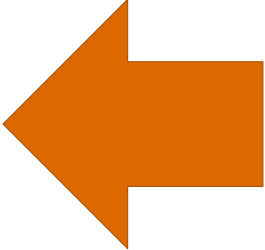


Digital Innovation & Prevention / Early Intervention

Presentation to the
Productivity Commission
December 2016

Agenda

1. Digital innovation
 2. Prevention & early intervention
- 

Digital Innovation - Links

Digital Innovation

<http://www.digitalinnovation.pwc.com.au/>

Digital for Small and Medium Enterprises

<http://www.digitalinnovation.pwc.com.au/small-business-digital-growth/>

Digital for Government

<http://www.digitalinnovation.pwc.com.au/digital-innovation-for-government/>

Start Up Economy

<https://www.digitalpulse.pwc.com.au/wp-content/uploads/2013/04/PwC-Google-The-startup-economy-2013.pdf>

We are facing a technology change singularity

- Historic point in the maturing of multiple technologies
- Feeding into each other and combining with globalisation to accelerate change
- The result will be a technology change singularity over the coming decades
- Visible major disruptions already emerging – eg Amazon, Uber, Airbnb, etc
- Emerging disruptions – eg banking, education, health
- Government is not immune
- Threats and opportunities for Australia

We need to focus as a nation on building our innovation eco-system

Venture Capital

- Over the last 10 years, the US has spent \$285b in VC versus \$4.5b in Australia with key gaps across the ecosystem

Research & Development

- Over 50% of Business R&D is concentrated in physical capital industries and we lag in our ability to commercialise

Education

- STEM course completions have fallen from 22% to 16% (2002 to 2012) whilst our Asian neighbours increase (52% in Singapore 2012)

Digital Innovation benefits

In 2024...



Reduce Australia's estimated
Federal Budget deficit by
\$6 billion

Contribute an
additional 1.5%
to Australia's GDP



In 2034...

Potential for up to
\$136 billion GDP
increase created by a
thriving innovation ecosystem



