- idealised functioning ‘health markets’ do not exist for Aboriginal and Torres Strait Islander mental health services in many parts of Australia (the ‘thin market’ problem), so competitive processes are ineffective in maximising value for money
- where competitive tendering is possible, it risks favouring organisations that write strong applications, which are not those that necessarily improve access to services and deliver sustainable outcomes.

Hence, the Productivity Commission has considered whether ACCHSs should be preferred providers of Aboriginal and Torres Strait Islander mental health services, which would

⁸ Congress and Aboriginal and Torres Strait Islander Nurses and Midwives (sub. 75), National Aboriginal Community Controlled Health Organisation (sub. 507) and Nunkuwarrin Yunti of South Australia (sub. 798).

effectively allow them access PHN mental health funds outside of standard competitive procurement process — the position supported by the National Aboriginal and Torres Strait Islander Leadership in Mental Health, Indigenous Allied Health Australia and Australian Indigenous Psychologists Association (sub. 418) and ACCHSs themselves (IUIH, sub. 1108; NACCHO, sub. 507).

Aside from the shortcomings of competitive procurement in this context, the argument in favour is that ACCHSs generally offer benefits for Aboriginal and Torres Strait Islander people.

- According to National Aboriginal and Torres Strait Islander Leadership in Mental Health, Indigenous Allied Health Australia and Australian Indigenous Psychologists Association (sub. 418, p. 9), they provide:
... a more accessible service by being based in Aboriginal and Torres Strait Islander communities and providing a culturally safe service environment and a culturally competent service experience. In contrast, most other services tend to lack these community/ cultural connections that are essential for promoting access to services.
- Despite concluding that there is ‘a lack of evidence in the academic literature on the effectiveness of ACCHSs compared with mainstream health services’, a literature review noted that ‘... a range of studies have been conducted which, while mostly small-scale, indicate that the services provided by ACCHS are valued by their Aboriginal clients’ (Mackey, Boxall and Partel 2014, p. 6).

The argument against ACCHSs being preferred providers of Aboriginal and Torres Strait Islander mental health services hinges on whether the current arrangements adequately promote choice for Aboriginal and Torres Strait Islander people. Various participants highlighted the importance of choice that enables Aboriginal and Torres Strait Islander people to best meet their needs and preferences, for example, the Aboriginal Health and Medical Research Council (sub. 206) and the Mental Health Commission of New South Wales (sub. 948). But it is not clear that competitive processes do enhance choice for Aboriginal and Torres Strait Islander people. As noted above, competitive procurement processes seem somewhat unsuited to this context. And, were ACCHSs to be made preferred providers of Aboriginal and Torres Strait Islander mental health services, many Aboriginal and Torres Strait Islander people would retain access to mainstream providers funded via other means.

For these reasons, chapter 23 recommends that ACCHSs should be made preferred providers of Aboriginal and Torres Strait Islander mental health services.

Guidance provided to Primary Health Networks

The lack of guidance provided to PHNs over the discretionary part of the PHN Mental Health Care Flexible Funding Pool is problematic. PHN guidance documents generally require PHNs to commission ‘evidence-based’ services, but there is no direction provided to PHNs about which services are suitably evidence-based. Not all PHNs have the scale to develop

sufficiently high-level expertise in commissioning (TAMHSS, sub. 919). A review by the PHN Advisory Panel on Mental Health noted that:

Three years on from their establishment, stakeholder input to this review suggests significant variability between PHNs with respect to their organisational capability and capacity to implement mental health reform. Some PHNs demonstrate significant progress and achievements as change agents and system integrators while others evidence less readiness for these roles, with At the State and Territory Government level, the focus on hospital-based care over community-based care appears somewhat of a product of funding arrangements. a commensurate diminution in their progress. (PHN Advisory Panel 2018, p. 4)

Chapter 23 recommends that the Australian Government Department of Health should provide more guidance to PHNs.

G.3 Local Hospital Network funding arrangements

While governance arrangements differ between jurisdictions, generally State/Territory Government health departments purchase public mental healthcare (hospital-based mental healthcare, community ambulatory mental healthcare and residential mental healthcare) from providers managed by LHNs (with the Western Australian Mental Health Commission playing the role of the health department in Western Australia). In most States/Territories, LHNs are remunerated on an activity basis (activity-based funding) to provide most hospital-based mental healthcare, and receive block funding to provide community ambulatory and residential mental healthcare (box G.6).

Box G.6 Public mental healthcare funding models by State/Territory

New South Wales, South Australia, Western Australia and Tasmania each follow the funding model for public mental health services used by the Independent Hospital Pricing Authority to calculate Australian Government transfers for these services (albeit with different prices paid for different service types) (SA Health 2018; Tas DoH 2019; WA DoH 2017). They use activity-based funding for admitted care in general hospitals and block funding for admitted care in psychiatric hospitals, community ambulatory mental healthcare, and residential mental healthcare.

Queensland's model differs from these states in that it funds admitted care in general hospitals using a 'per diem' funding model (payments made per day of care provided) (Queensland Health 2019). By contrast, activity-based funding is paid per episode of care provided.

Victoria's funding model differs further. It funds admitted and residential care on the basis of 'available bed days' (meaning that funding is conditional on bed availability, rather than utilisation). And it funds community ambulatory mental healthcare on the basis of 'community service hours' (VIC DHHS 2019).

The ACT Government did not provide us with a description of the funding models it uses for public mental healthcare and the Northern Territory Government did not respond to our requests for information about its funding models.

This creates a financial incentive for LHNs to preference public hospital-based care over community-based care. LHNs receive additional (and, generally, cost-reflective) funding for each additional consumer they admit to hospital or service at an emergency department, but no additional funding for providing community ambulatory or residential mental healthcare to each additional consumer.⁹ Several participants and commentators noted this phenomenon.

- The New South Wales Government (sub. 551, p. 26) said:

Neither MBS nor [activity-based funding] within hospitals incentivise providers to invest in prevention and early intervention or address the underlying drivers of hospital admissions. They do not reward investments that support individuals using more appropriate and lower cost services (such as walk-in or community-based clinics).

- Wand (2014, p. 273) said:

Another criticism of the [activity-based funding] model is the potential for ‘gaming’ the system. This refers to hospitals or [LHNs] exploiting the system to obtain more funding. One example of this is the diversion of patients from community-based services to the more lucrative options of inpatient admissions and EDs. Not only would this add to the current problems with overstretched EDs and bed block, but it is at odds with the evidence favouring the effectiveness of community-based mental health care and consumer preferences.

- During our consultations, one participant remarked that ‘LHNs just play the [National Weighted Activity Unit] game’ — meaning that their concern is with ensuring that they meet their targets for hospital admissions.
- WentWest (sub. 445) noted that LHNs are hospital-centric.

Impacts of the National Health Reform Agreement

State and Territory Government health departments (or the Western Australian Mental Health Commission) could counterbalance LHNs’ incentives by specifying the mix of hospital-based, community ambulatory and residential mental healthcare that each LHN must provide. But Australian Government transfers to State and Territory Governments under the NHRA (box G.7) have created incentives for State and Territory Government health departments to favour hospital-based care (Allan Fels, sub. 303, attachment 2). From 2012-13 to 2016-17, the Australian Government subsidised 45% of the growth in the average cost of LHN-provided mental healthcare, lessening State and Territory Government incentives to limit cost growth in more expensive hospital-based care.

⁹ The scope to shift marginal consumers to hospital beds is limited as hospital beds are often full (chapter 13), which moderates the effects of this incentive.

Box G.7 The National Health Reform Agreement

The 2011 National Health Reform Agreement sets out the framework through which the Australian Government funds State and Territory Governments to deliver health services (overwhelmingly hospital services) (COAG 2011).

The mental health-related component of these transfers amounted to \$1.8 billion in 2018-19, or 29% of all State and Territory Government expenditure on specialised mental healthcare services in 2017-18 (the most recent year for which comparable data are available) (AIHW 2020a; unpublished data from DoH). The transfers grow at 45% of the growth in the national average cost of providing in-scope public mental healthcare, subject to an annual growth cap of 6.5% per annum that was introduced in 2017-18.

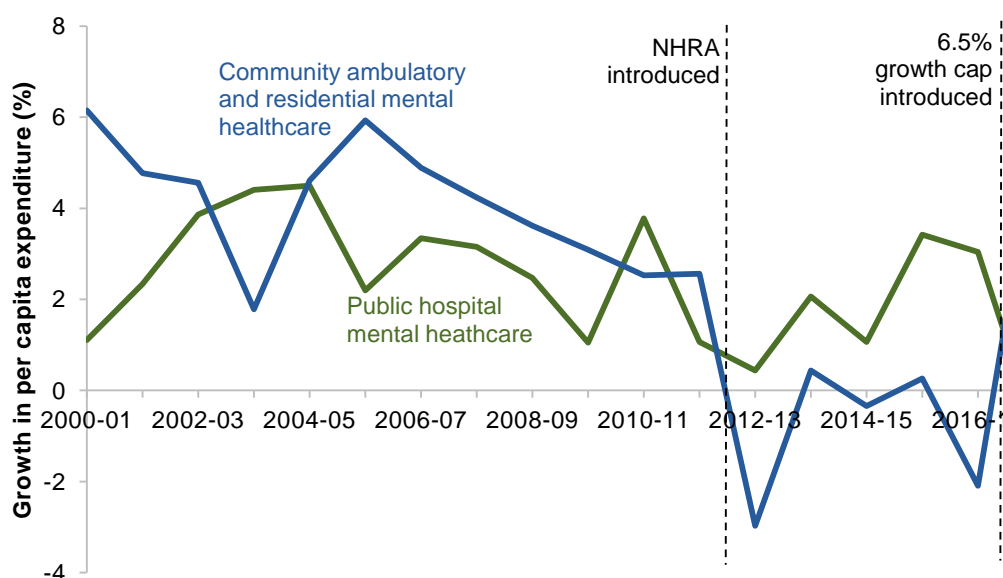
The agreement also sets out common devolved governance arrangements for State and Territory Government health services. It requires State and Territory Governments to establish LHNs as separate legal entities that directly manage health services under service agreements with State and Territory Governments.

The National Health Reform Agreement will expire on 31 June 2020. A 2020–25 agreement that maintains the existing funding parameters is expected to take effect from 1 July 2020 (all jurisdictions have signed a Heads of Agreement for this (COAG 2018)).

These incentives seem to have had some undesirable effects. Growth in expenditure on community ambulatory and residential mental healthcare generally exceeded growth in expenditure on public hospital-based mental healthcare prior to the NHRA taking effect (figure G.4). But since then, a much larger share of growth funding has gone to public hospital-based mental healthcare. This is despite National Mental Health Service Planning Framework benchmarks indicating that there are larger shortfalls in community ambulatory and residential mental healthcare than hospital-based mental healthcare, and frequent rhetoric about the need to build up services in the community to take pressure off hospitals (chapter 12).

Recent changes to the NHRA may have reduced its distortionary impacts, although it is too early to be certain. Since 2017-18, annual growth in *total* (mental and physical health related) Australian Government contributions to State and Territory Governments under the NHRA has been capped at 6.5% (box G.7). If this cap is reached (or if State and Territory Government health departments *expect* that it will be reached), then the distortion of State and Territory Government incentives — at least at the margin — would be neutralised. Funding growth in previous years has usually been sufficient to reach the cap. The cap was reached in 2018-19, but not in 2017-18 (the growth in Australian Government contributions in that year was 4.9% (NHFB 2020; pers. comm., 22 January 2020)). Years prior to the introduction of the cap saw growth in Australian Government funding comfortably exceed 6.5% — 11.5% in 2014-15, 11.1% in 2015-16 and 8.4% in 2016-17 (DoH 2019b).

Figure G.4 Growth in expenditure on public mental healthcare^a
State and Territory Government recurrent expenditure including Australian Government contributions



^a Public hospital mental healthcare includes public psychiatric hospitals and specialised wards or wards in public acute hospitals.

Source: AIHW (2020a).

Empirical evidence of the impact of the funding cap is scant. Growth in expenditure on community ambulatory mental healthcare rose and growth in expenditure on hospital-based mental healthcare declined in 2017-18 (figure G.4), which is consistent with the cap having some impact, but it would be unwise to draw conclusions from only one year of data.

The NHRA has also had other effects. As NHRA transfers are linked to growth in State and Territory Government mental healthcare costs, the NHRA (as interpreted by the Independent Hospital Pricing Authority) necessarily specifies the scope of State and Territory mental healthcare services that are eligible for Australian Government subsidies (box G.8).

There is an incentive for State and Territory Governments to preference in-scope services ahead of services that are not in scope. Since its introduction, the NHRA has provided comprehensive coverage of hospital-based mental healthcare, but not community-based services.

- Some community ambulatory mental healthcare services were not originally funded under the NHRA, but have since been brought within its scope. Older persons' community mental health services and child and adolescent community mental healthcare services were deemed in-scope from 2014-15 and 2019-20, respectively (box G.8). All community ambulatory mental healthcare services now appear to be within scope, as Queensland Health indicated that all of its clinical mental healthcare services now fall within the scope of the NHRA (pers. comm., 2 September 2019), and

the Independent Hospital Pricing Authority has not received any further requests from State and Territory Governments to bring additional mental healthcare services within scope (Independent Hospital Pricing Authority, pers. comm., 28 August 2019).

- More generally, innovative approaches to service delivery and the funding of primary care and general counselling do not fall within the scope of the NHRA (PC 2017b).
- Psychosocial supports commissioned by State and Territory Governments are out of the scope of the NHRA (box G.8).

Box G.8 Scope of mental healthcare services funded under the National Health Reform Agreement

The Independent Hospital Pricing Authority is tasked with interpreting the National Health Reform Agreement to determine which State and Territory Government mental healthcare services fall within the scope of the agreement.

Admitted mental healthcare has been deemed to be within the scope of the agreement from the outset, as have forensic mental health inpatient services provided that they are recorded as within the scope of the 2010 Public Hospitals Establishment Collection.

Over time, the agreement's scope has expanded to include community mental healthcare services. The following community mental healthcare services have been within scope since at least 2013-14:

- Adult integrated community mental health services
- Crisis assessment and treatment (including telephone-based services)
- Dual diagnosis services for patients with comorbid conditions
- Home and community-based eating disorders programs
- Mental health hospital avoidance programs
- Mobile support and treatment services
- Perinatal infant mental health services
- Step-up step-down services
- Telephone triage services.

In 2014-15, older persons' community mental health services became eligible for funding, as did child and adolescent community mental health services in 2019-20.

Source: Independent Hospital Pricing Authority Pricing Framework for Australian Public Hospital Services (various issues).

Changes to the National Health Reform Agreement are not feasible in the short term

Given these shortcomings, the Inquiry draft report contemplated recommending that mental health funding be excised from the NHRA and provided to State and Territory Governments on a block funding basis under a new intergovernmental agreement. Doing so would remove the distortions outlined above. However, changes to the NHRA seem unlikely for at least

five years. The NHRA is due to expire on 31 June 2020, and a 2020–25 agreement that maintains the existing funding parameters is expected to take effect from 1 July 2020 (box G.7).

Instead, chapter 23 recommends other reforms to reduce these biases.

- Extending activity-based funding to community ambulatory mental healthcare, which is primarily to drive greater productivity at community ambulatory mental healthcare services but would also reduce LHNs' incentives to preference hospital-based care ahead of community ambulatory mental healthcare.
- Establishing a National Mental Health and Suicide Prevention Agreement to govern Australian Government transfers to State and Territory Governments for clinical mental healthcare and psychosocial supports that are additional to the NHRA transfers. The National Mental Health and Suicide Prevention Agreement should clearly set out funding commitments by both levels of government and require that these new transfers are not channelled toward acute hospital beds.

G.4 Current approach to managing split government roles

As noted throughout this appendix, the Australian Government and State and Territory Governments share responsibility for clinical mental healthcare and psychosocial supports. The current split in responsibilities contributes to the missing middle, as it does not allow either level of government to be fully held responsible for the problem. The Australian Government funds primary mental healthcare and State and Territory Governments provide specialised mental healthcare in public hospital, community ambulatory and residential settings. Both levels of government fund psychosocial supports outside of the National Disability Insurance Scheme (NDIS).

The experience of participants to this Inquiry and other stakeholders supports the proposition that a lack of clarity in government roles has exacerbated the missing middle.

- The Primary Health Network Cooperative (sub. 377, p. 15) noted that consumers missing out on the services they need because of the missing middle 'are at risk of falling through the silos and divides of our health system'.
- Rosenberg (2015, p. 1) attributed the problem to neither level of government clearly having ownership of it:

It is widely accepted that on closing the asylums, Australia failed to invest in an alternative model of community mental health care. This means that for people seeking mental health assistance, there are few alternatives between the GP's surgery and the hospital emergency department.

These alternatives reflect the financial demarcation between the federal government, which pays for primary care, and the states and territories, which manage hospitals. Nobody currently 'owns' or has responsibility for community mental health services.

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- Transforming Australia’s Mental Health Service Systems (sub. 919, p. 16) said:

The lack of clarity of roles and planning for integration has given us the missing middle, between highly constrained state services and the fee for service single practitioner market with all its distortions and perverse incentives.

- The Grattan Institute (sub. 816, p. 8) said:

The disjunction between Commonwealth Medicare-funded out-of-hospital services and state inpatient-oriented systems creates a yawning gap for people who need intensive community support but not inpatient care: the missing middle.

More broadly, participants submitted that the divide in government roles has fragmented service delivery by limiting integration between services (box G.9).

Efforts by governments to clarify roles and integrate services

The major intergovernmental agreements that lay out responsibilities for healthcare and disability supports do not satisfactorily clarify responsibility for mental healthcare and psychosocial supports.

- *Clinical mental healthcare* — the National Healthcare Agreement defines mental health services as a shared responsibility to be jointly funded (COAG 2012), while the National Health Reform Agreement (subject to the Independent Hospital Pricing Authority’s interpretation) defines the scope of State and Territory-provided public mental healthcare that is eligible for Australian Government co-funding (as previously discussed), but does not clearly lay out which mental health services the Australian Government is responsible for providing (COAG 2011).
- *Psychosocial supports outside of the NDIS* — the bilateral agreements between the Australian Government and State and Territory Governments accompanying the introduction of the NDIS prioritise continuity of support for existing recipients of psychosocial support who were not eligible for the NDIS (PC 2017a). While continuity of support is important, it does not assist with clarifying responsibility for providing services to the substantial number of people who need psychosocial support but do not currently receive it. And the National Disability Agreement does not clarify responsibility for psychosocial supports outside of the NDIS (PC 2019).

Priority Area One of the Fifth National Mental Health and Suicide Prevention Plan (COAG Health Council 2017) (hereafter the ‘Fifth Plan approach’) amounts to a more substantive attempt by all governments to clarifying government roles and integrate services.¹⁰ While it does not set out which level of government should deliver which type of service, it tasks co-located PHNs and LHNs (hereafter ‘PHN–LHN groupings’) with agreeing to a division of responsibilities and means of integrating services on a region-by-region basis by

¹⁰ The Bilateral Agreements on Co-ordinated Care Reforms convey similar sentiments to the Fifth Plan approach, as do the amendments to the NHRA that accompany its 2020–25 extension (Council on Federal Financial Relations 2019).

undertaking joint regional planning, jointly commissioning services, and establishing care and referral pathways underpinned by shared clinical governance arrangements and data sharing protocols.

Box G.9 Participants' views on the federal divide in mental health services

There are at least four vastly different mental health systems operating in parallel, rarely in concert. These are the public and private hospital system, community and primary mental health systems and the NDIS. At each level of care patients and carers experience deep frustration at the lack of interface between services; for example, between the public and private tertiary hospital system, between the tertiary system and community care and between the NDIS and all other forms of support. Fragmentation of the mental health system is fundamentally driven by siloed funding models and is particularly marked between the public and private sectors. Further fragmentation is introduced by the establishment of PHNs as commissioning bodies, with variable readiness and lack of joint commissioning approaches particularly with local health districts (LHDs) or private hospitals and continued inadequate funding across the sector. (CHA, sub. 463, p. 4)

The Australian Government and some state governments have recently introduced a number of mental health initiatives separately or in parallel that have added complexity to an already fragmented healthcare system. (PHN Cooperative, sub. 377, p. 11)

The complexity of Commonwealth/state relations acts as a barrier to designing good care for people with mental illness. The Australian mental health system is currently fragmented, with poor integration between public, private and non-government organisations. The current funding of mental health where the Commonwealth, State and Territory Governments all have responsibility for mental health creates an environment of cost shifting and blame and fragmentation of governance and reform. It is an environment that is difficult for clinicians to navigate, let alone consumers and families when they are unwell. (CAHS, sub. 255, p. 1)

One of the main factors that has impeded past reform efforts is the lack of cohesion between service responses provided by the State and Commonwealth governments. Service responses are often developed in isolation, leading to a service system that can be fragmented and lacking a whole-of-government direction/vision. (Merri Health, sub. 120, p. 2)

In Australia, one of the main issues around the management of mental health-related issues is the fragmentation of the system at all levels (especially the divide between the state/territory and federal). The [Royal Australian College of General Practitioners] highlights the significant shifting of responsibilities between state-funded or territory-funded mental health services and federally funded initiatives such as general practice incentives and Primary Health Networks (PHNs). This divide between state/territory and federal funding means that real mental health reform will continue to fail. Mental health care practitioners and patients often experience significant confusion because of a lack of system knowledge. (RACGP, sub. 386, p. 13)

The mental health sector is complex and fragmented, with multiple providers and siloed funding streams. Variability exists in both state government funded services and the federally funded Better Access program. Mental health care provision in the community is provided by general practice, Primary Health Networks, community health organisations, state hospital care, Headspace, the National Disability Insurance Scheme (NDIS) and aspects of private care, all contributing to fragmentation of the mental health system. Fragmentation results in limited consumer understanding of the services provided by these sources. Consumers and carers experience poor care and unmet needs due to overlaps, insufficiencies, poor planning and lack of coordination of services. (GPMHSC, sub. 395, p. 4)

Unfortunately, it is not yet possible to gauge how successful the Fifth Plan approach will be at clarifying government roles and integrating services, as its most important aspect — PHN–LHN groupings producing ‘comprehensive’ joint regional plans — is not expected to be completed until mid-2022 (Integrated Regional Planning Working Group 2018b).

Indicators of the progress made so far are mixed.

- The National Mental Health Commission’s (NMHC’s) progress report for 2017-18 was largely positive (table G.1), although lacking in detail. The NMHC’s 2018-19 progress report has not been published.
- Our consultations indicated that some PHN–LHN groupings were working well together, while others were not. In some instances, cooperation appears (at best) superficial with details of effective cooperation lacking.
- Some participants expressed frustration with the Fifth Plan approach. The Royal Australian and New Zealand College of Psychiatrists (Sydney transcript, p 23) said:

So, I think this has been a sore on the side forever, since the first national mental health plan. The last plan went some way towards joint planning, joint commissioning, and eventually joint funding. So we're now three years down from that plan, and although we've got some joint planning, we have limited joint commissioning and we have no real joint funding. So the question is, yes, that's a great ambition, but when would that ever be achieved? I think that's the issue.

And the ACT Government (sub. 1241, p. 17) said:

It is noted that there are currently both overlap and gaps across the service system and while there is a move towards joint planning and co-commissioning, it is time consuming for all parties.

- Some PHNs provided the Productivity Commission with examples of where they had worked cooperatively with LHNs (box. G.10). These each appear promising.

Table G.1 Progress of actions toward Priority Area One of the Fifth Plan

Selected actions from the Fifth National Mental Health and Suicide Prevention Plan 2017-18 Progress Report

<i>Action</i>	<i>PHN progress</i>	<i>State/Territory Government progress</i>	<i>Australian Government progress</i>
1.1b — Development of joint regional mental health and suicide prevention plans	3 PHNs ahead of schedule, 3 PHNs behind schedule, 20 PHNs on track	1 State/Territory behind schedule, all others on track.	On track.
1.1c — Public release of joint regional mental health and suicide prevention plans	2 PHNs ahead of schedule, 8 PHNs behind schedule, 17 PHNs on track.	1 State/Territory behind schedule, all others on track.	On track.
2.2 — Engaging with the local community, including consumers and carers, community managed organisations, Aboriginal Community Controlled Health Services, National Disability Insurance Scheme providers, the National Disability Insurance Agency, private providers and social service agencies	2 PHNs complete, 4 PHNs behind schedule, 21 PHNs on track	1 State/Territory behind schedule, all others on track.	On track.
2.3a — Primary Health Networks (PHNs) and Local Hospital Networks (LHNs) work towards data sharing to map regional service provision and identify areas of duplication, inefficiency and service gaps	5 PHNs ahead of schedule, 3 Behind schedule, 20 PHNs on track.	1 State/Territory behind schedule, all others on track.	—
2.3b — PHNs and LHNs utilise the National Mental Health Service Planning Framework and other planning tools to facilitate regional needs assessment and planning	3 PHNs complete, 1 PHN ahead of schedule, 4 behind schedule, 20 on track.	1 State/Territory behind schedule, all others on track.	—
2.5 — Develop joint, single regional mental health and suicide prevention plans and commissioning services according to those plans.	1 PHN ahead of schedule, 7 behind schedule, 20 on track	1 State/Territory behind schedule, all others on track.	—
2.7 — Developing region-wide multi-agency agreements, shared care pathways, triage protocols and information-sharing protocols to improve integration and assist consumers and carers to navigate the system.	5 PHNs behind schedule, 22 PHNs on track	1 State/Territory behind schedule, all others on track.	—
2.8 — Developing shared clinical governance mechanisms to allow for agreed care pathways, referral mechanism, quality processes and review of adverse events.	8 PHNs behind schedule, 20 PHNs on track.	1 State/Territory behind schedule, all others on track.	—

Source: NMHC (2018).

Box G.10 **Selected examples of PHN–LHN cooperation**

- The Brisbane North Primary Health Network (PHN) and Metro North Health and Hospital Service (its neighbouring Local Hospital Network) have created a ‘neutral space’ where separate parts of the health system can come together (the Health Alliance) and a shared governance mechanism (the Joint Board Committee) with rotating membership to progress shared goals (MNHHS, Brisbane North PHN, MSHHS and Brisbane South PHN, sub. 874).
- The Women’s and Children’s Hospital Network, Department of Human Services and Adelaide PHN funded an evidence-based therapy program for mothers with borderline personality disorder (PHN Cooperative, sub. 850).
- The Hunter New England Central Coast PHN and Hunter New England and Central Coast Local Health Districts (its neighbouring LHNs) both committed resources toward a dynamic simulation modelling for suicide prevention process to inform future commissioning of suicide prevention services. The same grouping also collaboratively commissioned a program to provide assertive outreach and linkage to primary care for people with complex psychosocial needs (PHN Cooperative, sub. 850).

Instead of drawing sharp conclusions about its success on the basis of this limited evidence, we have examined the fundamentals of the Fifth Plan approach — its potential strengths (regionalism) and weaknesses (misaligned incentives of PHNs and LHNs) and the effectiveness of how it is being pursued.

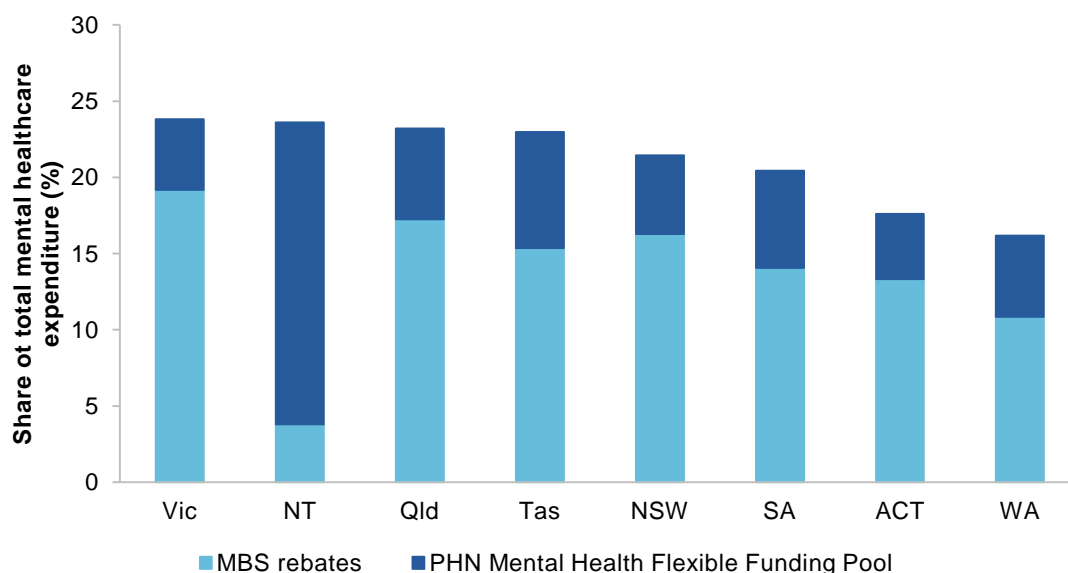
A regional strategy is a sound foundation

Regionalism is at the core of the Fifth Plan approach. Effectively, the Fifth Plan approach seeks to clarify PHN and LHN roles and integrate PHN-commissioned and LHN-provided services on a region-by-region basis, which allows for some regional variation in government roles and promotes regional approaches to integrating services across levels of government.

A regional approach to clarifying roles and integrating services seems the most likely to succeed, for three reasons:

- Government roles are *not* currently uniform across Australia. Australian Government funding for mainstream mental healthcare services is mostly via MBS rebates, which flow disproportionately to wealthier urban areas (section G.2). And while PHN funding counteracts these inequities, it only partially cancels out the differences when regional differences are taken into consideration (section G.2). As a result, the Australian Government share of total mental healthcare funding varies between States/Territories, from as high as 24% in Victoria to as low as 16% in Western Australia (figure G.5) — and this obscures regional differences within States/Territories.
- Regional differences suggest the ‘optimal’ service mix will differ between regions. A rigid approach to clarifying roles risks locking in a uniform service mix.
- Effective integration requires, among other things, personal relationships that can only be formed at the regional level (PC 2017b).

Figure G.5 **Medicare and PHN share of total mental healthcare expenditure^a**
2017-18



^a 'Total mental healthcare funding' here comprises State and Territory Government expenditure on specialised mental health services (inclusive of Australian Government contributions); MBS rebates to GPs (mental health items only), psychiatrists and allied mental health professionals; and the PHN Mental Health Care Flexible Funding Pool.

Source: AIHW (2020a); unpublished data supplied by the Australian Government Department of Health.

This conclusion comes with two important provisos:

- Regional-level role clarification does not subsume the need for national-level role clarification (which, as noted previously, is not adequate at present). Rather, national-level role clarification should set expectations about the types of services that each level of government is responsible for funding (whether via PHNs, LHNs, MBS rebates or other means), and PHN–LHN groupings should then take this allocation of roles at a national level as a starting point to clarify roles at a more granular level via joint regional planning.
- Regional-level role clarification is necessary *only* if responsibility for commissioning mental health services remains split across levels of government. If a single level of government were to take full responsibility for commissioning mental health services, then national-level role clarification would suffice (although regional commissioning would remain preferable for the reasons outlined in box G.4). We discuss the potential for placing all commissioning responsibilities with a single agency (a Regional Commissioning Authority) in section G.5 and chapter 23.

Existing incentives undermine the scope for PHN–LHN cooperation

The Fifth Plan approach requires cooperation between PHNs and LHNs. Cooperation is common, and there is no underlying reason why cooperation between PHNs and LHNs could not integrate mental health services and allocate resources to better meet consumer needs.

However, cooperation will only be an effective strategy where it is mutually beneficial to the relevant parties. A primary concern with the Fifth Plan approach is that neither PHNs nor LHNs face strong financial incentives to work together in a cooperative manner.

Consider the incentives of PHNs. As set out in chapter 12, there likely would be savings to the mental health budget by better servicing the missing middle. But these savings would likely come in the form of reduced demands on acute mental healthcare and non-health services, neither of which are captured by the PHNs. Moreover, the ability of the Australian Government to direct the PHNs to ‘internalise’ these potential savings appears limited. Reducing ‘potentially preventable hospitalisations’ is an objective in the PHN Program Performance and Quality Framework (DoH 2018), but there is no measure for potentially preventable mental illness-related hospitalisations (AIHW 2018). And while the general PHN Grant Program Guidelines note that an objective of establishing PHNs is to ‘help patients to avoid having to go to emergency departments or being admitted to hospital for conditions that can be effectively managed outside of hospitals’ (DoH 2016a), the Mental Health Care Flexible Funding Pool Guidance Documentation mentions hospital avoidance only in the context of clinical care and coordination delivered by mental health nurses, and only in passing.

On the LHN side — and as already discussed in section G.3 — activity-based funding for public hospital-based mental healthcare limits incentives to seek to service the missing middle. Coordinating with PHNs runs counter to this.

Supporting policy settings are inadequate

Given the current incentives that PHNs and LHNs face, well-designed regulation and strong oversight is likely to be necessary to drive PHNs and LHNs to cooperate. These are not in place at this time.

Joint regional planning is critical, but is not adequately mandated

Ideally, cooperative arrangements would see PHN–LHN groupings allocate resources and share information as though each grouping were a single organisation holding a single mental health budget and singularly responsible for providing/commissioning mental healthcare. To drive such behaviour, governments must clearly specify verifiable activities required of PHNs and LHNs that require them to behave in this way, while not being so prescriptive as to undermine the benefits offered by regionalism.

The activities required of PHN–LHN groupings under the Fifth Plan approach (box G.11) *could* be used to require groupings to behave in this way. In particular, activities 2.1–2.5 require each PHN–LHN grouping to jointly develop a regional mental health and suicide prevention plan and align their commissioning/service provision processes with this plan. The development of these plans *could* serve as objectively verifiable evidence that PHN–LHN groupings have cooperated with one another, and the plans *could* be used to hold PHN–LHN groupings accountable for their future resourcing allocations. And the requirement is not unduly prescriptive, as joint region planning is a necessary input to successful cooperation.

Box G.11 Cooperative activities required of PHNs and LHNs

Priority Area One of the Fifth Plan sets out that following actions that PHNs and LHNs must undertake.

- Utilise existing agreements between governments for regional governance and planning arrangements (activity 2.1) — commencing early 2018.
- Engage with the local community, including consumers and carers, community-managed organisations, ACCHSs, National Disability Insurance Scheme providers, the National Disability Insurance Agency, private providers and social service agencies (activity 2.2) — commencing early 2018.
- Undertake joint regional mental health needs assessments to identify gaps, duplication and inefficiencies to make better use of existing resources and improve sustainability (activity 2.3) — progressively from June 2018.
- Examine innovative funding models, such as joint commissioning of services and fund pooling for packages of care and support, to create the right incentives to focus on prevention, early intervention and recovery (activity 2.4) — commencing mid-2020.
- Develop joint regional mental health and suicide prevention plans and commission services according to those plans (activity 2.5) — foundation plans due mid-2020, comprehensive plans due mid-2022.
- Identify and harness opportunities for digital mental health to improve integration (activity 2.6) — completed mid-2020.
- Develop region-wide multi-agency agreements, shared care pathways, triage protocols and information-sharing protocols to improve integration and assist consumers and carers to navigate the system (activity 2.7) — completed mid-2021.
- Develop shared clinical governance mechanisms to allow for agreed care pathways, referral mechanisms, quality processes and review of adverse events (activity 2.8) — completed mid-2021.

