

How do we realise the potential of our human resources for better health and economic outcomes in the region?

Latrobe Early Years Summit
May 2016

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To do list:

Crucial...



Must do...



Can wait...



In time...



Next week...









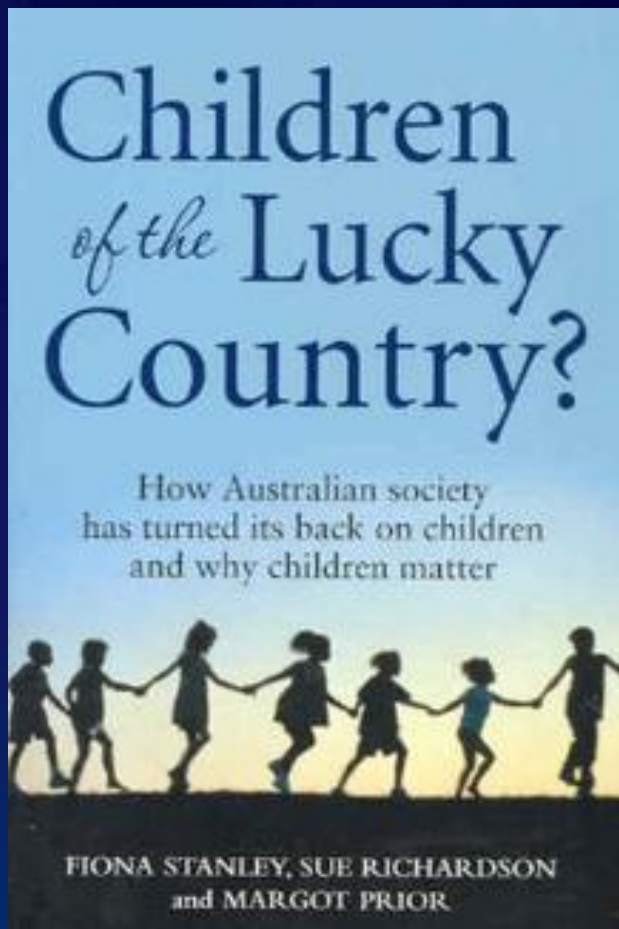
Reload images











“A society that is good to children is one with the smallest possible inequalities for children, with the vast majority of them having the same opportunities from birth for health, education, inclusion and participation.”
(*Stanley, Richardson & Prior, 2005*)

Overview

1. Policy context
2. Adversity and child development
3. Inequalities for Australia's children
4. Geographic inequities
5. Contextual principles (levers) for change
6. What can we do?

1. CHALLENGES FOR CHILDREN'S POLICY IN AUSTRALIA

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1. Child health morbidities.. “wicked problems”
2. Service misdistribution
3. Imbalanced spending and policy attention-aging population

Millennial morbidity (2000–present): disorders of the bioenvironmental interface

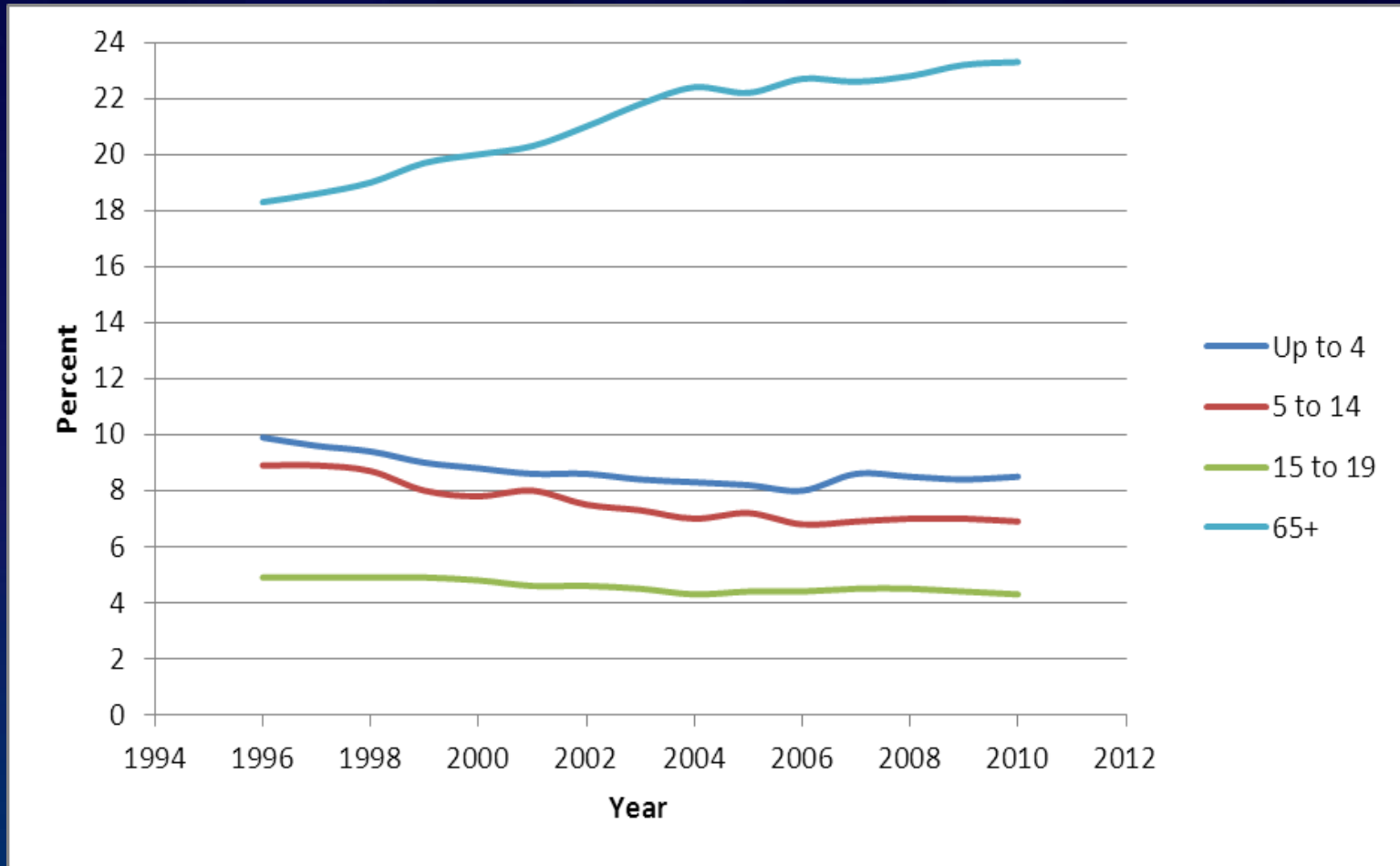
- Socioeconomic influences on health- including poverty
- Health disparities
- Technological influences on health
- Overweight and obesity
- Increasing mental health concerns

Palfrey, J. S., T. F. Tonniges, et al. (2005). 'Introduction: Addressing the millennial morbidity—the context of community pediatrics.' *Pediatrics* **115**(4 Supplement): 1121-1123.

Tackling wicked problems is an evolving art. They require thinking that is capable of grasping the big picture, including the interrelationships among the full range of causal factors underlying them. They often require broader, more collaborative and innovative approaches. This may result in the occasional failure or need for policy change or adjustment.

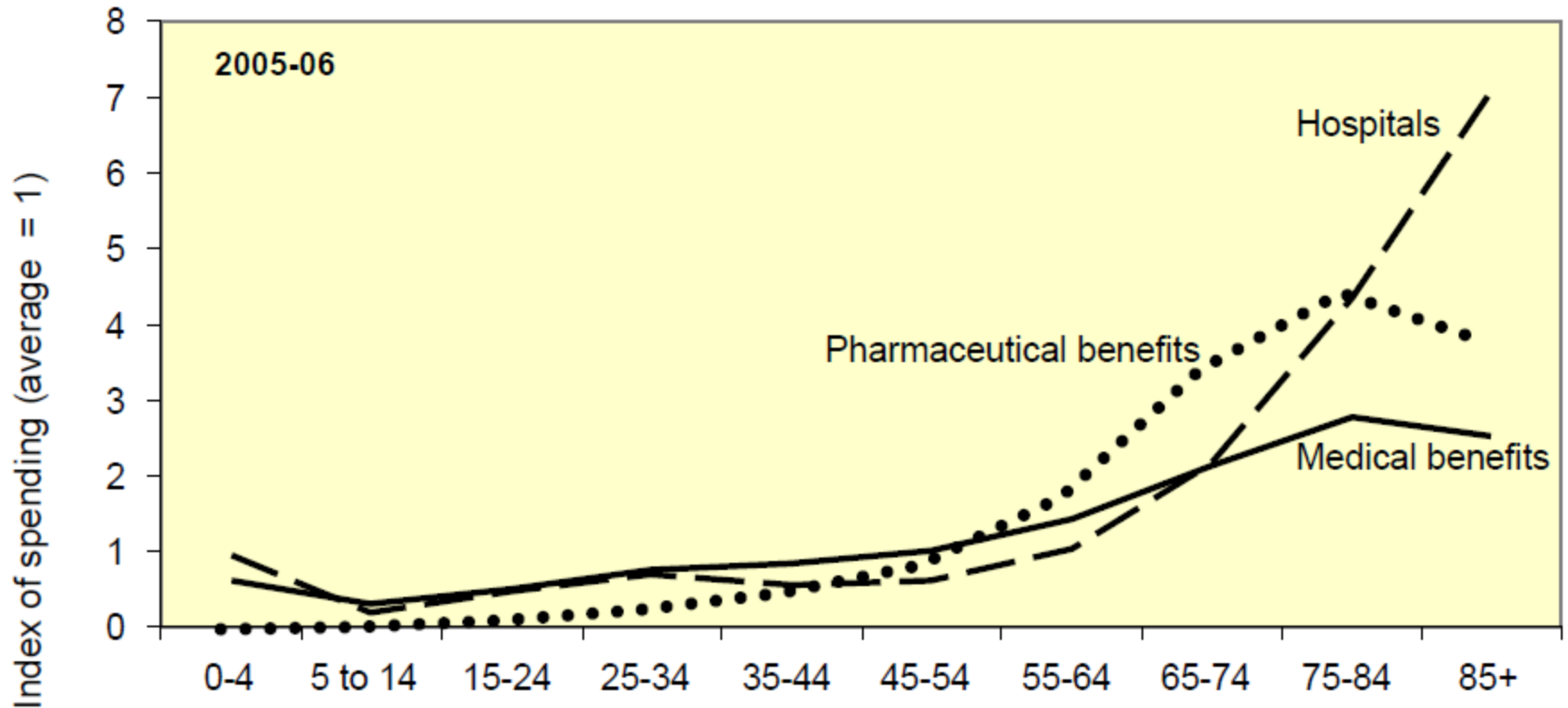
Lynelle Briggs
Australian Public Service Commissioner 2007

Overall Proportion of GP visits 1996 – 2010



Freed et al. Changes in the demography of Australia and therefore general practice patient populations.
Australian Physician , Sept, 2012

Health care costs rise steeply with age



2. THE EARLY IMPACTS OF DISADVANTAGE

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The Adverse Childhood Experiences (ACE) Study (N=17,000)

Abuse:

Emotional • Physical • Sexual

Neglect:

Emotional • Physical

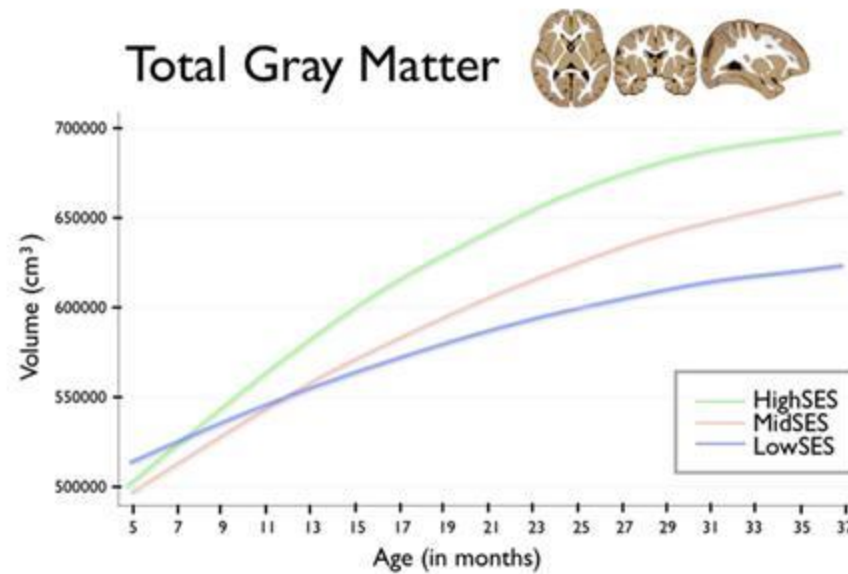
Household Dysfunction:

Mother treated violently • Household substance abuse • Household mental illness • Parental separation or divorce • Incarcerated household member



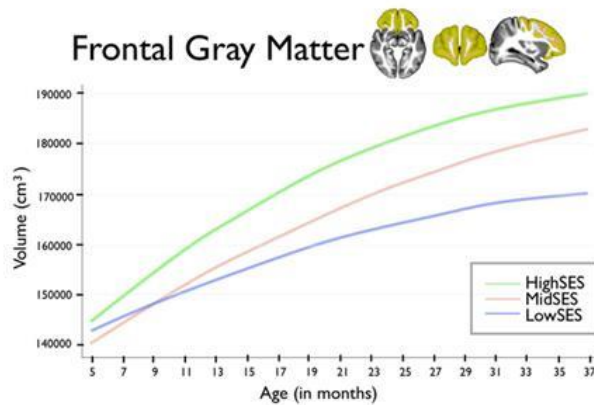
Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. Felitti, Vincent J et al. American Journal of Preventive Medicine , Volume 14 , Issue 4 , 245 - 258

Figure 2. This figure shows total gray matter volume for group by age.



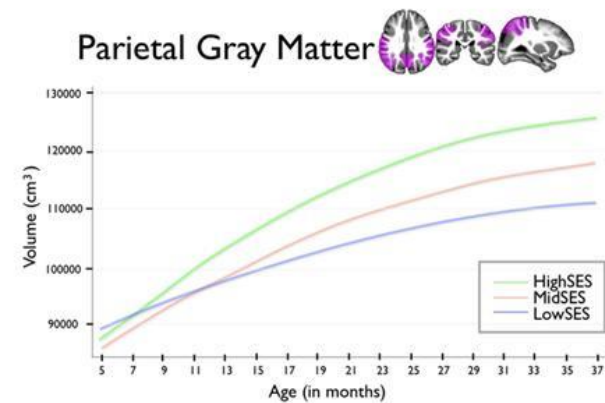
Hanson JL, Hair N, Shen DG, Shi F, et al. (2013) Family Poverty Affects the Rate of Human Infant Brain Growth. *PLoS ONE* 8(12): e80954. doi:10.1371/journal.pone.0080954
<http://www.plosone.org/article/info:doi/10.1371/journal.pone.0080954>

Figure 3. This figure shows frontal lobe gray matter volumes for group by age.