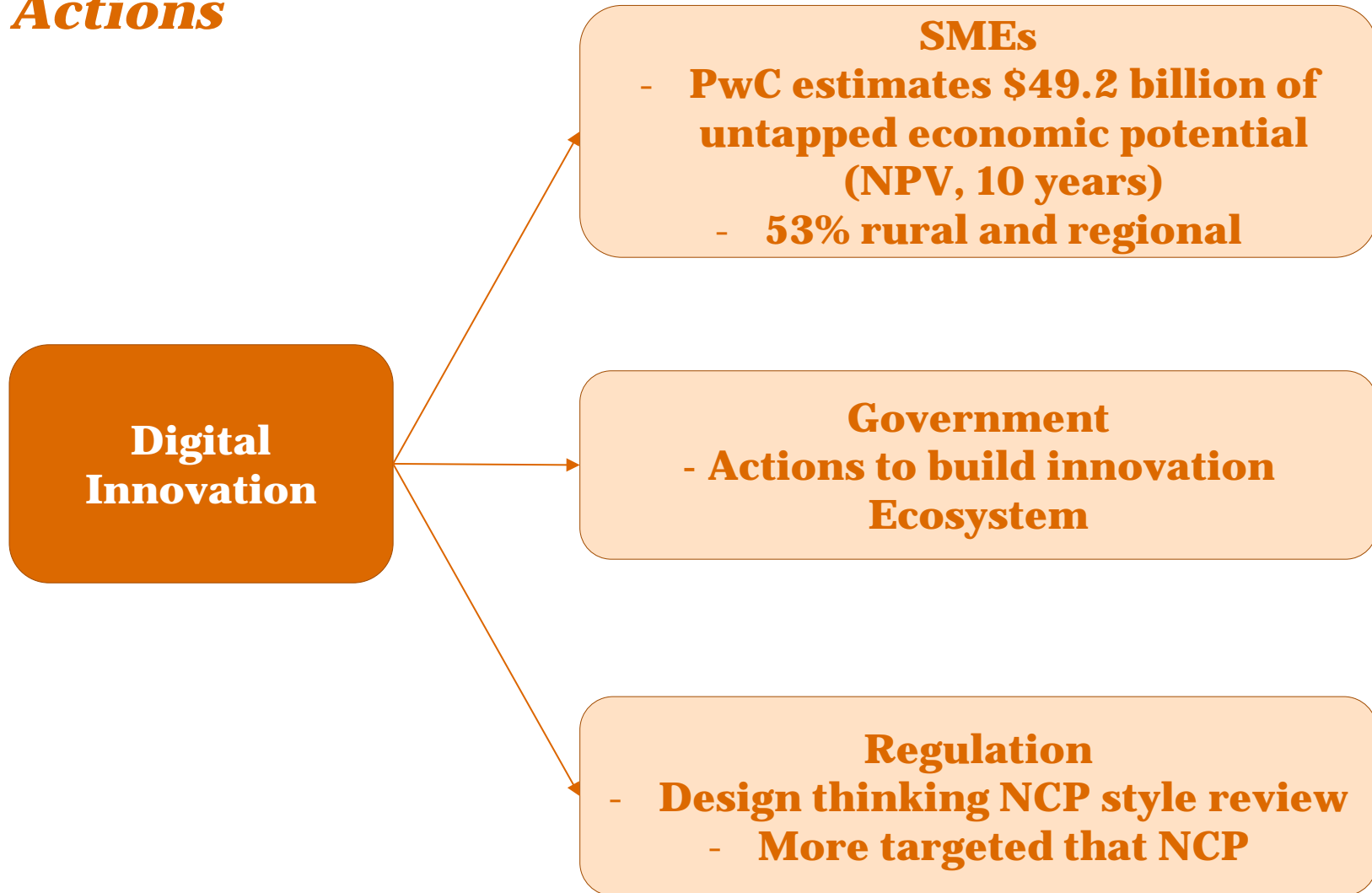
540,000 new jobs
could be created



Role for Government?

- **Be the creator of innovation opportunities**
- **Shore the skill base**
- **Incentivise innovation**
- **Put digital and citizen first**

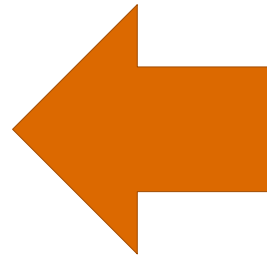
Actions



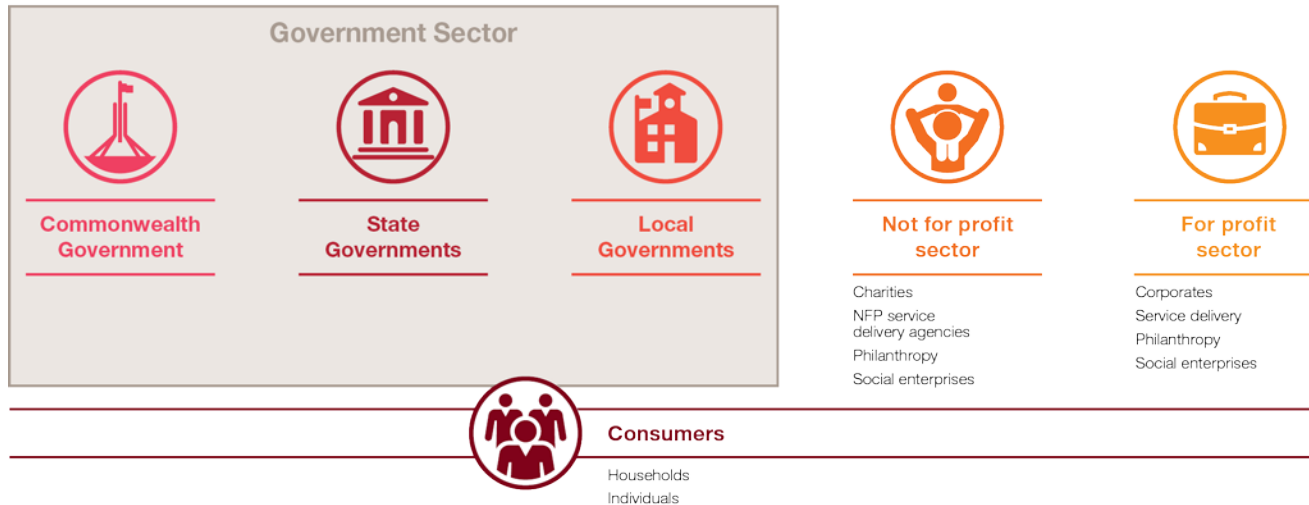
Agenda

1. Digital innovation

2. Prevention & early intervention



Australia's social purpose market



In April 2016, PwC & the Centre for Social Impact launched a report on Australia's social purpose market:

- **Over \$510 bn** is spent each year on health, education, social security & housing
- Governments contribute 80% (**55% by the Commonwealth**)
- 7 key areas that can yield productivity gains emerged, including prevention / early intervention