Source: COAG Health Council (2017); NMHC (2018).

However, guidelines for joint regional plans developed subsequent to the Fifth Plan do not require PHN–LHN groupings to develop plans that would have sufficient detail to guide regional cooperation. The guidelines grant ‘significant flexibility, variation and innovation’ (Integrated Regional Planning Working Group 2018b, p. 14) in relation to, among other things:

- the format, structure and length of the plans
- whether the regional plan is endorsed by other local stakeholders
- whether detailed joint service mapping, planning and development is undertaken to inform the plan or is an agreed action over the life of the plan.

Further, PHN–LHN groupings are not expected to obtain approval from either the Australian Government or State/Territory Governments for their joint regional plans. Given the current incentives that PHNs and LHNs face, these weak governance processes create a risk that some PHN–LHN groupings will produce plans of little substance.

There appears to be no intention for either the Australian Government or State/Territory Governments to use the joint regional plans to hold PHN–LHN groupings to account. Even if a PHN–LHN grouping does produce a high-quality plan, the incentives for each party to stick to that plan are not strong. LHNs may commit to providing more community ambulatory mental healthcare at the outset, and receive (block) funding to support this, but will still face incentives to direct consumers toward activity-funded hospitals. PHNs may commit to integrating their services tightly with LHN services, but may subsequently find it easier to fall back into their traditional primary care sphere of influence.

The guidelines also fall short of ensuring adequate consumer and carer input. PHN–LHN groupings are expected to develop a ‘consultation plan’ that includes (among other things) a strategy for engaging with consumers and carers, but they are not required to publish these plans (Integrated Regional Planning Working Group 2018a). And there are no formal requirements on how planning processes should engage with consumers and carers, or whether they should endorse joint regional plans.

Monitoring and reporting lacks independence and detail

The National Mental Health Commission (NMHC) is responsible for monitoring and reporting on the implementation of the Fifth Plan approach. To do so, it mostly draws on surveys of PHNs and State and Territory Governments about the degree to which they have implemented the actions of the Fifth Plan approach (NMHC 2018).

We have two concerns with this approach:

- The NMHC is an executive agency of the Australian Government Department of Health (chapter 22), so some stakeholders would not perceive it as independent.
- The reporting is often subjective — it is based on the perceptions of PHNs and government agencies at both levels of government about progress made toward the activities laid out in box G.11. There have been comparatively fewer attempts to use objective data to examine the impacts that cooperation between PHNs and LHNs is having, such by reporting gap

analyses using National Mental Health Service Planning Framework benchmarks (chapter 24) and comparing actual service delivery with planned commitments. As regards the latter point, existing guidelines for joint regional planning are too vague to give hope that joint regional plans (as currently conceived) could feed into such analysis.

Psychosocial supports need more attention

The Fifth Plan approach is healthcare-centric. While it acknowledges the importance of non-health sectors, its focus is on the integration of primary and specialist mental healthcare.

This means that, with regard to psychosocial supports outside of the NDIS, it has become quickly outdated. Since its introduction, the Australian Government has devolved its residual psychosocial support programs outside of the NDIS to the PHNs (chapter 17). And LHNs in some states (for example, New South Wales) also commission psychosocial supports (Coordinare et al. 2018).

Integration of Australian Government and State and Territory Government psychosocial support programs outside of the NDIS may have deteriorated in recent times. The Australian Government's National Psychosocial Support program — a funding boost to psychosocial supports — offered an opportunity to clarify federal responsibilities. Instead, both tiers of government increased funding to psychosocial supports, but did so in an uncoordinated way. On this point, Mental Health Australia (sub. 544, p. 7) said:

The commissioning service model was intended to be developed in collaboration by the Australian Government, state and territory governments and PHNs in an attempt to ensure it is flexible and attributable to all involved parties. The approach to date has, however, followed a similar uncoordinated path, with the Commonwealth funding PHNs to address the diminishing Partners in Recovery (PIR) and Personal Helpers and Mentors Service (PHaMs) programs and some states and territory governments selecting programs that were already being delivered and committing some new and some already allocated funding through them. This is an example of an unintended consequence resulting from inadequate Commonwealth and state negotiations in relation to significant social services reform.

Joint regional planning guidelines *do* mention that: 'Governments expect that joint regional planning by LHNs and PHNs will support the planned implementation and coordination of psychosocial support services for people with severe mental illness and associated psychosocial impairment who are not more appropriately supported through the NDIS' (Integrated Regional Planning Working Group 2018b, p. 38). But, consistent with the shortcomings of expectations of joint regional planning discussed above, precisely what is expected of PHN–LHN groupings in this regard has not been made clear.

G.5 To renovate or rebuild the system?

In recognition of the need to clarify government roles for mental healthcare and psychosocial supports, the draft Inquiry report proposed two options for reform to commissioning

arrangements, termed ‘Renovate’ and ‘Rebuild’. Box G.12 provides a recap of these options, including how they would integrate with other reforms to funding arrangements that were proposed in the draft Inquiry report.

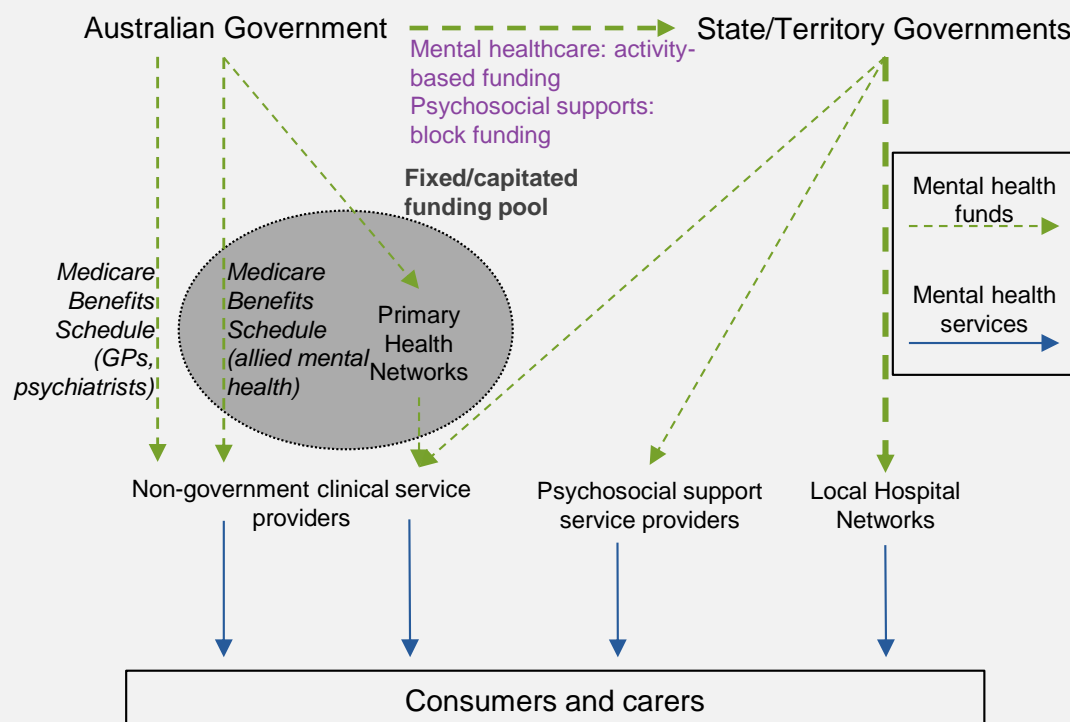
Box G.12 Two models in the Inquiry draft report: Renovate and Rebuild

Renovate

Renovate sought to rationalise psychosocial support funding, integrate the accounting of Medicare Benefits Schedule (MBS) rebates for allied mental healthcare with Primary Health Network (PHN) funds, and embraced PHN–Local Hospital Network (LHN) cooperation as a mechanism to coordinate mental health services funded by both levels of government.

- State and Territory Governments would take on sole responsibility for commissioning psychosocial supports outside of the National Disability Insurance Scheme, supported by additional Australian Government funding.
- PHN mental health funds and MBS rebates for allied mental healthcare would be drawn from fixed/capitated regional pools, with PHNs free to co-fund MBS-rebated allied mental healthcare as they see fit.
- Responsibilities for clinical mental healthcare services would remain largely unchanged. Renovate would continue the current approach of supporting PHNs and LHNs to work cooperatively to create a unified mental health system, as set out in the first priority area of the Fifth National Mental Health and Suicide Prevention Plan (COAG Health Council 2017).

Funding flows under the Renovate model (proposed in the Inquiry draft report)



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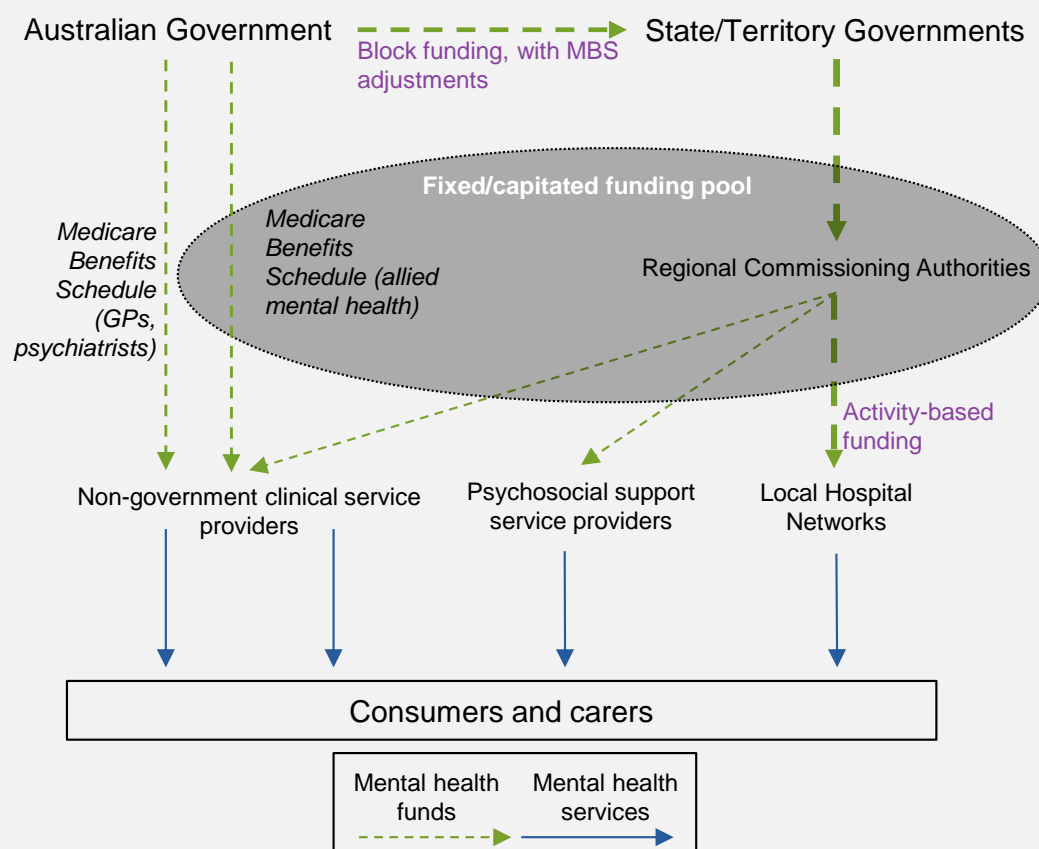
Box G.12 (continued)

Rebuild

Rebuild — a more significant change — would place responsibility for all mental health service commissioning with a single agency in each region and integrate the accounting of MBS rebates for allied mental healthcare with these agencies' funding pools.

- Under Rebuild (as proposed in the draft report) (figure below), State and Territory Governments would establish 'Regional Commissioning Authorities' (RCAs) that commission:
 - all mental healthcare (that is, mental healthcare currently commissioned by PHNs, and State and Territory Government health departments), excepting MBS-rebated mental healthcare (GPs, allied mental health and psychiatry)
 - all psychosocial supports outside of the National Disability Insurance Scheme.
- Each region would have a fixed/capitated mental health funding pool comprising pooled Australian Government, and State and Territory Government funds (MBS rebates for GPs and psychiatrists would sit outside this pool). To give effect to this, the Australian Government would transfer a needs-based block of funds to each RCA, but deduct from this transfer the volume of MBS rebates for allied mental healthcare billed in that RCA's catchment.

Funding flows under the Rebuild model (proposed in the Inquiry draft report)



Feedback following the draft report exposed both benefits and limitations of each approach. Consequently, this report recommends a third option that combines elements of both Renovate and Rebuild (chapter 23). This section summarises the further analysis that underpins this third option.

Rebuild resolves structural shortcomings

Rebuild would better clarify roles and reduce funding distortions than would Renovate. This is for two reasons.

First, Rebuild would assign clearer responsibilities for mental health service provision (especially to the missing middle) by assigning all commissioning to a single agency in each region — a Regional Commissioning Authority (RCA). Many participants and commentators agreed on the importance of establishing clear responsibilities,¹¹ including some State and Territory Governments (box G.13). By contrast, under Renovate, responsibility for commissioning would remain spread across both tiers of government.

Second, Rebuild would be more likely to reduce the existing distortions that incentivise relative overinvestment in hospital-based care and Medicare Benefits Schedule-rebated (MBS-rebated) services (sections G.2 and G.3) than would Renovate. It would establish, for each RCA catchment, a fixed/capitated needs-based mental health funding pool from which nearly all mental health services would be funded — thus neutralising the scope for cost shifting between levels of government. Under Renovate, however, incentives would remain for State/Territory Government health departments to shift costs to MBS-rebated care (as these would remain funded from outside their budgets).

¹¹ AFMH, sub. 1195; MHCSA, sub. 794; QUT Faculty of Health, sub. 826; RANZCP, Sydney transcript; TAMHSS, sub. 919; The Mitchell Institute, sub. 744.

Box G.13 State and Territory Government views on the two models

The New South Wales Government (sub. 1243) did not support either model because both would see mental healthcare continue to be funded via the Medicare Benefits Schedule, but leaned toward Renovate. It raised concerns that Rebuild would silo physical and mental healthcare.

The Victorian Government did not comment in detail as it did not wish to pre-empt the recommendations of its ongoing Mental Health Royal Commission. It acknowledged that Rebuild could ‘support better collaboration between different levels of government’ (sub. 1228, p. 17), but raised high-level concerns about a separation of physical and mental health.

The Western Australian Government (sub. 1227, attachment) supported Rebuild in-principle, and suggested that it could pilot the model with its mental health commission acting as a State-wide Regional Commissioning Authority (RCA).

The South Australian Government (sub. 692, p. 6) did not comment substantially, other than to urge consideration of any unintended consequences of creating RCAs.

The Tasmanian Government did not specify a position, but urged flexibility in the design of RCAs. It would ‘welcome a simplified approach to commissioning which recognises that the current situation can result in overlapping agendas and mismatch of need’ (sub. 1242, p. 3).

The ACT Government (sub. 1241, p. 17) supported Rebuild in-principle, noting that it ‘reduces the number of funding sources and simplifies commissioning and funding activities to a level that could provide substantial beneficial efficiencies’.

The Northern Territory Government (sub. 1220, p. 5) said only that Rebuild would ‘need further consideration and investigation prior to implementation in the NT’.

The Queensland Government did not submit a response following the release of the Inquiry draft report.

Rebuild is unlikely to hamper coordinated physical–mental healthcare

Various participants, including the PHNs (box G.14) and some State/Territory Governments (box G.13), raised concerns that administering funds via RCAs would weaken coordination between the physical and mental healthcare that consumers with comorbid physical–mental illness receive. For example:

- the Consumers Health Forum of Australia (sub. 646, p. 24) highlighted a risk of ‘fragmentation between mental and physical health services’
- the Mental Health Coordinating Council (sub. 920, p. 23) said ‘establishing separate mental health specific commissioning bodies may impact negatively on systemic capacity to further drive integrated care for people with mental health issues’
- the PHN Cooperative (sub. 850, pp. 10–11) said that implementing Rebuild could lead to mental health becoming ‘increasingly “siloed” and distanced from the broader health system within which it functions’, and that it ‘signals the delinking of mental health and physical health which would be the antithesis of the principles of integrated care, to which the government has publicly committed, and moves away from meeting the full healthcare needs of individuals and communities’.

Box G.14 PHN views on Renovate vs. Rebuild

Many Primary Health Networks (PHNs) (including WA Primary Health Alliance, sub. 722; WentWest Limited, sub. 788; Victorian and Tasmanian PHN Alliance, sub. 849; PHN Cooperative, sub. 850; COORDINARE, sub. 1194; and Murrumbidgee Primary Health Network, sub. 1199) strongly rejected Rebuild, under which they would no longer be responsible for commissioning mental health services.

PHN arguments against Rebuild include that it would:

- reduce the influence of GPs on mental health commissioning decisions and/or lead to primary care being disregarded (WA Primary Health Alliance sub. 722; PHN Cooperative, sub. 850; COORDINARE sub. 1194)
- introduce an extra layer of bureaucracy and cost (PHN Cooperative, sub. 850)
- disrupt the gains made by PHNs (WentWest Limited, sub. 788; COORDINARE, sub. 1194).

The PHNs proposed a variant on Renovate, termed 'Repurpose'. It would involve PHNs taking on sole responsibility for commissioning psychosocial supports (which sat with State and Territory Governments under Renovate), but is otherwise very similar to Renovate.

These concerns warrant careful consideration given the high rates of comorbid physical–mental illness (chapter 14). However, in our view, they are overstated because they conflate coordinated *delivery* of care from a consumer's perspective with the *funding* of that care. Indeed, these concerns are symptomatic of a system that is 'funder' centric and places less emphasis on consumers' experiences of services.

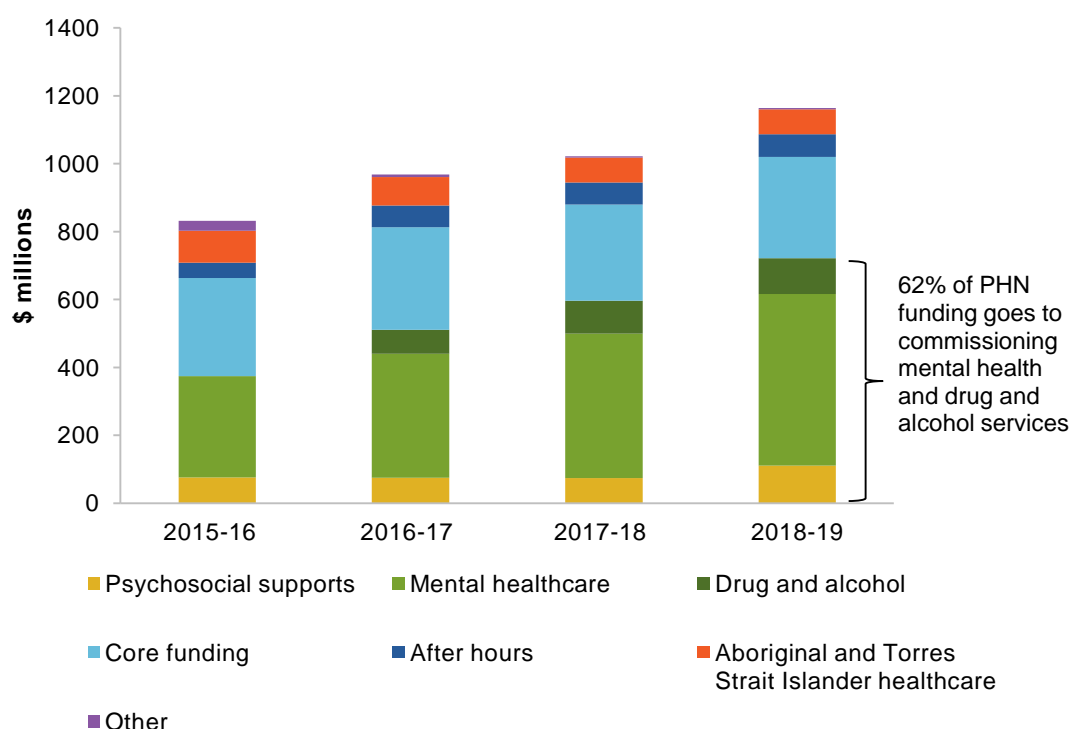
Under Rebuild, RCAs would be responsible for mental healthcare commissioning and PHNs and State and Territory Government health departments would be responsible for physical healthcare commissioning. The issue is whether separating mental and physical healthcare commissioning responsibilities would be likely to reduce coordination of physical and mental healthcare. In part, this depends on the extent to which, under the current arrangements, coordination is contingent on a single funder commissioning both physical and mental healthcare.¹²

There is limited scope for this to be the case for primary healthcare, because the PHNs do not commission much primary physical healthcare (it is overwhelmingly funded via MBS rebates). The bulk of Australian Government funding to PHNs is mental health related (62% in 2018-19; figure G.6). Moreover, 67% of the non-mental health funding (or 26% of all funding) is 'core funding', much of which does not go toward commissioning services. By contrast, only about 8% of total government health expenditure in Australia goes toward mental health services (AIHW 2020a). Put differently, this evidence demonstrates that PHNs are themselves almost specialist mental health service commissioners, so transferring their mental health commissioning responsibilities to different specialist mental health service

¹² Examples of care coordination activities that are *not* contingent on a single funder commissioning both physical and mental healthcare include GPs managing the care of consumers with comorbid physical–mental illness and PHNs establishing referral pathways and other linkages between mental healthcare providers (whether MBS-rebated or PHN-commissioned) and GPs (MBS-rebated). These could continue under Rebuild.

commissioners (RCAs) would be closer to a straight transfer of responsibilities between two mental health commissioning bodies rather than an of undermining the coordination of primary physical and mental healthcare.

Figure G.6 Australian Government funding to Primary Health Networks^a



^a 'Psychosocial supports' includes Partners in Recovery, the National Psychosocial Support Measure and Continuity of Support programs. 'Mental healthcare' is the Primary Mental Health Care Flexible Funding Pool. 'Aboriginal and Torres Strait Islander healthcare' includes Integrated Team Care and other Indigenous health programs. 'Core funding' includes general practice support.

Source: Unpublished data supplied by the Australian Government Department of Health.

At the State/Territory level, there currently are single funders (State/Territory Government health departments) commissioning both physical and mental healthcare in every State/Territory except Western Australia. Hence, any coordination problem under Rebuild is more likely to arise due to the split of commissioning responsibilities at this level than at the PHN level.

However, recent experience from Western Australia suggests that the separation of physical and mental healthcare commissioning at the State/Territory level need not undermine the coordination of physical and mental healthcare from a consumer perspective. Since 2010, the Western Australian Government has tasked its Department of Health with commissioning physical healthcare from LHNs and its Mental Health Commission with commissioning mental healthcare from LHNs and other mental health services from non-government providers — a practical example of separate physical and mental health

service commissioning. There is little to suggest that these arrangements resulted in a lessening of physical–mental healthcare coordination. While two recent reviews (Chapman et al. 2019; OAGWA 2019) were highly critical of the Western Australian arrangements, both primarily critiqued the lack of clarity in, and duplication of, the roles and responsibilities of the Western Australian Mental Health Commission and the Western Australian Department of Health for various aspects of the funding and delivery of *mental health* services alone.

The findings and recommendations of these reviews do, however, provide important learnings for any future attempt to establish RCAs that we have incorporated into our recommendations (chapter 23).

An immediate and wholesale transition to Regional Commissioning Authorities is not justified

While moving to RCAs, as outlined in the Rebuild option presented in the draft report, would eliminate many of the existing undesirable incentives that hinder regional coordination in mental health, an immediate and wholesale transition to a RCAs in every region of Australia cannot be justified at present.

- The implementation of RCAs would undoubtedly prove more disruptive in some parts of Australia than either maintaining or improving on the current cooperative arrangements between PHNs and LHNs.
- The long-term benefits of having RCAs relative to cooperative arrangements between PHNs and LHNs depend heavily on whether or not these cooperative arrangements can be improved. Moreover, while the Productivity Commission has concerns about the prospects of PHN–LHN cooperation — at least for some parts of Australia — no concrete determination of its prospects can yet be made as most PHN–LHN groupings are yet to commence critical milestones — examining co-commissioning approaches (from mid-2020) and producing comprehensive joint regional plans (by mid-2022) (section G.4).

As such, the Productivity Commission considers that a better approach is to allow for individual States and Territories to take bespoke approaches. PHN–LHN cooperation should be strengthened through reforms to improve oversight and strengthen joint regional planning. However, individual States and Territories should be able to, at any time, choose to move to RCAs. For example, if a State or Territory either considers that PHN–LHN cooperation is unlikely to be successful even with these reforms or, if after implementing the reforms they consider that cooperation is not delivering a person-centred mental health system, that State or Territory can work with the Australian Government to implement regional commissioning of mental health services through RCAs.

G.6 Additional considerations underpinning chapter 23 reforms

This section provides additional detail on three reforms proposed in chapter 23:

- The case for developing a National Mental Health and Suicide Prevention Agreement.
- Considerations underpinning proposed RCA governance arrangements.
- The proposed method for determining the allocation of Mental Health Care Flexible Funding Pool funds to PHNs (and RCAs).

The case for a National Mental Health and Suicide Prevention Agreement

Chapter 23 argues that it is necessary secure the agreement of all governments to:

- recast the NMHC as an interjurisdictional statutory authority;
- clarify government responsibilities for mental healthcare, psychosocial supports, mental health carer supports and suicide prevention services; and
- administer additional Australian Government financial transfers to State and Territory Governments to both support the transfer of responsibility for psychosocial supports to State and Territory Governments and to assist with filling the sizeable gaps in State and Territory Government provision of clinical mental healthcare and psychosocial supports.

The Productivity Commission's view is that such agreement is best sought via a new Intergovernmental Agreement — a National Mental Health and Suicide Prevention Agreement. This is because the alternatives of a) modifying existing agreements, or b) negotiating a range of new smaller agreements are less suited to achieving the changes necessary.

The nature and scale of the relevant recommendations in this Inquiry rules out option a).

- Transferring responsibility for non-NDIS psychosocial supports from the Australian Government to State and Territory Governments (recommendation 23) would necessitate a corresponding transfer of funds. While these changes could (and should) be reflected in the National Disability Agreement, the transfer of funds to support them would need another authorising agreement.¹³
- The significant increases to State and Territory Government expenditure on mental healthcare and psychosocial supports recommended by this Inquiry (about \$1.2-1.9 billion per annum (chapter 23)) would also necessitate additional transfers from the Australian Government to State and Territory Governments, as the Australian Government's has access to more efficient tax bases (with the exception of

¹³ The Productivity Commission's (2018) Review of the National Disability Agreement recommended that a new National Disability Agreement be developed that would clarify responsibilities for disability support (including psychosocial supports) outside of the NDIS and be a 'living document' (meaning that its schedules are updated as required).

State/Territory land taxes and municipal rates) and greater scope to raise additional tax revenues (PC 2011). Again, these transfers would require an authorising agreement. As noted above, the National Disability Agreement is unsuited to governing the transfer of additional funds for psychosocial supports. Meanwhile, a renegotiation of the NHRA (which provides intergovernmental transfers to support mental healthcare) seems unlikely and the mechanism it uses to determine transfers is unsuited to incentivising additional investment where it is most needed (section G.3).

- It would be desirable for all jurisdictions to consent to the NMHC becoming an interjurisdictional statutory authority that could evaluate State and Territory Government mental health programs (recommendation 22) and more thoroughly monitor and report on PHN–LHN cooperation (recommendation 23). This requires a new agreement.
- All governments should formally commit to establishing RCAs on a State-by-State basis if PHN–LHN cooperation is lacking (recommendation 23). This also requires a new agreement.

Option b) (negotiating a range of smaller agreements) is also not advised. Although governments could potentially negotiate a series of smaller agreements, administering tightly interlinked reforms through separate agreements risks creating inconsistencies. For example, it would not be desirable to specify the role of the NMHC in monitoring and reporting on PHN–LHN cooperation (recommendation 23) separately from its role as an evaluation body and its broader interjurisdictional reporting remit (recommendation 22).

Moreover, combining the reforms under a single agreement would enable the Australian Government to leverage the offer of additional funding to seek reforms to governance, monitoring, reporting and evaluation that State and Territory Governments would otherwise have little incentive to pursue. Several Inquiry participants noted that past reforms without commensurate funding commitments have failed (Queensland Advocacy Incorporated, sub. 116; Community Mental Health Australia, sub. 449).

Hence, negotiating a single new comprehensive agreement is preferred. The Australian, State and Territory Governments should develop a single national agreement to govern funding transfers, specify government roles and responsibilities and set out the new role for the NMHC — a National Mental Health and Suicide Prevention Agreement. The proposal in the Inquiry draft report for such an Intergovernmental Agreement received overwhelming support from participants.¹⁴

¹⁴ ANU College of Health and Medicine (sub. 669); Australasian College for Emergency Medicine (sub. 926); Black Dog Institute (sub. 1207); Community Services Industry Alliance (sub. 915); Consumers Health Forum (sub. 646); Consortium of Australian Psychiatrists and Psychologist (sub. 882); Dietitians Association of Australia (sub. 766); Health Justice Australia (sub. 749); Mental Health Australia (sub. 864); Mental Health Carers NSW (sub. 1231); Mental Health Coordinating Council (sub. 920); Mental Health Council of Tasmania (sub. 869); Roses in the Ocean (sub. 710); SA Mental Health Commission (sub. 691); UnitingSA (sub. 807); WAAMH (sub. 1112); Western Australian Government (sub. 1227).

Governance of Regional Commissioning Authorities

Where RCAs are established, chapter 23 noted that they should be separate entities at arms' length from Ministerial control. The Productivity Commission considered three options to reach this conclusion:

- Establishing RCAs within LHNs. This option is not preferred, as conflicts of interest would arise when RCAs commission services from LHNs. Grow Australia (sub. 847, p. 16) summarised this point well:

... if Regional Commissioning Authorities are just LHNs/LHDs/HHSs in disguise, that will be a backward step. These bodies are already conflicted because they operate as both funders and providers (unlike PHNs), hence we have seen no significant shift in funding patterns away from acute services (which LHNs fund and operate) to community based services which keep people out of hospital.

- Establishing RCAs within State/Territory Government health departments. This could assuage concerns about RCAs undermining the integration of physical and mental healthcare (although such concerns are overstated; section G.5), and generate administrative cost savings if RCAs and health departments are able to share staff. But some participants highlighted that, for cultural reasons, health departments tend to prioritise acute hospital services ahead of community-based mental healthcare.

Historically our experience has been that state entities are very focused on their own 'clinical' services and bed-based hospital services, and less interested in the role that community-based mental health services play. (Aftercare, sub. 835, p. 8)

The acute nature of hospital services, their higher political profile, and the generally higher status of their staff, conspire to make it easier for hospitals to attract funding and for their needs to be seen as more urgent and more important. They are often able to gain additional funding at the expense of community services. (Grattan Institute, sub. 816, pp. 10–11)

Hence, this option is not preferred.

- Establishing RCAs as separate entities at arms' length from Ministerial control. This would counter health departments' cultural preferences for acute care. It would also remove the potential for political influence on RCA decision-making (TAMHSS, sub. 919). For these reasons, this option is preferred.

Chapter 23 also proposed that RCAs should be governed by skills-based boards with lived experience representation. These boards would be supported by diverse advisory councils.

Several participants suggested modifications to these arrangements.

Some participants called for Australian Government representation in RCAs. The Consortium of Australian Psychiatrists and Psychologists (sub. 882, p. 34) suggested that the boards of RCAs ought to 'have proportionate representation of Commonwealth and State governments based on funding provided by these respective tiers of government'. Relatedly, Aftercare (sub. 835) suggested that RCAs should be interjurisdictional bodies. The Productivity Commission is concerned that such arrangements would allow for blame shifting to occur. By

contrast, establishing RCAs as State/Territory Government entities allows State/Territory Governments to be held *solely* responsible for how funds are allocated.

Other participants called for greater representation of Aboriginal and Torres Strait Islander people in RCA governance. The National Aboriginal Community Controlled Health Organisation (sub. 1226, p. 18) suggested that RCAs should be required to ‘establish Aboriginal and Torres Strait Islander governance groups with majority Indigenous membership including [Aboriginal Community Controlled Health Organisations], and decision-making powers including consultation and agreement on funding decisions’. And the Centre of Best Practice in Aboriginal and Torres Strait Islander Suicide Prevention and National Aboriginal and Torres Strait Islander Leadership in Mental Health (sub. 1217) suggested that each RCA’s board should include at least one Aboriginal or Torres Strait Islander person.

Greater community control over Aboriginal and Torres Strait Islander mental health service delivery is essential. The primary way to achieve this would be to ensure that ACCHSs remain preferred providers of the Aboriginal and Torres Strait Islander suicide prevention and mental health services that were funded by PHNs prior to the establishment of RCAs (recommendation 23).

Recommended Primary Health Network/Regional Commissioning Authority funding allocation model

Chapter 23 sets out that the Australian Government Department of Health should reform the way it determines the amount of Mental Health Care Flexible Funding Pool funds that each PHN/RCA receives. The detailed mechanics of the recommended funding allocation model are set out in figure G.7 and box G.15.