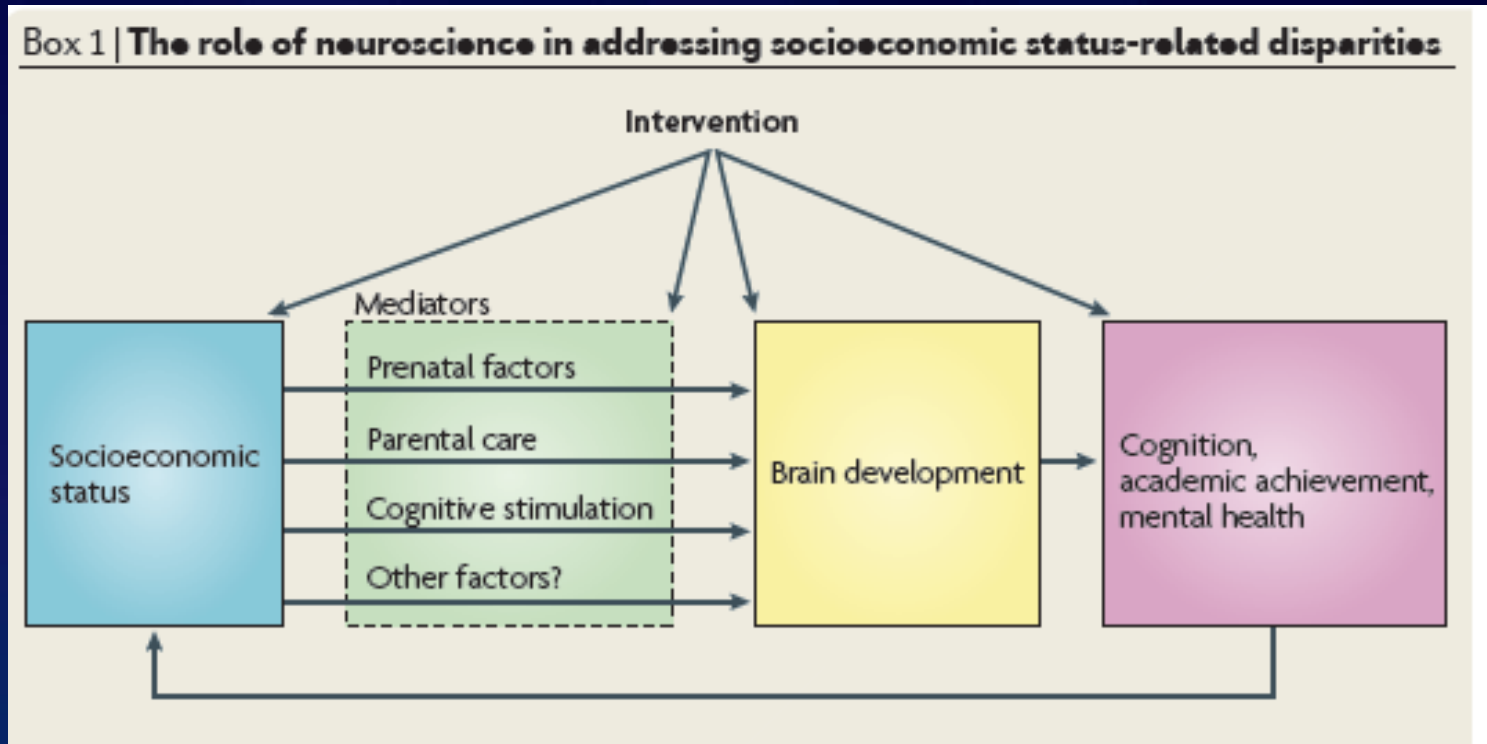
Hanson JL, Hair N, Shen DG, Shi F, et al. (2013) Family Poverty Affects the Rate of Human Infant Brain Growth. *PLoS ONE* 8(12): e80954. doi:10.1371/journal.pone.0080954
<http://www.plosone.org/article/info:doi/10.1371/journal.pone.0080954>

Figure 4. This figure shows parietal lobe gray matter volumes for group by age.



Hanson JL, Hair N, Shen DG, Shi F, et al. (2013) Family Poverty Affects the Rate of Human Infant Brain Growth. *PLoS ONE* 8(12): e80954. doi:10.1371/journal.pone.0080954
<http://www.plosone.org/article/info:doi/10.1371/journal.pone.0080954>

Impact of adversity early in life



Hackman D, Farah M, Meaney M. Socio economic status and the brain: mechanistic insights from human and animal research. Neuroscience. Vol11 2010; 651-659

3. UNEQUAL OUTCOMES FOR AUSTRALIAN CHILDREN

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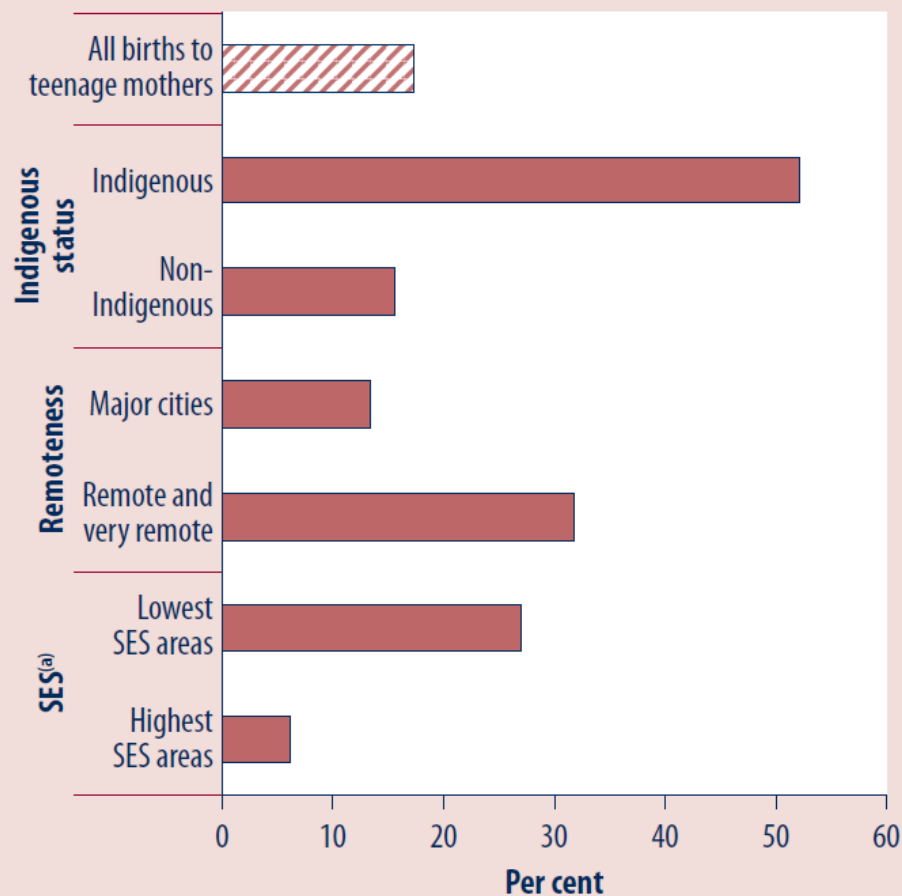


Antenatal

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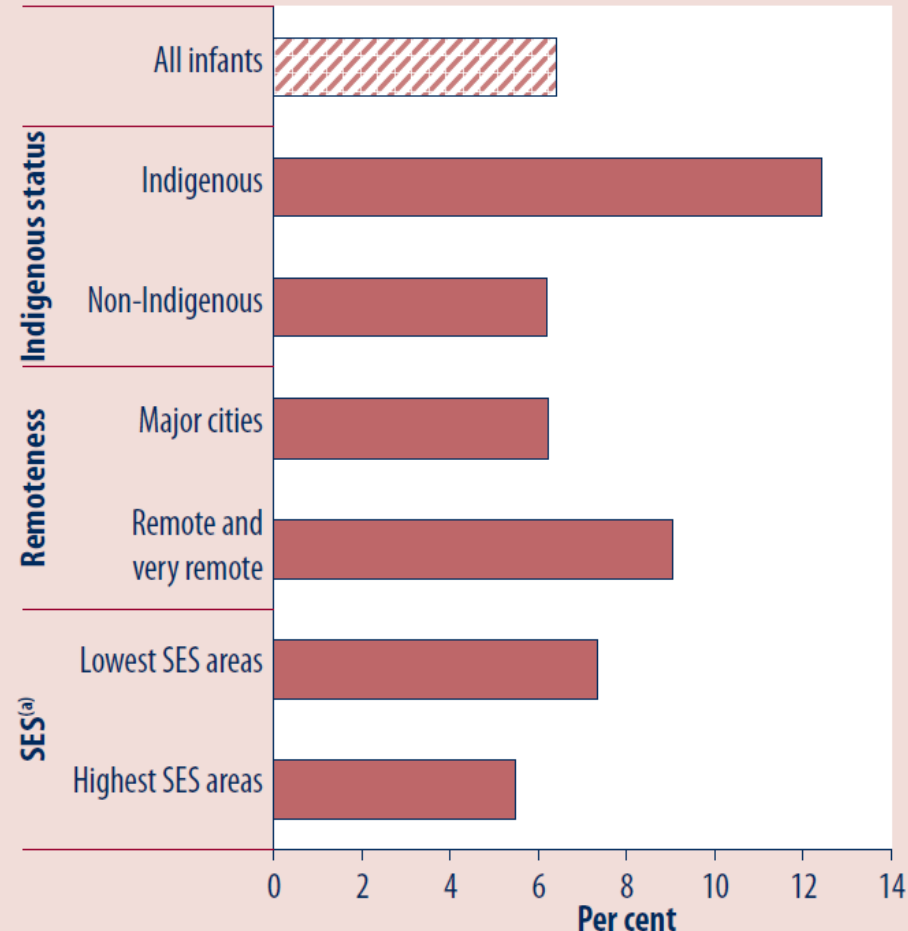


(a) See Appendix 1 Methods for explanation of socioeconomic status (SES).

Note: Remoteness and socioeconomic status based on mother's usual place of residence.

Sources: Laws & Hilder 2008; AIHW National Perinatal Data Collection, unpublished data.

Figure 19.2: Women who smoked during pregnancy, by population group, 2006



(a) See Appendix 1 Methods for explanation of socioeconomic status (SES).

Source: AIHW National Perinatal Data Collection.

Figure 21.3: Low birthweight infants, by population group of mother, 2006

Preschool

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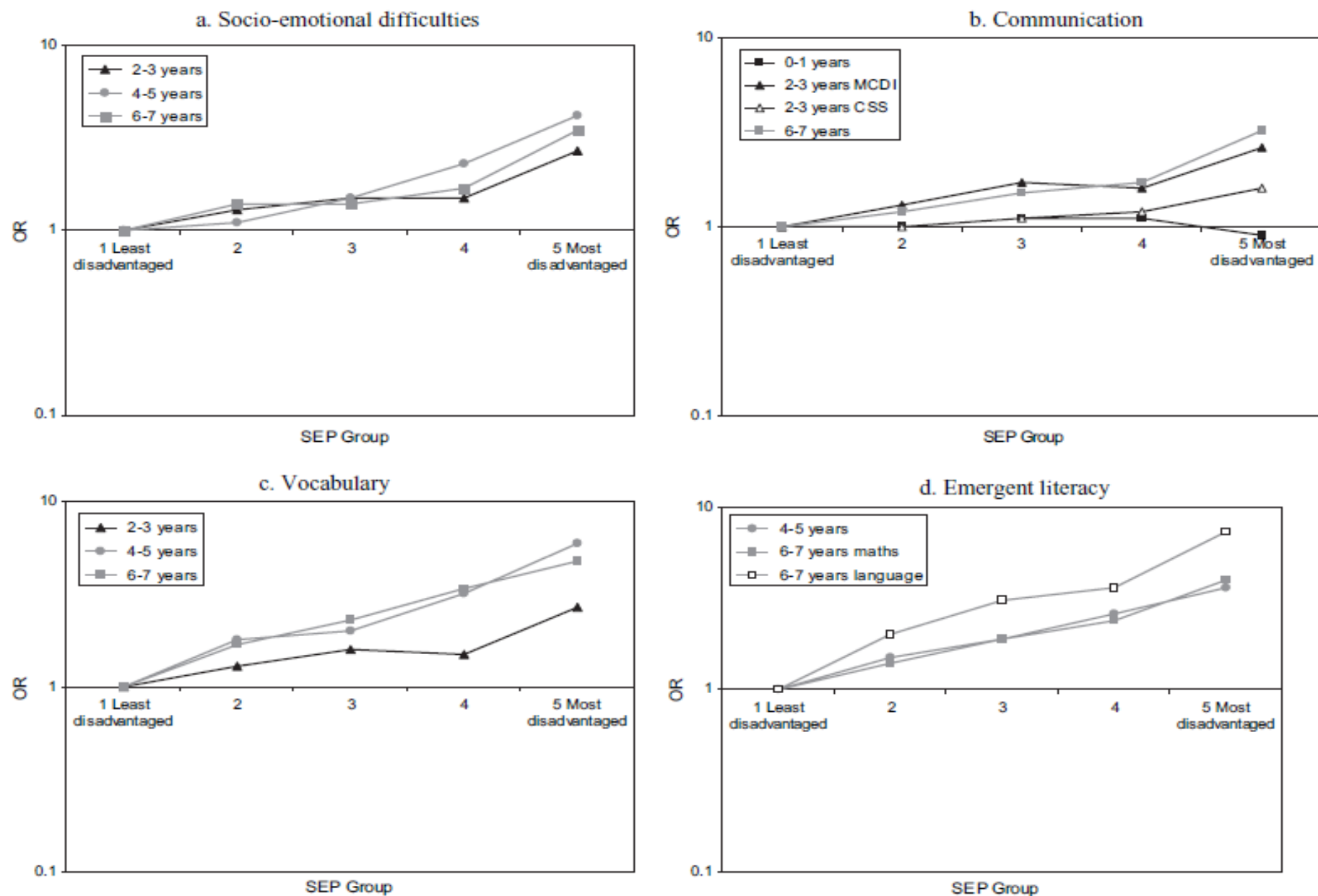


Figure 1 ORs (presented on a log scale) by socioeconomic position quintile for socio-emotional difficulties, and poor communication, vocabulary and emergent literacy skills.

School entry

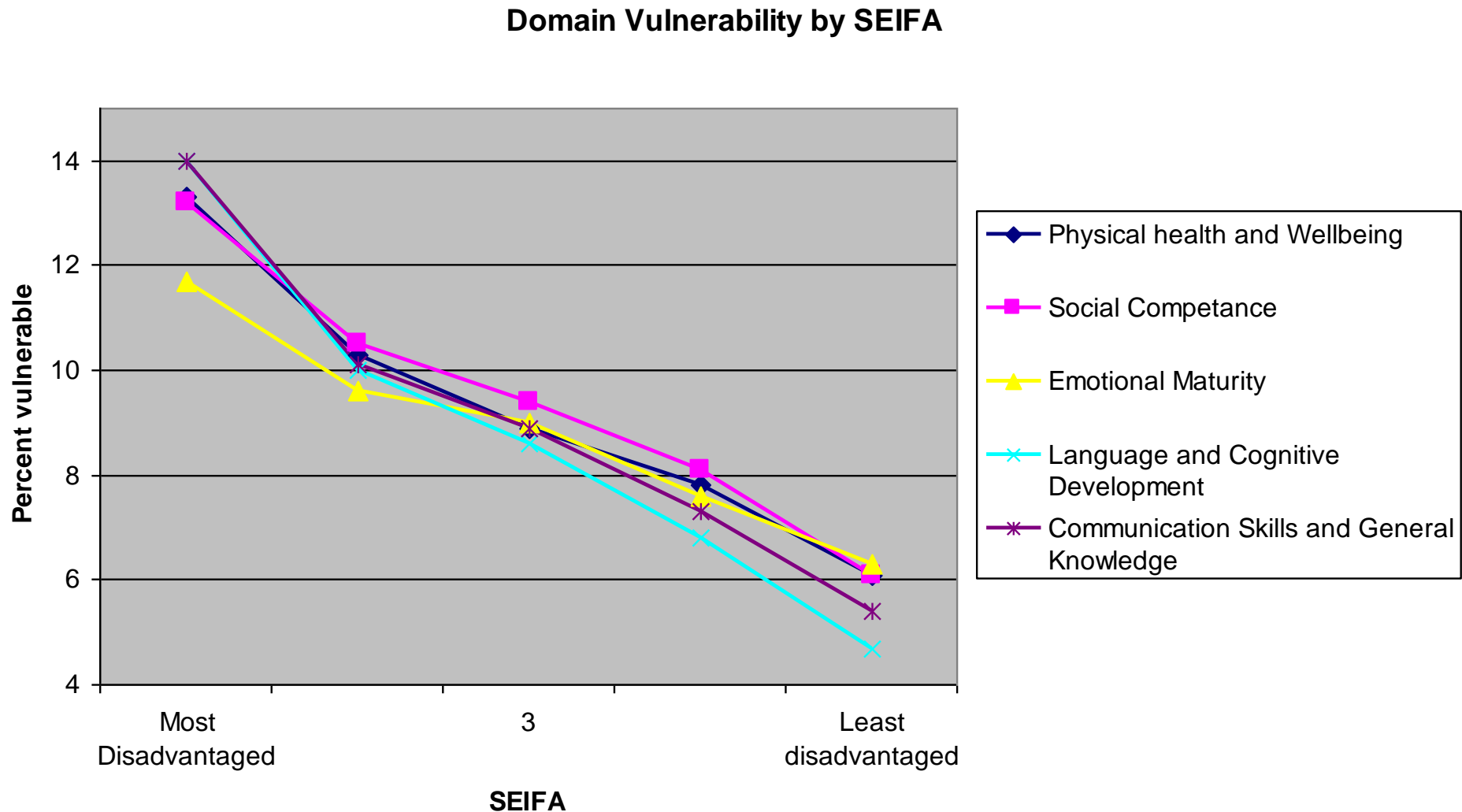
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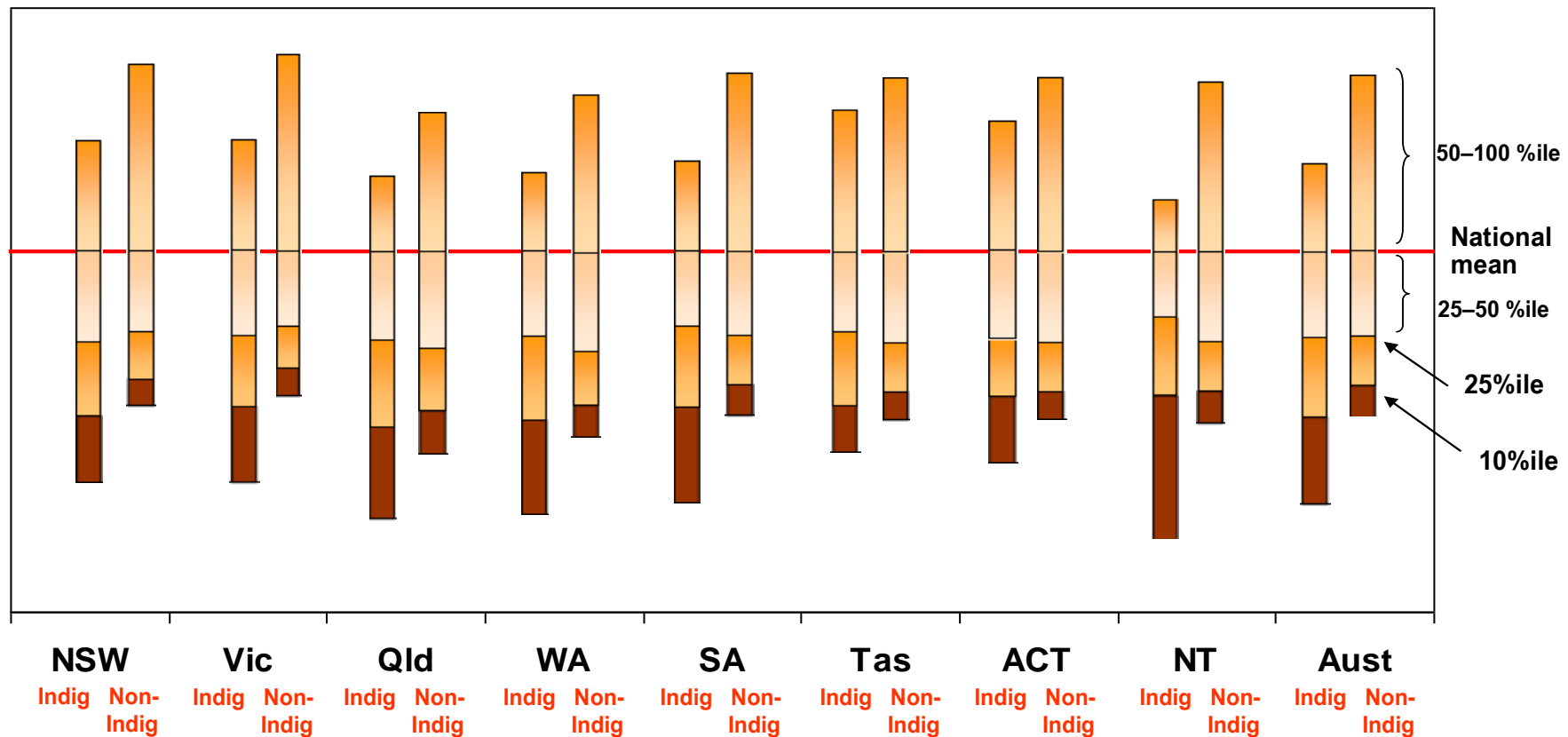
AEDI Domain comparison – vulnerability by SEIFA