Hypothesis: there is massive underinvestment in prevention & early intervention

Prevention / early intervention vs Acute

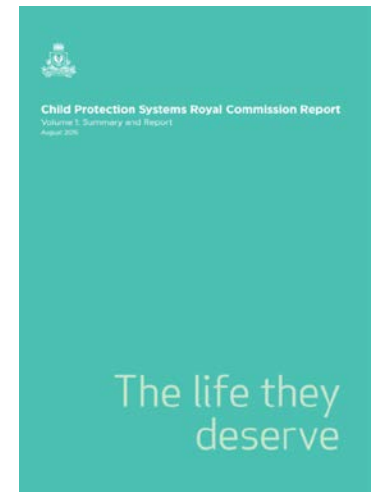


Victorian Royal Commission into Family Violence:

- **227 recommendations**
- **3 'prevention'** category recommendations

South Australian Child Protection Systems Royal Commission:

- **260 recommendations**
- **5 prevention / early intervention** recommendations



Political economy



Prevention & Early
intervention

- Primary – before there is a problem
- Secondary – early warning signs
- Tertiary – better managing chronic states

Reform narrative

- Prevention is better than cure
- Early childhood & children
- Less institutional barriers
- Economic case
- Budget repair

Barriers

- Longer term nature of benefits
- \$ away from frontline services
- Lack of confidence in execution & delivery of benefits

Acute

Early childhood

- **Early childhood is an opportunity** to influence health, education & employment outcomes later in life
- PwC's 2014 report demonstrated the **potential benefits of quality education and care** to the Australian economy:



Benefits of increased female workforce participation

\$6.0 bn

cumulative to 2050, *or*

\$3.7 bn

in NPV terms

Benefits for children receiving a quality education and care program

Up to

\$10.3 bn

cumulative to 2050, *or*

\$3.0 bn

in NPV terms*

Benefits of increased participation of vulnerable children

\$13.3 bn

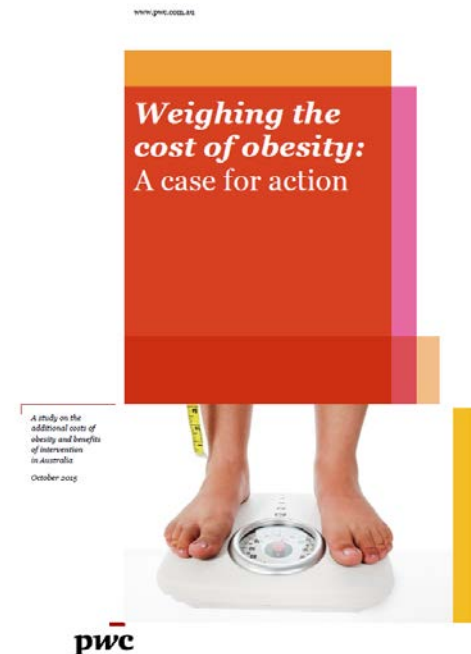
cumulative to 2050, *or*

\$2.7 bn

in NPV terms

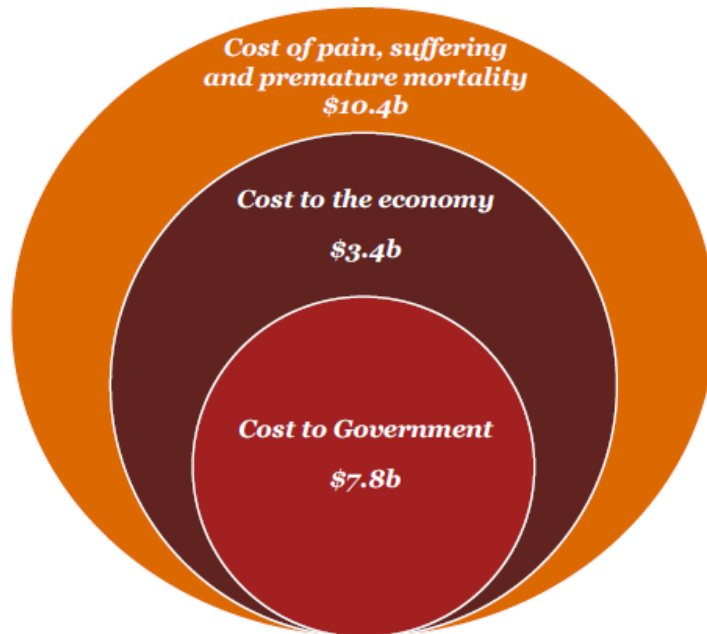
Obesity

- Australian prevalence has **increased 47%** between 1995 and 2011-12
- Associated **risk factor for a range of diseases** eg CVD, musculoskeletal disease, mental health issues, diabetes, cancer etc.
- PwC report for Obesity Australia projected obesity would **cost Australia \$88 bn over 10 years**
- Suite of prevention & interventions has **potential benefits of \$2.1 bn over 10 years**