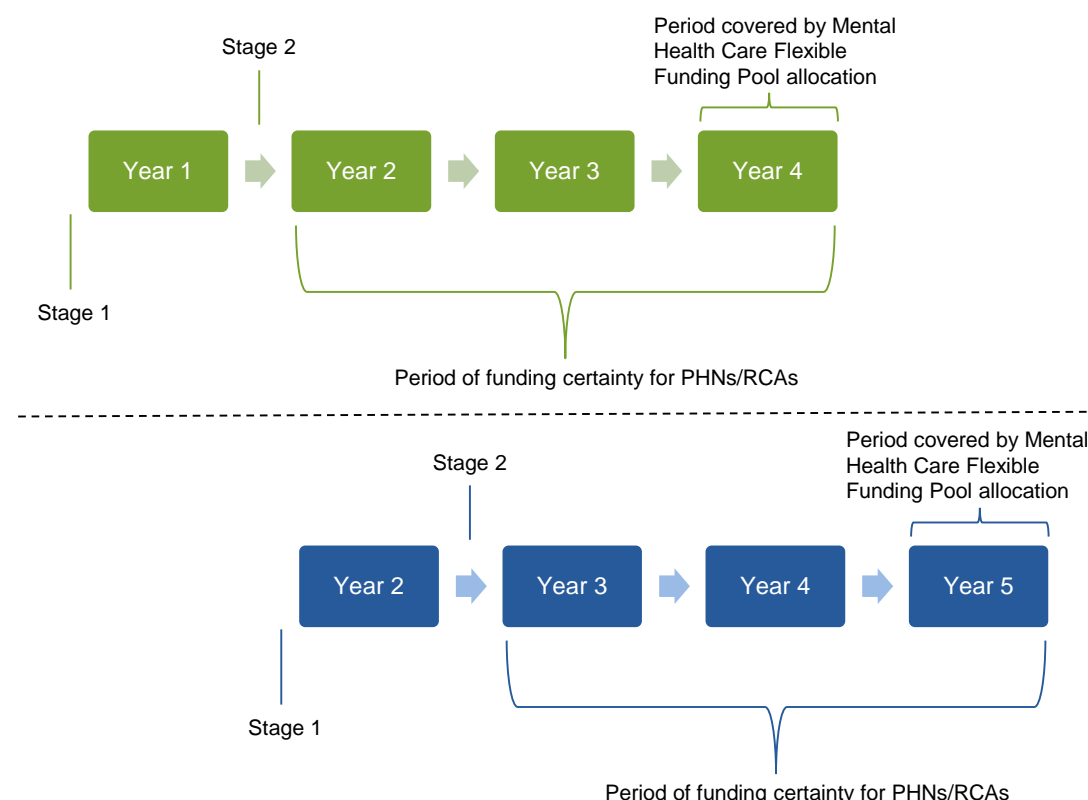
Several other considerations informed the development of the funding allocation model.

- *MBS-rebated services included in funding allocation model.* The draft Inquiry report proposed that only allied mental health MBS-rebated services ought to be included in the funding allocation model, on the grounds that they are most clearly substitutes for PHN-commissioned services (box. G.3). We have now expanded this scope to include psychiatry MBS-rebated services, both because this would promote greater geographic equity and because some substitution between psychiatry MBS-rebated services and PHN-commissioned services is probable. However, it remains our view that the case for including allied mental health MBS rebates in the process is stronger than is the case for including psychiatry MBS rebates.
- *Digital mental health services included in funding allocation model.* Chapter 10 recommends an expansion of digital mental health services (recommendation 10). We do not favour including the funding to these services in the funding allocation model. There is no strong equity case for doing so, as online services do not typically suffer the same regional inequities in access as do face-to-face therapies. And doing so would be unlikely to significantly change PHN’s/RCA’s commissioning decisions, as digital

mental health services are cost effective low intensity treatments (hence, PHNs/RCA's would be unlikely to seek to commission other services in preference to them).

- *The lag between when an MBS item is billed and a deduction is made to the corresponding PHN's/RCA's budget.* There is a trade-off here. A shorter delay would more strongly reduce PHN/RCA incentives to shift costs to the MBS and better allow PHNs/RCA's to pursue new models of care that might result in higher commissioned expenditure and lower MBS expenditure. Meanwhile, a longer delay would guarantee greater certainty of funding for PHNs/RCA's. We have recommended a three year delay, but only because this aligns with the time horizon over which PHNs/RCA's are currently granted funding certainty (Hunt 2019). We now do not favour the 'real time' reconciliation that the draft Inquiry report contemplated, as this could create significant uncertainty for PHNs/RCA's.

Figure G.7 Proposed process for determining PHN/RCA Mental Health Care Flexible Funding Pool allocations



Box G.15 Recommended process for determining PHN/RCA Mental Health Care Flexible Funding Pool allocations

Let:

- $x_1, x_2, x_3, \dots, x_{31}$ such that $\sum x_i = 1$ be the Australian Government Department of Health's determination of the share of total primary mental healthcare funding that the i th Primary Health Network (PHN) region ought to receive
- $MBS_{i,t}$ be the total MBS rebates for allied mental healthcare and psychiatry billed in the i th PHN's region in year t
- $MHCFFP_{i,t}$ be the total Mental Health Care Flexible Funding Pool funds allocated to the i th PHN in year t .

Stage 1

At the beginning of year 1, the Department of Health would announce the amount of total funding T that it intends to allocate to year 1 MBS rebates for mental healthcare (which are unknown at this stage) and the year 4 Mental Health Care Flexible Funding Pool. That is:

$$T = \sum_i MBS_{i,1} + \sum_i MHCFFP_{i,4}$$

The Department of Health would also announce the allocation of the total funding T among PHNs (T_i for all i) by applying the determination:

$$T_i = x_i T$$

Stage 2

At the beginning of year 2, the Department of Health would deduct year 1 MBS rebates for mental healthcare (which are now known) in each PHN's region from the allocation determined one year prior. The remainder would become each PHN's year 4 Mental Health Care Flexible Funding Pool allocation:

$$MHCFFP_{i,4} = x_i T - MBS_{i,1}$$

This process would then repeat each year.

Additional considerations

- If actual year 1 MBS rebates for mental healthcare were substantially higher than expected across Australia, the Department of Health could retrospectively increase the total funding T . In general, T should increase over time in line with population growth, inflation, and expected increases in MBS rebates for allied mental healthcare and psychiatry due to increases in the number of MBS-eligible allied mental health professional and psychiatrists.
- The size of the Mental Health Care Flexible Funding Pool could be insufficient to correct for regional inequities in the distribution of MBS rebates, meaning that this method would suggest a negative Year 4 Mental Health Care Flexible Funding Pool allocation for some PHNs (i.e. if $MBS_{i,1} > x_i T$ for some i). If this is the case, it could be necessary to establish a minimum level of per capita Mental Health Care Flexible Funding Pool funding that each PHN must receive.

Note: this assumes that no States/Territories have transitioned to Regional Commissioning Authorities (RCAs). In States and Territories that have transitioned to RCAs, Mental Health Care Flexible Funding Pool funds would be transferred to the corresponding RCA.

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H Calculating the cost of mental ill-health and suicide in Australia

This appendix provides greater detail on how the Productivity Commission has calculated the cost of mental ill-health and suicide in Australia (presented in chapters 3 and 9). The aim is to quantify costs in monetary terms, using data from the Australian, State and Territory Governments, survey data, estimates from the literature and our own assessments. Nonetheless, data is limited in some areas. Our aggregate estimate of the cost of mental ill-health should, therefore, be considered a reasonable and informative estimate, based on the available data. Future attempts to calculate the cost of mental ill-health and suicide in Australia should review the available data sources and endeavour to improve estimation techniques. Future researchers should also provide feedback on possible improvements in data collection.

There are other costs that cannot be quantified, such as the emotional costs of stigma and lower social participation. These costs are discussed in chapter 3 and throughout the report qualitatively. The lack of quantification of these costs does not diminish their importance.

H.1 Mental healthcare and related expenditure

Government expenditure on mental health-related services

Total Australian, State and Territory Governments direct recurrent expenditure on mental healthcare and related services was estimated to be about \$10 billion in 2018-19 (table H.1). State and Territory Government outlays on specialised mental health services accounts for about two-thirds of this total government expenditure, consisting primarily of expenditure in public hospitals and community healthcare.¹⁵

¹⁵ Australian Government contributions for state and territory public hospital services are paid under the National Health Reform Agreement (NHRA). This arrangement includes grants and activity-based payments specifically tied to the operation of specialist mental health services delivered by state- and territory-managed public hospitals. While the quantum of funding made for mental health specific services under the NHRA is significant and identifiable, expenditure of those funds continues to be attributed to states and territories on the basis of their role as system managers of Australia's public hospital services. Current estimates available to the Department of Health, based on public reports of the National Health Funding Body indicate that mental health specific payments made by the Australian Government under the NHRA in 2018-19 totalled \$1.79 billion. Allocating this funding to the Australian Government will change the relative split of expenditure for Australian Government (51%) and State and Territory Government (49%) (AIHW 2020b).

Table H.1 Estimated mental healthcare expenditure
2018-19^a

	<i>\$billion</i>
<i>Australian Government</i>	
Medicare Benefits Schedule	1.3
Pharmaceutical Benefits Scheme	0.5
Mental healthcare ^b	0.5
Alcohol and other drugs services	0.3
Strategy, research, promotion and prevention	0.5
<i>Australian Government total^c</i>	3.1
<i>State and Territory Government</i>	
Public hospitals (admitted patients)	2.7
Community mental healthcare services	2.3
Alcohol and other drugs services	0.8
Other ^d	0.7
<i>State and Territory Government total^c</i>	6.6
Individual out-of-pocket expenses ^e	0.7
Private health insurers ^f	0.6
Workers compensation insurers	0.3
<i>Total</i>	11.3

^a Some expenditure converted to 2018-19 estimates using the health index of the CPI inflator. This indexing does not take into account growth in expenditure due to population growth in programs where funding is uncapped. ^b Includes Department of Health managed national programs and initiatives that are treatment focused and private health insurance premium rebates related to the provision of mental healthcare services. ^c Components do not necessarily sum to the total due to rounding errors. ^d Includes grants to non-government organisations. ^e Only includes out-of-pocket expenses for MBS and PBS items. ^f AIHW have advised that this estimate does include some expenditure by workers compensation insurers but is mostly private health insurers expenditure (AIHW, pers. comm., 23 Apr 2020). Consequently, there may be a small amount of double counting with the private health insurers and workers compensation expenditure estimates.

Source: Productivity Commission estimates based on ABS (*Consumer Price Index, June*, Cat. no. 6401.0; *Microdata: Multi-Agency Data Integration Project, Australia*, Cat. no. 1700.0); AIHW (2020a); DoH, pers. comm., 23 Sep 2019; Safe Work Australia's National Data-Set for Compensation-based Statistics; Ritter et al. (2014).

This estimate should be considered conservative as a range of other expenditure is not covered (box H.1). For example, there is an under attribution in the amount assigned to mental health from the Medicare Benefits Schedule (MBS). It is projected that the Australian Government spent approximately \$1.3 billion on MBS-rebated mental health specific services in 2018-19 (table H.1). However, this estimate only captures those MBS numbers associated with mental health. It does not capture mental health services under other MBS items, such as a standard consultation with a GP that deals with mental health problems. The Australian Institute of Health and Welfare (AIHW) (2020b, p. 1) consider the underestimate to be substantial.

It is unclear how many additional people receive GP mental health-related care that is billed as a consultation against generic GP MBS [Medicare Benefits Schedule] item numbers; however, the

results of the 2015-16 Bettering the Evaluation and Care of Health (BEACH) survey suggest that this number is likely to be substantial. The BEACH survey estimated that, in 2015-16, 12.4% (18 million encounters or 749.9 encounters per 1,000 population) of all GP encounters were mental-health related. In the same year about 3.2 million (or 135.5 services per 1,000 population) Medicare-subsidised mental health-specific services were provided.

Box H.1 What is counted in AIHW government expenditure?

Estimated Australian Government expenditure reported covers only those areas of expenditure that have a clear and identifiable mental health purpose. Broadly, this covers:

- programs and services principally targeted at providing assessment, treatment, support or other assistance
- population-level programs that have as their primary aim the prevention of mental illness or the improvement of mental health and wellbeing
- research with a mental health focus.

Expenditure by specialised mental health services is taken from the Mental Health Establishments National Minimum Data Set. It includes all specialised mental health services managed or funded, partially or fully, by state or territory health authorities. Specialised mental health services are those with the primary function of providing treatment, rehabilitation or community health support targeted towards people with mental illness. These activities are delivered from a service or facility that is readily identifiable as both specialised and serving a mental healthcare function. While expenditure is notionally allocated to State and Territory Governments, some expenditure is funded by the Australian Government.

Source: AIHW (2020b).

There is also unaccounted expenditure on suicide prevention programs. The Australian Government spent over \$50 million on suicide prevention under its National Suicide Prevention Program in 2017-18 (AIHW 2020a, table EXP.31). State and Territory Governments also provide and fund their own suicide prevention plans and activities, designed to meet local needs. However, data on the expenditure and service activity for these plans are not publicly available in a consolidated form for all jurisdictions (chapter 9). Nevertheless, the NSW Government (sub. 551, p. 6) submitted that they had committed \$19.7 million in 2019-20 to support implementation of key suicide prevention initiatives.

No administrative overheads associated with management of the mental health items within the MBS and Pharmaceutical Benefit Scheme (PBS) are covered in the Australian Government expenditure data (AIHW 2020b).

To minimise unaccounted expenditure, some estimates are based on research literature and unpublished sources. For example, national data collections for mental health do not include the expenditure of publicly-funded treatment for substance use disorders. Nevertheless, based on the estimates by Ritter et al. (2014) and data from the Australian Department of Health, healthcare costs of substance use disorders are estimated to be in the order of \$1 billion in 2018-19 (Productivity Commission estimates).

Mental healthcare expenses by non-government parties

Out-of-pocket costs to individuals

Individuals also incur costs associated with mental healthcare known as out-of-pocket costs. These cost can represent the full cost of a service or a shared payment, over and above any amount paid by the Australian Government or a private health insurance fund. There are many examples of how out-of-pocket costs can be incurred.

Based on administrative data, out-of-pocket costs for consultations and medication (that had an associated government rebate) for people with mental ill-health was \$0.7 billion in 2018-19 (table H.1). Of the mental health services that the Australian Government provides rebates for through the MBS, such as services from a GP, individuals contributed an estimated \$0.3 billion in 2018-19 (Productivity Commission estimates based on AIHW 2020a).¹⁶ Based on PBS data, the total patient contribution for mental health prescriptions in 2018-19 was \$0.4 billion (Productivity Commission estimates using ABS 2018). Co-payments for products and services under the MBS and PBS are just two possible sources of out-of-pocket costs (chapter 3).

In the draft report, we sought additional sources of data for out-of-pocket costs. We appreciate the information that some participants provided on the cost of their programs, how out-of-pocket costs could be reduced and the barrier they creates in accessing services (for example, Independent Private Psychiatrist Group, sub. 742; Bupa, sub. 1191). However, this information was not sufficient to provide aggregate estimates of existing expenditure beyond out-of-pocket expenses associated with MBS and PBS expenditure.

Future surveys represent a possible source of aggregate out-of-pocket costs data, particularly the ABS surveys. For example, the ABS is in the process of designing the next Mental Health and Wellbeing survey, which could gather information on costs that consumers incur outside the PBS and MBS, such as private prescriptions, full treatment costs or associated travel and accommodation costs.

Private insurance costs

Private health insurers also fund mental healthcare, which is estimated to be approximately \$0.6 billion in 2018-19 dollars (table H.1).

Similarly, workers compensation insurers fund mental healthcare for work-related claims (chapter 7). According to Safe Work Australia, over 7000 Australians are compensated for

¹⁶ Out-of-pocket costs for MBS could be overstated as some consumers may receive a further rebate in costs incurred from their private health insurer. This only applies to private patients in hospital. If a doctor and other health providers charges more than the MBS fee, this is paid by the consumer unless the provider has a 'gap arrangement' with the insurer and the service is provided under that arrangement. Many doctors and insurers use gap arrangements to remove or reduce out-of-pocket costs for consumers (DoH 2020).

work-related psychological claims each year, equating to \$0.3 billion paid in workers compensation (Safe Work Australia's National Data-Set for Compensation-based Statistics).

H.2 Expenditure on other services and supports

In addition to direct expenditure on mental healthcare and related services, governments also fund a range of programs and services that help support people. However, as only some of these services are used as a direct result of a person's mental illness, assumptions are necessary to attribute expenditure (box H.2).

Box H.2 **Attributing expenditure on services and supports to mental ill-health**

For specialised mental healthcare and related services, all expenditure relates to mental ill-health. This is less clear for other social services. In most cases, the expenditure on other support services attributable to mental ill-health would be less than 100% of the aggregate expenditure.

People using these support services may or may not have mental illness, and for those who do, it may not be the factor motivating them to access the service. For example, some people with mental ill-health may be accessing public housing primarily because they work in a low income occupation, and therefore are eligible for this service. Whereas other people with mental ill-health may be accessing public housing because their mental ill-health prevents them from working, which is the direct cause of their low income and eligibility for public housing. Ideally, expenditure from the latter should be included in any estimate of the cost of mental ill-health, whereas the former should not.

There are a number of options for attributing expenditure on other support services to mental ill-health.

- *Use data collected on the reason a person is accessing the service.* Some services collect this data and it provides some indication of the motivating reason for accessing the service. However, as mental health is highly correlated with a number of other likely factors, self-reporting may not be entirely accurate.
- *Use the 'population attributable fraction'.* This calculates the proportion of people accessing services as a result of their mental illness. It does so by estimating the increased likelihood of accessing a support service given mental illness and uses this to derive the number of people for whom mental illness is a plausible determining factor in their use of a service.
- *Assume that every person with mental illness who is involved with a service does so because of their mental health disorder.* While likely to be an overestimate, it may be the only method available due to data limitations.

Homelessness services

The Australian, State and Territory Governments provide many forms of housing support (chapter 20).

In 2018-19, total net recurrent expenditure on homelessness services was \$990 million (SCRGSP 2020b). This includes expenditure on specialist homelessness services funded by governments under the Council of Australian Governments National Affordable Housing Agreement and the National Partnership Agreement on Homelessness. Government and non-government specialist homelessness service providers deliver a range of services to clients — including supported accommodation, counselling, advocacy, links to housing, healthcare, education and employment services, outreach support, brokerage and meals services, and financial and employment assistance.

Mental ill-health is prevalent among those seeking homelessness services, but not all services are sought because of mental ill-health. In 2017-18, about one-third of clients of specialist homelessness services reported a mental illness. About half of those with mental ill-health reported this as a reason for seeking assistance from homelessness service providers (18% of all clients) (AIHW 2019b). Based on this data, it is estimated that homelessness services provided as a result of a person's mental ill-health was approximately \$174 million in 2018-19 (table H.2).

Social housing

In 2018-19, State and Territory Government net recurrent expenditure on social housing was \$4.0 billion (SCRGSP 2020b). Social housing is subsidised rental housing provided by not-for-profit, non-government or government organisations to assist people who are unable to access suitable accommodation in the private rental market. It includes public housing, State owned and managed Indigenous housing, community housing and Indigenous community housing.

As eligibility for social housing is primarily based on income, not all people accessing social housing with mental illness will do so because of their mental disorder. However, a person's mental health affects their ability to complete schooling, undertake further education, and participate in the labour market, all of which can have flow on effects to their income. That said, as the indicator of mental illness was collected based on households, it is not possible to calculate the attributable proportion (a person-based measure).

As a result, expenditure on social housing was assumed to be related to mental health based on the proportion of households in social housing utilising mental health services in the past 12 months. In 2016, across the various types of social housing, the following proportions of households reported that they had utilised mental health services in the past 12 months:

- public housing (20%)
- State owned and managed Indigenous housing (14%)
- community housing and Indigenous community housing (24%) (AIHW 2017).

Based on this, approximately \$811 million of social housing net recurrent expenditure was estimated to be related to mental health costs in 2018-19 (table H.2).

Employment support

The Australian Government funds employment support to help eligible jobseekers find and maintain employment (chapter 19). Employment support providers are contracted to deliver a range of programs. The two major employment support programs are:

- jobactive, which is designed to provide support to most jobseekers who are in receipt of unemployment benefits. In 2018-19, total expenditure on jobactive was \$1.4 billion (DJSB 2019)
- Disability Employment Services (DES), which is a specialist service that assists people with disabilities find employment. In 2018-19, total expenditure on DES was \$0.8 billion (DSS 2019).

In jobactive, approximately 14% of participants had mental illness (Department of Employment, Skills, Small and Family Business, unpublished data). Based on administrative data, approximately \$139 million in jobactive payments were made for job seekers who had disclosed a mental illness in 2018-19 (Department of Education, Skills and Employment, pers. comm., 11 June 2020). However, this is likely to be an underestimate as it relies on self-disclosure by the job seeker that they have mental illness, something that they may not be inclined to do given the potential discrimination that could result (chapter 9).

Some people with mental illness are eligible for specialist disability employment services because of their mental health disorder. In June 2019, about 40% of DES clients were eligible for assistance because of disability due to mental illness (Department of Social Services, unpublished data). In 2018-19, approximately \$328 million of expenditure on DES is estimated to be attributable to mental illness.

The Australian Government also funds the Community Development Program for job seekers in remote Australia. Approximately \$53 million of the expenditure from this program is attributable to mental illness (chapter 19).

Psychosocial supports

Psychosocial support services help people experiencing or recovering from mental illness to achieve higher levels of wellbeing and to increase their social and economic participation (chapter 17). Supports can include those that assist with participating in the community, managing daily tasks, undertaking work or study, helpline and counselling services, advocacy and promotion, finding accommodation and making connections with friends and family. Australian, State and Territory Governments fund psychosocial support services.

The Australian Government provides psychosocial supports for people with mental illness through the National Disability Insurance Scheme (NDIS) (chapter 17). Allocated funding for these supports was estimated to be \$1.1 billion in 2018-19. Approximately 56% of these funds were actually spent in 2018-19 (NDIA, pers. comm., 27 Mar 2020). Given this, the cost of the NDIS support for people with mental illness was estimated to be about \$0.6 billion in 2018-19.

In 2018-19, the Australian Government also funded psychosocial support programs, such as Partners in Recovery, Personal Helpers and Mentors, Day-to-Day Living and Mental Health Respite: Carer support (chapters 17 and 18). Australian Government funding for psychosocial support programs is estimated to be about \$0.4 billion (AIHW 2020a; DoH 2019).

State and Territory Governments have responsibility for funding, delivering and/or managing specialised mental health services, including psychosocial support services (chapter 17). Total expenditure on psychosocial supports was estimated to be \$0.5 billion in 2018-19 (AIHW 2020a).

Education

All educational institutions have requirements to provide healthy environments that promote and support mental health and wellbeing for children and young people. These span early childhood education and care centres, primary and secondary schools, higher education institutions as well as vocational education and training providers (chapters 5 and 6). Consequently, these institutions have been tasked to develop and implement policies to create these healthy environments, along with the delivery of a range of mental health and wellbeing services and initiatives that span from mental health promotion, prevention, early intervention to treatment. Examples of services and initiatives that educational institutions deliver or implement include:

- early childhood education and care providers implementing wellbeing frameworks, such as Beyond Blue's Be You program
- explicitly teaching a social and emotional wellbeing curriculum in primary school and up to year 10 in secondary school
- undertaking an assessment of the wellbeing of young children through the Australian Early Development Census
- providing school counselling and support services in schools, including individual and grouped sessions
- higher education institutions and vocational education and training authorities providing mental health, counselling and welfare services
- making 'reasonable adjustments', such as extra tuition, to ensure that students with disabilities, including those with mental illness, are able to access and participate in education and training on the same basis as other students.

Despite these institutions dedicating considerable resources to supporting the mental health and wellbeing of children and young people, we are unable to provide an estimate of the overall cost of these activities (chapter 5). Before coming to this conclusion, we sought information from stakeholders in the draft report — with some participants acknowledging the difficulty of this task (for example, The Mitchell Institute, sub. 744; Monash University, sub. 698). Chapter 5 outlines the challenges for collecting expenditure data in the schooling sector. Similar issues arise in the university and vocational education and training sectors.

Justice

As the costs of mental illness in the criminal justice system are difficult to determine (chapter 21), we have calculated the cost of people being imprisoned that is attributable to mental illness. This is estimated to be \$1.1 billion in 2018-19 (table H.2).

- In 2018-19, State and Territory Governments total net operating expenditure and capital costs on prisons was approximately \$4.9 billion (\$310 per day with an estimated prison population of 43 000 people) (SCRGSP 2020a).
- Based on prevalence data of mental illness in the population and in prisons, approximately 23% of the cost of housing people in prisons is attributable to mental illness (Productivity Commission estimates using SCRGSP 2020a).

Table H.2 Government expenditure on other services and supports attributable to mental illness 2018-19^a

<i>Service or support area</i>	<i>\$million</i>
Homelessness services	174
Social housing	811
Employment support	520
Psychosocial supports — National Disability Insurance Scheme	638
Psychosocial supports — Australian Government non-National Disability Insurance Scheme	403
Psychosocial supports — State and Territory Governments	452
Education	na
Justice	1 120
Total	4 119

^a Expenditure converted to 2018-19 estimates using CPI inflator. This does not take into account growth in expenditure due to population growth in programs where funding is uncapped. Components do not necessarily sum to the total due to rounding. **na** Not available.

Source: Productivity Commission estimates.

Informal care of those with mental illness

Informal carers, such as family members, partners and friends, play a significant role in the care of people with mental illness in Australia (chapter 18). They can help and support a family member or friend with mental illness by coordinating their healthcare, providing emotional support, and assisting with day-to-day living. The total annual replacement cost for adult informal mental health carers in 2015 was \$14.3 billion (Diminic et al. 2017). This represents the cost involved in replacing the caring tasks currently provided by informal carers with formal or paid mental health support services. In 2019, this represented an annual replacement cost of approximately \$15 billion. Diminic (2017, p. 3) noted:

The intention is never for government to completely replace the care provided by mental health carers. Rather, a replacement cost analysis is a method used to quantify the economic value of informal care, and in turn highlight the importance of carers.

Cost of collecting taxes to provide services

Governments use a variety of taxes to collect tax revenue that ultimately funds mental health services and provides financial support payments to eligible people and families. The tax distribution process involves governments transferring revenue from taxpayers to mental healthcare and other service providers. Such transfers do not occur without a cost. These costs include the cost of administration that lie behind tax collection, the compliance costs that businesses and individuals face as they meet eligibility criteria, and the costs of distortions imposed when governments collect tax. The latter is known as the excess burden of taxation, or its ‘deadweight loss’ to society.

Estimating the cost of collecting tax revenue is, however, complex and beyond the scope of an inquiry that is focused on mental health. Some issues include:

- establishing the best methodology used to measure the excess burden of a given tax
- not all taxes create an excess burden. In the case of externalities, such as the negative health effects of smoking, taxing the sale of and lowering output of the externality producing good (in this case, cigarettes) is an improvement in welfare
- the difficulty of establishing the net effect on society for a given level of taxation when governments levy a range of taxes.

H.3 Government income support

The Australian Government provides a range of income support payments to assist people with mental ill health and their carers. These include the Disability Support Pension (DSP), Newstart Allowance, Youth Allowance, Carer Payment, and Carer Allowance (chapters 18 and 19). In 2018-19, \$10.9 billion in income support payments were estimated to be related to mental illness (table H.3).

Table H.3 Income support payments related to mental illness
2018-19

<i>Income support payment</i>	<i>Total cost</i>	<i>% mental health related^a</i>	<i>Cost attributable to mental illness</i>
	\$billion		\$billion
Disability Support Pension	16.7	35	5.8
Newstart Allowance ^b	9.7	26	2.6
Youth Allowance	0.9	11	0.1
Carer Allowance	2.3	32	0.7
Carer Payment	5.6	27	1.5
Carer Supplement	0.6	..	0.2
Total income support payments related to mental illness			10.9

^a DSP: primary medical condition is recorded as psychological or psychiatric, Carer Allowance or Payment: primary medical condition of the care receiver is recorded as psychological or psychiatric, Newstart Allowance and Youth Allowance: the jobseeker has a partial capacity to work and reported a mental illness.

^b The JobSeeker Payment replaced the Newstart Allowance and some other payments on 20 March 2020.
.. Not applicable

Source: Productivity Commission estimates.

The projected future lifetime cost for an average individual (aged 18–40 years) on DSP with a psychological or psychiatric primary medical condition at 30 June 2017 is estimated to be \$614 000. On average, these individuals are expected to receive an income support payment, including the Age Pension, in 47 years or 91% of their future life (table H.4). In 2027, 85% of this group are expected to be receiving DSP, 6% are expected to not be receiving any income support payments, 2% are expected to be receiving a working age payment and 5% are projected to have passed away (Department of Social Services, unpublished data).

The projected future lifetime cost for an average individual (aged 18–40 years) on a working age payment (this does not include the DSP) with a primary psychological/psychiatric medical condition at 30 June 2017 is expected to be \$355 000. On average, these individuals are expected to receive an income support payment, including the Age Pension, for the next 36 years or 61% of their future life (table H.4). However, when time in receipt of the Age Pension is excluded, on average, this group is expected to receive income support for about 19 years. In 2027, 32% of this group are projected to be receiving a working age payment, 37% are expected to not be receiving any income support payments, 7% are expected to be receiving a parenting payment, 5% a carer payment, and 7% are expected to be receiving DSP (Department of Social Services, unpublished data).

Table H.4 Projected future lifetime costs and duration of income support for a person aged 18–40 years with a psychological or psychiatric medical condition

	<i>Including Age Pension</i>			<i>Not including Age Pension</i>		
	<i>Average future lifetime cost</i>	<i>Future duration in income support</i>		<i>Average future lifetime cost</i>	<i>Future duration in income support</i>	
	\$	Years	% ^a	\$	Years	% ^a
Disability Support Pension	614 000	47	91	494 000	32	62
Working Age payments (primarily Newstart or Youth Allowance (other)) ^{b,c}	355 000	36	61	241 000	19	33

^a % of future lifetime on income support. ^b The Priority Investment Approach working age payment class is primarily made up of Newstart Allowance and Youth Allowance (Other) recipients, but also includes a small number of Partner Allowance, Sickness Allowance, Special Benefit, Widow Allowance, ABSTUDY (Apprentice), and Austudy (Apprentice) recipients. ^c The JobSeeker Payment has since replaced the Newstart Allowance and some other payments.

Source: Department of Social Services, unpublished data.

H.4 Effects of mental health on work

Participation

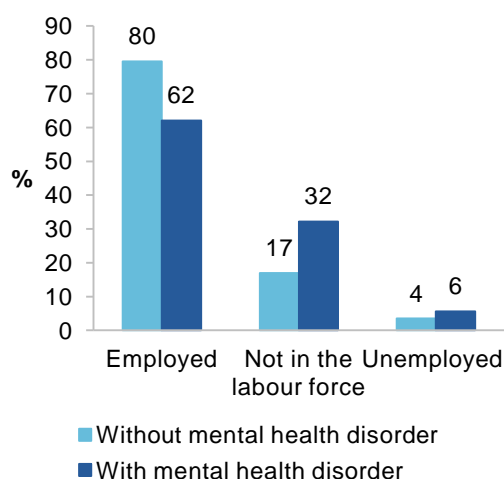
Mental ill-health reduces people's participation in the workforce (figure H.1). Compared to the broader population, a lower proportion of people with mental ill-health are employed and a higher proportion of people are unemployed or are not in the labour force. A person's level of psychological distress can also affect whether or not they are employed or in the labour force. Generally, as a person's level of psychological distress increases, the less likely they are to be employed, for example.

To capture the effect of mental illness on participation in the workforce and productivity, the Productivity Commission modelled the cost of forgone output due to mental illness to be between \$12.2 billion and \$22.5 billion in 2018-19 (using the wage model outlined in appendix J).

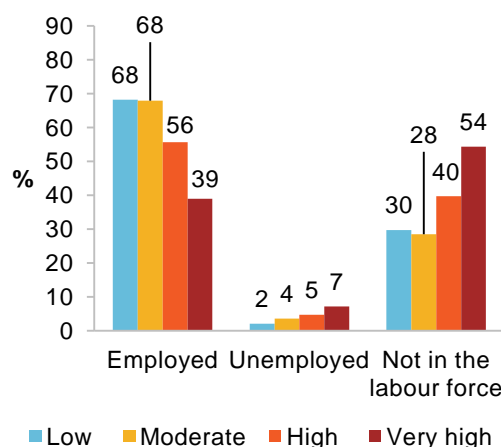
Figure H.1 Mental ill-health affects people's ability to participate in the workforce^a

People aged 15–64 years

Labour force status by mental health disorder



Labour force status by Kessler 10 category of distress level



^a The Kessler 10 is a 10-item questionnaire intended to measure psychological distress based on questions about anxiety and depressive symptoms. Low = scores of 10–15; Moderate = scores of 16–21; High = scores of 22–29; Very high = scores of 30–50.

Source: ABS (*National Health Survey: First Results 2017-18*, Cat. no. 4364.0.55.001; *Microdata: National Health Survey, 2017-18*, Cat. no. 4324.0.55.001).

There are two possible interpretations of what is captured in these estimates. At minimum, these costs include only the effect on people's foregone income from reduced or no participation in the workforce due to their mental illness. For those employed, the consequence of missing days at work due to mental illness (absenteeism) or functioning less effectively (presenteeism) are temporary and not reflected in their income. At the other end of the spectrum, the costs could be interpreted to capture participation effects and lower productivity for those in employment. The implication is that the consequence of people being absent from their employment or not always being able to function effectively while at work has a permanent effect on their income (table H.5). In practice, the average effect of mental illness on participation and productivity will be somewhere on this spectrum.

Absenteeism

Some employed people with mental ill-health may require some time off from work to recover. Individuals with mental ill-health who are employed have a higher number of temporary absences than those without any mental disorders.

According to the ABS National Health Survey people with mental ill-health took an average of 10–12 days off work due to psychological distress — depending on the indicator used to

determine mental ill-health (ABS 2019).¹⁷ This calculation is based on a survey question that asks people if they were unable to work, study or undertake day-to-day activities because of feelings of distress in the last 4 weeks. If people were employed at the time of the survey and they had indicated they were unable to do any of the tasks listed, we have assumed they were unable to work. We have defined mental ill-health using both:

- the self-reported mental and behavioural conditions that are within the scope of this inquiry (chapter 1)
- a Kessler 10 score of 16 or greater, which corresponds to psychological distress levels of ‘moderate’ to ‘very high’. The Kessler 10 is a 10-item questionnaire intended to yield a measure of psychological distress based on questions about anxiety and depressive symptoms. Higher Kessler 10 scores are correlated with the existence of a mental health disorder.

Monetising the total number of days off work using average weekly earnings, it is estimated that the cost of days off work for people with mental ill-health to be \$7.9 billion to 9.6 billion in 2018-19. These cost calculation take into account the effects of hours worked (full- and part-time) and gender.

Presenteeism

Mental ill-health can also affect a person’s ability to function effectively while at work. This is known as presenteeism. Symptoms such as fatigue, decreased concentration and poor memory can affect employee performance (chapter 7).

Using data from the ABS National Health Survey, people with mental ill-health noted that they were less productive at work on an average of 14 to 18 days due to their psychological distress — depending on the measure of mental ill-health used. This calculation is based on a survey question that asks people if they ‘cut down’ on work or study or day-to-day activities because of ‘feelings’ in the last 4 weeks. If people were employed at the time of the survey and indicated that they had ‘cut down’, we assumed that they had functioned less effectively at work (ABS 2019).

Measuring presenteeism or an individual’s reduction in productivity on particular days is difficult as it is not easily observed. Measurement typically has been based on self-reported survey data collected from employees. However, questions relating to an employee’s output on these days is not asked in the ABS National Health Survey. Data from other presenteeism surveys cannot be easily used for this exercise as they report average productivity reductions across all employees with mental ill-health, not just those that who stated they had reduced productivity.

¹⁷ This estimate is based on the average number of days absent in the last 4 weeks scaled up to an annual estimate by a factor of approximately 12 — assuming that employees work for 48 weeks per year and take 4 weeks annual leave.