N~261,000 (2009)



Disadvantage begins early in life

AEDI developmental scores of 5 year olds: Australia, 2009



NAPLAN

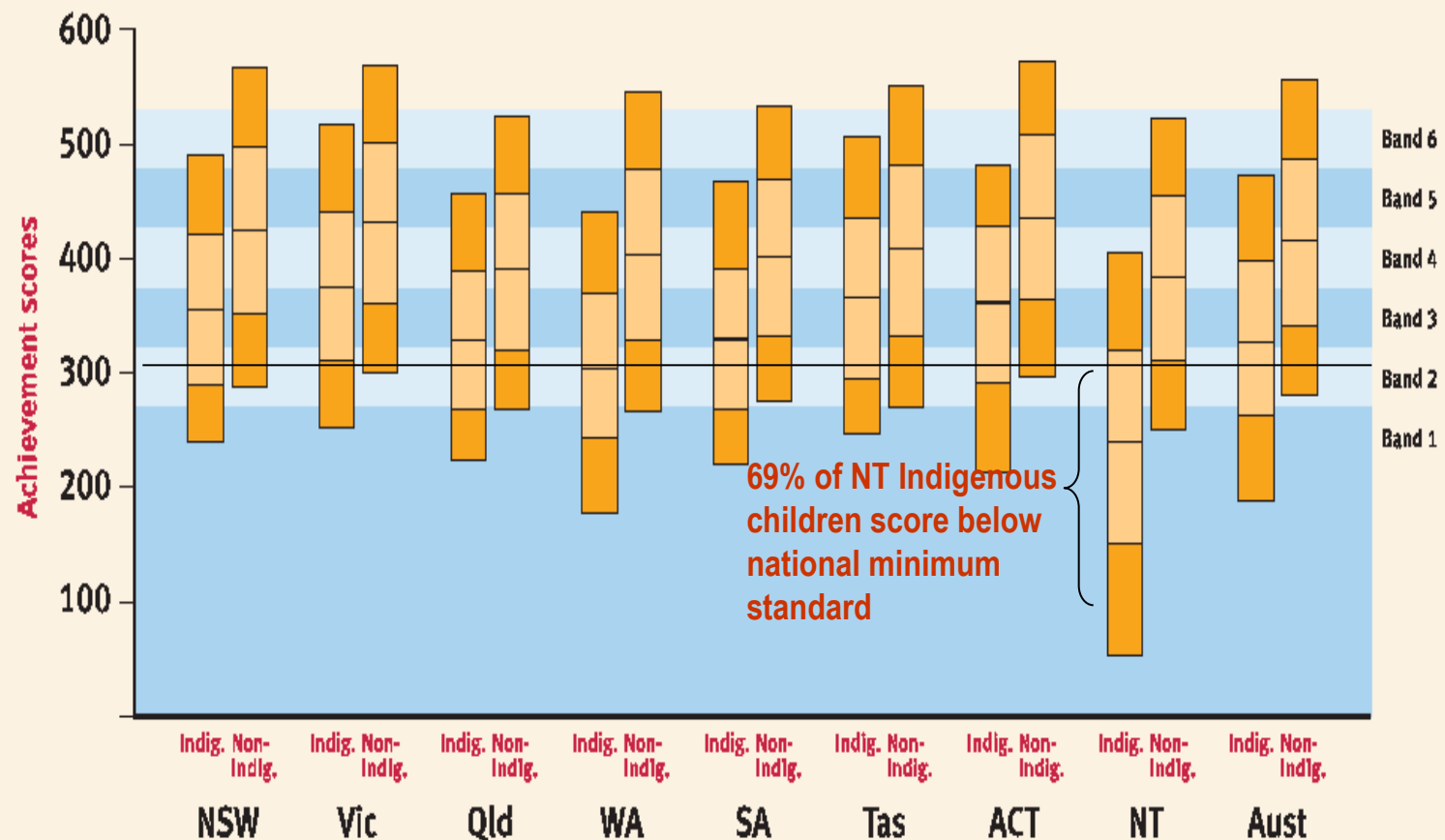
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NAPLAN Year 3 Reading

Figure 3.R3: Achievement of Year 3 Students in Reading, by Indigenous Status, by State and Territory, 2009.



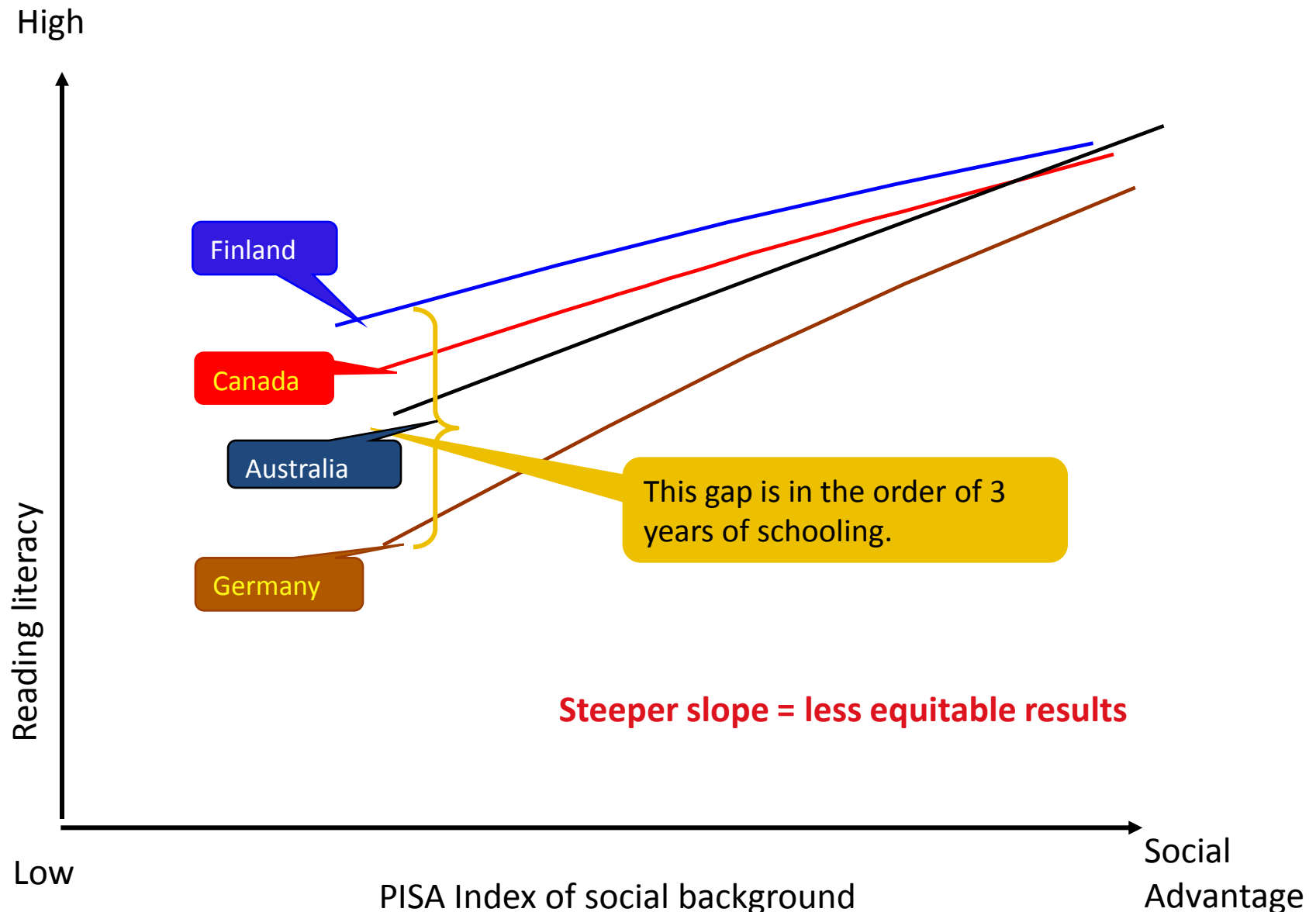
Secondary school

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Social background & reading literacy (PISA 2000)



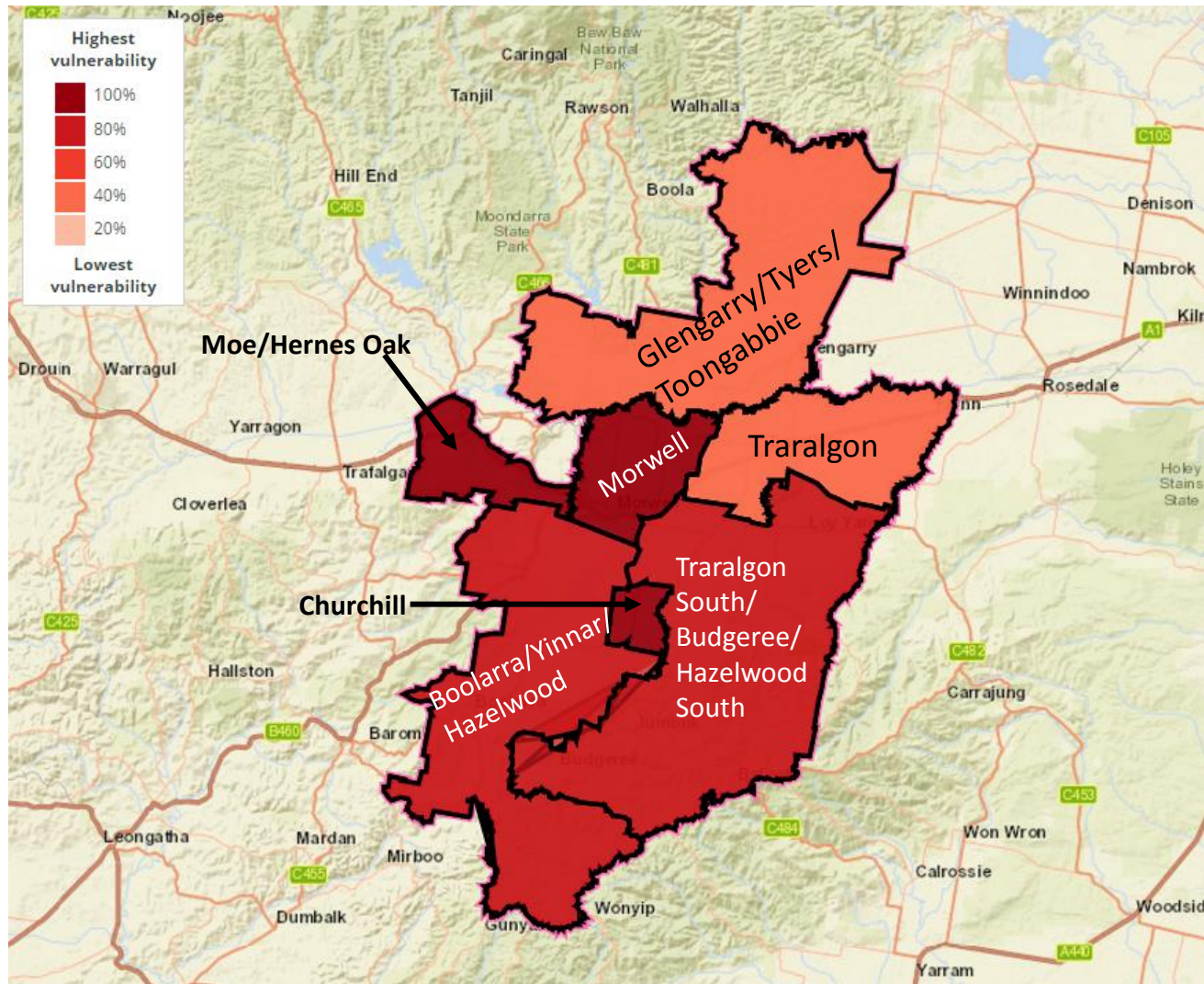
4. UNDERSTANDING GEOGRAPHIC INEQUITIES

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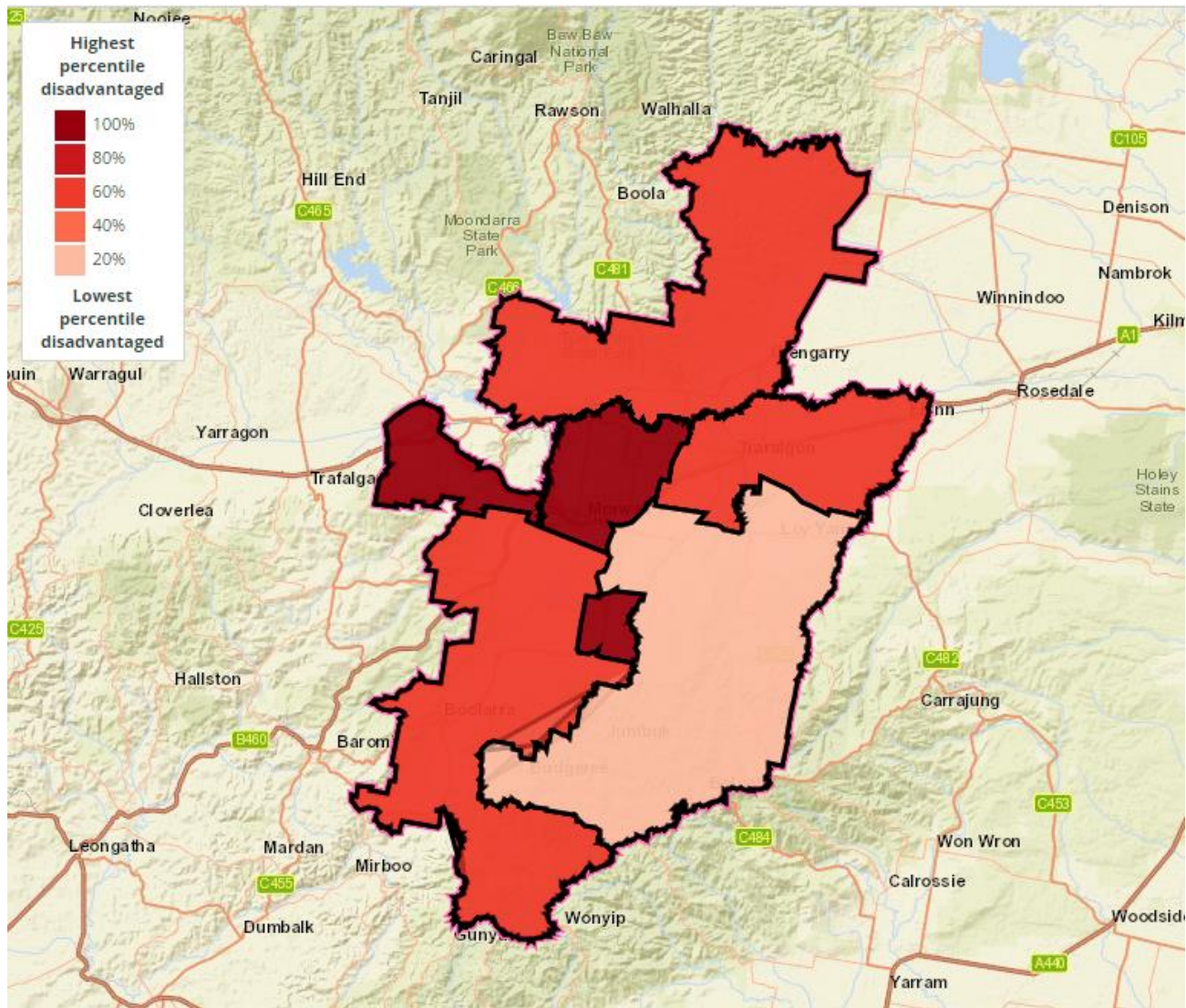
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Number and Percentage of children developmentally vulnerable on one or more domains Latrobe community