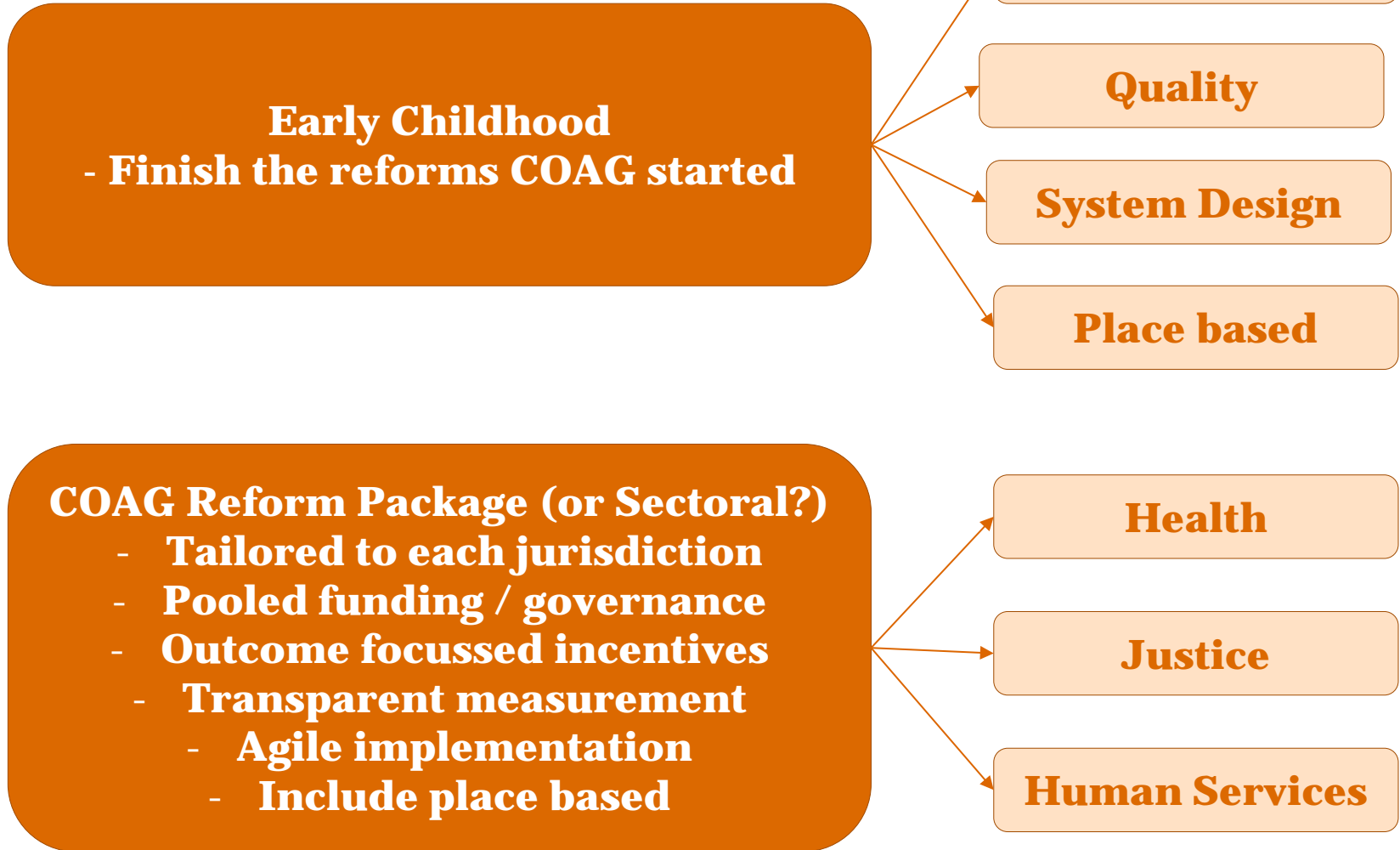
Domestic violence

- **Half of all women** experience violence, abuse or stalking from age 15+
- PwC report estimated violence against women **costs Australia \$21.7 bn a year**



- **Potential lifetime benefits** of reducing violence against women:
 - **>\$35.6 m** from **community mobilisation** programs
 - **>\$2.2 bn** from **individual & direct participation** programs

Actions



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