Consequently, it was assumed that workers with mental ill-health had lower productivity of 50% on days that they specified working less effectively. Based on this, approximately 7 to 9 days per worker with mental ill-health per year, on average, is lost because of presenteeism due to mental ill-health. Using average weekly earnings to monetise this cost, it is estimated that presenteeism as a result of mental ill-health to be in the range of \$5.3 billion to \$7.0 billion in 2018-19. These cost calculations take into account the effects of hours worked (full- and part-time) and gender.

Table H.5 Estimates of labour market costs due to mental ill-health
2018-19, \$billion

<i>Loss due to:</i>	<i>Lower bound</i>	<i>Upper bound</i>
Lower participation and productivity ^a	12.2	22.5
Absenteeism	–	9.6
Presenteeism	–	7.0
Total	12.2	39.1

^a The lower bound estimate is based on assumptions that the costs captured include not working, working fewer hours and lower productivity for those in employment. Separate estimates for presenteeism and absenteeism are therefore not included. The upper bound estimate assumes the costs captured are attributed to not working or working fewer hours. Any effect of presenteeism and absenteeism is temporary and not reflected in wages. Separate estimates for productivity are, therefore, included in the overall total of the upper bound.

Source: Productivity Commission estimates.

H.5 The cost of diminished health and reduced life expectancy

Mental illness affects a person's life, in terms of the healthy years of life lost due to disability, and years of life lost due to premature death. This loss is gauged using an epidemiological measure known as disability-adjusted life years (DALYs) (chapter 2). This measure of diminished health is based on disability weights that attempt to capture the severity of the effects of ill-health on a scale from 0 (perfect health) to 1 (equivalent to death). Attribution of these weights are based on various international surveys of people in the general community. This allows the effect of a variety of health conditions to be compared or aggregated (AIHW 2019a).

The total consequence of mental illness for a population measures the gap between the actual health and an ideal health situation, where the entire population lives to an advanced age, free of ill-health. In 2015, Australians lost about 710 000 years of healthy life due to living with and dying early from mental illness (AIHW 2019a).

The years of healthy life lost can be converted into a monetary value using an estimate of the value of a statistical life year (box H.3). Using the Office of Best Practice's estimate of

value of a statistical life year, the total cost of healthy life lost due to mental illness, suicide and self-inflicted injury is estimated to be \$151 billion in 2019 (table H.6).

Table H.6 Cost of disability and premature death due to mental ill-health, suicide and self-inflicted injury

	<i>Mental disorders</i>	<i>Suicide and self-inflicted injury</i>	<i>Total</i>
Years of life with disability	558 596	1 241	559 837
Years of life lost due to death	14 178	134 133	148 311
Disability adjusted life years (2015)	572 775	135 374	708 149
Cost of disability and premature death (\$b) (2019)	122.0	28.8	150.8

Source: Productivity Commission estimates using AIHW (2019a) and OBPR (2019).

Box H.3 Valuing life: can it be done?

Valuing life is not without disagreement. Some believe life cannot be valued in monetary terms: the value of a person's life is immeasurable. This principle is displayed in what would seem like a willingness by governments and other groups to spend an unlimited amount of money to rescue individuals from a dangerous situation that risks death or serious injury.

While placing a monetary value on life may not sit easy with many people, in an environment where resources are limited, choices need to be made on how these resources are allocated. In the absence of a value of life, decisions will still be made on where to invest in mental healthcare and its supports, implicitly making such valuations in the process. Calculating the value of life, despite the difficulties and limitations, to use in this decision-making process makes the valuation explicit, transparent and consistent with other decisions.

The value of a statistical life is an estimate of the financial value society places on reducing or avoiding the death of one person. By convention, it is assumed to be based on a healthy person living for another 40 years. It is known as a 'statistical' life because it is not the life of any particular person. An estimate of the value of life is, therefore, a tool for decision-making, not the value that is placed on any particular person.

There are a variety of methods used to value a life, but the 'willingness to pay' method is viewed as the most appropriate technique (OBPR 2014). Unlike other methods, such as the human capital model that captures the discounted value of future earnings, the willingness to pay method quantifies non-market preferences and values, such as quality of life, health and leisure (ASCC 2008; box H.4). For Australia, various studies have estimated that the value of a statistical life (using the willingness to pay method) ranges from \$3 million to \$15 million (OBPR 2014, based on a review by Abelson (2008)). Abelson (2008) concludes \$3.5 million to be a plausible estimate for the value of a statistical life in 2007. For use in cost-benefit analysis, the Office of Best Practice Regulation has estimated the value of a statistical life to be \$4.9 million in 2019.

The value of a statistical life year converts the value of a statistical person's life over the next 40 years into an annual estimate. Having an annual value of life allows for the valuation of life years that are lost or gained that is less than 40 years. The Office of Best Practice Regulation has estimated the value of a statistical life year to be \$213 000 per year in 2019.

H.6 Estimating the economic cost of suicidal behaviour

The Productivity Commission estimated the quantifiable economic costs of suicidal behaviour by estimating a range of direct and indirect costs associated with suicide deaths and non-fatal suicide behaviour in Australia. Suicide cost estimates indicate the magnitude of the suicidal behaviour as an economic and public health policy issue, and provide an economic context for efforts to reduce suicidal behaviour. Total costs associated with suicidal behaviour are estimated to be in the order of \$30.5 billion each year.

The overall cost of deaths to suicide is estimated using a ‘willingness to pay’ approach similar to that used by Bureau of Infrastructure, Transport and Regional Economics in calculating the costs associated with road fatalities (BITRE 2009). This approach centres around use of a notional monetary value assigned to the ‘intangible’ quality of life that is lost due to suicide. This ensures that all suicide deaths are costed equally, and that the value of leisure time is taken into account (BITRE 2009; ConNetica 2010). A ‘human capital’ approach is used to value foregone output as a result of non-fatal suicide behaviour (box H.4).

As well as the intangible value assigned to years of life lost due to suicide, a range of other direct and indirect costs are estimated, using the costing framework developed by Kinchin and Doran (2017). Other indirect costs include:

- production disturbances — the short-term costs experienced by firms following suicide-related behaviour of employees (for both fatal and non-fatal suicide behaviour)
- human capital costs — the long-run costs, such as loss of potential outputs. Where non-fatal suicide behaviour results in an inability to work (full incapacity), human capital costs are calculated using the value of potential future earnings from time of injury to retirement age in Australia assuming a discount profile and productivity loss.

Human capital costs are calculated for people experiencing full incapacity due to non-fatal suicide behaviour, regardless of their employment status. Average wage rates were used to calculate lost productive output for employed people who experience ongoing incapacity to work. It is assumed that people who were not employed at the time of experiencing ongoing incapacity would have otherwise engaged in some productive activity that is not based on wages, such as caring for others or volunteering. The wage model outlined in appendix H was used to estimate average expected wages for employed and non-employed adults. Based on the assumption that about half of people not in employment would enter part-time work, it was estimated that the average expected wages of non-employed people was 81% of the average expected wages of people currently in employment.

Box H.4 **Willingness to pay and human capital approaches to valuing human life**

Willingness to pay

The willingness-to-pay (WTP) approach estimates the value of life in terms of the amount of money that people are prepared to pay to reduce risks to their own lives (this is the value to the individual *prior* to any negative outcomes). In other words, the WTP approach attempts to capture trade-offs between individual wealth and small reductions in risk. Conceptually, the advantage of the WTP approach is that it tries to reflect people's preferences. The methods typically used to determine people's preferences are studies of revealed preference (such as wage risk studies and studies of consumer behaviour) and stated preference surveys.

However it can be difficult to effectively capture people's preferences, for several reasons.

- People participating in WTP surveys often have difficulties in valuing small differences in risks.
- Individuals often have different perceptions of risk.
- There are also differences in people's willingness and ability to pay.

In using WTP to estimate costs associated with suicide, there is an implicit assumption that the value placed on an individual's life is from the perspective of the community rather than the individual affected.

Human capital

The human capital approach estimates the expected value to society of forgone output on an ex-post basis. The output in this context refers to the forgone economic contribution to society from both workplace and household participation, from the age at which premature death occurs to the end of the expected natural life. Implicit in this approach is the concept of a 'productive life'.

This approach has several advantages, in that it provides a transparent value that is relatively straightforward to estimate, while also reflecting age and gender differences in the loss of output.

However, there are a number of conceptual problems with the human capital approach.

- Given the focus on productive output as the indicator of value, this approach explicitly values the lives of working people above those who are not working.
- Similarly, it does not take into account the value that people place on their non-working (leisure) time, and the non-pecuniary benefits that people would have enjoyed if they were not working.

While there are conceptual problems in using the human capital approach to estimate costs of fatal suicides, it is considered a reasonable approach to quantifying the cost to society of the foregone outputs that result from non-fatal suicide behaviour.

Source: BITRE (2009); Mendoza and Rosenberg (2010).

Costs directly incurred as a result of fatal and non-fatal suicide behaviour include:

- the cost of medical treatment, which varies by according to the level of severity of the injury experienced
- administrative costs, including the costs of investigating an incident, travel to medical support and funeral costs (funeral costs are brought forward by suicide fatality)
- a range of other costs, including the cost of carers, aids, modifications, counselling and bereavement support for those affected by suicide fatalities.

The Productivity Commission used average costs estimated by Kinchin and Doran (2017) and inflated the costs to 2018 dollars using the CPI. Key assumptions and parameters are presented in table H.7, while average and total costs are summarised in table H.8.

Table H.7 Summary of key assumptions and estimates

<i>Description</i>	<i>Estimate</i>	<i>Source</i>
Suicide		
Years of life lost due to suicide	134 133	AIHW (<i>Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015</i>) (AIHW 2019a)
Non-fatal suicide attempts		
Years of life lost due to disability	1241	AIHW (<i>Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015</i>) (AIHW 2019a)
Number of suicide attempts	78 319	ABS (<i>National Survey of Mental Health and Wellbeing, 2007</i> , Cat. no. 4326.0), updated using population growth rate
Hospitalisation rate (per 100 000 people)	118.8	Harrison and Henley (2014)
Proportion full incapacity	0.6%	Kinchin et al. (2017) using Harrison and Henley (2014)
Proportion short absence	99.4%	Kinchin et al. (2017) using Harrison and Henley (2014)
Employed	41%	ABS (<i>National Survey of Mental Health and Wellbeing, 2007</i> , Cat. no. 4326.0)
Not employed	59%	ABS (<i>National Survey of Mental Health and Wellbeing, 2007</i> , Cat. no. 4326.0)
Productivity (% wage rate)		
Employed	100%	Productivity Commission estimates
Non-employed	81%	Productivity Commission estimates
Other parameters		
Value of a statistical life year	\$213 000	OBPR (2019)
Costs inflated to 2018 dollars	7%	ABS (<i>Consumer Price Index, June 2019</i> , Cat. no. 6401.0) inflation rate from June 2014 to June 2018
Population growth rate	20%	ABS (<i>Australian Demographic Statistics, December 2018</i> , Cat. no. 3101.0) inflation rate from June 2007 to June 2018

Table H.8 Costs of suicide and non-fatal suicide behaviour
2018 dollars

	<i>Suicide deaths^a</i>		<i>Non-fatal suicide behaviour (full incapacity)</i>		<i>Non-fatal suicide behaviour (short absence)</i>	
	<i>Employed</i>	<i>Not employed</i>	<i>Employed</i>	<i>Not employed</i>	<i>Hospitalised</i>	<i>Not requiring hospitalisation</i>
Average intangible costs						
Year of life lost	43.4	43.4	2.6	2.6	..	..
Costs (\$)	9.2 m	9.2 m	562 514	562 514	..	..
Average indirect cost						
Production disturbance (\$)	40 549	..	40 549	..	353 ^b	353 ^b
Human capital (\$)		..	2.1 m	1.7 m	..	..
Average direct costs						
Medical (\$)	2 593	2 593	13 354	13 354	4 961	875
Administrative (\$)	7 501	7 501	2 811	2 811	35	35
Other (\$)	123 884	123 884	85 532	85 532	..	..
Average cost per person (\$)	9.4 m	9.4 m	2.3 m	1.8 m	5 349	1 263
Number of people	1 268	1 825	193	277	29 191	48 658
Total costs (\$b)	11.9	17.1	0.6	0.7	0.2	0.06

^a As years of life lost to suicide and self-inflicted injury data are from 2015, the number of deaths by suicide is also taken from that year. ^b Production disturbance costs are included only for those people who were employed at the time of their non-fatal suicide behaviour. .. Not applicable.

Source: Productivity Commission estimates.

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I Benefits and costs of improved mental health

This analysis looks at the health benefits that are likely to stem from the main Inquiry actions, and provides an indication of how much health improvements that result from the recommended actions are likely to cost. This serves several purposes — it demonstrates that the recommended actions provide relatively good value for money in terms of health returns for government expenditure and provides an indication of what actions give the biggest health returns for a given amount of expenditure.

A number of terms that are used throughout the appendix are defined in box I.1.

I.1 Benefits and costs framework

The benefits of improved mental health that were readily quantified are:

- improved employment prospects
- increased labour income (wages)
- improved health-related quality of life (in terms of quality-adjusted life years, or QALYs) (box I.2).

Estimating the expected benefits of the actions involved two steps:

- The relationship between mental health and wages, labour market outcomes, and health-related quality of life was quantified, using an econometric model based on representative population (HILDA) data. This model is described in detail in appendix J.
- The econometric results were combined with information from the existing mental health literature that describes the possible effect of policy changes on the mental health of people targeted by an action. This allowed the calculation of estimates of expected changes in employment, wages, and health-related quality of life. Information about possible health effects, costs and cost savings are outlined in appendix K.

This is a relatively straight-forward approach to estimating the health and labour market benefits that result from improved mental health. However, there are some important limitations to this approach.

- Spillover benefits are not fully captured in this model. For example, improving someone's housing situation can facilitate better access to other services, which in turn is likely to improve overall outcomes (chapter 20).

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- Quantified benefits are limited to short-term benefits that directly result from improved mental health. This means that long-run benefits, such as the labour market benefits that result from improving the mental health and wellbeing of children are not estimated.

Box I.1 Definitions used in this discussion

Increased costs/expenditures

Increases in costs/expenditures refers to the additional annual government expenditures required to implement a recommended action, such as the Medicare costs associated with the increased use of group therapies.

Cost savings

Cost savings are expenditures that are offset by the implementation of an action. For example, increases in Medicare expenditures for group therapies are likely to be partially offset by a reduction in expenditures associated with individual therapies.

Additional income

The majority of actions are likely to result in improvements in the mental health of people affected (the target population). Consequently, improvements in mental health are likely to result in increases in employment and wages. The additional labour market income can then be aggregated as an indicator of the economic benefits associated with an action.

Additional Quality-Adjusted Life Years (QALYs)

Improvements in mental health are reflected in better health-related quality of life, measured in quality-adjusted life years (box I.2). Additional QALYs that are associated with the mental health improvements resulting from an action are aggregated as a measure of the benefits of that action.

Net cost

The net costs associated with an action are the increases in expenditures required to implement the action, minus any cost savings and additional incomes that may result from the action. Where the cost savings and additional incomes are greater than the costs, an action is considered to be *net cost saving* — the additional expenditures associated with their recommendation is more than completely offset by the expenditure savings and expected increases in aggregate income.

Net cost per QALY

The net cost per QALY is the average cost of an additional QALY gained by implementing an action. It reflects the likely effect of additional expenditure on mortality and morbidity associated with mental illness, and can be used to assess the value of that action relative to other forms of health expenditure. Where a group of actions are likely to be net cost saving, the net cost per QALY is less than zero. This means that not only is the action expected to result in net savings, but it is also expected to lead to improved health.

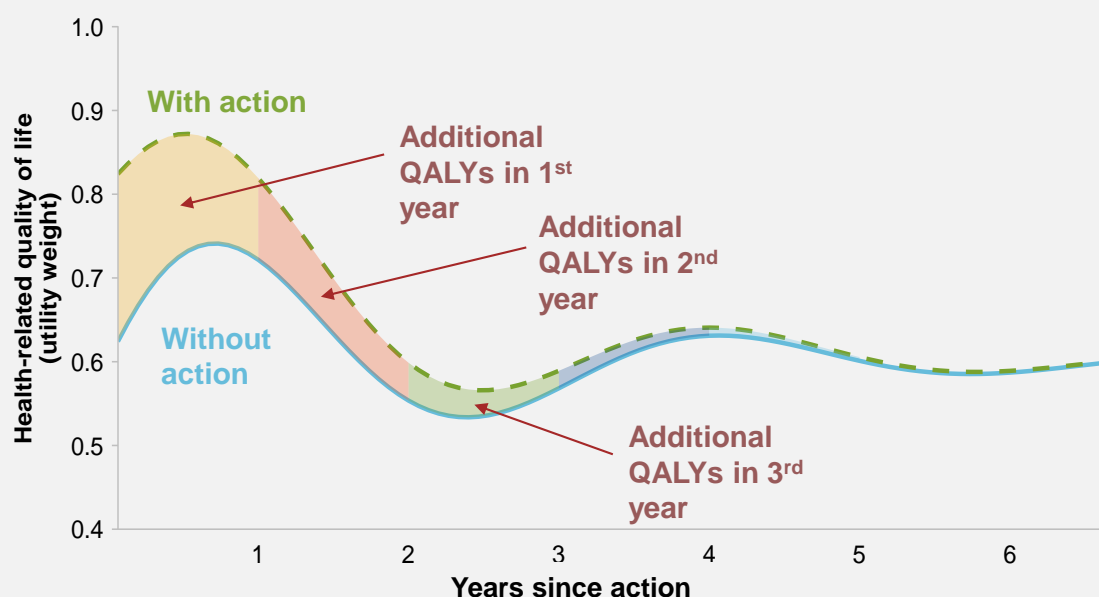
Box I.2 What are quality-adjusted life years?

In this analysis, the potential health benefit associated with a recommended action has been measured in quality-adjusted life years (QALYs).

QALYs provide a measure of the effect that illness — including mental illness — has on the quality of life experienced by people affected. The effect of an illness on quality of life is reflected by a 'utility weight' (derived from standard valuations), where a weight of 1 equates to perfect health, and a weight of 0 is equated with death. Certain health states can be assigned a negative value as they may be characterised by severe disability and/or pain that are regarded as worse than death (Whitehead and Ali 2010). QALYs can be calculated using questionnaires which cover general aspects of health. For example, a commonly used questionnaire is the SF-6D, which allocates a person to one of 18 000 potential health states using their responses to the questionnaire (Norman et al. 2014).

Economic evaluations can assess the value of interventions by calculating the cost per unit of health improvement. In our case, units of improved health are measured by improvements in QALYs. A successful intervention may reduce the duration a person has a mental illness, or the severity of that illness. This may be conceptualised as an increase in the utility weight that reflects a person's health-related quality of life, in terms of QALYs. The health benefit in QALYs attributed to a recommended action is determined by the difference in the utility weights associated with the action, and the time over which the difference persists (figure).

Stylised increase in quality-adjusted life years associated with a recommended action



The improvements in health can be measured as an increase in the number of QALYs experienced by the people affected. In the diagram above, the total health benefit attributable to a recommended action, measured in QALYs gained, is the area between the two curves. However, in the analysis presented in table I.1, it is assumed that benefits 'decay' after a single year, meaning that only the yellow health effects are counted. This is a conservative assumption, and the effects of this assumption are shown in table I.4

In addition to possible benefits, many of the recommended actions have substantial cost implications. New programs have implementation and ongoing costs, but also result in cost savings as demand for other services is reduced. Costs considered include direct expenditures to government that are required to implement actions, and cost savings include government expenditures that are reduced as a result of a recommended action. Where possible, time and out-of-pocket costs to individuals are incorporated in estimates of costs and cost savings. As with benefits over the longer term, it is likely that there are reductions in government expenditures (cost savings) over the longer term that are not taken into account, meaning that cost savings are also likely to be understated.

Cost effectiveness

The expected costs of an action or suite of actions can be combined with estimates of the mental health benefits expected, to indicate priority areas for change. In this analysis, the cost per QALY is used as a measure of cost effectiveness — that is, for a given action or group of actions, how much is an additional QALY likely to cost, on average?

In order to assess whether this represents value for money, the costs per QALY estimates can be compared to benchmark values that indicate the opportunity costs with respect to the next best uses of funding within the healthcare system. However, there is considerable diversity in the benchmarks used for cost effectiveness:

- An early analysis of cost effectiveness in Australia found that the Pharmaceutical Benefits Advisory Committee was unlikely to reject medication when the cost of an additional life year was less than \$42 000 (in 1998-99 dollars). This is around \$96 000 in 2019 dollars.
- The Assessing Cost Effectiveness in Prevention study in 2010 assumed a threshold value of \$50 000 per Disability-Adjusted Life Year averted as a decision threshold to determine whether or not an intervention was effective or not (Vos et al. 2010). This is around \$64 000 in 2019 dollars.¹⁸
- More recently, Edney et al. (2018) estimated the expected QALY gains from additional government health expenditure, finding that there is an opportunity cost of 1 QALY for every additional \$33 000 of government expenditure (2019 dollars).

This provides three thresholds by which the actions included below may be assessed:

1. Very cost effective — cost is less than \$33 000 per QALY.
2. Cost effective — cost is less than \$64 000 per QALY.
3. Marginally cost effective — cost is less than \$96 000 per QALY.

¹⁸ This has been used as a cost effectiveness threshold in Australia for some time, and appears to be originally based on a threshold used in the United Kingdom by the National Institute of Clinical Evidence. They have traditionally used a threshold of between £20 000 and £30 000 as a threshold for cost effectiveness. This threshold appears to be a rule of thumb and has not been changed since 2004 (Claxton et al. 2013).

Calculating cost per QALY

To calculate the cost per QALY, the monetary values from the actions are combined into a net cost. The net costs included here are:

- additional annual expenditure associated with implementing an action
- any cost savings that are likely to be realised as a result of the implementation of an action
- any additional wages that result from improved mental health leading to changes in expected employment and labour productivity.

Costs and cost savings are simulated from triangular distributions, with the lower and upper bounds taken from the lower and higher cost estimates (appendix K).¹⁹ Changes in income and QALYs are simulated from their respective posterior distributions implied by the econometric model. It is assumed that these distributions are independent. The simulated values for cost, cost savings, and changes in income are then aggregated together to calculate a simulated value for net cost and net cost per QALY. This process is repeated 100 000 times to construct a distribution of net cost per QALY. Table I.1 presents the 10th to 90th percentile of these distributions.

Grouping of actions

The report includes a large number of recommended actions over a broad range of policy areas, and there is potential for complementarities and substitution effects between the policy changes recommended. That is, the effects of some actions are likely to be greater if other changes are instituted, and other actions may have a smaller effect with other changes in place. It is not possible to model the interactions between actions due to a lack of information due to a lack of information about how this might play out.

There is a large scope for overlap and double counting of benefits in terms of improved mental health. This makes the presentation of aggregate benefits and cost savings difficult. For example, aggregating effects of healthcare changes with those associated with improvements in psychosocial supports is likely overstate benefits given likely overlap of benefits between those areas. This was a problem discussed at a roundtable discussion with a number of experts in early 2020, and it was agreed that the best approach was to ‘group’ actions so as to minimise overlap.

¹⁹ Drummond et al. (2015) noted that where evidence about a cost parameter is limited it is inappropriate to use a single value, and that distributions should be used to represent the uncertainty about possible mean values. Gamma distributions are commonly used to represent cost uncertainty but, as with a triangular distribution, require assumptions about shape. The decision to use triangular cost distribution was made so as to make better use of the higher and lower cost estimate information.

Other caveats

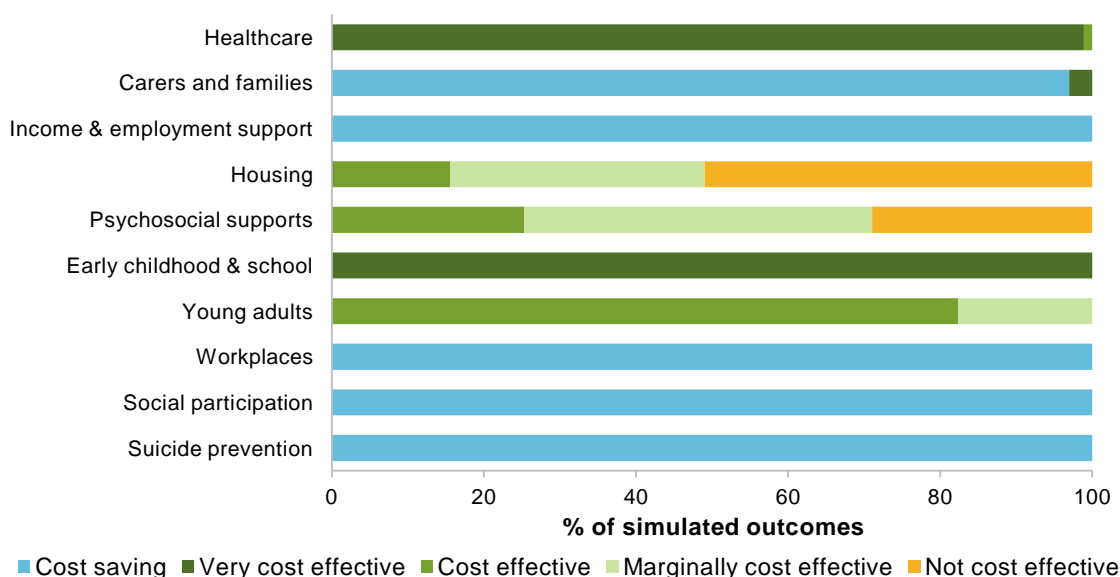
This analysis can only be considered indicative of the potential benefits and costs that are associated with actions in the final report. There are a number of caveats that need to be considered.

- The labour market model is based on an assumption that labour demand is completely responsive to labour supply. That is, it assumes that firms are able to create jobs to meet the increased supply of workers.
- Information about the mental health effects of some actions is limited. In cases where benefits have been estimated, the effect sizes which have been used to represent an improvement in mental health are based on standardising them for comparability. This is similar to what is done in meta-analyses, where multiple studies which use different scales are combined together.
- The evidence for the scalability of some actions is limited, with some actions requiring substantial scaling. For example, the benefits and costs of rolling out a national Individual Placement and Support (IPS) program have been estimated on the basis that 40 000 people will end up using these services. However, it is estimated that only 1800 people were using IPS employment support in mid-2018.
- There are many actions included in the report for which it was not possible to estimate expected costs and benefits. This includes instances where the Productivity Commission recommends reviews be undertaken, or where there is an absence of sufficient evidence to indicate possible costs and benefits. Similarly, actions that affect governance arrangements for the provision of services have not been quantitatively assessed.

I.2 Results

This analysis shows that there are a number of actions that governments can take that are likely to be cost effective in improving the health-related quality of life of people living with mental illness. There are also a range of actions that may also result in net cost savings and improvements in health (figure I.1)

Figure I.1 **Cost-effectiveness of recommended actions**



^a Actions are cost saving if the net cost per quality-adjusted life year (QALY) is negative, very cost effective if the net cost per QALY is less than \$33 000, cost effective if net cost per QALY is less than \$64 000; marginally cost effective if the net cost per QALY is less than \$96 000; and not cost effective if the net cost per QALY is greater than \$96 000.

Source: Productivity Commission estimates.

Assumptions about the persistence of mental health benefits resulting from actions have a substantial effect on estimates of total QALYs and cost-effectiveness. In this model, it has been assumed that all benefits ‘decay’ after a single year — in most cases this is a very conservative assumption, and suggests that the benefits in table I.1 should be considered as understating likely effects. For example, if the assumption of full annual decay of benefits is replaced by an assumption that benefits decay by 50% each year (over 5 years with a 3% real discount rate), then the net cost per QALY for early childhood and school recommended actions decreases from \$3000–\$7000 per QALY to \$1000–\$3000 per QALY. The effects of persistence assumptions and discount rates on cost per QALY estimates are shown in table I.4.

Table I.1 Estimated benefits and costs by action group

All benefits decay after one year

Action group	Benefits		Costs		Net cost per QALY ^{a,c}
	Additional income ^a	Additional QALYs ^a	Additional costs ^b	Cost saving ^b	
	\$ million		\$ million	\$ million	\$ '000
Access to healthcare	501-718	10 280-15 280	900-910	30-50	11-30
Carers and families	124-245	4 390-6 390	160-189	40-73	Cost saving
Income & employment support	42-90	240-430	108-286	186-624	Cost saving
Housing	8-21	920-4 780	740-940	450-790	47-199
Psychosocial supports	79-177	4 910-8 900	373-1 085	—	45-136
Justice ^d	..	..	380-420	12-18	..
Early childhood & school	46-86	29 300-52 860	260-260	2	3-7
Young adults	..	980-1 790	60-87	—	40-76
Workplaces	12	170-310	60-60	67	Cost saving
Social participation	22-44	420-760	4-6	—	Cost saving
Suicide prevention	3	50	63-194	294	Cost saving

^a Changes in income and quality-adjusted life years (QALYs) are simulated from their respective posterior distributions implied by the model described in appendix J. Ranges for additional income, additional QALYs and net cost per QALY are the 5th and 95th percentiles ^b Cost and cost savings for actions groups with only one action are based on the lower and upper bounds presented in appendix K. Where there is more than one action in an action group, cost and cost savings represent 5th and 95th percentiles based on simulated distributions. It is assumed that these distributions are independent. ^c Action groups are regarded as 'cost saving' if they are estimated as having a net cost less than zero. ^d Benefits were not able to be quantified for justice actions.

.. Not applicable. — Nil or rounded to zero.

I.3 Cost and benefit inputs

The additional expenditures and expected cost savings associated with recommended actions are presented in table I.2. Details of the target population and the mental health benefits they receive are in table I.3. Detailed assumptions used in calculating likely costs associated with recommended actions are presented in appendix K.

Table I.2 Costs and cost savings associated with recommended actions

<i>Actions</i>	<i>Cost increases (\$m)</i>	<i>Cost savings (\$m)</i>	<i>Description of costs included</i>
Access to healthcare			
Increased psychiatric advice to GPs	0.4–1.1	_a	Increased costs based on additional time required by psychiatrists, GPs, and paediatricians.
Encouraging more group psychological therapy	0.9–1.5	1.9–2.6	Increased expenditure from additional people using group therapy. Cost savings of substitution from individual to group therapy, for those already using services.
Increased access to psychiatry and psychological therapy by telehealth	3.3–6.5	11.1–31.1	Increased costs from additional people using telehealth. Cost savings from substitution of face-to-face initial assessments and removing additional rebates paid to psychiatrists for telehealth consultations.
Expanding supported online treatment options	47–69	7–22	Increased costs include provision for a review, an information campaign for culturally and linguistically diverse people, consumers, and health professionals, and the costs of providing online supported treatment. Cost savings are from the substitution to a lower-cost online treatment.
State and territory community ambulatory services	403	–	Increased expenditure for the provision of additional community ambulatory services for people aged over 18 years.
Bed-based services	426	–	Increased expenditure for the provision of additional long stay residential non-acute bed-based services.
Alternatives to emergency departments	2.6–4.1	3.3–5.8	Increased expenditure from expanding trials of mobile crisis services and safe haven cafés. Cost savings from a reduction in emergency department presentations.
Online navigation portal to support referral pathways	6–10	–	Increased expenditure from establishing HealthPathways portals for the three Primary Health Networks that do not already have it, and expanding the portal into areas beyond health across all Primary Health Networks.
Care coordinators and single care plans	176–413	–	Increased expenditure from having additional care coordination services and single care plans developed and reviewed. Costs and benefits associated with care coordinators and single care plans are excluded from aggregate healthcare calculations due to substantial overlap with community ambulatory services.

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Table I.2 (continued)

<i>Actions</i>	<i>Cost increases (\$m)</i>	<i>Cost savings (\$m)</i>	<i>Description of costs included</i>
Carers and families			
Family and carer inclusive practices	73–101	–	Increased expenditure from subsidising carer and family consultations and on family and family and carer workers in each region.
Support services for carers and families	87	–	Increased expenditure on family and carer support services.
Cost savings across carer actions		40–73	Reductions in the number of hospital admissions and emergency department presentations.
Income and employment support			
Staged rollout of Individual Placement and Support	108–286	186–624	Increased expenditures from cost of providing Individual Placement and Support. Cost savings are from reduction in use of healthcare services and reduction in Disability Employment Services costs which would have otherwise been incurred.
Housing			
Housing security for people with mental illness	12–52	–	Increased expenditure for mental health training and resources for social housing workers and expansion of tenancy support programs.
Supported housing	230–807	147–540	Increased expenditure for providing additional supported housing places and meeting the gap for homelessness services. Cost savings are reductions in health and other expenditures.
Housing after discharge from hospital or prison	15–94	25–333	Increased expenditure from care coordination and access to accommodation. Cost saving are from reduction in use of healthcare services.
Homelessness services	278–393	67–132	Increased expenditure from homelessness services and long-term housing arrangements. Cost saving are from reduction in use of healthcare services.

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Table I.2 (continued)

<i>Actions</i>	<i>Cost increases (\$m)</i>	<i>Cost savings (\$m)</i>	<i>Description of costs included</i>
Psychosocial support			
Filling the gap in demand for psychosocial support services	373–1 085		– Increased expenditures from providing additional psychosocial supports — expenditures are based on past programs — Personal Helper and Mentors Service (PHaMs) and Day to Day Living in the Community (D2DL).
Justice^b			
Improving access to court diversion programs	46		– Increased expenditures from ensuring that all magistrate courts have court liaison services, and the associated additional cost for mental health courts.
Increased support for police	15–23	12–18	Increased expenditures from scaling up co-responder models, based off similar programs in other states, nationally. Cost savings from reduction in emergency department attendances and reduced police time spent on mental health-related cases.
Additional mental health expenditure on prisoners	48–110		– Increased expenditures so that the expenditure per prisoner is equivalent to the expenditure per person in the community.
Aboriginal and Torres Strait Islander prison expenditure.	170		– Increased expenditure are cost of establishing models, similar to the Winnunga Model of Care in the ACT, nationally.
Health justice partnerships	1.2		– Increased expenditure from establishing health justice partnership trials in all Australian states and territories (based on the cost of cost of Mind Australia's pilot in Victoria)
Legal representation at mental health tribunals	49		– Increased expenditures are cost of increased legal representation for those appearing before mental health tribunals.
Individual non-legal individual advocacy services	13		– Increased expenditures are cost of provision of non-legal advocacy services.
Advance directives, statements or agreements	22		– Increased expenditures are cost of advance directive development support.