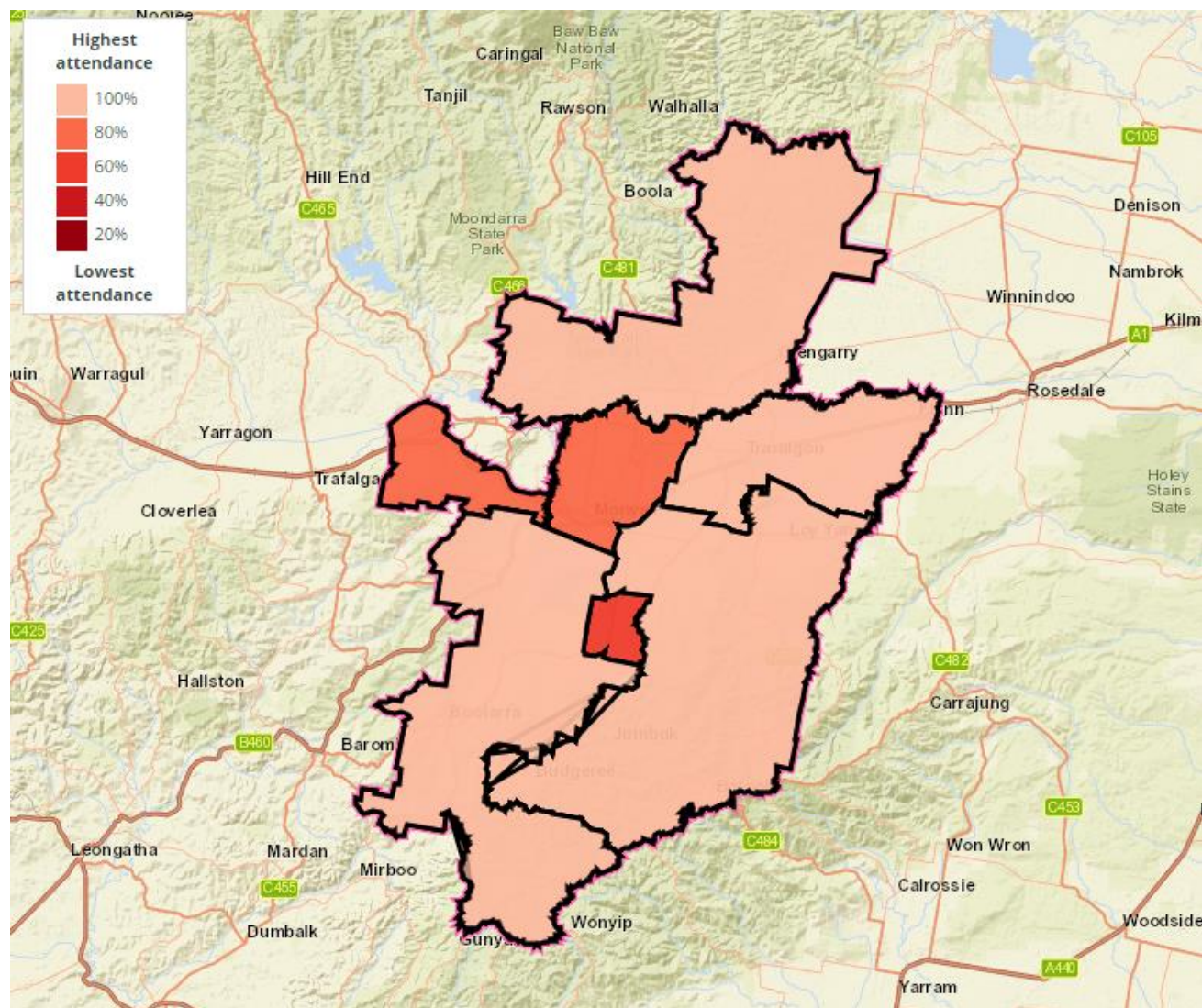


SEIFA Score 2011 (Index of Relative Socio-Economic Disadvantage) – Total Population, ABS Data Latrobe community



Percentage of children who attended a preschool program 2015

Latrobe community



‘Complex social issues cannot be dealt with merely by interventions with children or by strengthening families or by building community capacity. Policy needs an integrated focus on all 3 elements: children, families and communities.’

- A. Hayes, M Gray, AIFS, 2008

5. CONTEXTUAL DRIVERS: PRINCIPLES (LEVERS) FOR CHANGE

- Equity
- Ecology
- Early intervention
- Early childhood

Equity

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Inequity is the presence of systematic and potentially remediable differences among population groups defined socially, economically, or geographically

International Society for Equity in Health [<http://www.iseqh.org>]

Venkatapuram S, Bell R, Marmot M: **The right to sutures: social epidemiology, human rights, and social justice.** *Health Hum Rights* 2010, 12:3-16.

Equality

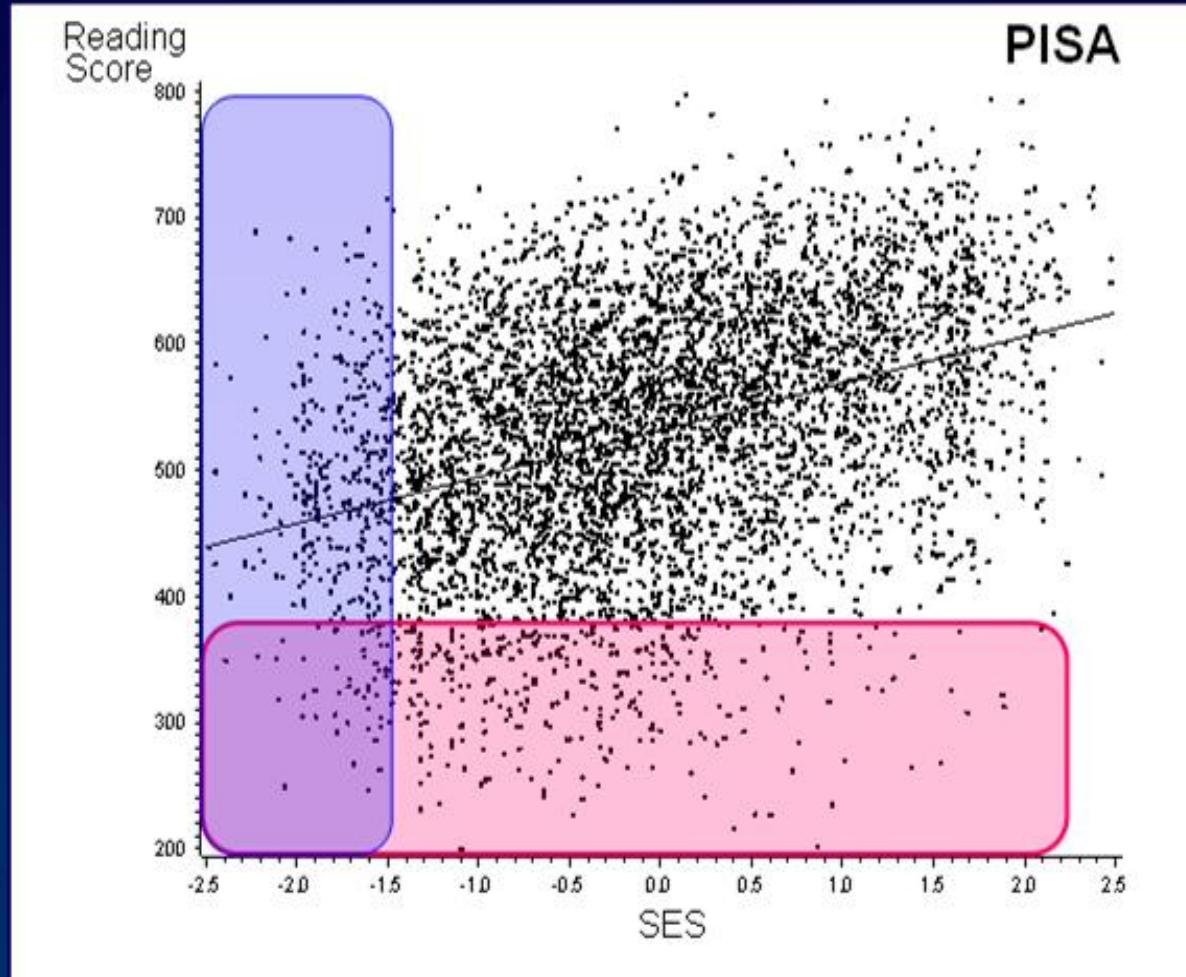


Equity



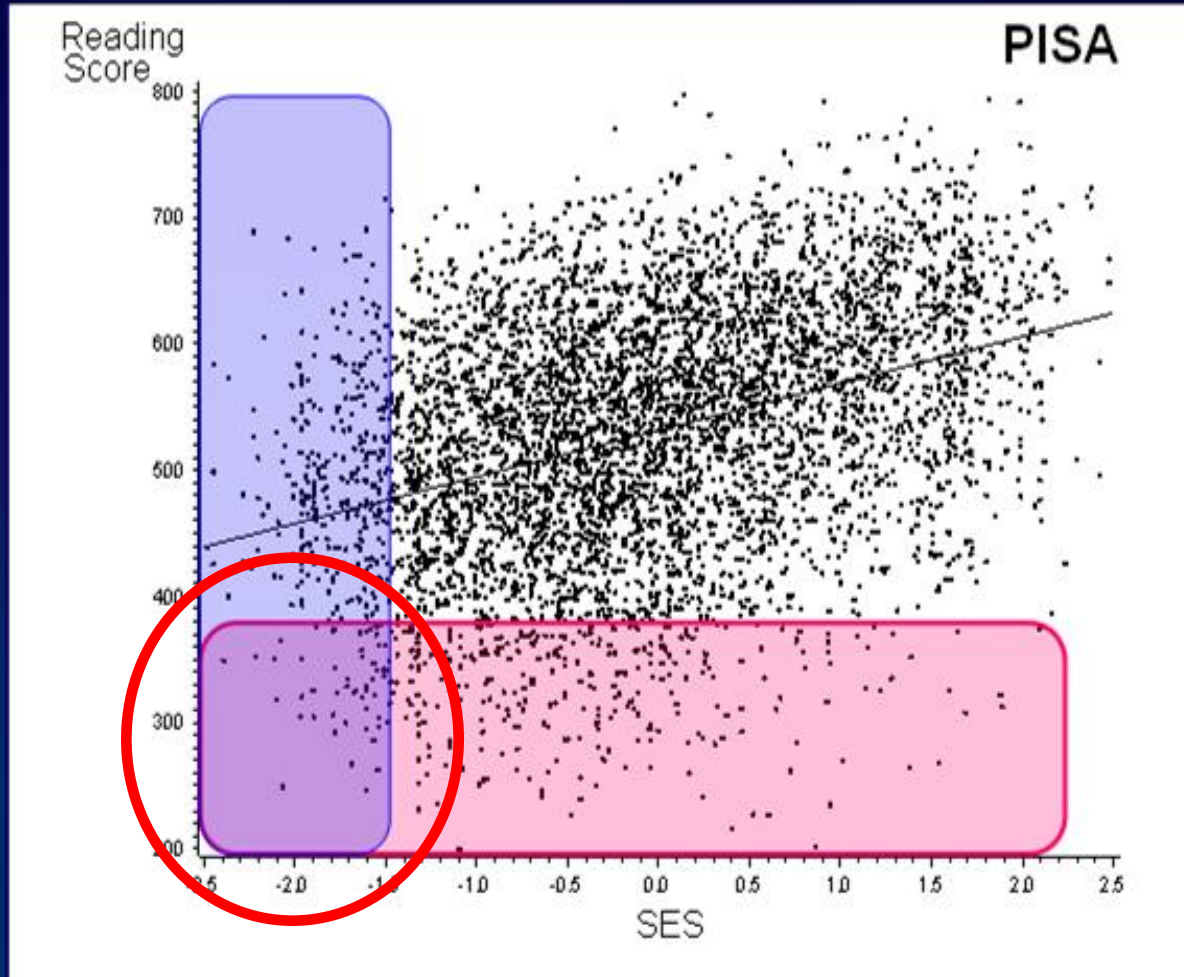
Targeting low-ses students v. targeting low performing students

Source: Masters (2009) using PISA data



Targeting low-ses students v. targeting low performing students

Source: Masters (2009) using PISA data

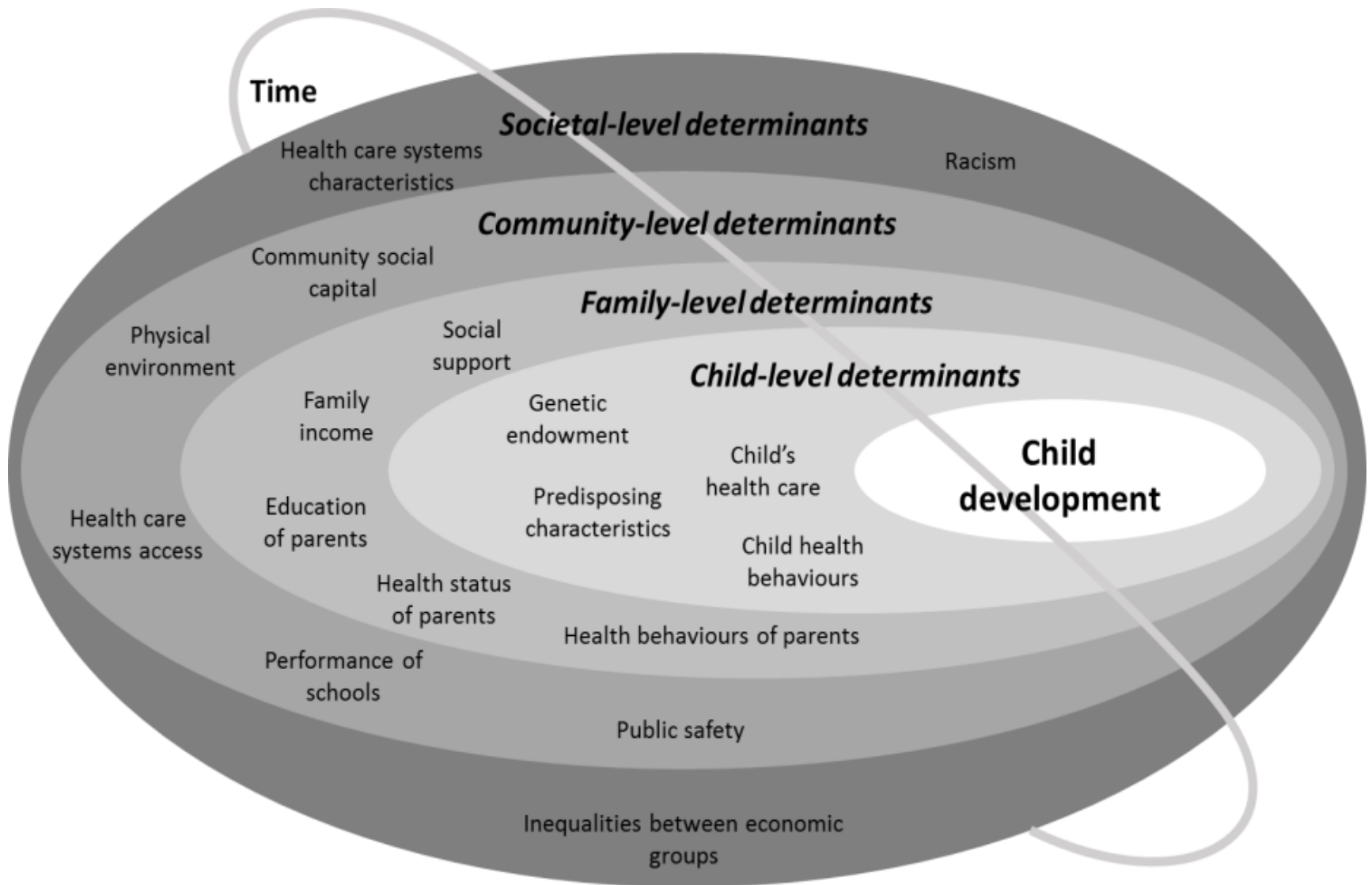


Ecology

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Newacheck, PW, Rising, JP & Kim, SE 2006, 'Children at risk for special health care needs', *Pediatrics*, vol. 118, pp. 334-342