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Table I.2 (continued)

<i>Actions</i>	<i>Cost increases (\$m)</i>	<i>Cost savings (\$m)</i>	<i>Description of costs included</i>
Children			
Perinatal mental health	18–23	–	Increased expenditures from: (1) raising awareness about screening (2) implementing screening (3) receiving care (for example, face-to-face with psychologist or online supported treatment).
Expanded provision of parent supports	6.8	2.2	Expenditures from the rollout of an indicated parent education program designed to prevent anxiety disorders in children. Cost savings from reduced healthcare costs (from treating anxiety).
Education support for the mental health of school-aged children	230	–	Increased expenditure of consistent improvements to wellbeing policies and practices in schools.
Young adults			
Training for educators in tertiary education institutions	60–87	–	Increased expenditure from providing mental health training for staff at universities who have direct contact with students, based on the cost of a mental health first aid course.
Workplaces			
Prioritising mental health in the workplace	49	67	Cost for employees to complete a universal, self-directed online mental health course. Cost savings through cases of depression avoided.
No-liability treatment for mental health related workers compensation claims	9	–	Increased expenditure from the medical costs that would have previously been rejected, but would be accepted under a no-liability system.
Social participation			
National stigma reduction strategy	3.8–6.4	–	Increased expenditure on implementing a national anti-stigma campaign, based on comparable campaigns in the United Kingdom and Denmark.
Suicide prevention			
Universal aftercare after suicide attempts	63–194	294	Increased expenditure of providing aftercare for people who have been hospitalised due to intentional self-harm. Cost savings from a reduction in medical, administrative, transfer, and other costs from suicide attempts.

a – Nil or rounded to zero. **b** There are likely to be a number of cost savings that result from the implementation of these actions, including reduced arrests, imprisonment and being held involuntarily in beds.

Table I.3 Target populations, mental health effects, and estimated benefits

<i>Action grouping</i>	<i>Population affected</i>	<i>Effect size</i>	<i>Income (\$ million)</i>	<i>Number of QALYs</i>
Access to healthcare	<ul style="list-style-type: none"> • 3 000-5 000 additional people using group therapy • 5 000-7 000 people using group therapy instead of individual therapy • 5 000-10 000 additional people accessing therapy by telehealth • 200 000-400 000 psychological therapy and psychiatry consultations via telehealth instead of face-to-face • 50 000 additional people — not currently accessing any other treatment — using online supported treatment • 100 000 people using online supported treatment instead of other treatment options • 84 000 people provided a full mix of community ambulatory services • 28 000 people accessing acute beds 	<ul style="list-style-type: none"> • An effect size averaging about 0.9 is shown in Burlingame et al. (2016) and Cuijpers et al. (2019) for group therapy. Each additional person accessing therapy has a 25% chance of improving. • For those accessing therapy through telehealth, we assume an effect size of 0.8, in line with meta-analyses by Berryhill et al. (2019). Each additional person accessing therapy has a 25% chance of improving (Lambert, Hansen and Finch 2001). • A meta-analysis of computer therapy by Andrews et al. (2018) suggested an effect size of 0.8 for online supported treatment. • For ambulatory and bed based services, effect sizes are calculated using data on measures at admission and discharge from the AMHOCN (2019). 	501-718	10 280-15 280
Carers and families	<ul style="list-style-type: none"> • 55 000 mental health carers with unmet needs • 7 500 care recipients with schizophrenia or psychosis • 200 800 children of parents with mental illness (COPMI) 	<ul style="list-style-type: none"> • The results of a range of interventions for families and carers suggests an effect size of 0.4 for carers (appendix K). • A meta-analysis of family psychosocial interventions for schizophrenia (Pharoah et al. 2010) suggested an effect size of 0.79 for care recipients from schizophrenia or psychosis. • Solantaus et al. (2010) suggested a child-focused psychoeducation discussion with parents has an effect size of 0.12 for COPMI. 	124-245	4 390-6 390
Income and employment support	40 000 people with severe mental illness, of employment age	<ul style="list-style-type: none"> • Synthesising the results of a range of IPS trials suggests an effect size of 0.08 for calculating health-related quality of life benefits (Burns et al. 2009; Drake et al. 1999; Kukla and Bond 2013; Michon et al. 2014). • Labour market benefits are based on the secondary vocational outcomes (duration of employment, average hours worked, hourly wage) reported in Waghorn et al. (2014). 	42-90	240-430

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Table I.3 (continued)

<i>Action grouping</i>	<i>Population affected</i>	<i>Effect size</i>	<i>Income (\$ million)</i>	<i>Number of QALYs</i>
Housing	Between 15 000-40 000 people: <ul style="list-style-type: none"> • have unmet needs for assistance to sustain a housing tenure • are in need of housing upon discharge from hospital or prison • require supported housing • have unmet needs for long term housing. 	<ul style="list-style-type: none"> • Additional QALYs are calculated using estimates from Aldridge (2015) and Connelly (2013). These papers suggested that a year of homelessness is associated with a loss of between 0.06-0.12 QALYs. • Flatau et al. (2007) reported a difference in employment rate of about 4.5 percentage points at the follow-up after their entry into support. It is assumed that recipients of IPS will be on minimum wage, and the number of hours and weeks worked is assumed to be the same as those who gain competitive employment under IPS from Waghorn et al. (2014). 	8-21	920-4 780
Psychosocial supports	There is a gap of 154 000 people with severe mental illness who require psychosocial supports.	Muir, Meyer and Thomas (2016) conducted an evaluation of the Wellways Partners in Recovery program and estimated an effect size of 0.44 on the 'managing mental health' dimension. The number of hours and weeks worked is assumed to be the same as those who gain competitive employment under IPS from Waghorn et al. (2014).	79-177	4 910-8 900
Early childhood & school	<ul style="list-style-type: none"> • Around 11 100 students benefit from the rollout of an indicated parent education program designed to prevent anxiety disorders in children. 	Reduced anxiety effects are drawn from Rapee et al. (2005).	na	385-703 ^a
	<ul style="list-style-type: none"> • There are 3.9 million students in primary and high schools across Australia (ABS 2020) who are expected to experience improved health-related quality of life from social and emotional learning programs. • 12 000 partners of new mothers, who are screened and identified to have a perinatal mental illness. 	<ul style="list-style-type: none"> • Sklad et al. (2012) conducted a meta-analysis on school-based universal social, emotional, and behavioural programs and found an effect size of 0.1 on follow-up outcomes for mental disorders. • For partners of new mothers, it is assumed that an even mix of face-to-face and online supported treatment is used, with an effect size of 0.9 (Burlingame et al. 2016; Cuijpers et al. 2019) and 0.8 (Andrews et al. 2018) respectively. 	46-86	29 300-52 860

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Table I.3 (continued)

Action grouping	Population affected	Effect size	Income (\$ million)	Number of QALYs
Young adults	<ul style="list-style-type: none"> There are around 271 100 young adults who could benefit from teaching staff at TAFE and universities having improved access to adequate mental health training. 	<ul style="list-style-type: none"> A meta-analysis of the effects of workplace health promotion interventions by Martin, Sanderson, and Cocker (2009) identified an effect size of 0.05 on composite mental health measures. 	—	980-1 790
Workplaces	<ul style="list-style-type: none"> The introduction of no-liability treatment for mental health-related workers compensation, is expected to result in a total of around 8 000 people returning to work earlier than otherwise would have been the case. Because these claims are related to mental health, it is assumed that people in this group have a mental illness. Around 10 000 people are expected to have health-related quality of life benefits from recommendations to prioritise mental health in the workplace. 	<ul style="list-style-type: none"> For no-liability treatment for mental health related workers compensation claims, it is assumed that the time spent reliant on workers compensation is reduced by 21% for people making a mental health claim (estimated using data from Safe Work Australia (2018) and Sampson (2015)). The QALYS estimated are from prevented cases of depression resulting from prioritised mental health in the workplace, using an effect size of 0.23 from Stratton et al. (2017). 	12	170-310
Social participation	<ul style="list-style-type: none"> 1.2 million people with a diagnosed mental illness are expected to have to have health-related quality of life benefits Of those, 850 000 people with a diagnosed mental illness are expected to have labour force benefits 	<p>There is a limited evidence about the magnitude of the effect on mental illness due to the endogeneity of mental illness and stigma, meaning that assumptions about likely mental health benefits are required. The assumed effect sizes are:</p> <ul style="list-style-type: none"> 0.01 for people with a severe mental illness 0.005 for people with moderate mental illness 0.001 for people with a mild mental illness. 	22-44	420-760

(continued next page)

Table I.3 (continued)

<i>Action grouping</i>	<i>Population affected</i>	<i>Effect size</i>	<i>Income (\$ million)</i>	<i>Number of QALYs</i>
Suicide prevention	<ul style="list-style-type: none"> There were 3 046 deaths due to suicide in 2018, where 2 380 were people aged 20-64 (ABS 2019) and there were 31 083 hospitalisations due to self-harm in 2017-18 (AIHW 2019). Of those who would have completed suicide, or would be permanently incapacitated by their attempt, 37 cases are prevented. A second effect is included for those who would have a short absence from work due to a suicide attempt, but are not permanently incapacitated. This can prevent about 6 150 short absences from work. 	<ul style="list-style-type: none"> Kinchin and Doran (2017) estimated that 0.6% of suicide attempts result in full incapacity, and 99.4% lead to a short absence from work. Aftercare can lead to a 19.8% reduction in subsequent suicide attempts and a 1.1% reduction in the suicide rate (Krysinska et al. 2016). 	3	50

^a Improvements in social and emotional wellbeing for preschool children are estimated in disability-adjusted life years (DALYS) averted and should not be added with QALY benefits.

Persistence of mental health benefits over time

The extent to which mental health benefits are likely to persist over time has a noticeable effect on the aggregate benefits, and therefore the costs effectiveness estimates. The results above present the benefits and costs that are expected to result from action groups, based on the assumption that the benefits ‘decay’ over a single year.

This is a conservative assumption in some respects — where people are provided with care that is likely to assist their return to recovery, it may be reasonable to expect the benefits to persist beyond a year. Where people require ongoing services in order to maintain a state of recovery, persistence of benefits is less likely. In the table below, estimated benefits and net costs per QALY are calculated using an alternative assumption about the persistence of benefits are assumed to decay by 50% each year, for a total of 5 years (by which time they are almost non-existent). This is an assumption used in other cost-effectiveness models in this literature (Mihalopoulos et al. 2011, 2012). Results are not presented for housing and psychosocial support services which are not assumed to have persistence effects.

Increasing persistence of benefits improves the cost effectiveness of all action groups. For example, assuming benefits decay by 50% each year, for a total of 5 years shifts the lower bound estimate for the ‘young adults’ action group from cost-effective to very cost effective, while the ‘access to healthcare’ action group becomes cost saving. The rate at which future benefits are discounted does not noticeably influence cost effectiveness.

Table I.4 Costs per QALY with varying persistence effects

Grouped actions	Benefits persist for ...		
	1 year	5 years (50% decay in benefit, 3% discount rate)	5 years (50% decay in benefit, 7% discount rate)
	\$ '000	\$ '000	\$ '000
Access to healthcare	11–30	Cost saving	Cost saving
Carers and families	Cost saving	Cost saving	Cost saving
Income & employment support	Cost saving	Cost saving	Cost saving
Housing ^a	47–199	..	..
Psychosocial supports ^a	45–136	..	..
Early childhood & school	3–7	1–3	1–3
Young adults	40–76	21–40	22–42
Workplaces	Cost saving	Cost saving	Cost saving
Social participation	Cost saving	Cost saving	Cost saving
Suicide prevention	Cost saving	Cost saving	Cost saving

^a Persistence of benefits is not assumed for housing and psychosocial support. .. Not applicable.

Source: Productivity Commission estimates.

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J Mental health, labour market outcomes and health-related quality of life

Mental health is an important aspect of an individual's 'human capital' — the individual attributes such as knowledge and skills that affect people's productivity, and the wages they earn if they are employed. For people already employed, improvements in mental health would be expected to result in higher wages. For people who are unemployed or not in the labour force, improvements in mental health are expected to increase the probability of gaining employment, as well as their income if they find employment.

Individuals are also likely to experience an improvement in their health-related quality of life as their mental health improves. The Productivity Commission has estimated how improvements in mental health are likely to increase the quality of life across the population expected to benefit from its recommendations and actions. These improvements in quality of life are measured in 'quality-adjusted life years' (QALYs).

This appendix outlines how the relationship between mental health, and labour market outcomes and health-related quality of life is quantified (sections J.1 and J.2). Results of this model are briefly presented in section J.3. The way in which the results of this estimation are used to calculate the potential benefits that may result from improved mental health is outlined in section J.4.

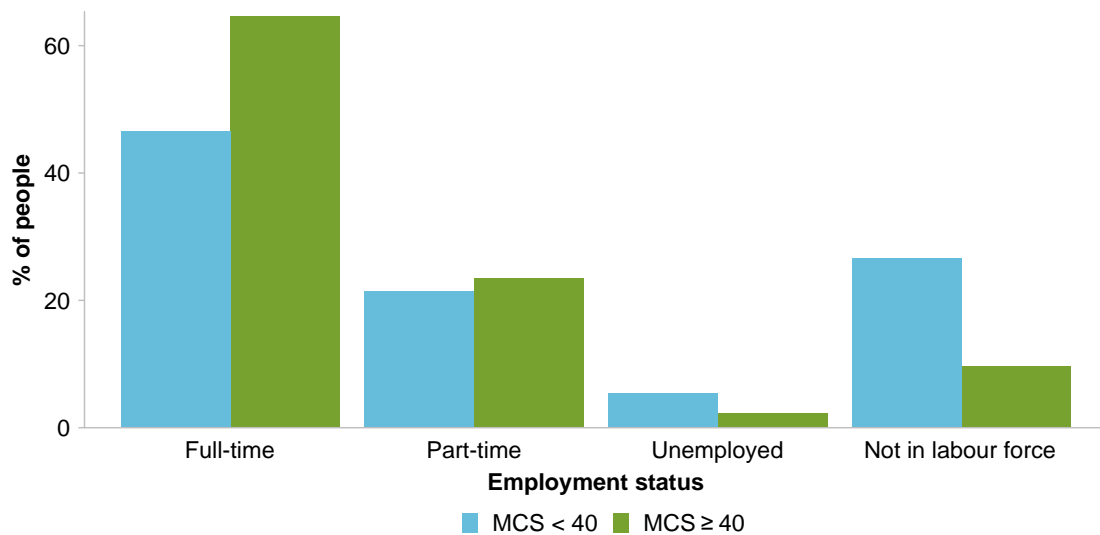
J.1 Estimating the effect of mental health on employment and wages

Mental health is associated with labour market outcomes such as employment and wages (Forbes, Barker and Turner 2010). People with mental ill-health are less likely to be employed, and if they are employed they are likely to earn less (figure J.1). For example, depression can lead to absenteeism and lower productivity (Waghorn and Lloyd 2005), and prolonged absenteeism can lead to a complete withdrawal from the labour market. The stigma associated with mental illness may also mean that employers do not hire someone with mental illness.

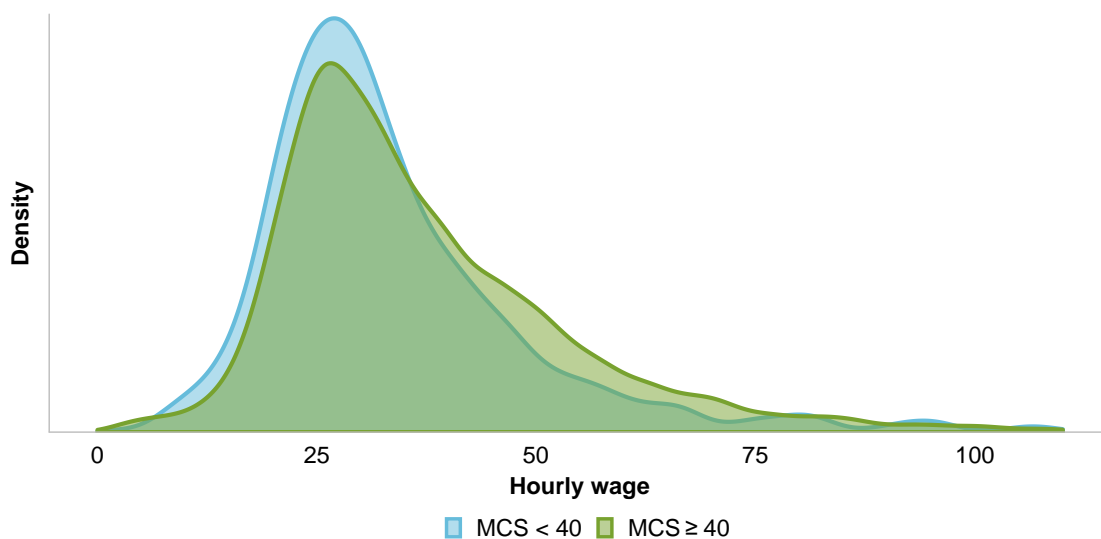
Frijters et al. (2014) provided examples of studies that have attempted to establish causal relationships between mental health and employment (Alexandre and French 2001; Chatterji et al. 2007; Ettner, Frank and Kessler 1997). These studies found that diagnoses of

psychiatric disorders and depression can reduce the probability of employment by 13–26% across different cohorts.

Figure J.1 **People with mental ill-health are more likely to be unemployed or not in the labour force^a ...**



... and, if they are employed, they are likely to earn lower wages^{a,b}



^a A mental component summary (MCS) score below 40 can be considered indicative of a mental illness (Kiely and Butterworth 2015). ^b The hourly wage is calculated as current weekly gross wage across all jobs divided by hours per week usually worked across all jobs.

Source: Housing, Income and Labour Dynamics in Australia, wave 18.

In addition to mental health, there are a range of other human capital and sociodemographic factors that are likely to affect an individual's labour force status and the wages they can expect. These include age, gender, education, marital status, work history, language and cultural background, geographical location and family composition (Cai 2010; Forbes, Barker and Turner 2010; Frijters, Johnston and Shields 2014).

Reverse causality is a problem

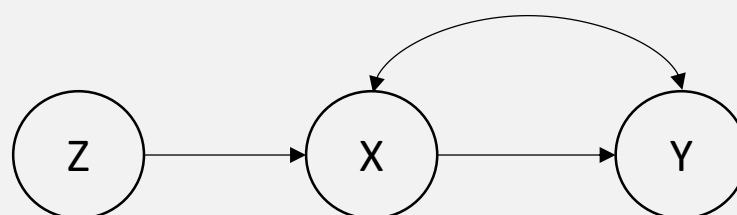
While the correlation between mental health and labour market outcomes is clear, it can be difficult to demonstrate the *causal* effects of mental health on labour market outcomes — mental health not only influences people's ability to work, but their experiences at work can also influence their mental health. This is known as a 'reverse causality' or 'endogeneity' problem.

The model used in this analysis draws on the work by Frijters et al. (2014), who studied the effects of mental health on employment using an instrumental variable model (box J.1). They addressed the problem of reverse causality between employment and mental health by using 'the death of a close friend in the last 3 years' as an instrumental variable to control for the endogeneity between employment status, wages and mental health.

Box J.1 What is an instrumental variable?

Suppose we have a dependent variable Y and an independent variable X , where there is likely to be two-way correlation or reverse causality. It is not possible to establish the size of the effect of X on Y using standard regression approaches. Instrumental variables are an econometric method that can be used to resolve problems of reverse causality.

An instrument, Z , is a variable that is correlated with X , *and* correlated with Y — but only through its effect on X . In other words, the instrument should change X and only change Y *through* its effect on X , allowing for the identification of a causal effect.



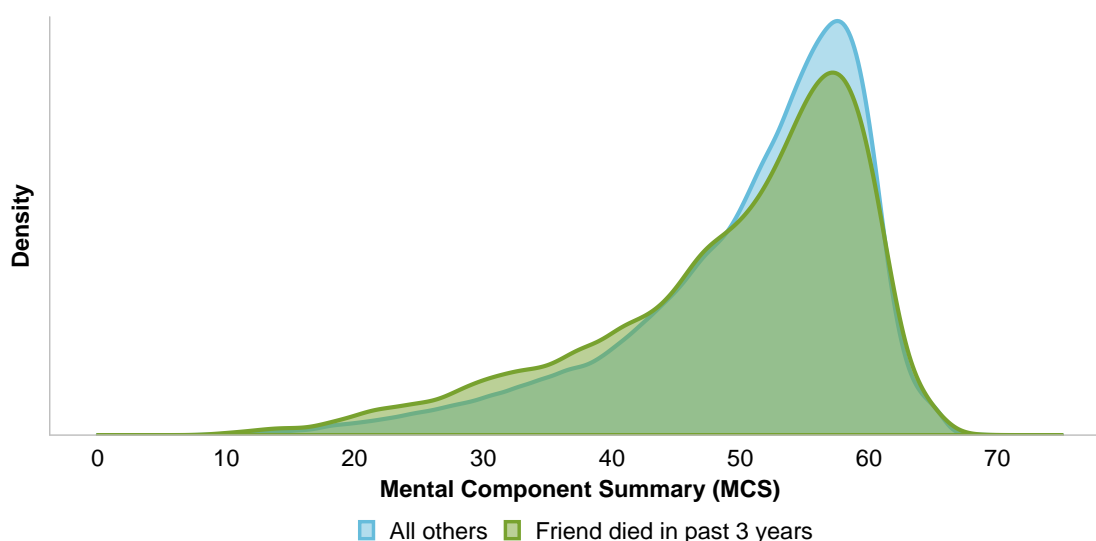
For example, suppose that we are interested in the effect of hours of attendance at a tutoring program (X) on grades (Y). The relationship between these two are likely to exhibit reverse causality — more hours at the tutoring program is likely to lead to higher grades, and students with higher grades may attend for more hours. A potential instrument for the tutoring program could be proximity to the tutoring program (Z), which can be argued to affect the hours of attendance (X) directly, and to only affect grades (Y) through its effect on hours of attendance (X).

The choice of the instrument, Z , is crucial as it is up to the researcher to argue that the instrument affects X , but is only correlated with Y through its effect on X .

This ‘death of a close friend’ instrument is found to be correlated with mental health, but independent of labour market outcomes. A literature review conducted by Frijters et al. (2014) found that stressful life events can have substantial effects on mental health and can increase symptoms of depression. Data from the Housing, Income and Labour Dynamics in Australia (HILDA) survey supports these findings — people who have experienced the death of a close friend in the past 3 years are more likely to be in the left-tail of the distribution of mental health scores (figure J.2).

Frijters et al. (2014) also argued that the use of ‘death of a close friend’ as an instrument is more appropriate than using the ‘death of a relative’ or the ‘death of a spouse or child’. The authors suggest that it is conceivable that a person will take time off work to look after a terminally-ill parent or their spouse/child after these events, whereas it is less likely in the case of a terminally-ill friend.

Figure J.2 **The ‘death of a close friend’ instrument is correlated with mental ill-health**



Source: Housing, Income and Labour Dynamics in Australia, waves 2–18.

Establishing the effect of mental health on wages and QALYs using an instrumental variable approach involves four stages.

The first stage involves establishing the relationship between the ‘death of a friend’ variable and mental health by estimating the linear regression:

$$MH = \alpha_1 + X_1\gamma + \delta \times \text{Death of friend} + \varepsilon_1 \quad [1]$$

where MH represents a measure of mental health, α_1 is the parameter for the intercept, X_1 is a matrix of independent variables, γ is a vector of parameters, Death of friend is the instrumental variable (a dummy variable indicating whether a close friend has died in the

last three months; 1=yes, 0=no), δ is the parameter associated with the instrument, and ε_1 is a vector of independently and identically normally distributed random variables with variance σ_1^2 . Where statistically significant, the parameter δ denotes the relationship between the death of a friend and mental health.

The results of the first stage equation are used in several ways. The residuals are used in the second stage regression (multinomial logistic regression for employment outcomes) as part of a control function approach, and the fitted values are used in the third stage wage regression (linear regression) and the QALY regression (linear regression) as part of a two-stage least squares approach.

Mental health and employment

The second stage equation is a multinomial logistic regression, that controls for the endogenous variable (mental health) by including the residuals from the first stage as an explanatory variable. L is a categorical variable for labour force status, where the model assumes that people can either be employed full-time, employed part-time, unemployed, or not in the labour force.

$$L = \text{Multinomial Logistic}(\alpha_2 + X_2\beta + \tau \times \text{MH} + \phi\hat{\varepsilon}_1) \quad [2]$$

where α_2 is the parameter for the intercept, X_2 is a matrix of independent variables, β is a vector of parameters, τ is the parameter associated with MH, $\hat{\varepsilon}_1 = \text{MH} - \widehat{\text{MH}}$, which is the vector of residuals from the first stage equation, and ϕ is the parameter associated with the first stage residual. Because there are four categories, three sets of coefficients are estimated.

The predicted probability of each labour force status can be estimated using the results of this regression. Let \hat{p} be the predicted probability of employment (summing up the predicted probability of working full-time or part-time) and \hat{q} be the probability of not being employed (summing up the predicted probability of being unemployed or not in the labour force).

Mental health and wages

The third stage involves estimating a wage equation that seeks to explain the expected wage rate for each individual given their characteristics. Because wages are only observed for people who choose to work, this means that there is likely to be bias in the estimation procedure because those who are not employed are likely to be systematically different to those who are employed. For example, those that are not employed tend to have lower levels of education, a greater incidence of chronic illness and a longer experience of unemployment. Human capital theory suggests that, given their characteristics, these people would be expected to be less productive on average if they were employed than people who are currently working, and, as a result, earn lower wages.

One way to control for the bias is to use a control function approach (the Heckman correction is a prominent example of this). A third order polynomial is constructed from the predicted probability of not being employed (\hat{q}) from the second stage equation, taking into account the possibility of full-time and part-time employment. The polynomial is then included as additional predictors in the wage equation, alongside the fitted value of the measure of mental health from the first stage equation that controls for the endogeneity between wages and mental health.

$$\log(\text{Wage}) = \alpha_3 + X_3\theta + f(\hat{q})\theta_{CF} + \xi \times \widehat{MH} + \varepsilon_3 \quad [3]$$

where α_3 is the parameter for the intercept, X_3 is a matrix of independent variables, θ is a vector of parameters, $f(\hat{q})$ is a third order polynomial constructed from the fitted probability of not being employed from the second stage, θ_{CF} is a vector of parameter associated with the probabilities of not being employed, ξ is the parameter associated with the fitted value of the measure of mental health, and ε_3 is a vector of independently and identically normally distributed random variables with variance σ_3^2 . The variable used for the exclusion restriction is unemployment history (the proportion of time spent unemployed since leaving full-time education) — that is, it is included in X_2 but not X_3 .

Mental health and quality-adjusted life years

The fourth stage of the model estimates the relationship between QALYs and mental health. Using the fitted values of the measure of mental health from the first stage equation, QALYs are regressed on mental health and other characteristics.

$$\text{QALY} = \alpha_4 + X_4\zeta + \kappa \times \widehat{MH} + \varepsilon_4 \quad [4]$$

where α_4 is the parameter for the intercept, X_4 is a matrix of independent variables, ζ is a vector of parameters, κ is the parameter associated with the fitted value of the measure of mental health, and ε_4 is a vector of independently and identically normally distributed random variables with variance σ_4^2 .

Unobserved heterogeneity

Another factor to consider is the unobserved heterogeneity (differences) across individuals. With linear models, this is commonly dealt with by including individual fixed effects within the model. However, with non-linear models (such as the multinomial logit model used here), the inclusion of individual-specific fixed effects typically leads to the incidental parameters problem (whereby the large number of additional parameters included biases the estimates of the covariance used in estimation). One way of dealing with this in non-linear models is to use conditional maximum likelihood estimation. However, a drawback with this approach is that the unconditional predicted probabilities cannot be recovered, which are important to the analysis.

A Chamberlain-Mundlak correlated random effects approach is used to account for individual heterogeneity. This requires a stronger set of assumptions than the individual fixed effects model regarding idiosyncratic shocks and unobserved individual heterogeneity. However, it affords considerable flexibility and allows for the identification of average partial effects and unconditional predicted probabilities (Wooldridge 2019).

Bayesian methods

Traditional, or frequentist, approaches to statistical inference typically calculate single ‘point’ estimates for each population parameter and the corresponding confidence intervals. Frequentist approaches assume that there are a ‘true’ set of underlying population parameters, and then construct an estimator, with errors resulting from finite sampling. Conclusions driven by a frequentist interpretation usually have a true/false conclusion resulting from statistical methods for testing hypotheses (Wagenmakers et al. 2008). As such, the probability assertions made under a frequentist approach are pre-sample. For example, a 95% confidence interval contains the true parameter value with a probability of 0.95 only before observing the data — after observing the data, the probability is either zero or one. However, confidence intervals are often incorrectly interpreted by many as a guide to post-sample uncertainty (Hoekstra et al. 2014).

Bayesian inference treats everything as random before it is observed, and everything observed as no longer random. Unobserved parameters can be therefore be constructed as probabilistic statements that are conditional on observed data. This is one of the distinguishing features of a Bayesian approach. Bayesian inference attempts to assign probabilities to different sets of parameters, given a higher weight if they are more likely to lead to the observed data (McElreath 2019). Prior probability distributions are first specified and are then updated with information arising from the data, given the assumed model structure. The resultant probability distribution (the posterior probability distribution) can be interpreted as the distribution of possible values that a parameter can take.

For this analysis, there is not likely to exist a single ‘true’ value quantifying the benefits of the reforms recommended. As a result, Bayesian inference is used to evaluate the outcomes for many different scenarios and to assign probabilities to the likelihood of occurrence. The end product is a distribution of potential benefits and their associated credibility intervals (for example, ‘for reform X, there is a Y% chance that the labour force benefits will exceed \$Z million’).

To allow the analysis to be informed by the data, diffuse priors are used for the parameters in the model — that is, prior distributions with relatively large variances. The priors for the regression coefficients are that they have a Normal (0, 10) distribution and that the standard deviations have an Inverse Gamma (0.5, 5) distribution.

How should parameter estimates be interpreted?

The posterior distributions from a Bayesian--estimated model are often simplified for presentation using summary statistics. The uncertainty associated with parameter values is often reported using the 5th and 95th percentiles of the posterior distribution — sometimes as a shaded area, sometimes as lines that indicate ranges. This can be interpreted as saying, ‘there is a 90% chance that the true parameter value lies in this range’.

J.2 Housing, Income and Labour Dynamics in Australia

The HILDA survey is a nationally representative household panel survey, conducted annually and contains information from respondents on a range of different areas including education, health, labour force status, and demography. As of May 2020, there were eighteen waves of data available, all but the first are used in the analysis undertaken here.²⁰

Following Frijters et. al. (2014), the analysis is focused on the Australian population aged between 21–64 years. Summary statistics for individual level characteristics are presented in table J.1. Mental health is measured using the mental component summary (box J.2).

²⁰ The first wave of HILDA does not include the instrumental variable.

Table J.1 Sample means of key variables^{a,b}

	<i>All respondents</i>	<i>MCS ≤ 40</i>	<i>MCS > 40</i>
Employed	0.826	0.654	0.857
Full-time employment	0.606	0.444	0.634
Part-time employment	0.221	0.211	0.222
Unemployed	0.033	0.062	0.028
Not in the labour force	0.141	0.283	0.116
Unemployment history	0.043	0.072	0.038
Mental component summary (MCS)	50.498	32.287	53.694
Physical component summary (PCS)	51.816	42.163	53.509
Utility weight (quality-adjusted life years)	0.683	0.347	0.742
Female	0.513	0.583	0.501
Age (single-year)	40.290	39.860	40.370
Highest qualification – University degree	0.318	0.259	0.329
Highest qualification – Diploma/certificate	0.327	0.331	0.326
Highest qualification – Year 12	0.158	0.164	0.157
Married	0.688	0.561	0.711
Divorced	0.089	0.148	0.079
Lives in regional area	0.295	0.304	0.294
Aboriginal or Torres Strait Islander	0.020	0.032	0.018
Non-English speaking background	0.170	0.155	0.173
Currently studying	0.045	0.049	0.044
Number of children between ages 0–4 years	0.229	0.203	0.233
Number of children between ages 5–14 years	0.415	0.403	0.417
Number of children between ages 15–24 years	0.305	0.310	0.304
Many friends	4.422	3.644	4.559
Death of a close friend in the past 3 years	0.167	0.209	0.159
Sample size	127 886	19 321	108 565

^a A mental component summary (MCS) score below 40 is considered indicative of mental illness (Kiely and Butterworth 2015). 'Unemployment history' is defined as the proportion of time a person has been unemployed since finishing full-time education. 'Many friends' is a value between 1–7 based on participants response to the question 'I seem to have a lot of friends', where 7 represents strongly agree and 1 represents strongly disagree. ^b Waves 2 to 18 of HILDA are pooled for estimation.

Source: Housing, Income and Labour Dynamics in Australia, waves 2–18.

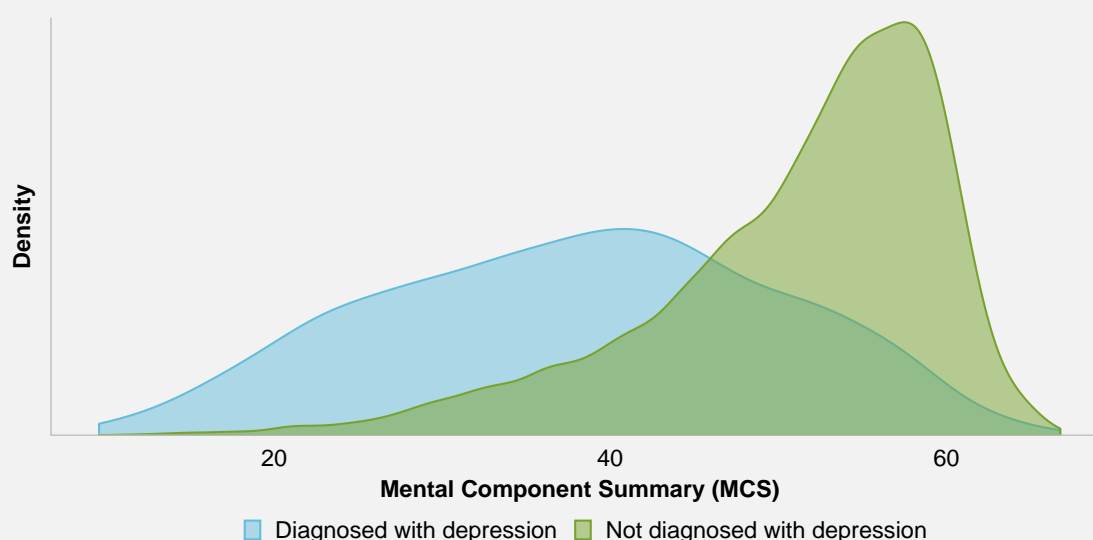
Box J.2 **Measuring mental health using the mental component summary**

The measure of mental health used for this analysis is called the mental component summary (MCS). The MCS is derived from responses to the Short Form 36 (SF-36) questionnaire, and transformed into a range from 0 to 100, with a mean of 50 and standard deviation of 10, with higher scores corresponding to better mental health (Ware and Kosinski 2001). The SF-36 is reflective of a range of health indicators over the preceding four weeks.

While the SF-36 does not include references to symptoms of specific diseases, the measures derived from it have been shown to be highly correlated with the frequency and severity of many health problems. The SF-36 is comprised of 36 questions relating to different aspects of an individual's health-related quality of life. The 36 questions are used to derive eight subscales of health, each ranging from 0 to 100, that measure different elements of health: physical functioning; limitations in carrying out usual role due to physical problems; bodily pain; perception of general health; vitality; social functioning; limitations in carrying out usual role due to emotional problems; and mental health. The physical and mental health summary measures are produced by aggregating the most correlated of the subscales.

To check the validity of the MCS as a measure of mental health, the distribution of the MCS of people who have been previously diagnosed with long-term depression are compared with the corresponding distribution for those who have not been diagnosed with long-term depression (where long-term is defined as lasting or expected to last for at least six months). The figure below suggests that the MCS is strongly correlated with the diagnosis of depression, where people with lower MCS scores much more likely to have been diagnosed with depression.

While the draft report used an uncorrelated (orthogonal) factor solution to calculate the factor loadings to compute the PCS and MCS, the estimates presented here use a correlated (oblique) factor solution, as suggested by an expert roundtable.



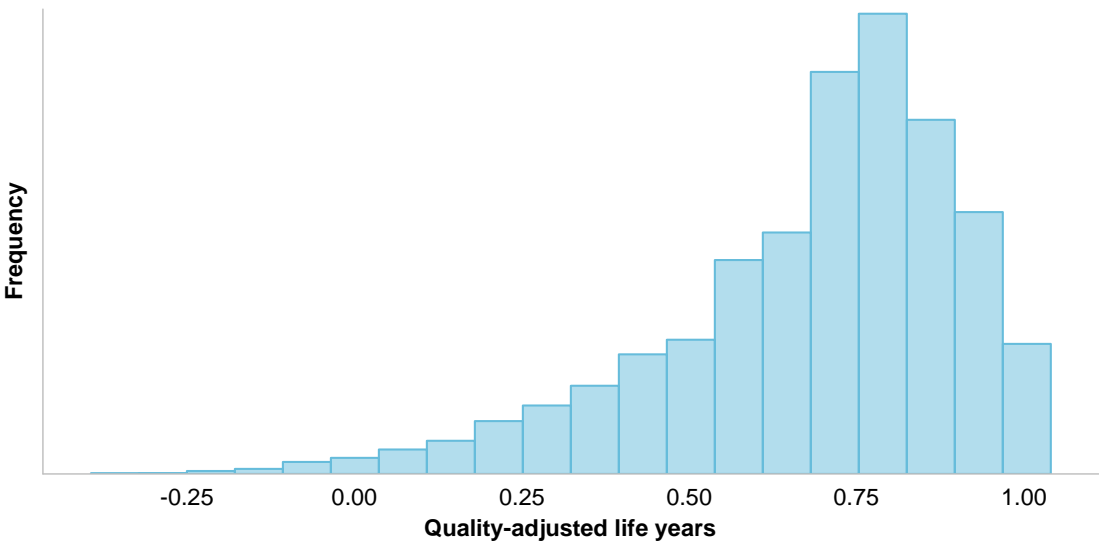
Source: Ware and Kosinski (2001); Housing, Income and Labour Dynamics in Australia, wave 17.

Health-related quality of life

Health-related quality of life is measured in terms of QALYs. A QALY is the arithmetic product of life expectancy combined with a measure of the quality of life-years — as shown be a healthy utility weight — remaining. The time a person is likely to spend in a particular state of health is weighted by a utility weight, derived from the SF-6D instrument (Norman et al. 2014). A utility weight value of 1 indicates perfect health, while a health utility weight of 0 is conceptually equivalent to death. Certain health states can be assigned a negative value as they may be characterised by severe disability and/or pain that are regarded as worse than death (Whitehead and Ali 2010). In HILDA, the distribution of QALYs is left-skewed, with the majority of people having between 0.6–0.8 QALYs. (figure J.3).

If an intervention provided perfect health for one additional year, it would produce one QALY. Likewise, an intervention providing an extra two years of life at a health status of 0.5 would equal one QALY.

Figure J.3 **Distribution of quality-adjusted life years in HILDA**



Source: Housing, Income and Labour Dynamics in Australia, waves 2–18.

Estimating parameters

Before estimating the model, continuous variables are rescaled so that the posterior distributions can be estimated more efficiently. In most cases, this involves normalising the variables to zero mean with a unit standard deviation. Some variables are categorical variables that need to be interpreted relative to a baseline (table J.2).

Table J.2 Categorical variables — baseline

<i>Variable</i>	<i>Relative to:</i>
Multiple categories	
Age 21–24 years, Age 25–44 years	Age 45–64 years
Vic, Qld, SA, WA, Tas, NT, ACT	NSW
University degree, Diploma/certificate, High school	Did not graduate high school
Binary categories	
Female	
Married/de facto	
Divorced	
Lives in a regional area	
Aboriginal and Torres Strait islander	
Non-English speaking background (NESB)	
Currently studying	
Death of a friend in the past 3 years	

The Productivity Commission used the statistical package Stan (Carpenter et al. 2017) through an interface to the R programming language to rescale the posterior distributions.

For all but the simplest cases, there is no mathematical equation that defines the posterior distribution — this means that it needs to be estimated empirically. This estimation can be computationally difficult. Indeed it has only been possible to estimate complicated models in recent years, as computing power has increased. Stan uses an algorithm called Hamiltonian Monte Carlo to explore and sample from the posterior probability distribution. Statistical inference about the posterior distribution is conducted using these samples.

J.3 Parameter estimates

Table J.3 Parameter estimates — Instrumental Variable equation^{a,b}

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>5th percentile</i>	<i>Median</i>	<i>95th percentile</i>
Age 21–24 years	-0.112	0.011	-0.130	-0.112	-0.093
Age 25–44 years	-0.107	0.007	-0.119	-0.107	-0.096
University degree	-0.038	0.006	-0.049	-0.038	-0.028
Diploma/certificate	-0.004	0.006	-0.014	-0.004	0.005
High school graduate	-0.018	0.007	-0.029	-0.018	-0.006
Married/de facto	0.189	0.006	0.178	0.189	0.199
Divorced	0.036	0.009	0.022	0.036	0.049
Vic	-0.046	0.005	-0.054	-0.046	-0.038
Qld	0.022	0.006	0.012	0.022	0.031
SA	-0.027	0.008	-0.040	-0.027	-0.012
WA	-0.011	0.007	-0.023	-0.011	0.001
Tas	-0.006	0.014	-0.031	-0.006	0.017
NT	-0.037	0.022	-0.073	-0.036	-0.001
ACT	0.006	0.015	-0.017	0.006	0.030
NESB	0.074	0.006	0.065	0.074	0.083
Currently studying	-0.062	0.010	-0.079	-0.062	-0.045
Lives in a regional area	0.038	0.005	0.030	0.038	0.046
Indigenous	-0.056	0.014	-0.080	-0.057	-0.033
Unemployment history	-0.020	0.002	-0.024	-0.020	-0.017
Experience	-0.079	0.021	-0.115	-0.078	-0.044
Experience squared	0.108	0.018	0.078	0.107	0.138
PCS	0.596	0.002	0.593	0.596	0.600
Children 0–4 years	-0.021	0.003	-0.026	-0.021	-0.016
Children 5–14 years	-0.031	0.004	-0.037	-0.031	-0.024
Children 15–24 years	-0.025	0.003	-0.031	-0.025	-0.019
Many friends	0.109	0.003	0.105	0.109	0.114
Female	-0.093	0.004	-0.100	-0.092	-0.085
Death of a friend	-0.058	0.005	-0.067	-0.058	-0.049

^a Year-specific fixed effects are included in the model, but not shown here. ^b The covariates and outcome variable were standardised prior to estimation.

Source: Productivity Commission estimates using Housing, Income and Labour Dynamics in Australia.

Table J.4 Parameter estimates — Wage equation^{a,b}

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>5th percentile</i>	<i>Median</i>	<i>95th percentile</i>
Age 21–24 years	0.035	0.007	0.024	0.035	0.048
Age 25–44 years	0.060	0.004	0.053	0.059	0.066
University degree	0.309	0.004	0.303	0.309	0.315
Diploma/certificate	0.101	0.003	0.095	0.101	0.106
High school graduate	0.103	0.004	0.097	0.103	0.109
Married	0.070	0.003	0.065	0.069	0.075
Divorced	0.036	0.005	0.028	0.036	0.043
Vic	-0.029	0.003	-0.034	-0.029	-0.025
Qld	-0.022	0.003	-0.027	-0.022	-0.017
SA	-0.052	0.004	-0.059	-0.052	-0.045
WA	0.034	0.004	0.028	0.034	0.040
Tas	-0.028	0.007	-0.040	-0.028	-0.016
NT	0.035	0.010	0.018	0.034	0.052
ACT	0.100	0.007	0.088	0.100	0.112
NESB	-0.067	0.003	-0.072	-0.067	-0.062
Currently studying	0.010	0.006	-0.001	0.010	0.020
Lives in a regional area	-0.059	0.002	-0.063	-0.059	-0.055
Indigenous	0.043	0.008	0.030	0.043	0.055
Experience	0.236	0.010	0.220	0.236	0.253
Experience squared	-0.088	0.009	-0.102	-0.088	-0.074
PCS	0.022	0.002	0.019	0.022	0.024
Many friends	-0.003	0.002	-0.006	-0.003	-0.001
Female	-0.071	0.002	-0.075	-0.071	-0.067
MCS	0.009	0.002	0.007	0.009	0.012

^a Year-specific fixed effects are included in the model, but not shown here. ^b The covariates and outcome variable were standardised prior to estimation.

Source: Productivity Commission estimates using Housing, Income and Labour Dynamics in Australia.

Table J.5 Parameter estimates — QALY equation^{a,b}

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>5th percentile</i>	<i>Median</i>	<i>95th percentile</i>
Age 21–24 years	0.034	0.013	0.013	0.033	0.056
Age 25–44 years	0.014	0.010	-0.002	0.014	0.032
University degree	0.018	0.006	0.008	0.018	0.028
Diploma/certificate	0.008	0.005	0.000	0.008	0.016
High school graduate	0.014	0.006	0.004	0.014	0.024
Married	-0.029	0.016	-0.056	-0.028	-0.005
Divorced	-0.020	0.007	-0.032	-0.020	-0.009
Vic	-0.004	0.006	-0.013	-0.004	0.006
Qld	-0.012	0.005	-0.020	-0.012	-0.003
SA	-0.008	0.007	-0.019	-0.008	0.003
WA	-0.018	0.006	-0.027	-0.018	-0.008
Tas	-0.021	0.012	-0.040	-0.021	0.001
NT	0.051	0.017	0.021	0.050	0.079
ACT	0.003	0.012	-0.017	0.003	0.023
NESB	-0.085	0.008	-0.098	-0.084	-0.072
Currently studying	0.005	0.010	-0.011	0.005	0.022
Lives in a regional area	-0.002	0.005	-0.010	-0.002	0.006
Indigenous	-0.003	0.013	-0.024	-0.003	0.018
Unemployment history	-0.007	0.003	-0.011	-0.007	-0.003
Experience	0.039	0.019	0.007	0.038	0.071
Experience squared	0.003	0.017	-0.026	0.003	0.031
PCS	0.581	0.048	0.498	0.584	0.655
Children 0–4 years	0.007	0.003	0.002	0.007	0.012
Children 5–14 years	0.004	0.004	-0.002	0.004	0.011
Children 15–24 years	-0.001	0.003	-0.007	-0.001	0.004
Many friends	0.001	0.009	-0.014	0.002	0.015
Female	-0.016	0.008	-0.028	-0.017	-0.002
MCS	0.448	0.081	0.324	0.443	0.587

^a Year fixed effects are included in the model, but not shown here. ^b The covariates and outcome variable were standardised prior to estimation.

Source: Productivity Commission estimates using Housing, Income and Labour Dynamics in Australia.

J.4 Calculating expected benefits of recommended actions

The econometric results were combined with information from the existing mental health literature that describes the possible effect of policy changes on the mental health of people targeted by a recommended action. This allowed the calculation of estimates of expected changes in employment, wages, and health-related quality of life. Information about the possible effects of the actions, and their associated costs is presented in appendix I.

Given the difficulties in implementing longitudinal models over numerous subpopulations and recommended actions, this analysis considers only the short-term benefits of improved mental health. For example, various actions recommended regarding early childhood and school may ultimately result in long-term improvements in labour market outcomes of the children affected. However, this model only considers the health improvements (in terms of QALYs) that these children experience, and the potential for their parents to have better labour market outcomes in the short term. As a result, the benefits presented here are likely to understate the overall potential benefits of the recommended actions.

The direct economic benefits of improvements in mental health may be thought of as consisting of two elements — increases in income and increases in employment.

The recommended actions are modelled as functions that transform the relevant pre-reform variables into post-reform variables:

$$MCS_i^{\text{post}} = f_j(MCS_i^{\text{pre}}) \quad [5]$$

where f_j is a function that indicates how the mental health of individual i changes as a result of reform j . An individual's MCS is typically increased by the relevant effect in order to indicate the expected post-reform mental health state of affected individuals.

The increase in employment (which includes both full-time and part-time employment) between pre- and post-reform is given by the expression:

$$\Delta \text{Employed} = \sum_i \hat{p}_i(MCS_i^{\text{post}}) - \sum_i \hat{p}_i(MCS_i^{\text{pre}}) \quad [6]$$

The overall labour market benefits are calculated as the change in expected aggregate income. Changes in aggregate income can come from either a change in wages attributed to changes in mental health or a change in the probability of working full-time or part-time (and the associated average number of hours worked).

$$\Delta \text{Income} = \text{Weeks} \times \text{Hours}^{\text{FT}} \times \quad [7]$$

$$\begin{aligned} & [\sum_i \text{Wage}_i(MCS_i^{\text{post}}) \hat{p}_i^{\text{FT}}(MCS_i^{\text{post}}) - \sum_i \text{Wage}_i(MCS_i^{\text{pre}}) \hat{p}_i^{\text{FT}}(MCS_i^{\text{pre}})] \\ & + \text{Weeks} \times \text{Hours}^{\text{PT}} \times \\ & [\sum_i \text{Wage}_i(MCS_i^{\text{post}}) \hat{p}_i^{\text{PT}}(MCS_i^{\text{post}}) - \sum_i \text{Wage}_i(MCS_i^{\text{pre}}) \hat{p}_i^{\text{PT}}(MCS_i^{\text{pre}})] \end{aligned}$$

Similarly, interventions with an effect size which affect mental health are assumed to change a person's MCS score, and change the utility weight used to derive their QALYs, using the parameter estimates from equation [4]. This provides an indication of the change in QALY, given a change in mental health, which can then be summed up over the population for which the intervention is applied to.

$$\Delta\text{QALY} = \sum_i \text{QALY}_i(\text{MCS}_i^{\text{post}}) - \sum_i \text{QALY}_i(\text{MCS}_i^{\text{pre}}) \quad [8]$$

Waves 2–18 of HILDA are used to estimate the parameters of the model following the procedure outlined in section J.1. In constructing the dataset used for the analysis, observations are dropped when an individual has not provided a complete set of responses to the questions used to construct the variables required for estimation. To estimate the benefits of recommendations, the latest wave of HILDA is used as it is expected, with population weights, to more closely reflect the current state of the Australian population.

The Bayesian approach to estimating the relationships between mental health and wages, labour force participation and health-related quality of life (QALYs) produces a distribution over the parameters rather than a single 'point' estimate. Using the output from the models described in section J.1 combined with a set of reforms yields a range and distribution of possible expected effects (box J.3). Benefits estimated using this approach are presented in appendix I.

Box J.3 **Interpreting outputs from Bayesian statistical models**

Bayesian methods deliver parameter estimates spanning a range of possible values. The choice of which statistic to present in summarising the outputs requires judgment.

In this work, the median (50th percentile) is preferred as it represents outcomes with a reasonable chance of occurring and is not skewed, as the mean can be as a result of outliers. Uncertainty associated with an estimate is often indicated by presenting values from percentiles at the top and bottom of the span. The value at the 90th percentile, for example, can be interpreted as meaning that 'there is only a 10% probability that the true parameter value is greater than this figure'. Values between the 5th and 95th percentiles can be interpreted as indicating that 'there is a 90% chance that the true parameter value lies in this range'. This is sometimes referred to as a *credibility interval*.

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K Detailed assumptions about benefits and costs

This appendix outlines detailed assumptions used in calculating benefits and costs made in each of the various ‘groups’ of actions for which results are presented in appendix I. This includes a brief description of the recommended actions for which benefits and costs are presented, as well as the key assumptions made in order to quantify these benefits and costs.

In some cases, the beneficial effects of the actions are modelled as the cumulative effect of a number of actions. Where this is the case, there are some actions for which only costs are specified, with the assumptions underlying the effects detailed separately.

K.1 Access to healthcare

Action Increased psychiatric advice to GPs

The final report recommends that the Australian Government should introduce an Medicare Benefit Schedule (MBS) item for psychiatrists to provide advice to a general practitioner (GP) or a paediatrician over the phone on diagnosis and management issues for a patient who is being managed by the GP or paediatrician.

Costs

The additional time required by psychiatrists, GPs and paediatricians is expected to result in increased costs:

- It is assumed that 10 minutes is spent on each call.
- It is assumed that these changes will lead to an additional 3300-8000 GP and 500-2000 paediatrician calls to psychiatrists. (This is based on the estimated 1050 calls under the NSW Primary Health Network (PHN) GP Psychiatrist Support Line in 2019-20 (chapter 12), scaled up to a national level. In 2019-20, The NSW Support Line covered eight PHNs across New South Wales, constituting about 25% of Australia's population).
- It is assumed that all calls are bulk billed, and that the MBS rebate paid to psychiatrist per call will be set at \$66, using the average fee charged by psychiatrists for a consultation lasting for less than 15 minutes as a benchmark (Productivity Commission estimates based on MBS data).
- The (unreimbursed) cost of GP and paediatrician time is assumed to be \$4 per minute (based on MBS fees and average consultation lengths).
- The total cost is estimated to between \$400 000 and \$1.1 million (2019 dollars).

Additional considerations

- The NSW GP Psychiatrist Support Line is currently costing the commissioning PHNs \$500 000 per year in 2019-20, 2020-21 and 2021-22 (Productivity Commission estimate based on Coordinare, pers. comm., 27 May 2020). If these PHNs were to rely on the proposed MBS-funded services beyond this, it is likely that there would be additional cost savings.
- Cost estimates are highly sensitive to assumptions about expected use of this item.

Action Encouraging more group psychological therapy

Changes should be made to MBS rules to encourage more group therapy. This includes allowing group therapy with a smaller number of people and creating new group therapy Medicare items.

Implementation

- In 2019, about 7000 people received MBS-rebated group psychological therapy; the average number of sessions was 4.6; the average fee (rebate plus co-payment) was \$53 (unpublished MBS data).
- It is assumed that the average fee for a 60 minute session is \$53; for a 90 minute session it is \$70 and for a 120 minute session it is \$90. Existing sessions are assumed to remain at 60 minutes in length, 60% of additional sessions run for 60 minutes, 20% run for 90 minutes, and 20% run for 120 minutes. This implies an average fee per additional session of \$64.
- It is very difficult to predict either:
 - the number of people who will receive group therapy as a result of these changes, who would not have received any therapy otherwise. It is assumed between 3000 and 5000 additional people receive therapy.
 - the number of people who will receive group instead of individual therapy as a result of these changes. It is assumed between 5000 and 7000 people receive group therapy.

Effect

- It is assumed that the group therapy is as effective as the individual therapy for those already receiving individual services (chapter 12), and improves the mental health of people who were not previously receiving services.
- Format equivalence between group and individual therapy, and an effect size averaging about 0.9 are shown in Burlingame et al. (2016) and Cuijpers et al. (2019). People in these studies tend to receive many more than 4.6 sessions on average. We assume that each additional person accessing therapy get 4.6 sessions on average, and therefore has a 25% chance of getting this effect size, roughly in line with estimates from Lambert et al. (2001) and Howard et al. (1986). The other 75% are assumed to have no improvement. This is estimated to result in an additional 33-61 quality-adjusted life years (QALYs) and \$2.8-5.3 million in wages.

Costs

- For people who have not used previously accessed services, there is an average cost per person of \$293 (4.6 sessions times \$64 per session). For 3000 to 5000 people, total cost is estimated to be \$900 000 to \$1.5 million.
- For people already using services, substituting from individual to group therapy is likely to result in cost savings. In 2019, the average fee charged for individual therapy was \$145, so the difference in cost (between individual and group) is assumed to be \$81 per session. The cost saving per person switching from individual to group is estimated to be \$373 (4.6 sessions times \$81 per session). For 5000 to 7000 people, total cost saving is estimated to be \$1.9 million to \$2.6 million.

Additional considerations

The extent to which consumers will choose to access more group therapy after this change in policy is not clear, and cost estimates are highly sensitive to changes in demand. The changes are also likely to lead to an increase in the average number of sessions received.

Action Increased access to psychiatry and psychological therapy by telehealth

The Australian Government should make permanent the MBS items introduced during the COVID-19 pandemic that allow people across Australia to access certain psychiatric and psychological services by videoconference (and telephone where videoconference is not available). These should replace other telehealth items for psychiatry and psychological services.

Population

- There were about 82 000 psychiatry and about 14 000 psychological telehealth consultations in 2019 (chapter 12). In 2019, roughly a quarter of the population had access to psychiatry by telehealth, and roughly 10% to psychology by telehealth.
- But in March 2020 alone, following the measures introduced in response to the COVID-19 outbreak, there were about 24 000 psychiatry consultations by telehealth, and about 30 000 psychological therapy sessions by telehealth (chapter 12).
- It is very difficult to predict either:
 - the number of psychological therapy and psychiatry consultations that will occur via telehealth instead of face-to-face, because of our changes (we assume 200 000 to 400 000 consultations switch)
 - the number of people that will access psychological therapy who would not have accessed it otherwise, because of our changes (we assume 5000 to 10 000 people) — we assume that there is no change in the number of people accessing psychiatry, because psychiatrists are supply constrained (chapter 16).

Effect

- For people who are already receiving treatment, it is assumed that telehealth treatment has an equivalent benefit (chapter 12).
- For those who did not access psychological therapy previously, we assume an effect size of 0.8, in line with meta-analyses by Berryhill et al. (2019). People in these studies tend to receive many more than 4.5 sessions on average. We assume that each additional person accessing therapy get 4.5 sessions on average, and therefore has a 25% chance of getting this effect size, roughly in line with estimates from Lambert et al. (2001) and Howard et al. (1986). The other 75% are assumed to have no improvement.
- This is estimated to lead to an increase of between 49-90 QALYs and \$4.1-7.9 million in aggregate labour income.

Costs

- People are assumed to save time getting to and from appointments and incidental costs (such as transport costs and lost income). We estimate these cost savings to be between \$20–\$60 per consultation (based on Anderson et al. 2016). Assuming 200 000 to 400 000 consultations are done via telehealth instead of face-to-face, we estimate the total cost saving to be between \$4 million and \$24 million.

(continued next page)

Action Increased access to psychiatry and psychological therapy by telehealth (continued)

- We estimate a cost saving of \$7.1 million associated with removing additional rebates paid to psychiatrists for telehealth consultations, assuming no increase in co-payments (chapter 12).
- For people that were not previously receiving any therapy, we assume 4.5 sessions on average and an average fee (rebate plus co-payment) of \$145, in line with 2019 averages (unpublished MBS data). This implies a cost per person of \$652 (4.5 sessions time \$145). Assuming 5000 to 10 000 people in this category, we estimate a total cost of \$3.3 million to \$6.5 million.

Additional considerations

- It is difficult to estimate the increasing number of people who will choose to access psychological therapy via telehealth. The changes are also likely to lead to an increase in the average number of sessions received, as people find it easier to keep attending sessions if they are able to attend some via telehealth (though we have not accounted for this in our modelling). Given higher use of telehealth in the wake of COVID-19, cost savings from removing additional payments for psychiatrists could also be higher than \$7.1 million.

Action Expanding supported online treatment options

Funding should be expanded for services to accommodate up to 150 000 clients per year for supported online treatment as a lower intensity service for people with high prevalence mental health conditions. As part of this:

- Supported online treatment should have a strong evidence base and be offered to children, youth and adults. Services should cater for demand for services from people of culturally and linguistically diverse backgrounds.
- Funding should provide for information campaigns to increase awareness of the effectiveness, quality and safety of government-funded, supported online therapy.

Population

It is assumed that an additional 50 000 people with a mild mental illness who are not currently accessing treatment will use supported online treatment and 100 000 people will substitute towards supported online treatment from other treatment options.

Effect

- We assume an effect size of 0.8 for online supported treatment based on a meta-analysis by Andrews et al. (2018). People who substitute towards online supported treatment are assumed to have the same outcome as expected previously.
- Increased use of supported online treatments is estimated to result in an additional 1313-2390 QALYs and \$108-210 million in aggregate labour income.

Costs

- The cost of reviewing an expansion of online supported treatment is assumed to require 5.4 full-time equivalent (FTE) employees, at a total cost of up to \$400 000. This assumes a mix of public sector staff who will spend half a year conducting the review.
- There will be expenditures to run three information campaigns: one for culturally and linguistically diverse people, one for consumers and one for health professionals. Each campaign is assumed to cost \$450 000.²¹
- The cost of providing online supported treatment via MindSpot are between \$300-447 per client (Lee et al. 2017; Titov 2020).
- The total program is expected to cost between \$47 and \$69 million.
- Cost savings from substituting from care-as-usual are estimated to be between \$7-22 million, using parameters from Lee et al. (2017).

Additional considerations

- Effect sizes for supported online treatment can be influenced by a range of factors, in particular people's willingness and capacity to complete all modules of the treatment (adherence). By using a meta study, our results are not conditional on the circumstances or findings of one particular study. Of note, is that the median adherence rate in the meta study is similar to the rates of an Australian supported online treatment course (MindSpot).

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Action Expanding supported online treatment options (continued)

- Labour supply constraints may limit the uptake of online supported treatment.
- We estimate that supported online treatment services could be expanded by 150 000. This estimate are based on prevalence rates of mental illness and current treatment service usage, as well as recognising that it will take some time for both consumers and professionals to increase their knowledge of this form of treatment and decide if it is suitable. It also takes into consideration the ability of the sector to expand while maintaining quality treatment for consumers.

²¹ A campaign for Head to Health was previously run from December 2018 to May 2019 to help promote Head to Health as a trusted online resource for digital mental health information and services. The budget threshold for that campaign was up to \$450k (DoH, pers. comm., 17 January 2020)..

Action State and Territory community ambulatory services

Across Australia, State and Territory community ambulatory services fall short of population needs predicted by service planning tools. The final report recommends that Australian governments should increase funding for these services, in line with agreed commitments to rectify service shortfalls over time.

Population

- The National Mental Health Service Planning Framework (NMHSPF) provides benchmark estimates of the number of FTEs and costs required to provide the specified service mix of community ambulatory services. Care profiles associated with these service elements are identified, along with their population size. The benchmark number of FTEs required excludes FTEs from top-up care profiles, as these are additional services that are not assigned to a specific population. However, they are still taken into account in the gap analysis in chapter 12.
- It is assumed that the current 'real-world' mix of FTEs and services provided is proportional to the benchmarks for the services delivered to the care profiles in the NMHSPF.
- Data on the number of FTEs currently supplying community ambulatory services are from AIHW (2020c). This is compared against the benchmark estimates of FTEs from the NMHSPF to determine how many additional FTEs would be required to fill this gap for adults and older persons.

Effect

Effect sizes for each age group are calculated using data from the Australian Mental Health Outcomes and Classification Network (AMHOCN) for 2017-18 ambulatory services, using differences in the Kessler Psychological Distress Scale (K10+ LM) scores between admission and discharge (AMHOCN 2019). The K10 is highly correlated with the MCS (correlation coefficient of -0.8), meaning that changes in K10 are likely to be consistent with changes in the MCS. It is assumed that the benefits for older people will only consist of QALYs, while for adults, there will also be changes in the likelihood of employment and wages, if they are employed.

Costs and benefits

The results are estimated based on the NMHSPF assumption that 67% of clinical staff time is spent on consumer-related activity. However, the Productivity Commission estimates that in practice, only 29% of time is spent on consumer-related activity (chapter 12). An additional adjustment is added on top of the recurrent costs to cover capital costs (Rosenheck, Frisman and Neale 1994).

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Action State and Territory community ambulatory services (continued)

	<i>Child & adolescent (age less than 18)</i>	<i>Adults (age 18-64)</i>	<i>Older persons (age 65+)</i>
Effect size for ambulatory services	na	0.91	0.96
Marginal cost per FTE	\$156 118	\$167 214	\$170 139
Assuming 67% of clinical staff time spent on consumer-related activities			
Number of FTEs required to fill gap	1 063	1 271	1 118
Cost to fill gap	\$165 million	\$212 million	\$190 million
Change in QALYs per additional FTE	na	2.02-3.68	2.71-4.94
Change in income per additional FTE	—	\$157 390-304 486	—
Assuming 29% of clinical staff time spent on consumer-related activities			
Number of FTEs required to fill gap	5 233	12 453	3 567
Cost to fill gap	\$817 million	\$2.082 billion	\$607 million
Change in QALYs per additional FTE	na	0.87-1.59	1.17-2.14
Change in income per additional FTE	—	\$67 617-131 725	—

Assuming that 67% of clinical staff time is spent on consumer-related activity, if the FTE gap were to be completely filled for adults and older persons services, the costs are expected to be about \$403 million. The benefits are estimated to be between \$200-387 million in additional income and 5598-10 193 QALYs.

Additionally, we estimate that increasing the percentage of time that currently-employed clinical staff spend on consumer-related activities from 29% to 67% would generate *each year* an additional 9500 to 17 300 QALYs (not including benefits to children and adolescents), and an additional \$650 million to \$1.25 billion in income.

Additional considerations

- The benefits here are estimated assuming that the effects from treatment only persist for a single year. This can be seen as a conservative approach and may underestimate the true benefits from treatment, if the benefits were ongoing.
- It was not possible to estimate possible benefits to children and adolescents from increased access to community ambulatory care.
- The estimates of the workforce gap is based on the service mix set out in the NMHSPF. As the mental health system continues to evolve over time, the service mix will change to reflect the services that are being provided. In other words, what is perceived as optimal today is not likely to be optimal in the future.

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Action State and Territory community ambulatory services (continued)

- There are many types of community ambulatory services, but data from the AMHOCN which was used to calculate the effect sizes only contain a broad grouping for service settings described as ambulatory, which include ‘all other types of care provided to consumers of a public sector specialised community-based ambulatory mental health service’. This can hide the heterogeneity between the effectiveness of different types of community ambulatory services, as the analysis only focuses on the average effect across all community ambulatory services. For example, it could be the case that a particular type of community ambulatory service is more cost effective.
- The calculation of benefits captures only direct benefits to consumers, and does not capture the broader or longer-term benefits that may arise from community ambulatory staff spending time on non-consumer-related activities, such as research or training.
- In the AMHOCN, a ‘discharge’ collection occasion does not necessarily mean the person has entered recovery, rather it is an indicator that the episode of care has ended. For example, an ambulatory episode of care may end when a person is admitted to a hospital. However, based on the change in psychological distress scores between admission and discharge, it appears likely that most people who have been discharged have recovered.

Action Bed-based services

Across Australia, non-acute bed-based services fall short of population needs predicted by service planning tools. The final report recommends that Australian governments should increase funding for these services, in line with agreed commitments to rectify service shortfalls over time.

Implementation

- There are two ways in which supplying an additional non-acute bed can be assumed to improve outcomes. An additional non-acute bed can either:
 - free up an acute hospital bed in cases where people in hospital beds are experiencing delayed discharge, allowing more acute patients to be treated
 - be used to treat additional non-acute patients who were not being treated previously.
- It is assumed that people who are experiencing delayed discharge will have the same outcomes when treated in a non-acute bed.
- Occupancy rates and average length of stay are based on inputs from the University of Queensland (2016) and AIHW (2020b), which together provide an indication of the number of additional patients who could be treated per additional bed provided.
- Using the NMHSPF, a 'gap' in the supply of non-acute beds is estimated (chapter 13).

Costs and benefits

Cost per bed were estimated using data on the recurrent cost per day from SCRGSP (2020c). An additional on top of the recurrent costs is made to cover capital costs (Rosenheck, Frisman and Neale 1994).

<i>Bed type</i>	<i>Average length of stay (days)</i>	<i>Occupancy rate</i>	<i>Cost per year (\$)</i>	<i>Number of separations</i>
Long stay, residential	365	100%	236 541	1
Long stay, hospital	365	100%	398 001	1
Rehabilitation, residential	120	85%	201 060	2.6
Step up/step down, residential	14	85%	201 060	22.2
Acute, hospital	14	85%	—	22.2

Effect

Effect sizes for each age group are calculated using K10 scores from the AMHOCN for 2017-18 inpatient and residential services, using the difference between admission and discharge (AMHOCN 2019). It is assumed that the benefits for long stay beds (365 days) will only have QALY benefits. For those utilising rehabilitation and step up/step down beds, income is scaled down based on the time spent in a bed.

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Action **Bed-based services** (continued)

<i>Bed population</i>	<i>Effect size</i>
Acute, adult	1.012
Acute, older person	1.106
Non-acute, hospital	0.308
Non-acute, residential	0.615

Using the beds to move non-acute patients out of hospital

- Moving non-acute patients out of hospital can reduce the extent of delayed discharge, and allow for more acute patients to be treated. These are patients who could be discharged from hospital if appropriate accommodation or care were available. It is assumed that an additional 1800 residential beds are supplied in the community, and that non-acute patients treated in these settings will have the same outcome as being in hospital.
- For the additional acute patients who are not being treated, it is assumed that about 85% of these patients are of working age (AIHW 2020b) and will have both labour force and QALY benefits, while those not of working age will only receive QALY benefits.
- The average length of stay is assumed to be 14 days (for modelling convenience), with a 28 day readmission rate of 15%, and an occupancy rate of 85%. This implies a 14-day readmission rate of 8%, assuming independence of 14-day periods of recovery.²² Patients are assumed to have recovered if they are not readmitted within 28 days. These assumptions together suggest that about 28 000 patients can be treated per year.
- The cost of supplying the additional long stay residential beds is estimated to cost about \$426 million. The benefits are expected to be between \$128-166 million in additional aggregate labour income and an additional 2068-3766 QALYs.

Using the beds to treat non-acute patients who were not being treated

- The analysis is split into supplying additional hospital and residential beds, with a further split of residential beds into older adults and other. It is assumed that the real-world existing mix of non-acute beds is proportional to the mix of non-acute beds specified in the NMHSPF. This allows for a gap to be calculated for each bed type, the number of additional patients who can be treated, and hence the identification of the costs and benefits.
- While the AMHOCN has data on the outcomes for inpatient services in hospitals, the vast majority of the data are for acute episodes, which would not be an appropriate comparison. Instead, it is assumed that the effect size of a long stay hospital bed is half that of community residential services.