Early intervention

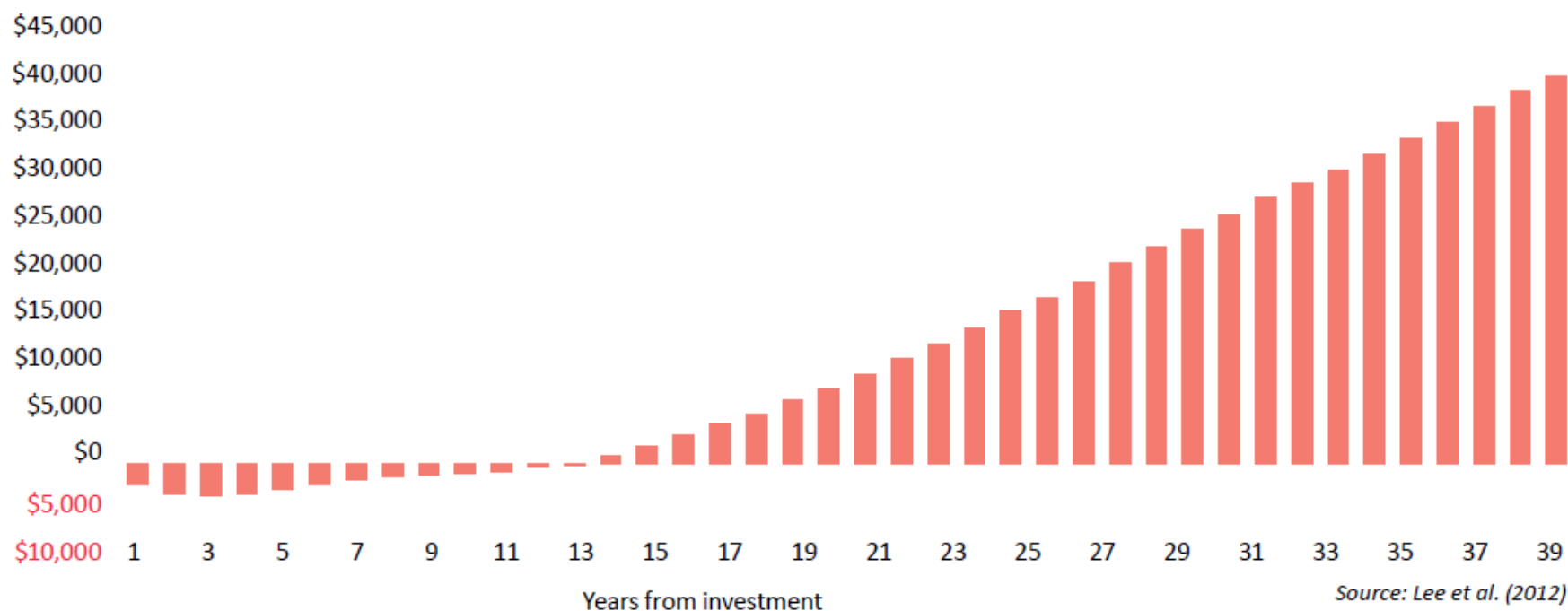
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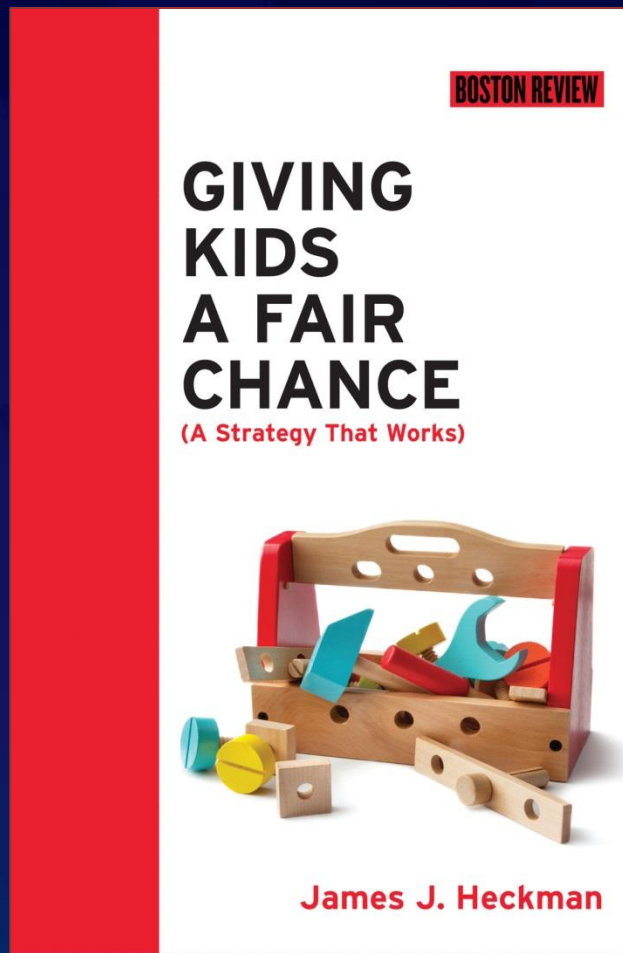
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CUMULATIVE BENEFITS OF EARLY INTERVENTIONS

Figure 2: Cumulative economic benefits of early education programs





In short, to foster individual success, greater equality of opportunity, a more dynamic economy, and a healthier society, we need a major shift in social policy toward early intervention, with later interventions designed to reinforce those early efforts.

James J. Heckman (2013). **Giving Kids a Fair Chance (A Strategy That Works)**. Cambridge, Massachusetts: MIT Press.

Early childhood

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Brain development

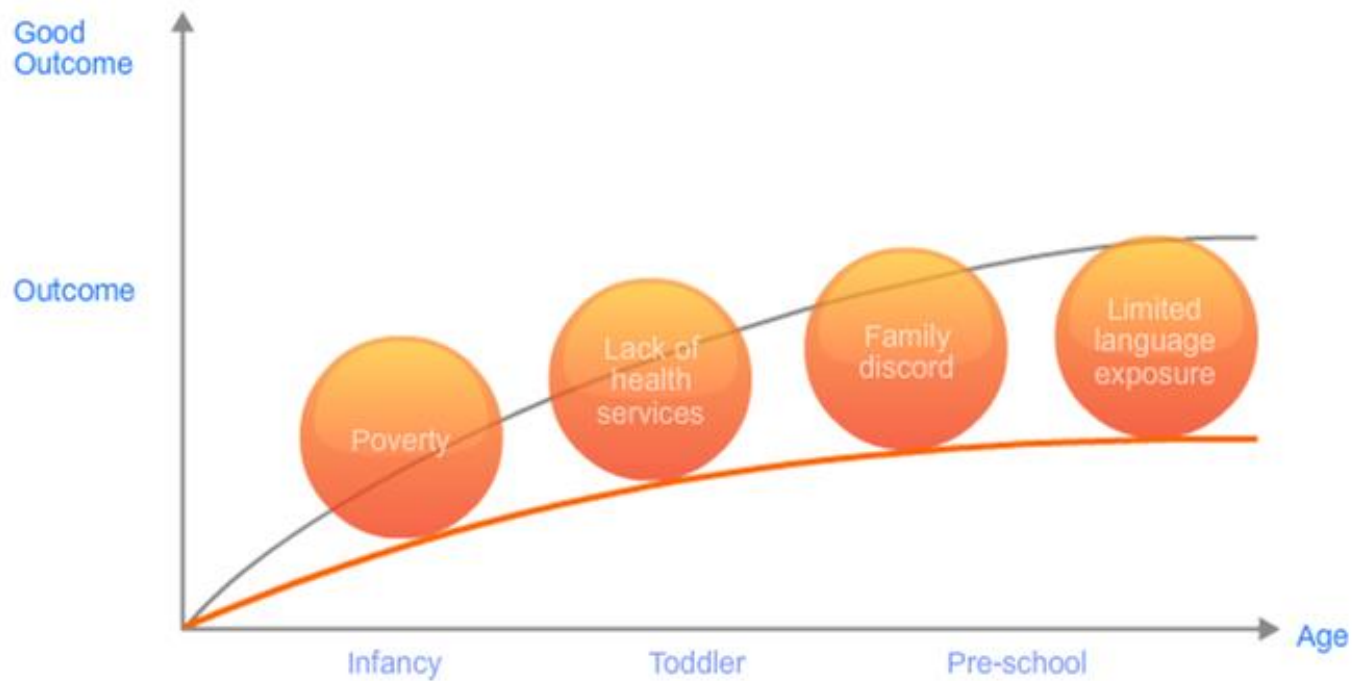
Building strong foundations

Getting the foundations right is important – healthy brain development is a prerequisite for future health and wellbeing.



Life course

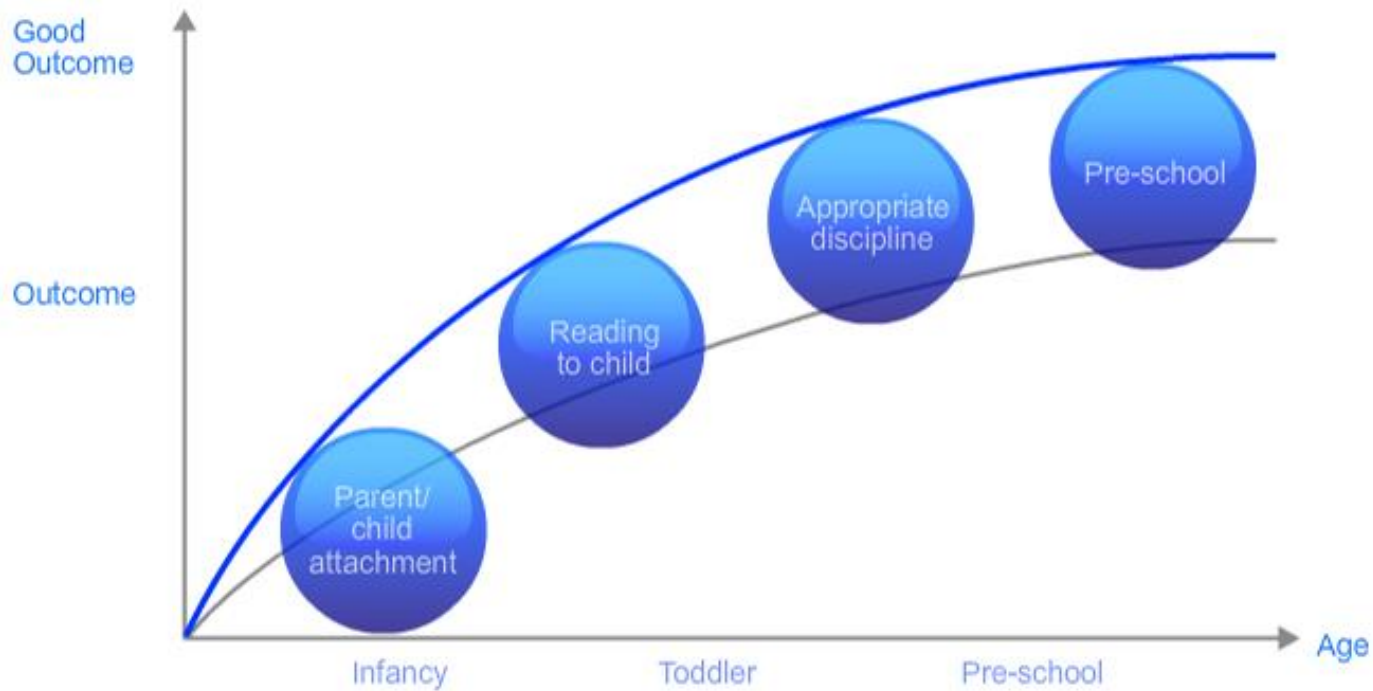
The accumulation of multiple risk factors means that children are more likely to be developmentally vulnerable.



Protective Factors



Risk Factors



The accumulation of multiple protective factors provides children with the best advantage.