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²² The probability of not being readmitted within 28 days is assumed to be 85%, or alternatively, there is some probability, p , such that the person will not be readmitted within 14 days. A person is not readmitted within 28 days if they are not readmitted in either of the 14 day periods. That is, p satisfies $p^2 = 0.85$, implying $p = 0.922$. Then $1 - p = 0.078$ is the probability of being readmitted within 14 days.

Action Bed-based services (continued)**Additional considerations**

- It would cost about \$771 million to supply these additional non-acute beds. The benefits are expected to be between \$24-48 in additional income and an additional 425-773 QALYs.
- While the results indicate that reducing the extent of delayed discharge (moving non-acute patients out of acute beds) may be a more cost effective measure in the short run, it is important to ensure that non-acute patients who are not currently treated have access to beds, as these people will usually have no other alternatives in seeking treatment for mental illness. Long stay residential beds are likely to be a more cost effective option compared to long stay hospital beds in the cases where the patient can be provided with a similar level of care.
- While the AMHOCN provides data on outcomes for different collection occasions, it does not provide an indication of the length of time a patient has spent within an episode. These results could be refined — for example, if a residential episode could be further disaggregated by length of stay, it would be possible to have separate effect sizes for long stay residential care and step up/step down care (which currently both use the same residential effect size).

Action Alternatives to emergency departments

State and Territory Governments should provide more alternatives to hospital emergency departments (EDs) for people with acute mental illness.

Population

There are people who attend EDs for a mental health-related reason who could have been treated elsewhere. Treating these people elsewhere could lead to better outcomes and cost savings from a reduction in ED presentations. The estimated cost savings arise from two different populations, based on the method of arrival. Those who arrive by ambulance potentially have cost savings from mobile crisis services, while those who arrive via walking, private/public transport, community transport, or taxi could have cost savings from after-hours/peer-led services.

Costs and cost savings

- The cost per ED presentation for a serious mental illness is assumed to be \$805 (2019 dollars) (IHPA 2017).
- Costs for mobile crisis services include increased expenditures as well as cost savings. It is assumed that, in the first instance, an additional five sites are trialled nationally.
 - For the Mental Health Acute Assessment Team (MHAAT), between 2015 and 2017, about 50% of mental health-related callouts resulted in patients bypassing EDs in favour of more appropriate care (WSLHD 2017), while a pilot trial in Victoria found 75% of attendances were diverted (Barwon Health 2019).
 - Cost data provided by NSW Ambulance suggested a cost of \$600 000 per year, covering two ambulance and two mental health FTEs. The trial results indicate that 51.5% of shift time (or 5.7 hours per day) is spent on MHAAT cases, with an average of 3.9 cases per day. Using the proportion of shift time spent working on mental health-related cases as a lower bound on the cost, this suggests a cost between \$1.5-3 million, and a cost saving between \$2.9-4.3 million (2019 dollars).
- Safe haven cafés
 - An evaluation of the St Vincent's safe haven café in Melbourne (PwC 2018) found that between 118 and 362 ED presentations could have been avoided per year. From the evaluation, the initial fixed cost was \$124 175, and the annual operating costs (which includes wages, overheads, and goods and services) were \$191 540 (2018 dollars). It is assumed that the fixed costs are equally spread over 10 years.
 - Establishing five safe haven café trials is estimated to cost \$1.1 million. Across the trials, this implies total cost savings of between \$470 000 and \$1.5 million per year.

Additional considerations

- For mobile crisis services, limited service utilisation will limit cost effectiveness. This could be due to time spent waiting for new cases to arrive which are suitable for the team. As such, it is important for any additional sites to be located strategically in areas that historically have had higher rates of mental health-related attendances. It is essential that appropriate locations for diversions be available within the area (e.g., community mental health services). Similar considerations apply to safe haven cafés — the additional sites should be located in areas with higher rates of mental health-related ED attendances.
- These are other unquantifiable benefits, such as avoiding the distress potentially associated with going to an ED.

Action Online navigation portal to support referral pathways

Commissioning agencies should ensure service providers have access to online navigation portal offering information on pathways in the mental health system.

Effect

This recommended action supports the implementation and effectiveness of other healthcare actions.

Costs

The HealthPathways portal model, which is already used by most PHNs, could be used to contain information on pathways within the mental health system. Increased expenditures will result from establishing portals for the three PHNs that do not already have it, and expanding the portal beyond the health sector to include schools and psychosocial supports, across all regional commissioning authorities.

Initial expenditures of \$2.6-4.3 million are required to expand online navigation portals to include non-clinical services, and to establish portals in the three regions not yet covered by HealthPathways.

- Startup costs are based on the \$282 400 to establish the HealthPathways portal in Mackay (Blythe, Lee and Kularatna 2019).
- The cost estimates used in this report also take into account that an additional 20% (\$1 750 880) and an upper bound estimate of an additional 40% (\$3 501 760) may be needed to expand the coverage of portals across all regions.

Ongoing annual costs are estimated to be about \$3.4–5.7 million, and include:

- the costs of the additional three portals, based on the ongoing annual cost of \$369 400 for the portal in Mackay
- an additional lower bound estimate of 20% (\$2 290 280) and upper bound of 40% (\$4 580 560) in ongoing costs to manage the non-clinical content in the portal (Blythe, Lee and Kularatna 2019).

Additional considerations

- These estimates are based on the implementation of HealthPathways in Mackay. Any regional differences in costs (such as wages) are not taken into account.
- The Productivity Commission is not recommending that governments adopt any particular model for the online navigation platforms. A navigation platform that is different to HealthPathways is likely to have different costs.
- Additional changes to platforms over time, such as including the ability to make bookings with providers through the platform, will likely increase the cost of the platform, which is not accounted for in these estimates.

Action Care coordination services and single care plans

Care coordination services and single care plans should be made available to people with severe and persistent mental illness who need them due to their complex health and social needs.

Population

- There are estimated to be about 354 000 people with severe mental illness and complex needs who require a care coordinator.
 - 64 000 of these people have the highest psychosocial needs, and are expected to receive these services from the National Disability Insurance Scheme (NDIS).
 - This leaves about 290 000 people who require a care coordinator.
- There are also 400 000 people who require high-intensity care, and are assumed to require a single care plan. This includes people with:
 - physical and/or substance use comorbidities in addition to their mental illness
 - moderate to severe mental illness who require psychosocial support services due to their mental ill-health, and are not receiving care coordination services (chapter 15).

Effect

These actions are in place to support the implementation and effectiveness of other healthcare actions.

Costs

- The NMHSPF includes a range of care profiles that require care coordination services, with the cost per person ranging from \$56 to \$1622, depending on the level of services required. It is assumed that people on the NDIS have the highest care coordination cost per person, while those who require a single care plan have the lowest costs. A plausible range of costs of between \$475–1217 per person is assumed in estimating total expected care coordination costs. Total care coordination costs for the 290 000 adults requiring care coordination services outside the NDIS are estimated to range between \$138–353 million.
- Single care plans are costed on the assumption that a care plan is developed and reviewed each year by a clinician, usually a GP. This is estimated to cost \$189.35 per person (MBS Online). It is assumed that between 50% to 80% of people will have their care plan developed and managed by a clinician who will receive these rebates. This suggests a total cost of \$38–61 million. Where the care plan is developed and managed by a worker who is not eligible for the MBS, for example, a psychosocial support worker, these activities are assumed to be part of their usual duties, and incur no additional cost.

Additional considerations

- There is a lack of information about how many people already receive care coordination services or have single care plans outside of the NDIS. The actual number of people who require these services will be less than the estimated 290 000 and 400 000 people assumed. As a result the actual increase in costs will also be lower than estimated.
- People receiving care coordination services will also require a single care plan. This is assumed to be included in the cost of care coordination services.
- Community ambulatory services include care coordination services. The cost of providing care coordination costs for these people are included in the costing of reforms to community ambulatory services.

K.2 Carers and families

Action Greater support for carers and families within mental healthcare and support services

A range of actions to benefit the carers and families of people with mental illness are presented in chapter 18, including:

- the promotion of family- and carer-inclusive practices in mental health services
- improvements to the responsibilities, planning and evaluation of carer and family support services in the community.

Family- and carer-inclusive practice requires mental health services to consider the needs of family members' and carers', and their role in contributing to the recovery of individuals with mental illness. The proposed action includes expanded access to rebated carer and family consultations, as well as increased accountability and capacity within state and territory mental healthcare services.

Improvements to carer and family support services in the community are assumed to fill unmet needs over time.

These actions are assumed to benefit carers and families in a single benefit that represents the cumulative effect of these proposed changes.

Population

There were almost 1 million carers of people with mental illness in 2018. Mental illness was the main condition of the care recipient for 414 000 (43%) of these mental health carers (chapter 18). However, not all carers require carer support services or interact with mental health services every year.

There are 96 000 primary carers who co-resided with person whose main condition was mental illness in 2018 (chapter 18) and it is estimated that 57% have unmet needs (table 18.4), suggesting that there are in the order of 55 000 carers who are assumed to benefit.

There are 4.4 million children and adolescents aged 4-17 (ABS 2019a). Of their primary carers, 4.6% reported that mental health problems had interfered with daily activities most or all of the time since the child was born (Johnson et al. 2019). Assuming one child per primary carer with mental health problems, there may be about 201 000 children of parents with mental illness who could benefit.

Costs

Carer and family consultations without the care recipient present

Between 6-15% of the people rebated under the MBS to see a psychiatrist, had a related non-patient consultation (unpublished MBS data, AIHW 2019e). If the same proportion was applied to all people using Better Access (1.25 million in 2017-18), between 79 000 and 192 000 additional people would have psychologist (or allied mental health) consultations without the care recipient present. 41% of these people would see clinical psychologists (at a cost of \$86.15 per session), with the remainder seeing registered psychologists or other mental health professionals (\$61.05 per session).²³

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²³ MBS benefits do not include out of pocket costs, meaning that these costs are likely to be an underestimate.

Action Greater support for carers and families within mental healthcare and support services (continued)

The annual cost of MBS rebates for carer and family consultations without the care recipient present for psychologists and other allied mental health professionals would be between \$9.6-23.3 million (2019 dollars). This is based on the assumption of an average of 1.7 sessions (based on unpublished MBS data).

Carer and family consultations with the care recipient present

Given that the MBS rebates clinical psychologists to provide any evidenced based therapy with the patient present, the cost associated with this action applies to sessions with registered psychologists and other allied mental health professionals, who are limited in the types of interventions they are subsidised to provide. It is assumed that the same proportion of people wanting a non-patient consultation — but excluded from doing so under current arrangements — would want a family and carer consultation with the patient present (6 -15%). It might be expected that between 46 000 and 113 000 families would benefit from this action (59% of the population estimated above).

The annual cost of MBS rebates for carer and family consultations with the care recipient present would be between \$4.0 and 9.7 million (2019 dollars). It is assumed that the average number of sessions is one (based on the single-session family consultation model, chapter 18) and that the MBS benefit is \$86.15.

Family- and carer-inclusive practices in state and territory mental healthcare services

Improving capacity for family- and carer- inclusive practices within state and territory community and inpatient mental healthcare services is expected to require additional dedicated staff, which is estimated to cost between \$59.5-68.3 million (2019 dollars).

Support services for carers and families in the community

Costs of providing carer and family support services that meet community need can be estimated using information from the NMHSPF and other cost assumptions. It is estimated that there is an a need for an additional \$153 million (2019 dollars) worth of these services in 2019-20, including:

- \$17.0 million for individual and group based carer peer work delivered by specialised mental health community support services
- \$101.6 million for day and flexible respite, and residential crisis and respite services
- \$10.1 million for other carer support services
- \$24.4 million for family support services.

The Survey of Disability, Ageing and Carers only provides information on the support needs of the subset of carers who are primary carers and reside with their care recipient. There were 96 000 co-resident primary carers to someone whose main condition was mental illness in 2018. Of these carers, 55 000 carers (57%) reported unmet needs for support (based on a range of measures reported in table 18.4). Assuming this percentage is proportional to the amount of services required to support all carer and family needs, an approximate estimate of the additional funding needed to meet the unmet mental health needs of families' and carers' is \$87.3 million per year.

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Action Greater support for carers and families within mental healthcare and support services (continued)

The total costs of providing greater support for carers and families within mental health care and support services is estimated to be between \$160 and 189 million (2019 dollars).

Effects

The costs outlined above cover a broad range of supports for families and carers. Families and carers who did not previously have access to support that met their needs are expected to benefit. However, the costs are not assessed against the benefits of a *particular* intervention, but rather, against a more general summary of possible effects on carers, care recipients, and children of parents with mental illness.

Carers

An effect size of 0.4 was estimated by combining effects from a selection of studies.

- Farhall et al. (2020) found that a family education program for carers of adults with serious mental illness has a mental health effect size of 0.3 for carers. This was based on the change in the total DASS score between time 1 and time 4 for the subsample considered in the study.
- McCann et al. (2013) reported results from a randomized control trial of bibliotherapy for carers of young people with first-episode psychosis. For those receiving the bibliotherapy intervention, there was an effect size of 0.44 (as measured by change in K10 between baseline and follow-up at 16 weeks).
- Chiocchi et al. (2019) found that a carer-led psychoeducational program for carers had an effect size of 0.89 between time 1 and time 5 (as measured by the Warwick-Edinburgh Mental Well-Being Scale).
- Hibbs et al. (2015) undertook a meta-analysis of interventions for carers of people with eating disorders and reported an effect size of 0.32 on carer distress (as measured by the GHQ, DASS, and The Hospital Anxiety and Depression Scale).

Care recipients

- A meta-analysis of family psychosocial interventions for schizophrenia (Pharoah et al. 2010) was used to construct an effect size for care recipients by synthesising the results across the studies. This suggests an effect size of 0.79 for care recipients. This is assumed only to benefit the 7500 care recipients with schizophrenia or other psychoses in SDAC of carers with unmet needs.
- The evidence base for the effect on the care recipient for other types of mental illness is limited and hence the benefits for these care recipients have not been included here.

Children of parents with mental illness

- Solantaus et al. (2010) found that a child-focused psychoeducation discussion with parents with depression has an effect size of 0.12 for children of parents with mental illness. Although, the effect size for the benefits for children of parents with mental illness was drawn from a study focused on parents with mood disorders, Reupert et al. (2012) demonstrated that significant effects extend to other forms of severe mental illness.

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Action Greater support for carers and families within mental healthcare and support services (continued)

	Population size	Effect size	Income	QAL Ys
Carers	55 000	0.40	\$124-245 million	1 602-2 917
Care recipients with schizophrenia or psychosis	7 500	0.79	—	431-785
Children of parents with mental illness	200 800	0.12	—	1 790-3 259

Cost savings

It is estimated that 29% of the care recipients who are expected to benefit have had an ED presentation in the past 12 months (Productivity Commission estimates using ABS 2020a). This means that there are potential cost savings from reduced ED presentations for about 7500 care recipients. However not all of these ED presentations will be avoided. A randomised controlled trial by Calvo et al. (2014) found that at the end of the group intervention, people in the psychoeducation group were 24 percentage points less likely to have had visited the emergency department. Combining this with the average cost of an ED presentation for severe mental illness (\$805 per presentation), the cost savings from a reduction in ED presentations are \$1.4 million.

Family psychosocial interventions for schizophrenia (Pharoah et al. 2010) and family interventions for early psychosis (Bird et al. 2010) can reduce the number of hospital admissions, compared with care as usual, by 26-49 percentage points. It is estimated that there were about 7500 hospital admissions by care recipients (Productivity Commission estimates using ABS 2020a). Assuming an average length of stay of 15 days in an acute bed (at an average cost of \$19 548 per stay), reducing the number of hospital admissions could lead to cost savings between \$38-72 million. This is likely to be a conservative assumption as it could be the case that multiple admission are avoided by the same care recipient.

Additional considerations

There are a number of other possible effects that need to be considered:

- Aggregate benefits to carers are likely to be underestimated. The population of carers who have unmet need and are likely to benefit from these reforms is an underestimate because carers who do not reside with their care recipient, are not primary carers, or are caring for someone who has mental illness but it is not their main condition are not included.
- The population of children of parents with mental illness with unmet needs is uncertain. All children of parents with severe and chronic mental illness have been included, but some of these families may not have unmet needs. Children of parents with severe but not chronic mental illness are not included in the population estimate, although some may have unmet needs.
- Other family and household members of people with mental illness who are not carers are also likely to experience benefits not quantified here.

K.3 Income and employment support

Action Staged rollout of Individual Placement and Support

The Individual Placement and Support (IPS) model of employment support should be extended through a staged rollout to all State and Territory Government community ambulatory mental healthcare services.

Population

IPS participants are assumed to be working age, not employed, consumers of community ambulatory mental healthcare services with the most severe mental illness (receiving medium to long-term treatment). It is estimated that there are currently 68 100 people who are potential IPS participants, and that after a full rollout, 40 000 of these people will use IPS (Productivity Commission estimates, chapter 19).

Effect

Health-related quality of life

IPS is assumed to have a positive effect on participant's health-related quality of life, thereby increasing their number of quality-adjusted life years. Assuming an effect size of 0.08, this suggests an additional 238-434 QALYs per year. The effect size is estimated based on pooling the estimates from several studies:

- Michon et al. (2014) evaluated the effectiveness of IPS for people with severe mental illness in the Netherlands. Mental health was measured using the Mental Health Inventory (MHI-5), and found an effect size of 0.17 for those with competitive employment at the end of the 30-month trial.
- Drake et al. (1999) evaluated the effectiveness of a supported employment for inner city patients with severe mental illness. Conducting a randomised control trial, mental health was measured using the BPRS (Brief Psychiatric Rating Scale) and an effect size of 0.16 was found for those who received IPS (compared to those receiving enhanced vocational rehabilitation).
- Kukla and Bond (2013) studied the effect of IPS on non-vocational outcomes including psychiatric symptoms and quality of life. These were measured using the Positive and Negative Syndrome Scale (PANSS), and found an effect size of 0.17 for those who received IPS compared to those that received a stepwise vocational model.
- Burns et al. (2009) studied a randomised controlled trial of IPS across six European countries, with participants allocated to IPS or the best alternative local vocational service. The authors did not find significant differences between the two groups, with an effect size of -0.051 based on using PANSS as the outcome measure.

Employment

Labour market benefits are based on vocational outcomes reported in Waghorn et al. (2014), which compared the effectiveness of IPS to current employment support programs for people with disability. The authors reported that, over a 12 month period, people receiving IPS were 19 percentage points more likely to be employed, work an additional 3.6 weeks, worked 5.1 hours less, and have a \$2.50 higher hourly wage compared to the control.

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Action Staged rollout of Individual Placement and Support (continued)

However, pre-existing differences in the employment rate between the two groups in the year preceding the study could bias these results. The employment rate was 11 percentage points higher in the treated group than the control (39% compared with 28 %).

Given this, a range of 8-19 percentage points is assumed for the difference in the probability of gaining employment, leading to a change in expected labour income of \$42-90 million (2019 dollars).

Costs

- The estimates of the total additional costs associated with a staged rollout of IPS are based on those identified in the evaluation of the national youth-focused IPS trial (KPMG 2019). The costs cited in the study include annual site expenses and a fidelity review. Across the range of sites evaluated in the review, the total cost per person ranges from \$2692-7149, with a mean of \$4449 (2019 dollars). Assuming an additional 40 000 people participate in IPS, total costs are likely to range from \$108-286 million, with a mean of \$178 million (2019 dollars).
- IPS is likely to result in substantial healthcare savings, ranging between \$137-575 million, with an average cost saving of \$329 million (2019 dollars). This translates to an average cost saving per person of \$8230 (2019 dollars). This is based on several studies.
 - Shi (2011) found that on average, healthcare costs were reduced by \$9581 over a 12-month period (2019 dollars).
 - Burns et al. (2007) found that the time spent in hospital was halved — equivalent to 15 days over a 12-month period. In Australia, the cost of a non-acute inpatient bed day is \$929 (2019 dollars). This suggests that healthcare cost savings over a 12-month period are \$14 380 per person (2019 dollars).
 - Heslin et al. (2011) found that costs of service use were reduced by \$6853 (2019 dollars) over a two year period. These include healthcare costs, day care, education, and social care. This suggests that cost savings over a 12-month are \$3427 per person (2019 dollars).
- There are likely to be further savings through people moving from Disability Employment Services (DES) into an IPS program. The cost of DES per person is estimated to be \$4609 (2019 dollars) over a 12-month period (DSS 2019; LMIP 2018). Using Waghorn et al. (2014), it is estimated that introducing an IPS program would result in 26% of DES participants moving into an IPS program, and an aggregate cost saving of \$49 million (2019 dollars).

Additional considerations

- It is assumed the total cost of running a program for adults is equivalent to running a youth-focused program.
- Studies used above have small sample sizes and this analysis assumes that there is no loss of benefit when the program is scaled up to service a national cohort. In actuality, the benefits are likely diminish as the size of the program increases.

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Action Staged rollout of Individual Placement and Support (continued)

- Some of the studies cited above are based on international evidence. When considering healthcare costs, the Productivity Commission has used purchasing power parities published by the OECD to convert costs from the units reported to Australian dollars. However, the proportion of employed participants in international studies was not adjusted to account for differences between international and Australian labour markets or health systems.
- Not all studies referenced above had statistically significant results (for example, Heslin et al. 2011). Estimates from Heslin et al. (2011) were included to so as not to upwardly bias the cost-savings estimates.

K.4 Housing

Action Housing security for people with mental illness

There is a need to help people with mental ill-health stabilise their tenancies in both the social and private housing markets. State and Territory Governments should provide mental health training to social housing workers and, with support from the Australian government, increase the provision of tenancy support services to people with mental illness in the private housing market.

Population

- The number of social housing workers who should receive mental health training was estimated using the ABS Census of Population and Housing (2017). The Census reports that 16 628 people worked in 'other residential care services'. This number has been adjusted to 2018-19 figures using population growth from the ABS Australian Demographic Statistics (ABS 2019a), giving 17 356 workers.
- There are an estimated 5503 people with a mental health problem, aged 10 years and over, with unmet need for assistance to sustain housing tenure in 2018-19 (Productivity Commission estimates based on AIHW unpublished data).

Costs

- Mental health training costs are estimated using a sample of 30 course listings (as of May 2020) for the 12 hour standard mental health first aid course (MHFA Australia 2020). This gives an average course cost of \$262 per person with a range between \$150 to \$440. Assuming 17 356 workers are provided training, the average total cost is \$4.5 million, with a range between 2.6-7.6 million.
- Tenancy support costs are drawn from Zaretsky and Flatau (2015), who estimate that the average cost of tenancy support to be \$3199. This included support to maintain an existing social tenancy (\$1402) and costs for general homelessness support to access/maintain a social housing tenancy (\$6394) (2012 dollars). This gives an average total cost between \$10-44 million (2019 dollars).

Additional considerations

- Mental Health First Australia training course fees vary for many reasons including individual Instructor qualifications and credentials, course venue, course location, course catering and course participant subsidies that may be available as a result of a community grant.
- Cost savings to government from avoiding eviction events are likely to be substantial. The Productivity Commission has not attempted to estimate the cost savings from these interventions (for example through fewer eviction events or escalation of mental illness episodes) as it is difficult to get estimates of the prevalence of such events and to predict the effectiveness of interventions in reducing such events. Zaretsky and Flatau (2015) estimated that average cost per eviction event was \$11 075 (2019 dollars) based on data for the ACT, Tasmania, Victoria and WA. This represents a significant savings opportunity for government.

Action Supported housing

Each State and Territory Government, working with housing support providers and with support from the Australian Government, should address the shortfall in the number of supported housing places for people with severe mental illness by providing a combination of long term housing options for people with severe mental illness who require integrated housing and mental health supports.

Population

It is estimated that between 9019 and 12 515 additional people required supported housing places in 2017-18. The 'gap' between current and required supporting housing was estimated using numbers of existing supported housing places (AIHW 2020c Table FAC.25) and an estimate of demand based on ABS population projections and the rate per 100 000 who need supported housing (ABS 2019a; Siskind et al. 2012).

Costs

Costs and cost savings are sourced from evaluations of the Housing and Accommodation Support Initiative (HASI) from Bruce et al. (2012) and Doorway (a private rental program) from Nous Group (2014). This suggests an average total cost of \$484 million with a range between \$230-807 million, and an average total cost saving of \$320 million with a range between \$147-540 million (2019 dollars).

Supported housing costs and cost savings^a

	<i>HASI</i>	<i>Doorway</i>
Average non-accommodation cost (2019 dollars)	\$46 361	\$13 498
Average accommodation cost (2019 dollars)	\$18 096	\$11 992
Average reduction in health service usage (2019 dollars)	\$43 142	\$16 274

^a HASI accommodation costs are assumed to be equal to mean public housing costs per annum. Doorway accommodation costs are based on rentals in the private housing market.

Additional considerations

- Fixed costs of providing new public housing have not been included above.
- The population of interest is based on 2017-18 data. The Productivity Commission has not adjusted this value to obtain a 2018-19 value.
- The estimate of the number of people who require supported accommodation is based on Siskind et al. (2012), who found that 88 supported accommodation places per 100 000 population were required, consisting of supported public housing, supervised supported hostels, crisis accommodation, and residential rehabilitation. The lower bound on the estimate of supported housing places required (9019) only includes supported housing and supervised supported hostels, while the upper bound (12 215) contains all forms of supported accommodation discussed. This means that the upper bound will have an overlap with community residential non-acute beds, while the lower bound will not.

Action Housing after discharge from hospital or prison

Each State and Territory Government, with support from the Australian Government, should commit to a nationally consistent formal policy of no exits into homelessness for people with mental illness who are discharged from institutional care, including hospitals and prisons.

Governments should ensure that people with mental illness who exit institutional care (particularly hospitals or prisons) receive a comprehensive mental health discharge plan, ready access to transitional housing, and services have the capacity to meet their needs. These programs should integrate care coordination and access to accommodation.

Population

There are 3000 people who are in need of housing upon discharge from hospital or prison (chapter 20). This is based on an estimated 2000 people in hospital who are able to be discharged and 1000 people who are discharged from 'institutional settings' into homelessness (AIHW 2019c).

Costs

Costs and cost savings are estimated using data from the Transitional Housing Team (Queensland) (Siskind et al. 2014), Homeless Teams (Perth) (Gazey et al. 2019), and the National Partnership Agreement on Homelessness (NPAH) Housing Support Worker Mental Health (HSWMH) Program (Wood et al. 2016). The total costs presented here are estimated by scaling up the range of average program costs to meet estimated demand. This suggests an average total cost of providing services of \$49 million with a range between \$15-94 million and an average total health cost savings of \$159 million with a range between \$25-333 million, and an overall potential net benefit of \$10-295 million.

Costs and cost savings associated with housing support after discharge

	<i>Transitional Housing Team (Queensland)</i>	<i>Homeless Teams (Perth)</i>	<i>NPAH HSWMH</i>
Average cost per support period (2019 dollars)	\$31 208	\$5 134	\$12 734
Average health cost savings per support period (2019 dollars)	\$38 605	\$8 397	\$111 000

Additional considerations

- There are large variations between the cost and cost saving estimates across pilot programs considered in this analysis. The Productivity Commission has not attempted to adjust these costs based on the reach or scalability of each of the three studies considered.
- The pilot programs used to estimate costs focus on people discharged from hospital rather than prison. The cost of providing discharge support to people leaving prison is likely to differ, although there is a lack of evidence in this respect.
- Addressing the shortage in non-acute beds (discussed above) will also help to ensure people are not discharged into homelessness. Given the potential overlap in the people that are likely to benefit from these two actions the cost of improving discharge from hospital may be an overestimate.

Action Homelessness services

Each State and Territory Government, with support from the Australian Government, should address the gap in homelessness services for people with mental illness in their jurisdiction. This should include increasing existing homelessness services as well as scaling up longer term housing options such as Housing First programs.

- Housing First programs should target people who experience severe and complex mental illness, are persistently homeless, and are unlikely to respond to existing homelessness services.
- This would require governments to invest in homelessness services that make long term housing available specifically for these programs.

Population

- There are between 15 366 and 18 832 people with a current mental health issue who have unmet needs for long-term housing (AIHW unpublished).

Costs

- Accommodation costs are estimated using average accommodation costs for social housing (\$18 096 per year) and private rental (\$20 860 per year) (Productivity Commission estimates based on ABS (2019, Housing Occupancy and Costs, Cat. no. 4130.0) and SCRGSP (2020a, 2020b, unpublished data)). Total costs are estimated to be between \$278-393 million per year. These estimates do not include the fixed costs of providing new public housing.
- Cost offsets from Zaretsky et al. (2013) are used to calculate the cost savings. They found an average cost offset of \$1643 for men, \$10 554 for women, and \$4360 across both genders (2019 dollars). Total cost savings are estimated to lie between \$67-132 million per year.

Additional considerations

- Cost offsets were not estimated for street-to-home clients owing to the a very small sample size, which is likely to have a materially significant impact on the average cost offsets.
- An eviction related cost-offset was not estimated, but evidence suggests that support results in a reduced probability of eviction from a public tenancy, resulting in a saving of just over \$600 per client (Zaretsky et al. 2013).

Benefits across housing actions

Population

Across the housing actions above, each year there are about:

- 5500 people requiring assistance to sustain housing tenure
- between 9000 and 12 500 additional people who require supported housing
- 3000 people who are in need of housing upon discharge from hospital or prison (AIHW 2019c)
- between 15 300 and 18 800 people with a current mental health issue who have unmet needs for long-term housing.

Effect

- Aldridge (2015) surveyed 27 homeless services in London and found that a year of spent in homelessness was associated with a loss of 0.117 QALYs. In an analysis of the benefits of providing mental health services to homeless people, Connelly (2013) reported results from a similar (unpublished) study in Wisconsin, which suggested that access to homeless services to treat mental illness could increase QALYs by 0.12, but a more conservative assumption of 0.06 was used to account for cross-country differences. Using a QALY gain of 0.06-0.12 across the set of actions, suggests an increase of 1968–4776 QALYs.
- Homelessness prevention and assistance is also likely to increase the likelihood of people gaining employment. Flatau et al. (2007) reported a difference in employment rate of about 4.5 percentage points at the follow-up after their entry into support. The number of hours and weeks worked is assumed to be the same as those who gain competitive employment under IPS from Waghorn et al. (2014). Using these parameters and assuming minimum wages, total additional labour income is likely to range between \$17-20.6 million (2019 dollars).
- The estimates of QALYs and income above are based on the assumption that the people affected across the different actions do not overlap. A conservative estimate may consider complete overlap — in which no more than between 15 300 and 18 800 people would experience a benefit. Under this more conservative population construct QALYs would increase by between 918-2256, and aggregate income would increase by between \$7.9-\$9.7 million.

Additional considerations

- Housing is fundamental to recovering from mental illness — without a place to live, it is difficult for people to receive support and recover. Further, as a key protective factor against mental ill-health, access to suitable housing is often a first step in promoting long-term recovery for people with mental illness (Giuntoli et al. 2018). Losing the psychological support associated with adequate housing can be detrimental to an individual's sense of order, trust, continuity and security (Hulse and Saugeres 2008; Muir et al. 2018).
- Cost effectiveness should not be the only factor in choosing whether or not to provide housing services. Cost-benefit analyses can lead to the perception that reducing homelessness is only beneficial from a financial perspective, and that sufficient regard is not given to the social equity motivations for policy change (Pleace et al. 2013).

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Benefits across housing actions (continued)

- The benefits considered here assume a counterfactual where the person would have otherwise been evicted, homeless, or did not have treatment for their mental illness without the interventions in place. Where this is not the case, estimates may overstate the change in QALYs which arise from the intervention.
- Estimates of labour market income may also overstate the benefits from these housing policies. In their HASI evaluation, Bruce et al. (2012), did not find a significant improvement in the employment of people with supported housing.
- There are likely to be overlaps between the population who require supported housing and non-acute beds — hence, aggregating the benefits across the two actions will overestimate the benefits.

External estimates of the impact of homelessness on QALYs are used here because data on the population who require housing is scarce, with the link between QALYs, mental health, and housing even more so. This means that the estimates of the effects on QALYs reported here are not necessarily comparable with other estimates — for example, Aldridge (2015) used the EQ5D to measure QALYs, while the QALYs in HILDA are based on the SF-6D using Australian utility weights.

K.5 Psychosocial supports

Action Filling the gap in demand for psychosocial support services

People who require psychosocial supports due to mental illness should receive them. Need for these supports should be determined through a functional assessment by a psychosocial support assessor.

Population

The NMHSPF estimates that about 290 000 people require psychosocial supports (Diminic, Gossip and Whiteford 2016). The Productivity Commission estimates that about 109 000 people currently receive psychosocial support, where 34 000 of these people are on the NDIS. Assuming that the cap for the NDIS (64 000 people) will be met at some point in the future and that the provision of supports outside of the NDIS remains constant, about 154 000 people are likely to be without requisite supports. The estimates of costs and effects presented here assume that 154 000 additional people receive psychosocial support.

Effect

- Muir, Meyer and Thomas (2016) conducted an evaluation of outcomes for Wellways Australia, and estimated an effect size of 0.44 on the 'managing mental health' dimension.
- The number of hours and weeks worked by those who gain employment is assumed to be the same as those who gain competitive employment under IPS from Waghorn et al. (2014).
- This suggests an aggregate increase in labour market income of between \$79-177 million, and an increase in QALYs between 4912-8903.

Costs

- Costs are based on two previous psychosocial supports programs (Productivity Commission estimates based on DSS and DoH, unpublished)
 - Personal Helpers and Mentors Service (average cost per client of \$7043)
 - Support for Day to Day Living in the Community (average cost per client of \$2421).
- Given that it is likely that people with higher level needs are provided with psychosocial services under NDIS, it is assumed that two thirds of consumers will be provided with lower cost services, and the other third will be provided with higher cost services. This suggests a total additional cost of about \$610 million with a range between 373-1085 million (2019 dollars).

Additional considerations

- There is considerable uncertainty concerning the estimates of benefits. Muir, Meyer and Thomas (2016) is an uncontrolled pre-post study, and the standard of evidence about the size of the effect is low due to the lack of randomisation. It is also likely that there would be overlap with other services areas, such as individual placement and support programs (above).

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Action Filling the gap in demand for psychosocial support services

(continued)

- The estimation of the number of people who are supported outside of the NDIS (approximately 75 100) is based on:
 - 2016-17 estimates of the number of people supported by Australian, State and Territory Government-funded programs (90-95 000 (DoH 2017))
 - State and Territory recurrent expenditure on grants to NGOs for specialised mental health services in 2017-18 (AIHW 2020a, table EXP.3)
 - Information about funding for NPS-T, NPS-M and CoS (DoH 2020)
 - The number of people being supported on NPS-T (DoH, pers. comm., 1 May 2020)
 - Unpublished acceptance rates data for Partners in Recovery, Personal Helpers and Mentors Service and Day to Day Living programs.