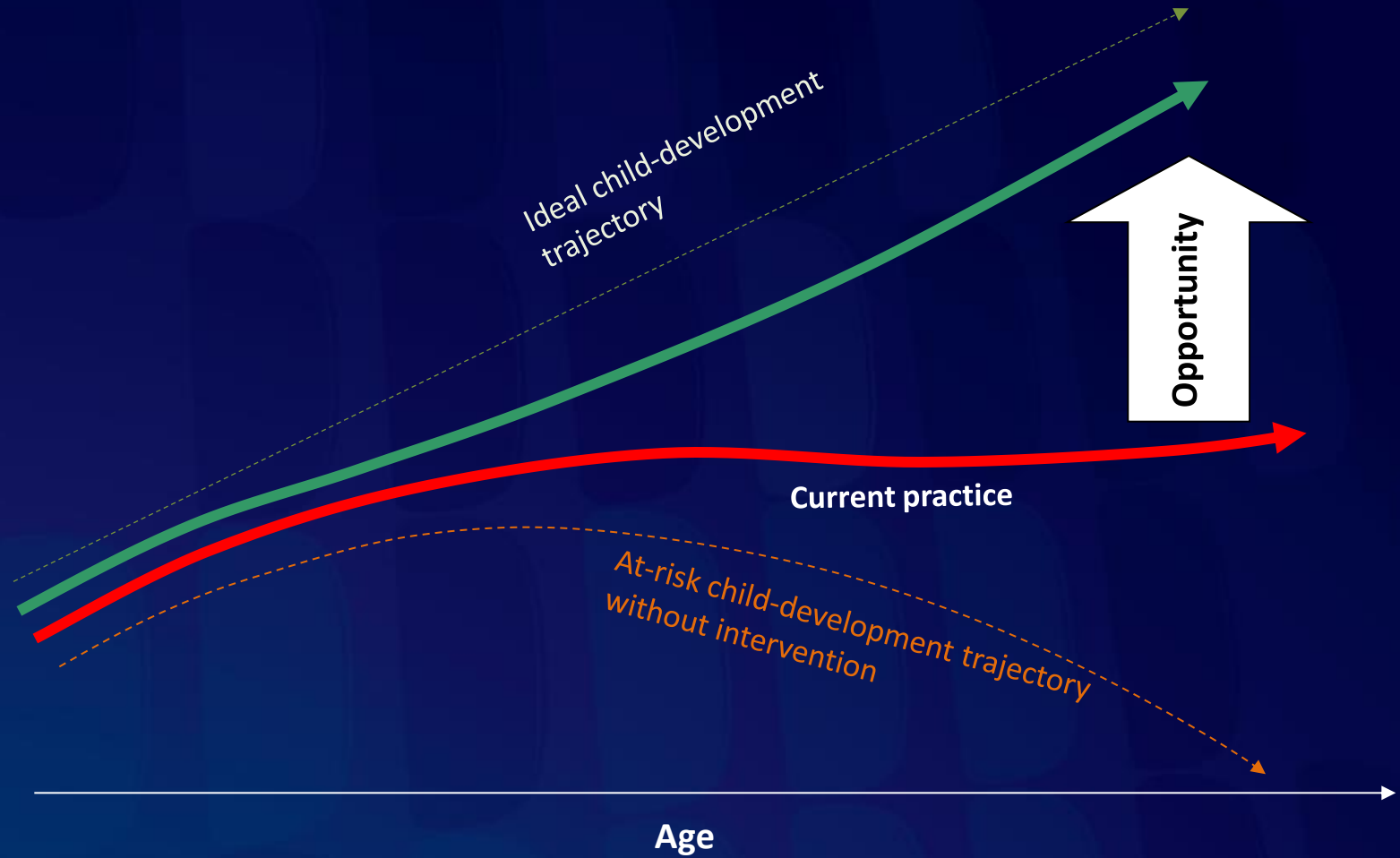


Protective Factors



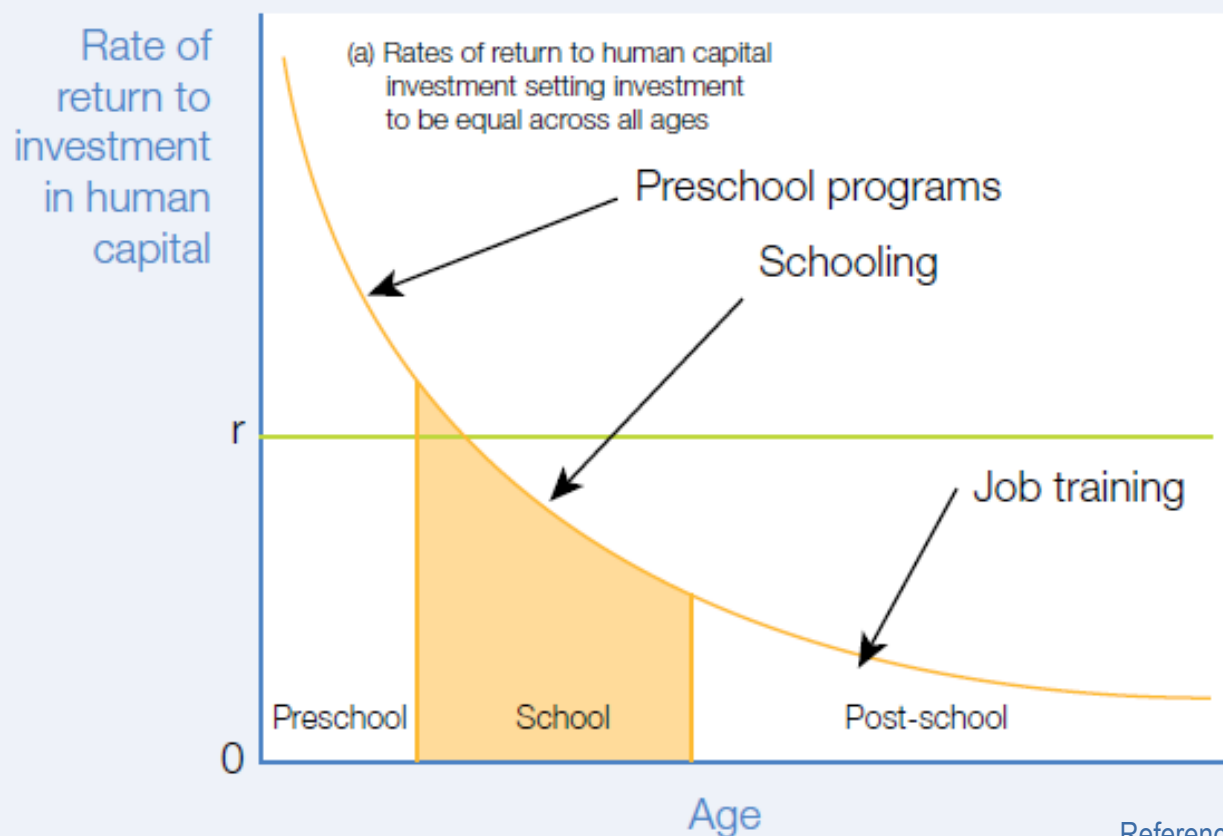
Risk Factors

Developmental health opportunity



Economics of human capital

Return on investment in the early years



Reference: Cunha et. al., 2006.

6. WHAT CAN WE DO TO CHANGE CHILDREN'S CHANCES?

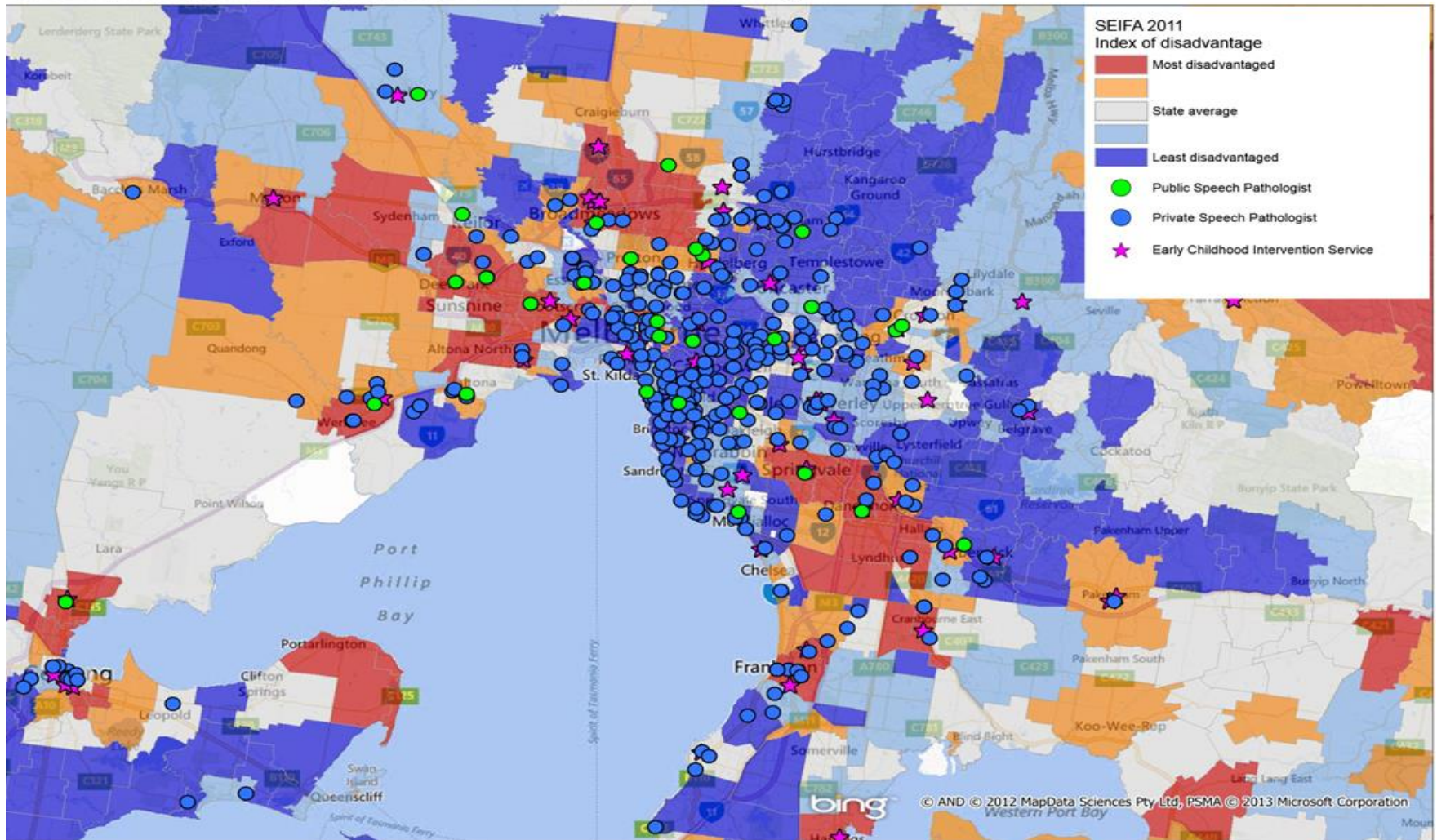
How to make a difference

- More **EQUITABLE** use of universal health and education platforms
- High quality ECEC
- Strong home learning environments
- Supportive communities

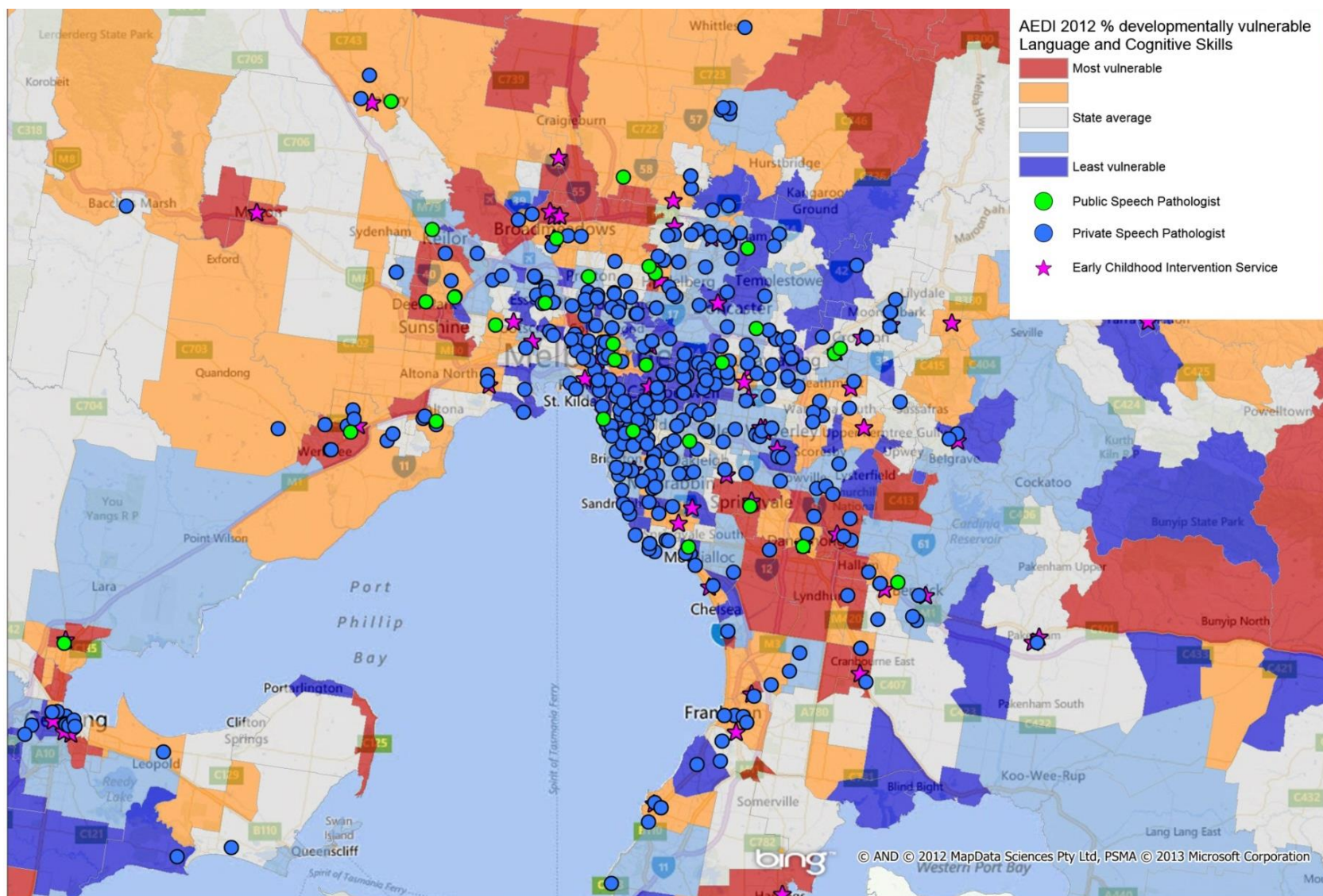
More EQUITABLE use of universal health and education platforms

Locations of speech pathologists

Public and private Speech pathologist locations, and SEIFA 2011 Index of Disadvantage



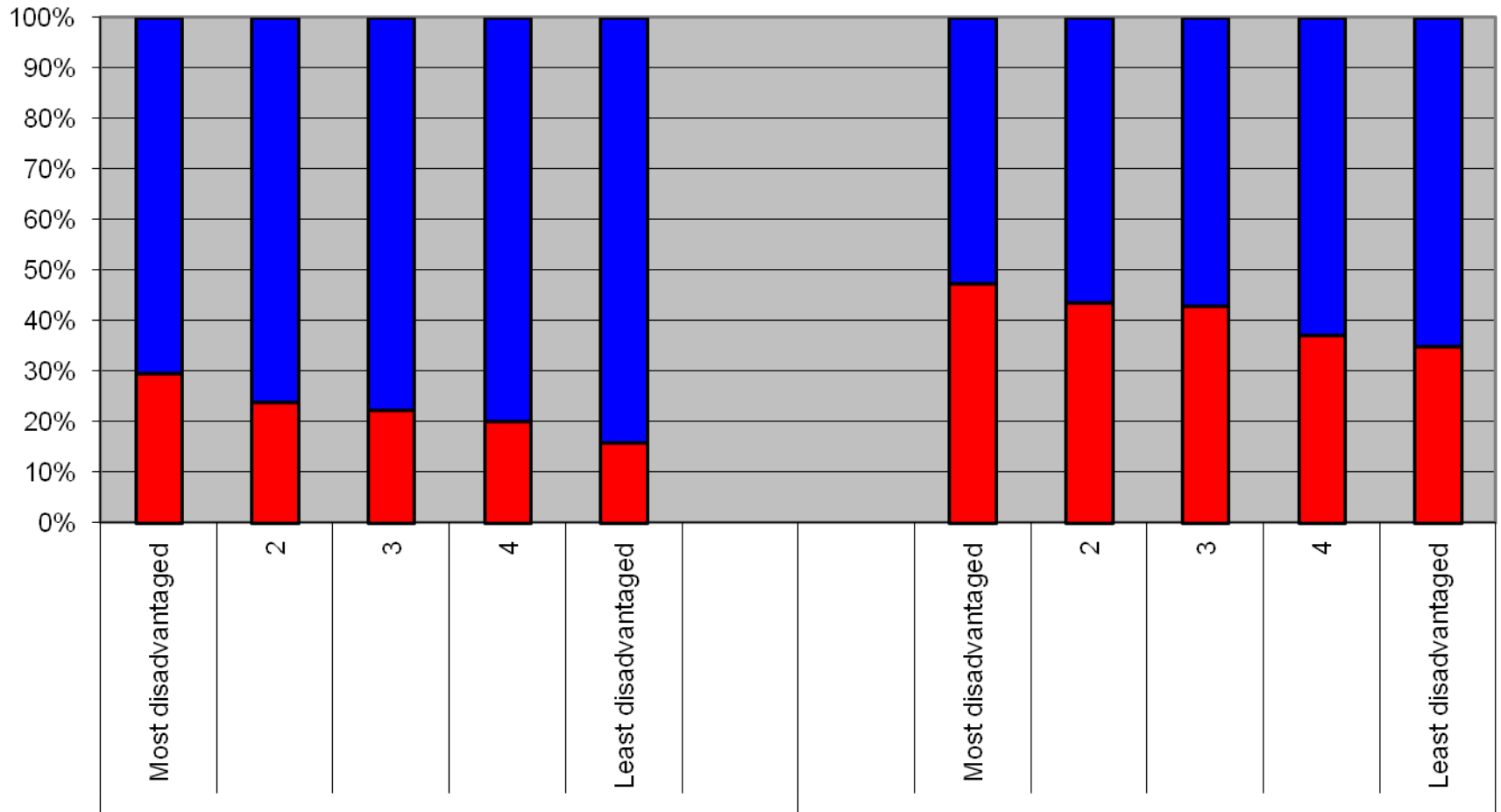
Source: NHMRC CRE in Child Language, 2014



Source: NHMRC CRE in Child Language, 2014

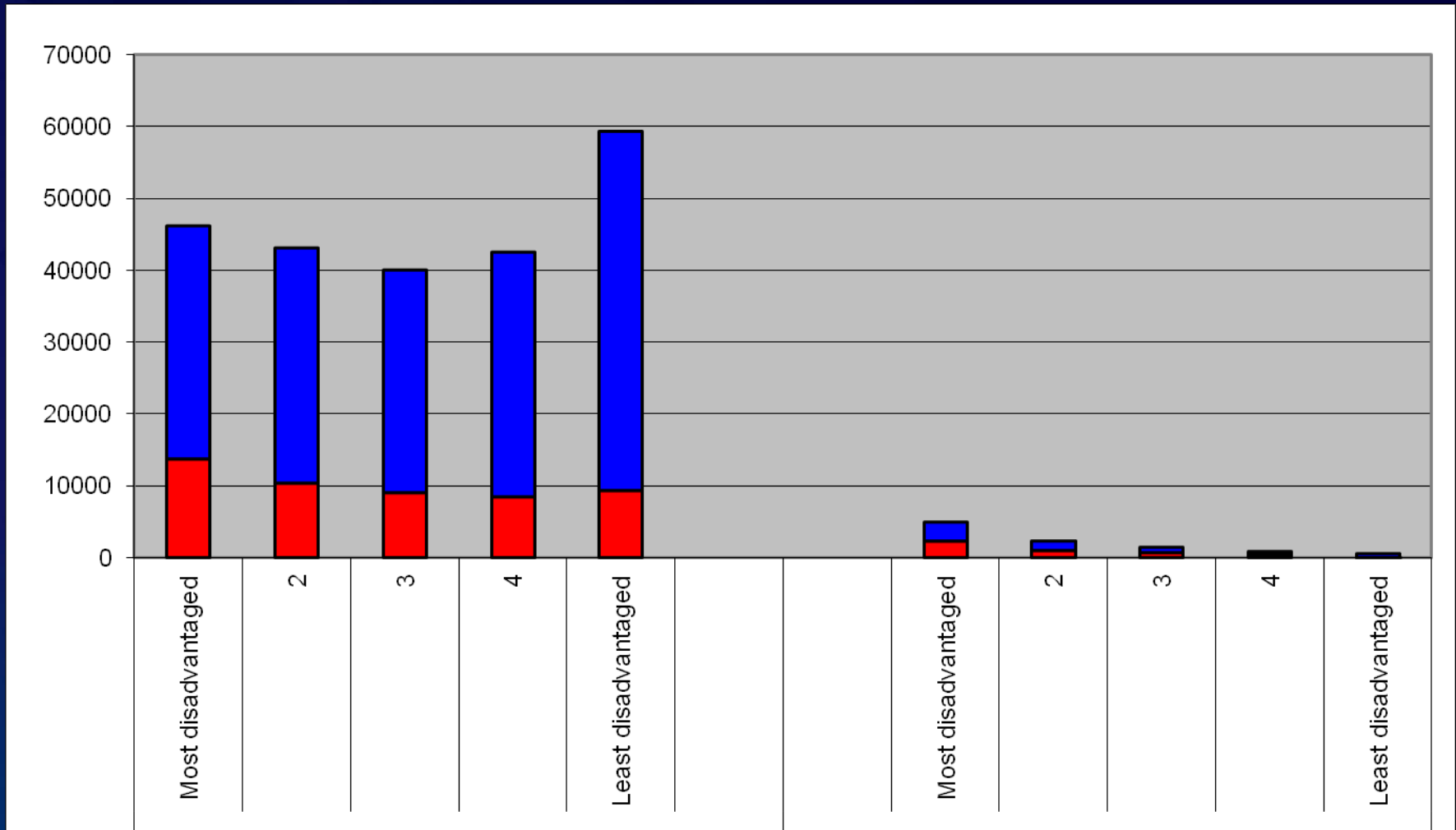


Percent: AEDI Vulnerability by Indigenous and SEIFA (2009)