K.6 Justice

The beneficial effects of the various actions recommended made in the justice chapter could not be quantified because of limited quantitative evidence about the *direct* mental health benefits that are likely to result. However, that is not to say that there are no benefits expected from the actions. For example, while research shows that mental health court diversion programs improve access to mental health services and can also reduce recidivism rates (chapter 21), evidence on the quantifiable change in mental health outcomes is limited. As a result, this section only details how cost estimates in the justice chapter are calculated.

Action Improving access to court diversion programs

State and Territory Governments have developed court diversion programs that ‘divert’ people with mental illness away from the criminal justice system. Mental health courts offer a different model and can operate alongside court liaison services. They provide a personalised, problem solving approach that differs from a mainstream court process. Court liaison services aim to identify people with mental illness who have been charged, intervening as early as possible, often pre-trial or during the trial process (Davidson 2015).

Costs

Mental health courts

Increased costs for mental health courts were estimated using program expenditure and funding data for states where mental health courts have been established — in Victoria, South Australia, Western Australia and Tasmania (although data could not be located for Tasmania). Queensland has a mental health court, but it specialises in matters relating to forensic patients.

- Victoria: was allocated \$22 million (2017-18 dollars) over four years for its Assessment and Referral Court — about \$5.5 million per year (MCV 2018).
- South Australia: was allocated \$3.3 million (2019 dollars) in the state budget (South Australian Government 2019).
- Western Australia: reported expenditure of \$4.2 million (2017-18 dollars) (State and Territory Government Survey).

There is lack of information about the population likely to benefit from increased coverage of mental health courts. For the purposes of deriving cost estimates, it is assumed that the number of referrals (and cost for mental health courts) double, giving an additional cost of \$13.5 million (2019 dollars).

Court liaison services

- Assume that all courts will receive court liaison services, with expenditures scaling up proportionately. This suggests total additional costs are estimated to be \$32 million (2019 dollars).

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Action Improving access to court diversion programs (continued)**Additional considerations**

- This cost estimate aims to provide some indication of how much current expenditure would need to increase in order to expand the court diversion program by a certain amount. It does not estimate the additional expenditure required to meet unmet demand for court diversion programs owing to data limitations. Although anecdotal evidence suggests there is unmet demand for these programs (NSW MHC 2017; Soon et al. 2018; Victoria Legal Aid, sub. 818), reliable data to quantify this was unavailable.
- The cost of expanding court liaison services coverage to all courts is likely to be an overestimate. While the physical presence of court liaison services in courts is beneficial, these services do not need to be based in every court — services can be provided on request if needed (Davidson 2018).

Action Increased support for police

A systematic approach, where mental health expertise is incorporated at multiple stages of police response, should be implemented to support police responding to mental health related incidents. State and Territory Governments should implement initiatives that enable police, mental health and ambulance services to collectively respond to mental health related incidents.

Population

- It is assumed that PACER-style programs are rolled out nationally.
- In 2017-18 there were 20 372 mental health-related ED attendances via police or a correctional services vehicle (AIHW 2019b). But this number is an underestimate of the number of cases which involve police, as some of these cases may be recorded as arriving by ambulance.
- Using data on the number of police interactions for states where data is available and imputing for states where data is not available, it is estimated that police deal with 44 300 mental health-related cases per year (Henry and Rajakaruna 2018; Meehan and Stedman 2012; Victoria Police 2019; State and Territory Governments Survey).

Effect

Increased support for police is expected to reduce the number of cases sent to an emergency department, with some evidence that ED attendances could be reduced between 27-63% (Allen Consulting 2012; Scott 2000). This will result in cost savings that are detailed below.

Costs

- Costs associated with rolling out systematic co-response programs are calculated on the basis of cost data from Western Australia (\$727 per case), and PACER (\$478-673 per case) (Allen Consulting 2012; Henry and Rajakaruna 2018; WA Mental Health Commission, unpublished data). This includes the estimated costs of having mental health expertise located in police call centres and in co-response teams responding to mental health incidents on the ground.

Based on estimates of police interactions (44 300 cases per year), it is estimated that the cost of increasing support programs for states which do not already have these programs is between \$15-23 million (2019 dollars).

- Reduced ED attendances are likely to result in cost savings — ED attendances for a serious mental illness cost on average \$760 (2017 dollars) per attendance (IHPA 2017). Using the lower bound on the number of mental health-related ED attendances, this suggests cost savings between \$4.4-10.3 million (2019 dollars).
- Reducing the time that police spend on mental health-related cases is expected to result in cost savings. The Allen Consulting Group (2012) estimated that police spent 2.8 hours per case on average and that this could be reduced to 0.7 hours per case. They also estimated that the cost of police time as \$65.37 per hour (2012 dollars). Based on estimates of police interactions (44 300 cases per year), the total cost savings are estimated to be \$7.4 million (2019 dollars).

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Action Increased support for police (continued)**Additional considerations**

- These cost estimates do not account for cost-savings from replacing existing programs, and so are likely to overestimate the true cost.
- Use of Western Australia numbers as a benchmark may also lead to overstating of costs, as coverage in Western Australia was expanded recently to obtain greater geographical coverage.
- Data on the number of police interactions (with people experiencing a mental health-related incident) was not available for all jurisdictions. For states with missing data, the number of cases per year were imputed.

Action Additional mental health expenditure on prisoners

Mental healthcare in correctional facilities should be equivalent to that in the community and mental healthcare should be continued seamlessly as people enter and leave correctional facilities.

State and Territory Governments should ensure that:

- there is mental health screening and assessment of all individuals (sentenced or un-sentenced) by a mental health professional on admission to correctional facilities, and on an ongoing basis where appropriate
- mental health information obtained from screening and assessment is comprehensive enough to inform resourcing of mental health services in correctional facilities
- with consent from the individual, there is communication with any of their community based mental health providers to further inform mental health needs
- individuals in correctional facilities are able to access timely and appropriate mental healthcare, that is equivalent to that in the community

Population

The number of people in prison with mental illness was estimated using prisoner population data (SCRGSP 2019) and prevalence (of mental illness) data from State and Territory Governments and the AIHW prisoner health survey in table 16.1 (AIHW 2019d; JHFMHN 2019; State and Territory Survey; Victorian Government, sub. 483). It is estimated that there are about 17 200 people with mental illness in prisons, nationally.

Costs

- Additional expenditure required to provide adequate care to people with mental illness in prison is calculated based on the Sainsbury Centre for Mental Health's estimate that 11 FTE mental health workers per 550 male prisoners are required to provide prison mental healthcare that is equivalent to community services (Davidson et al. 2019).
- Funding required to meet this benchmark is based on information about the number of fully funded FTEs for mental health services currently in prisons by state from Davidson et al (2019), share of mental health expenditure as a proportion of total health expenditure (AIHW 2020a), and total health expenditure in prisons from (SCRGSP 2019).
- Mental health expenditures on prisoners nationally should be about five times greater (from \$707 per prisoner to \$3479) in order to meet this benchmark.
- This implies additional expenditure of \$47.8 million (2019 dollars).
- However, when analysing at a state level and aggregating up, the estimate for additional expenditure is higher, at about \$109.8 million (2019 dollars). This is because, at a state level, the required increase to meet the FTE benchmark can be much higher than the national average estimate (five times greater). For example, in New South Wales, the estimated increase required is over 10 times.

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Action Additional mental health expenditure on prisoners (continued)**Additional considerations**

- State data on the number of fully funded FTEs for mental healthcare in prisons has several limitations. First, data had to be imputed for Victoria and South Australia. Second, the data is not directly comparable across states owing to different services delivery models. Third, data for some jurisdictions underestimate the number of FTEs. For example, in New South Wales psychology services are provided by Corrective Services (not Justice Health services), which was not included in the FTE count (Davidson et al. 2019). Additionally, in South Australia, visiting consultants provide mental healthcare are not included in the FTE count.
- Current mental health expenditure in prisons is estimated on the basis of reported health expenditure in prisons and the assumption that 7.6% of health expenditure is on mental health (as is the case in the community) (AIHW 2020a). This might not be the case in practice and may differ across states and territories. Where mental health expenditure is less than 7.6% of all health expenditure, the amount of funding required to meet the FTE benchmark will be higher.
- Prevalence data had to be imputed for Tasmania, the Northern Territory and the ACT.

Action Aboriginal and Torres Strait Islander prisoner expenditure

State and Territory Governments should ensure Aboriginal and Torres Strait Islander people in correctional facilities have access to mental health supports and services that are culturally appropriate.

Population

The number of Aboriginal and Torres Strait Islander people in prison is about 12 000 nationally (SCRGSP 2019). The number of Aboriginal and Torres Strait Islander people in prison with mental illness was not estimated, as the Winnunga Model of Care aims to address health and mental health needs for all Aboriginal and Torres Strait Islander people detained in the ACT's Alexander Maconochie Centre (Winnunga AHCS 2016).

Costs

- The cost of the ACT's Winnunga Model of Care at the Alexander Maconochie Centre (Winnunga AHCS 2016) is estimated to be about \$1.5 million (2017-18 dollars) per year, for about 110 Indigenous prisoners in 2018-19 (SCRGSP 2019). This implies an estimated cost per Indigenous prisoner of \$14 332 (2019 dollars).
- Across Australia, there are about 12 000 Indigenous prisoners (SCRGSP 2019), implying a total additional cost of about \$170.2 million (2019 dollars) if rolled out nationally.

Additional considerations

This recommended action is about ensuring Aboriginal and Torres Strait Islander people in correctional facilities have access to mental health supports that are culturally appropriate. However, the estimated cost is based on just one type of model that could be implemented. There are other models of care, such as South Australia's Model of Care for Aboriginal Prisoner Health and Wellbeing (Sivak et al. 2017). Costs would differ based on the model of care implemented in each state.

Action Health justice partnerships

State and Territory Governments should fund pilot programs of multi-site (rather than just single-site) health justice partnerships to:

- improve access to legal services for people with mental illness
- enable larger volumes of data to be collected, for more rigorous evaluation, to build the evidence base
- inform future policy and program development in this area.

State and Territory Governments should consult with relevant stakeholders to ensure a coordinated approach.

Costs

- Estimated using the cost of Mind Australia's pilot in Victoria, which was \$430 000 over two and a half years (2018 dollars) (LSBC 2019).
- Assuming that this can be scaled up across all other states and territories, the cost is about \$1.2 million per year (2019 dollars).

Additional considerations

The cost of establishing pilot programs in other states and territories may differ from Mind Australia's pilot in Victoria, which is funding a multi-site partnership between Mind Australia's mental health services and about six community legal services (Mind Australia 2018; sub. 380).

Action Legal representation at mental health tribunals

State and Territory Governments should ensure people appearing before mental health tribunals and other tribunals that hear matters arising from mental health legislation have a right to access legal representation. To ensure this, State and Territory Governments should adequately resource legal assistance services for this purpose — for example, through broader legal assistance funding or a specific legal assistance grant.

Population

Individuals who are or may be subject to compulsory mental health treatment, and expected to appear before mental health tribunals. However, the demand for legal assistance and representation would depend on the number of cases/hearings, not the number of individuals. There were about 52 000 mental health tribunal hearings conducted nationally in 2018-19.

Costs

- Legal representation costs were estimated using grant information provided by Victoria Legal Aid (to estimate a cost per case), and data on the number of hearings conducted by state and territory mental health tribunals (and other tribunals dealing with matters arising from mental health legislations), which were sourced from annual reports (ACAT 2019; NSW MHRT 2019; NT MHRT 2019; QLD MHRT 2019; SA DHW 2019; TAS MHT 2019; VIC MHT 2019; WA MHT 2019).
- In Victoria, a grant of legal aid is a set amount of funding per case that a legal practitioner can receive from Victoria Legal Aid on application. Under Victoria Legal Aid 2019 guidelines a grant of aid comprised: \$752 (2019 dollars) for preparation, and \$376 (2019 dollars) for appearance (VLA 2019). This sums to a total cost per case of \$1128 (2019 dollars).
- Scaling this up across Australia, and assuming that 83% of people want legal representation (NSW MHRT 2019), the total cost is \$48.6 million (2019 dollars).²⁴

Additional considerations

- This is an overestimate as it does not account for existing expenditure on legal representation (for mental health tribunal hearings) by states and territories. The ‘gap’ in legal representation, across states and territories, could not be estimated from available data.
- The proportion of people who would want legal representation may differ across jurisdictions. The cost estimates presented here are based on the proportion of cases that involve legal representation in New South Wales which averaged about 80%, over the past five years.
- Data on the number of hearings could not be located for South Australia. The number of mental health orders was used as a proxy, which is an underestimate.
- Estimating costs based on a *cost per case* method has limitations, and Victoria Legal Aid advised it is not the most reliable approach (VLA, pers. comm., 8 May 2020). Instead, Victoria Legal Aid advised that a *cost per Tribunal sitting day* would be more reliable, as it reflects how resources are committed in practice. However, data on the number of Tribunal sitting days could not be located for all states. As a result, a *cost per case* method was used. A cost per Tribunal sitting day method led to cost estimates that were much lower for Victoria (where data on the number of sitting days was available) — less than half of what was estimated under a cost per case method. Therefore, the use of a cost per case method may overstate the actual cost.

Action Individual non-legal advocacy services

State and Territory Governments should ensure individual non-legal advocacy services are available for any individual detained under mental health legislation. In particular, services should:

- focus on facilitating supported decision making by individuals
- be adequately resourced to provide assistance to individuals who require it
- not replace legal advocacy services.

Where an individual is detained under mental health legislation, or agrees to mental health treatment in lieu of being detained under mental health legislation, the treating facility should notify non-legal advocacy services and the individual's family or carer.

Population

People who are subject to mental health orders (both inpatient and community orders), by state and territory. The demand for individual non-legal advocacy services will depend on the number of mental health orders made per year, not the number of individuals subject to them per year, as people can be subject to multiple mental health orders. There were about 29 900 mental health orders made nationally in 2018-19.

Costs

- The total cost of this action is estimated using expenditure data from Western Australia Mental Health Advocacy Service (2018) and the number of mental health orders in each state and territory sourced from various annual reports (ACAT 2019; NSW MHRT 2019; NT MHRT 2019; Queensland Health 2019; SA DHW 2019; TAS MHT 2019; VIC MHT 2019; WA MHAS 2019).
- About 66% of the Western Australia Mental Health Advocacy Service expenditure (\$2.7 million) is on the cost of advocates and the chief advocate. Combining this with the number of involuntary treatment orders in Western Australia (4116), suggests an average cost of \$446 per order (2019 dollars).
- Scaling this nationally, give a total cost is estimate of \$13.3 million (2019 dollars).

Additional considerations

- This may overestimate actual cost as it assumes that all individuals subject to a mental health order would want individual non-legal advocacy services which may not be the case in practice. However, data are unavailable to establish the extent to which this may be the case.
- The cost of providing individual non-legal advocacy services may differ across states and territories, as they have different models of service delivery. For example, in New South Wales and Victoria, these services are delivered through parts of their state legal aid commissions. Whereas, in Western Australia, the service is provided through the Chief Mental Health Advocate, which is a statutory office.

²⁴ Although all individuals have the right to access legal representation, 83% of cases in New South Wales involved legal representation (NSW MHRT 2019).

Action Advance directives, statements or agreements

Advance directives, statements or agreements enable consumers to state their preferences regarding future treatment and their recovery. This can include identifying preferred medications, or nominating carers and specifying the types of information to be shared with carers.

Population

There is limited data on the number of people who want or need an advance directive. The number of mental health orders from various state and territory annual reports is used as a proxy of how many people may need an advance directive (ACAT 2019; NSW MHRT 2019; NT MHRT 2019; Queensland Health 2019; SA DHW 2019; TAS MHT 2019; VIC MHT 2019; WA MHAS 2019). This is because advance directives are often prepared by individuals who anticipate becoming subject to compulsory mental health treatment in the future. This suggests that about 29 900 people could need an advance directive.

Costs

- The Productivity Commission was advised by the Mental Health Legal Centre (MHLC, pers. comm., 11 March 2020) that the cost per advance statement (as they are called in Victoria) was about \$750 (2019 dollars) under its *MHLC Advance Statement Project* — which was delivered by its lawyers through outreach services located at mental health facilities (MHLC 2019).
- This suggests a total cost of \$22.4 million (2019 dollars), to provide support services nationally.

Additional considerations

- There are people who already have an advance directive, hence the costs presented here will be an overestimate.
- Cost estimates would vary depending on the type of support service provided (to help individuals complete advance directives). There are different ways to support consumers to complete advance directives, and the costs would differ depending on the approach. For example, support could also be provided through online resources and supporting workshops, as is the case in the ACT, which is likely to cost less than \$750 per advance directive.

K.7 Early childhood and school

Action Perinatal mental health

Increased availability of screening for perinatal mental illness for all parents of newborn children is expected to improve their mental health.

Population

Screening for perinatal mental illness is offered for 315 000 fathers and partners of new mothers (ABS 2019c). It is assumed that of these fathers and partners, 75% will engage in screening, and that 10% of those have perinatal mental illness (Paulson and Bazemore 2010). Of those who are identified as requiring treatment, it is assumed that half will seek and receive treatment.

Effect

- The 12 000 fathers and partners of new mothers who receive help experience a mental health benefit (instead of having a deterioration in mental health).
- It is assumed that an even mix of face-to-face and online supported treatment is used, with an effect size of 0.9 (Burlingame et al. 2016; Cuijpers et al. 2019) and 0.8 (Andrews et al. 2018) respectively.
- This is estimated to result in an additional 505-919 QALYs and \$46-86 million in labour market income.

Costs

Improving perinatal mental health is expected to result in an additional \$18-23 million in direct expenditure, including:

- a campaign to raise awareness about screening
- costs associated with implementing screening
- the cost of providing care, assuming that a mix of online supported and face-to-face treatments are used.

Additional considerations

- There is an implicit assumption that all fathers and partners of new mothers experiencing perinatal mental illness do not currently seek and receive help. Where they do seek treatment, the costs of that treatment should be deducted from the costs above so as to avoid double counting.
- There is limited literature regarding treatments and their effectiveness that is specific to new fathers (O'Brien et al. 2017). As a result, effect sizes are drawn from non-perinatal studies for general populations experiencing a mix of anxiety and depression. It is not clear in which direction this will bias results.

Action Expanded provision of parent supports

Parent education programs are part of a suite of measures recommended to improve the social and emotional development of preschool children. The expanded provision of parent education programs through a range of channels (including online platforms and child and family health centres) is expected to result in a range of mental health benefits for children. The intervention here indicates possible benefits and costs associated with the rollout of an indicated parent education program designed to prevent anxiety disorders in children. The anxiety program is an example of additional parenting supports that are recommended in action 5.2. It is expected that these results are indicative of benefits of additional parenting supports that may be expected more broadly.

Population

The intervention presented targets parents of pre-school children at risk of developing anxiety. The initial population includes the 649 000 children aged 3 or 4 in 2019 (ABS Cat no. 3101.0). On the basis of an existing study (Mihalopoulos et al. 2015), it is assumed that:

- 95% of these children attend preschool
- 75% of preschools take part in screening
- 29% of parents return screening questionnaires
- 63% of parents agree to participate in the intervention
- 16% of children meet screening criteria.

It is estimated that about 11 100 children receive the intervention.

Effect

The intervention is expected to reduce anxiety among children, with the effectiveness results sourced from Rapee et al. (2005).

Percentage of children with at least one anxiety diagnosis

<i>Follow-up time</i>	<i>Intervention</i>	<i>Control</i>
12 months	50.8	63.5
24 months	37.8	68.4
36 months	39.5	68.8

In terms of health-related quality of life, improved social and emotional development for preschool children is estimated to result in between 385-703 disability-adjusted life years (DALYs) averted. Other health benefits included in this appendix are specified in terms quality-adjusted-life-years. Disability-adjusted are conceptually similar to QALYs, but are typically disease-specific and do not take into account comorbidities.

Costs

Costs of the intervention are taken from Mihalopoulos et al. (2015), and adjusted for inflation and change in population. Screening costs included one hour of preschool teachers time, costs of training teachers, and the processing of screening questionnaires. Intervention costs include up to six 1.5 hour group sessions. The costs of time and travel for parents are also included. The total cost is estimated to be about \$6.8 million. Cost savings included the healthcare costs associated with treating anxiety and are estimated to be about \$2.2 million.

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Action Expanded provision of parent supports (continued)**Additional considerations**

- Unlike other interventions considered, the benefits calculated include those that accrue over subsequent years. This is due to the fact that benefits appear to increase in the years after the intervention. In the year following the intervention, it is estimated that about 95 DALYs are averted.
- Benefits are likely to be underestimated, given that costings in Mihalopoulos et al. (2015) include consideration of a number of children who are given access to the course without actually meeting screening criteria. No benefits from these children are included here.

Action Education support for the mental health of school-aged children

The mental health of school-aged children can be better supported by improving teachers' knowledge and understanding of child social and emotional development and wellbeing via the implementation of accredited programs in schools and improvements in pre-service education and professional development for teachers.

Population

3.9 million students in primary and high schools across Australia (ABS 2020b) are expected to experience improved health-related quality of life from improved social and emotional learning programs within schools.

Effect

Sklad et al. (2012) conducted a meta-analysis on universal, school-based, social, emotional, and behavioural programs and found an effect size of 0.1 (0.04-0.17) on follow-up outcomes for mental disorders. This is estimated to result in an additional 28 620-52 110 QALYs per year.

These recommended actions are likely to have ongoing positive effects for those benefiting, including improved educational outcomes. For example, using results from a random effects analysis of Longitudinal Study of Australian Children data by Khanam and Nghiem (2018), it is estimated that this effect is likely to result in an average improvement in NAPLAN of about 0.01 standard deviations for reading and writing and 0.005 standard deviations for spelling and numeracy.

Costs

Most of the actions for improving education support for the mental health of school-aged children involve repurposing of existing expenditures.

However, funding arrangements to support schools in identifying and addressing gaps in their ability to support the wellbeing of students will require some additional government expenditure. Based on similar schemes already existing in New South Wales and Western Australian, overall expenditure of \$230 million would be required annually. However, all jurisdictions, as well as the Australian Government, already invest in wellbeing programs in schools, so the true figure is likely to be far less.

Additional considerations

There are a number of uncertainties associated with these estimates:

- The benefits estimated use health utility weights derived using the SF-6D instrument. This is likely to give uncertain results for children and adolescents. Health benefits calculated in this way are indicative only.
- These actions are likely to result in improvements in domains other than mental disorders (the basis for the health benefits above), including improvements in academic achievement, prosocial behaviours and social-emotional skillsets, all of which are likely to have ongoing, lifelong economic and health benefits for those affected.
- Many of the schools affected by the actions already have (or are required to have) social, emotional and behavioural programs. As a result, the benefits expected might be towards the lower end of the likely range of benefits.

K.8 Young adults

Action Training for educators in tertiary education institutions

Staff who have direct contact with students are to undertake training on student mental health and wellbeing.

Population

There are about 1.1 million people aged between 15-24 currently studying for a Certificate level III or above (ABS 2019e, Education and Work, table 22). For people aged between 15-24, it is estimated that about 24% experience some form of mental illness each year (IHME 2019). This suggests there are about 271 100 young adults who could benefit from teaching staff at TAFE and universities having improved access to adequate mental health training.

Effect

There is an absence of evidence about the direct mental health benefits that are likely to accrue to students as a result of training university staff. However, a meta-analysis of the effects of workplace health promotions by Martin, Sanderson and Cocker (2009) suggest that they may achieve a standardised mean difference of 0.05 in composite mental health measures. If a similar effect was to be achieved for students in tertiary institutions, this would result in an increase of between 982 and 1789 QALYs per year.

Costs

- Nationally, there are 33 600 Vocational Education and Training (VET) teachers in 2019, and there were 134 112 teachers and student facing staff in 2018 (AISC 2020; DESE 2018).
- Gulliver et al. (2018) estimated that 50% of teaching staff at universities and TAFE did not have access to adequate training. This number of staff requiring training is increased by 10% to allow for student-facing non-teaching staff who may also require training, suggesting that there are about 92 000 people who should undergo training. The average cost for a mental health first aid training course is estimated to be \$262 (ranging between \$150 to \$440 per person) (MHFA Australia 2020). This gives a total cost of \$26 million, ranging from between \$14-41 million.
- There is also an opportunity in undertaking this training, as the time spent — 12 hours for the standard in-person mental health first aid training session — comes at the expense of other purposes. Wages for vocational education teachers and university lecturers and tutors (ABS 2019f, Employee Earnings and Hours, Data Cube 11) are used to calculate the opportunity cost of staff time spent training (\$46.5 million).
- The total costs are estimated to be between \$60-87 million (2019 dollars).

Additional considerations

- Expenditure on training VET and university staff is likely to yield benefits to students beyond the initial cohort considered here.
- The effect size above, although relatively small, is drawn from a workplace health promotion, and can only be considered as indicating possible outcomes.

K.9 Workplaces

Action Prioritising mental health in the workplace

The mental health of employees is to be improved by changes that make mental health as important as physical health in terms of Workplace Health and Safety legislation, and through the development of employer codes of practice to assist employers in meeting their duty of care in providing a mentally healthy workplace.

Implementation

The actions of each employer required to achieve a mentally healthy workplace are specific to their workforce, and would likely involve a mix of interventions including job-redesign and in-person training. Given this, a number of assumptions about how employers will act in order to achieve a mentally healthy workplace are required. For the purposes of estimating costs and benefits, it is assumed that select employers provide support for their employees to complete a universal, self-directed online mental health course (including time allocated during work hours).

Population

Medium-large firms (20 or more employees) that do not provide a mental health workplace are the target of this intervention:

- Bailey, Dollard and Richards (2015) estimate that about 35% of employees work in a low 'psychosocial safety climate' (PSC).
- Given that there are about 7.2 million people employed in medium-large firms, there are about 2.5 million people who may benefit from this intervention (ABS 2019b).
- It is assumed that 5% of these people (125 000) take up the opportunity to complete the self-directed online mental health course.

Effect

Using effects from a meta-analysis of 23 controlled trials of eHealth interventions by Stratton et al. (2017), it is estimated that about 8% of people who undertook the online course are likely to avoid depression. Interventions considered in the meta-analysis included web and mobile-based mindfulness, cognitive behavioural therapy and stress reduction programs. This suggests an increase in QALYs between 170-308 each year.

Costs

The total additional costs associated with increasing the consideration given to mental health in larger workplaces where this is likely to be an issue is estimated to be about \$48 million.

It is assumed that access to eHealth interventions have no marginal cost associated with accessing the course. The main cost to firms is the time required for employees to access the services during work hours. The average time spent on the interventions considered in Stratton et al (2017) was 7.5 hours. Given average hourly total cash earnings of \$40.9 (ABS 2019f), this suggests average total costs of \$307 per employee and total costs of about \$39 million.

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Action Prioritising mental health in the workplace (continued)

An additional overhead cost of \$328 per firm is included to account for administrative requirements. This value was calculated assuming that 8 hours of work (at an average wage rate of \$40.9) is required to research and select the eHealth intervention most suited to the organisation and to communicate the roll out of the program to staff. Applying this cost to an estimated 30 000 medium or large size firms (ABS 2019b) implies a total overhead cost of \$9.9 million.

Taking these measures is likely to result in substantial cost savings. The average cost per case of depression avoided in terms of lost productive time is estimated to be about \$6578 (2019 dollars). This is calculated on the assumption that an employee with depression is expected to be absent from work between 10 and 12 additional days. A further 7 to 9 days of productive output is lost due to presenteeism (appendix H). Part-time and full-time employees have similar amounts of lost time due to absenteeism and presenteeism (ABS 2019g). Average hours and wages are sourced from Employee Earnings and Hours (ABS 2019f), and inflated to 2019 values.

Applying an assumed take-up rate of 5%, this suggests potential cost savings of about \$67 million.

Additional considerations

- There are a range of interventions aimed at improving mental health in the workplace. As noted above, this modelling exercise is based on the assumption that a universal eHealth intervention is the only response implemented by workplaces.
- The target population is based on the assumption that the proportion of low PSC workplaces are evenly distributed among small and medium/large firms.
- Aggregate costs and benefits are highly sensitive to the assumed take up rate. If the take up rate was 10% (rather than 5%), then the additional expenditures (\$87 million) and total cost savings (\$218 million) would be doubled. The number of QALYs that would be gained would also be higher (340-615).

Action No liability treatment for mental health-related compensation claims

Workers compensation schemes should be amended to provide and fund clinical treatment (including any required rehabilitation) for all mental health related workers compensation claims, regardless of liability, until the injured worker returns to work or up to a period of six months following lodgement of the claim. Similar provisions should be required of self-insurers.

Population

The introduction of no-liability treatment for mental health-related workers compensation, is expected to result in a total of about 8000 people returning to work earlier than otherwise would have been the case in 2018-19. This includes 4700 people who have successful mental health-related claims for workers compensation, who had between a week and six months away from work. Because these claims are related to mental health, it is assumed that people in this group have mental illness. The other 3300 claims are for those workers with rejected claims who previously took extended leave (e.g. sick leave).

Effect

For no-liability treatment for mental health related workers compensation claims, it is assumed that the time spent on workers compensation is reduced by 21% for people making a mental health claim, as they can be treated earlier and return to work more quickly (estimated using data from Safe Work Australia (2018) and Sampson (2015)). This is expected to increase aggregate income by about \$11.9-12.2 million.

Costs

Increased expenditure is expected to relate to healthcare costs which would not be incurred under the current workers compensation system, but would be accepted under the proposed system. For example if this policy had been in place for the 2018-19 financial year, it would have costed about \$9 million per year. This estimate was based on information from various workers compensation schemes on the medical cost of accepted claims and involves a number of assumptions:

- the proportion of claims that result in an absence of work of less than six months is the same for rejected and accepted claims.
- the median healthcare cost is the same for both claims that are accepted and claims that are rejected.

In the 2018-19 financial year, this action would have resulted in a total of 3300 previously rejected claims (that resulted in up to six month of time off work) being accepted, and their medical costs being paid. The total additional cost is the product of the number of new claims and the median cost of a serious accepted claim (that resulted in up to six month of time off work).

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Action	No liability treatment for mental-health related compensation claims (continued)
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Additional considerations

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| <ul style="list-style-type: none">• Increased costs associated with no-fault liability must be regarded as a lower bound, as behaviours will change as policy changes, and people may become more likely to put in mental health claims. The incentive to do so can be argued to be low, as it only covers medical costs, and not income payments.• It is assumed that those that those workers who are expected to be off work for six months or longer for mental health reasons will not receive a substantively greater benefit from access to no fault liability relative to the current policy arrangements, and so are excluded from cost and benefits calculations.• The benefit estimates provide a lower bound as it assumes the only benefit from earlier access to medical care is an earlier return to work. The calculation does not include, for example, any increase in workplace productivity arising from better mental health. |
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K.10 Social participation

Action National stigma reduction strategy

A National Stigma Reduction Strategy is modelled as a national campaign that seeks to reduce stigma towards people with mental illness that is poorly understood in the community.

Population

The introduction of a national stigma reduction campaign is expected to result in a health-related quality of life benefits to 1.2 million people with a diagnosed mental illness. Of those, 850 000 are expected to have labour force benefits.

Effect

Stigma is likely to negatively affect mental illness, with internalised stigma leading to poor adherence to treatment and increased severity of psychiatric symptoms (Livingston and Boyd 2010) and is argued to be a fundamental source of health differences for people with mental illness (Hatzenbuehler, Phelan and Link 2013). There is a limited evidence about the magnitude of the effect on mental illness due to the endogeneity of mental illness and stigma, meaning that strong assumptions about likely mental health benefits are required. The assumed effect sizes are:

- 0.01 for people with severe mental illness
- 0.005 for people with moderate mental illness
- 0.001 for people with mild mental illness.

Across the population, a successful campaign is expected to result in:

- an additional \$22-44 million in labour income
- between 419-759 QALYs.

Costs

The campaign is expected to cost between \$3.8-\$6.4 million per year. Expected costs are based on similar campaigns in the United Kingdom (Henderson, Lacko and Thornicroft 2017) and Denmark (Bratbo and Vedelsby 2017) adjusted for differences in population size.

Additional considerations

- The potential benefits of a stigma reduction campaign can be considered indicative only, given that the mental health benefits are based on assumed effect sizes. However, the assumed effect sizes are conservative, meaning that minimal effect is required for a cost effective intervention.
- The cost estimates do not include reductions in healthcare expenditure that may result from improved mental health, meaning that actual costs per QALY may be lower than reported.
- While there is some evidence about the effectiveness of large-scale anti-stigma campaigns (Corrigan et al. 2012; Evans-Lacko et al. 2013b, 2013a), evidence as to their ability to effect lasting changes in public attitudes is mixed (Smith 2013).

K.11 Suicide prevention

Action Universal aftercare after suicide attempts

The provision of aftercare following a suicide attempt is likely to reduce subsequent suicide attempts and result in lower rate of suicide across the population. People that have attempted suicide should be provided with, or referred to, aftercare services. They should be provided with culturally-informed support prior to discharge or leaving the service, as well as proactive follow up support within the first day, week, and three months after discharge, when the individual is most vulnerable.

Population

There were 3046 deaths due to suicide in 2018, where 2380 were people aged 20-64 years (ABS 2019d) and there were 31 083 hospitalisations due to self-harm in 2017-18 (AIHW 2019a).

Effect

Kinchin and Doran (2017) estimate that 0.6% of suicide attempts result in full incapacity, and 99.4% lead to a short absence from work. Aftercare can lead to a 19.8% reduction in subsequent suicide attempts and a 1.1% reduction in the suicide rate (Krysinska et al. 2016).

These effectiveness rates for aftercare suggests that about 33 deaths by suicide could be prevented by providing those that attempted suicide with aftercare services. About 6150 suicide attempts are likely to be prevented including about 37 that would have resulted in permanent incapacity. It is estimated that the annual benefits are an increase in labour force income by about \$3.2 million and about 50 additional QALYs.

Costs

Direct costs incurred involve increases in expenditure associated with the provision of universal aftercare for people who have been hospitalised due to intentional self-harm. Estimates of aftercare costs range from between \$2000 to \$6000 per person, with KPMG and Mental Health Australia (2018, p. 50) suggesting a cost of \$4000 per person.

Using these estimates as lower and upper bounds, the cost of providing aftercare to all people hospitalised due to intentional self-harm is between \$63-194 million.

There are expected to be cost savings from a reduction in medical, administrative, and other costs from suicide attempts (Kinchin and Doran 2017), as well as indirect and intangible cost savings associated with suicide deaths (appendix H). Total cost savings are estimated to be about \$294 million dollars each year.

Additional considerations

Intangible cost savings are based on the 'value of a statistical life' approach to costing suicide deaths (appendix H).

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