Red= Vulnerable on one or more domains
Blue = No vulnerability

Number: Vulnerability by Indigenous and SEIFA (AEDI 2009)



Red= Vulnerable on one or more domains
Blue = No vulnerability

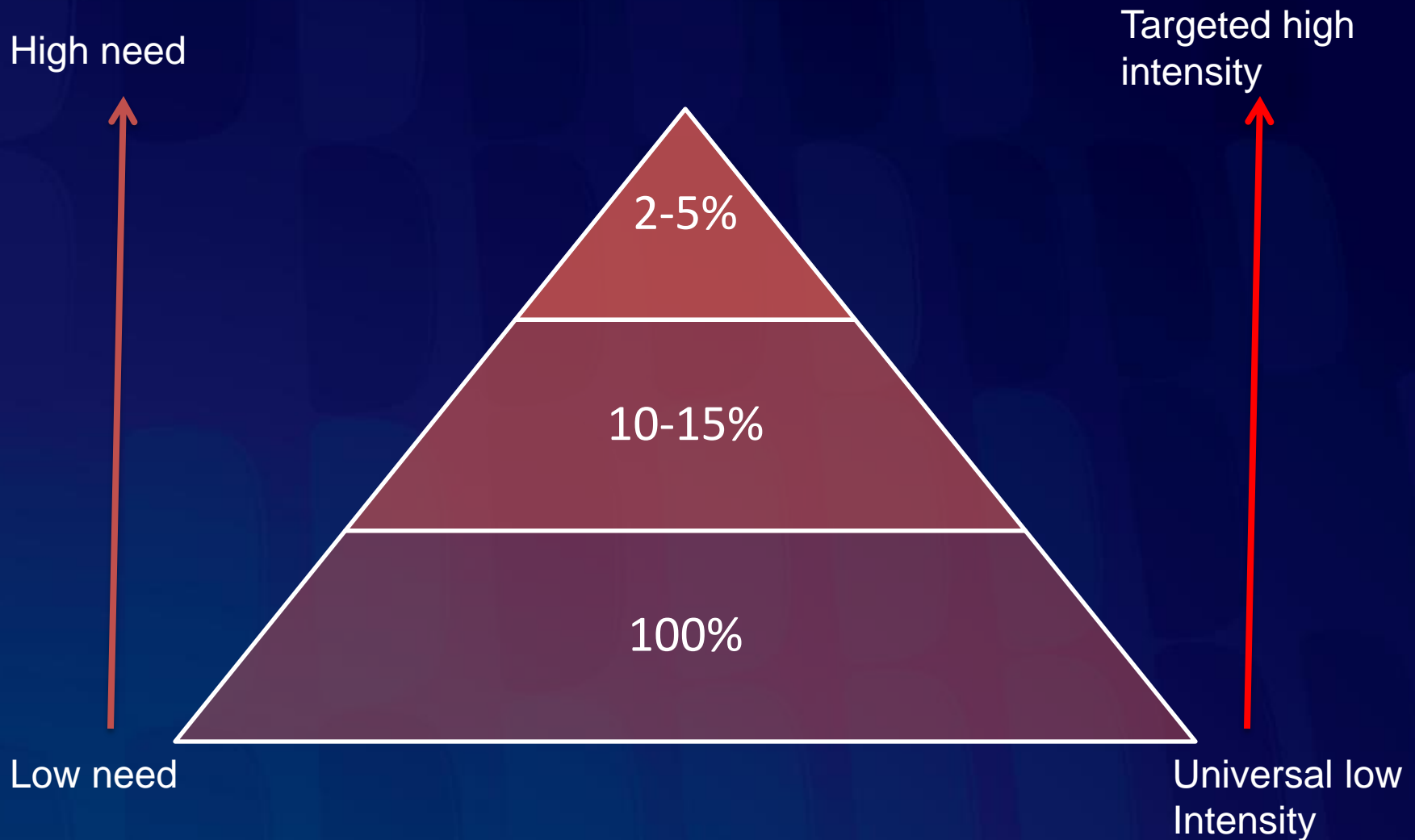


Focusing solely on the most disadvantaged will not reduce health inequalities sufficiently.

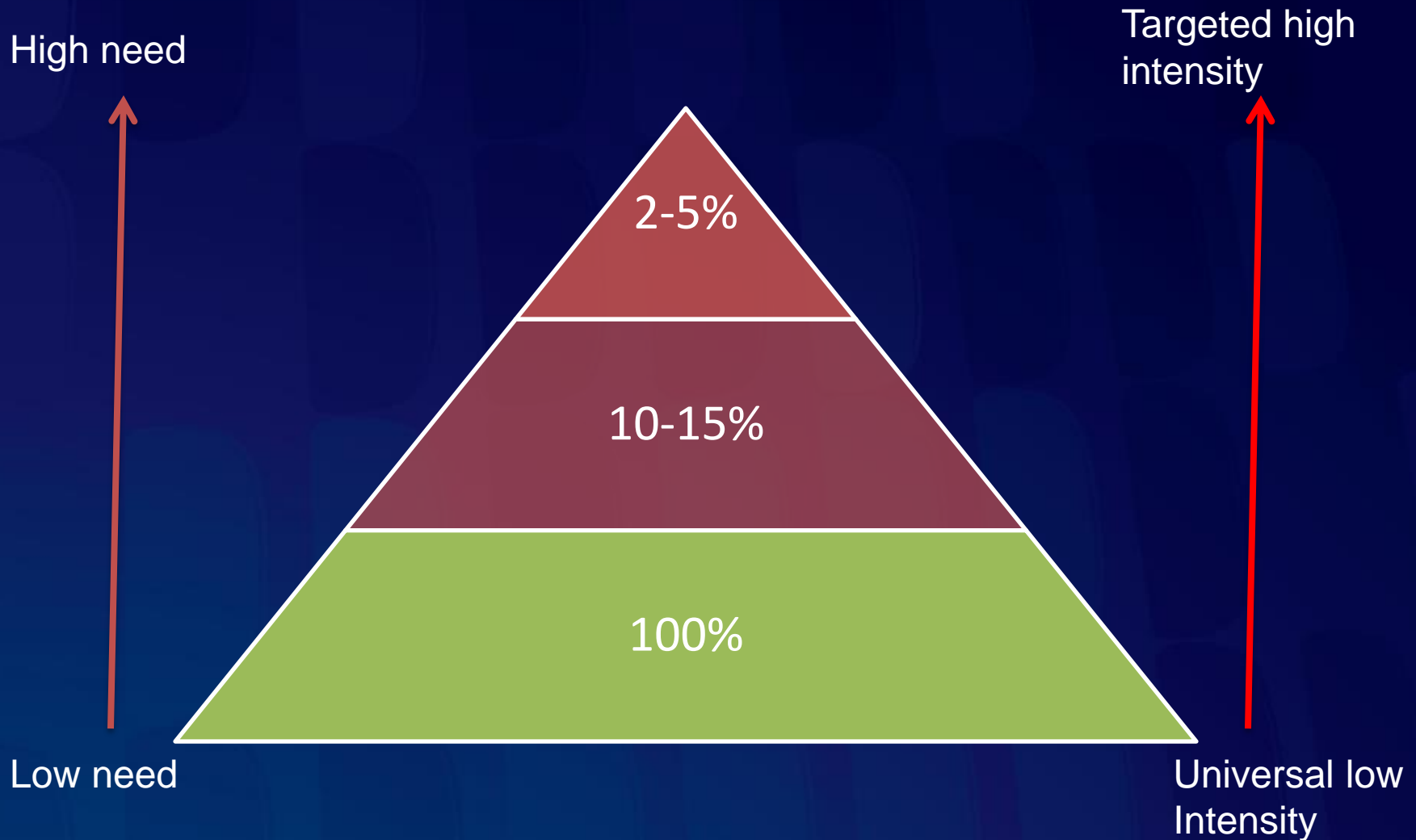
To reduce the steepness of the social gradient in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage.

We call this proportionate universalism.

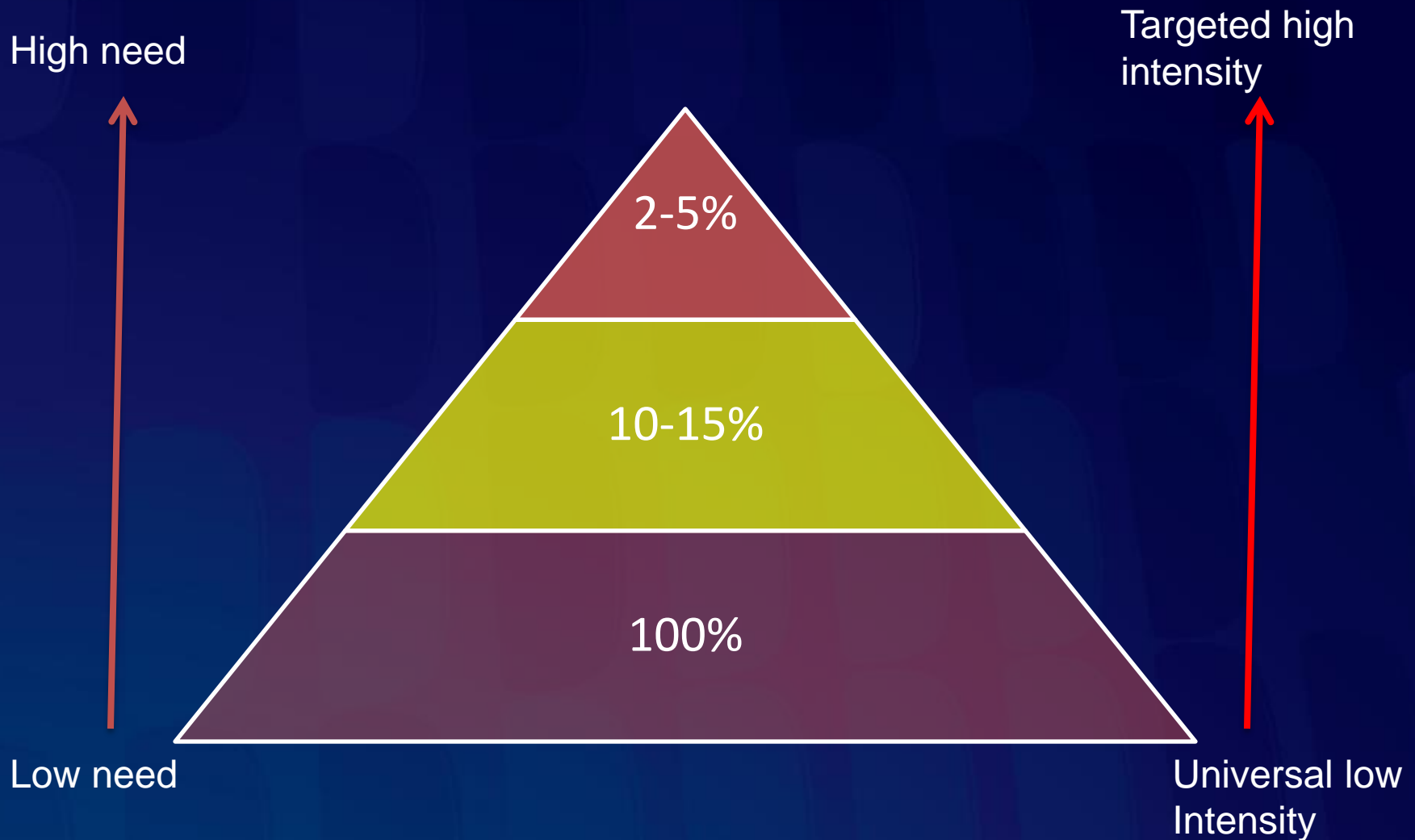
Tiered system of universal service delivery



Tiered system of universal service delivery



Tiered system of universal service delivery



CPOOL

Classroom Promotion of
ORAL LANGUAGE



Department of
Education & Training



MONASH
University

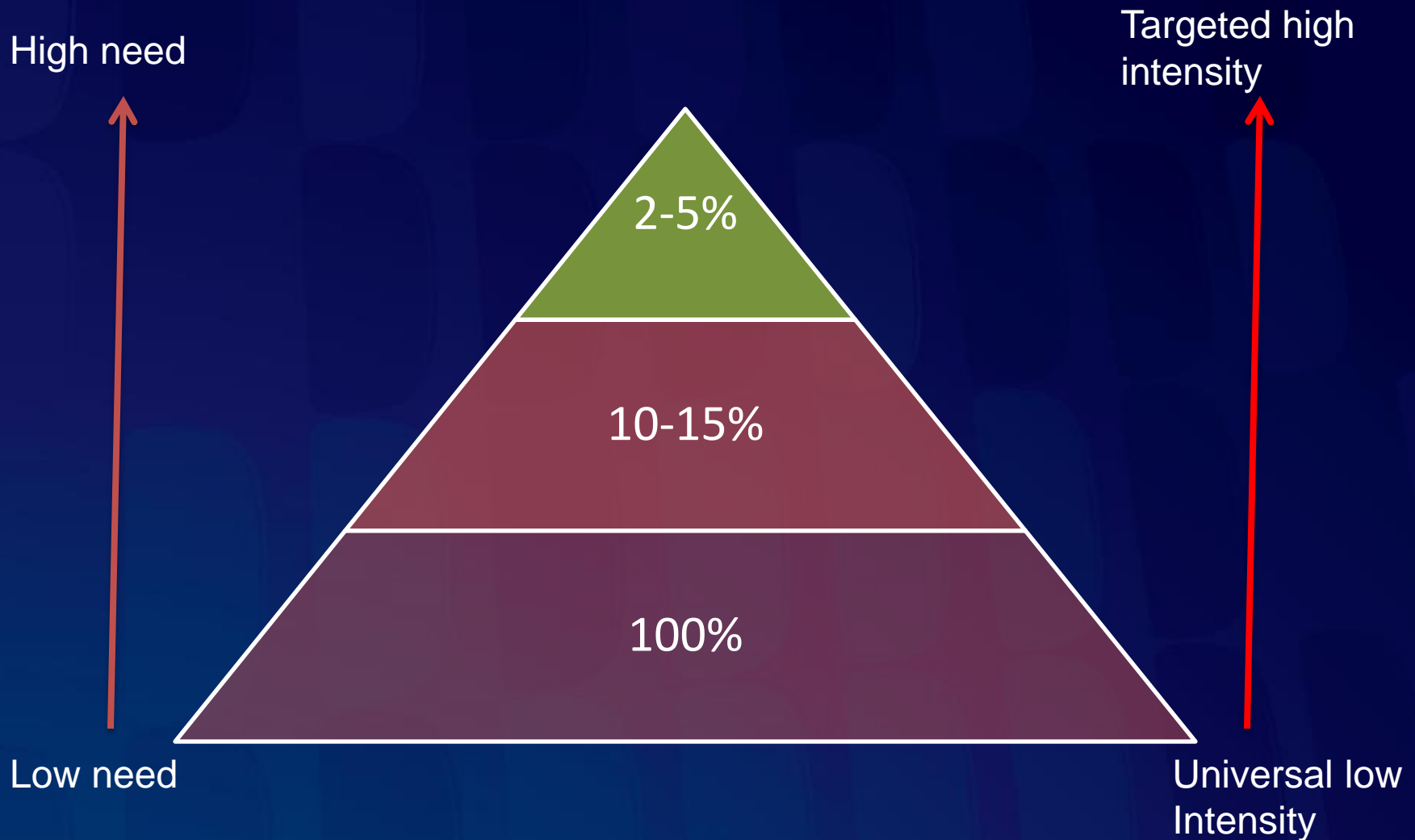


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Tiered system of universal service delivery





A national sustained nurse home visiting trial to promote family wellbeing and child development

High quality ECEC

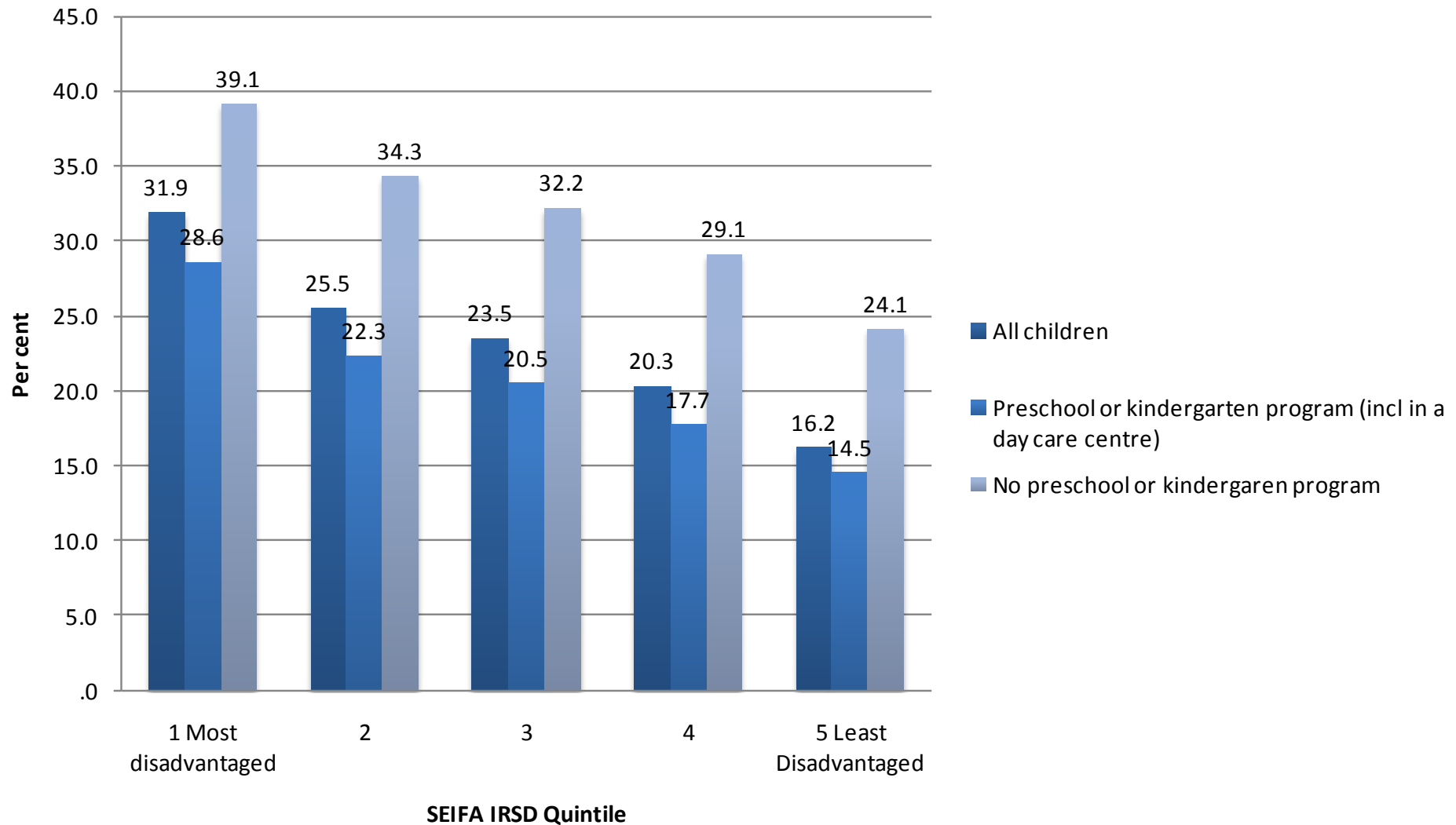
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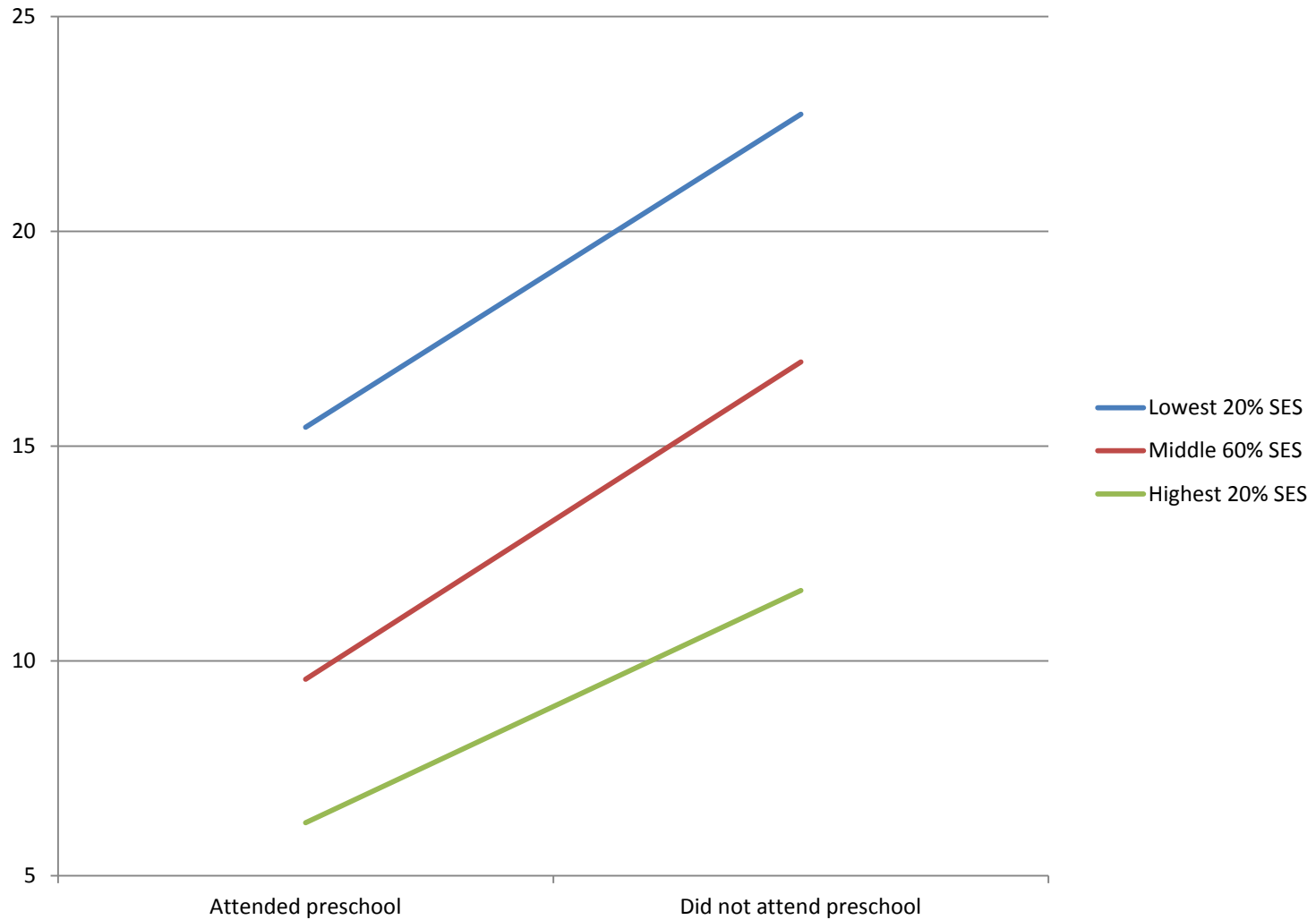


AEDI Results and preschool participation

Developmentally vulnerable on one or more AEDI domain



Equity and ECEC



Percent of children living in the top 20% of advantaged SES communities, middle 60% of SES communities, and bottom 20% of disadvantaged communities who are developmentally vulnerable on two or more AEDI domains.

Goldfeld, Sayers, O'Connor, O'Connor, Moore, Brinkman The relationship between early childhood education and care and children's developmental outcomes in Australia. (2013)

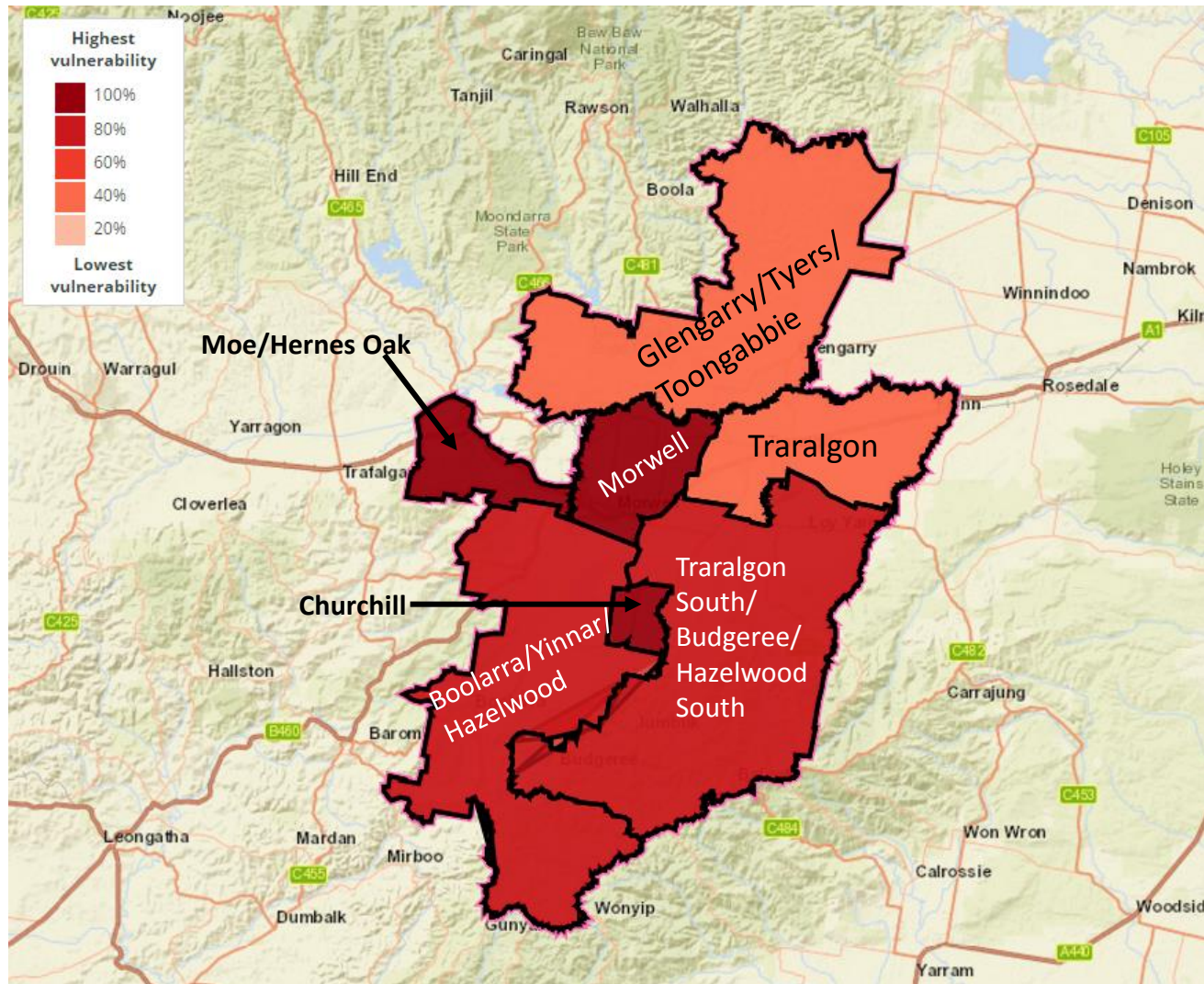
Community and neighbourhood as a platform for change

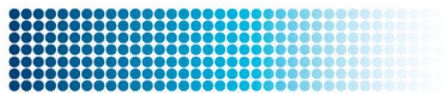
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Number and Percentage of children developmentally vulnerable on one or more domains Latrobe community





A snapshot of place-based activity promoting children's wellbeing

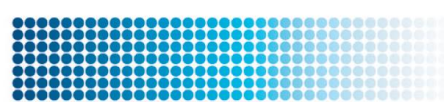
Collaborate for children: scoping project

*Produced by the Centre for Community Child Health
Funded by the Australian Government Department of Education*

November 2014



The Royal Children's
Hospital Melbourne



The evidence: what we know about place-based approaches to support children's wellbeing

Collaborate for children: scoping project

*Produced by the Centre for Community Child Health
Funded by the Australian Government Department of Education*

November 2014



The Royal Children's
Hospital Melbourne

Collective Impact

By John Kania & Mark Kramer

Stanford Social Innovation Review
Winter 2011

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Common Agenda

Continuous
Communication

Shared
Measurement
System

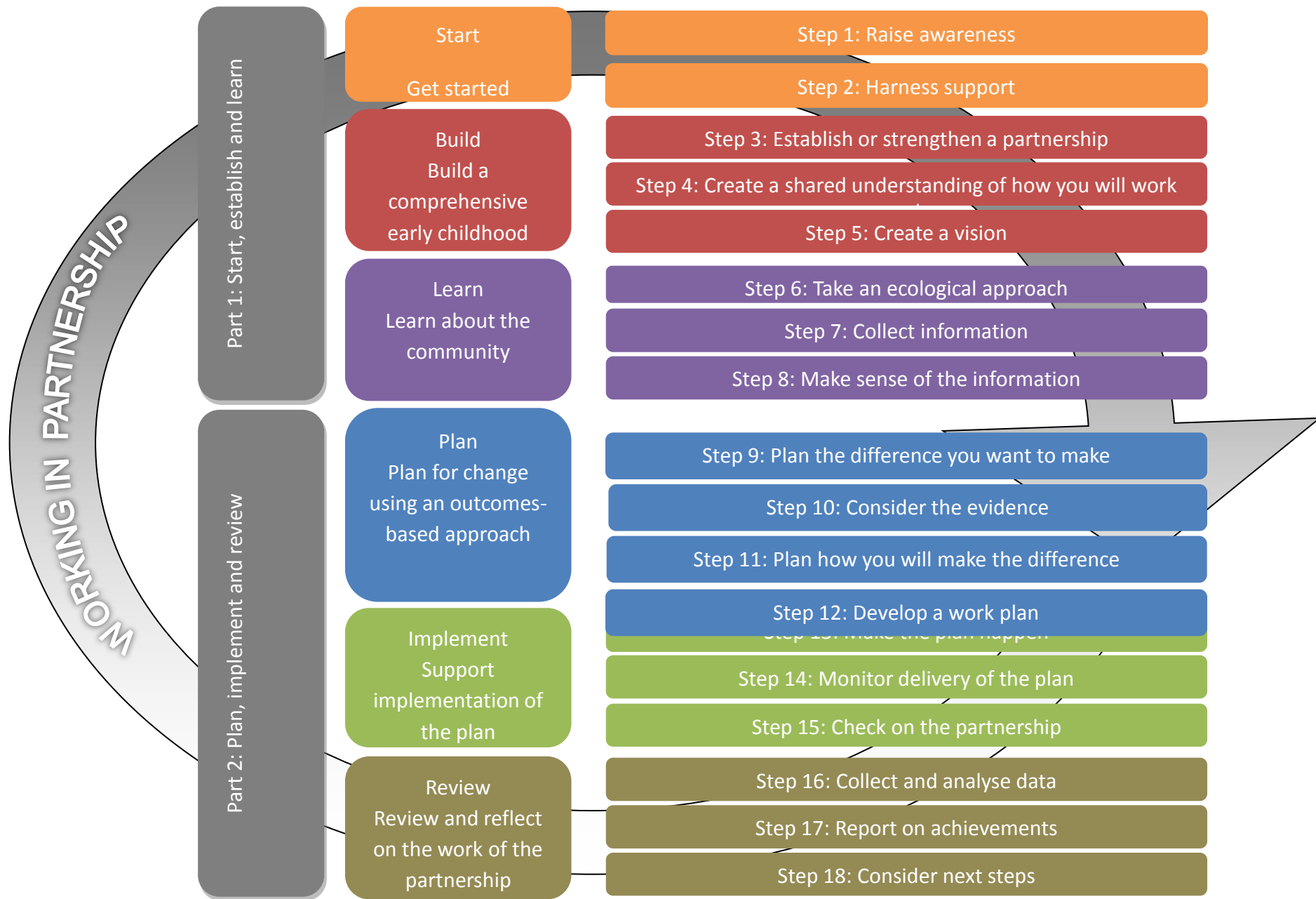
Backbone
Organisation

Mutually
Reinforcing
Activities

8 Key Principles of Children's Ground



A safe place for children to learn, grow and thrive; based on local knowledge and leading evidence and practice

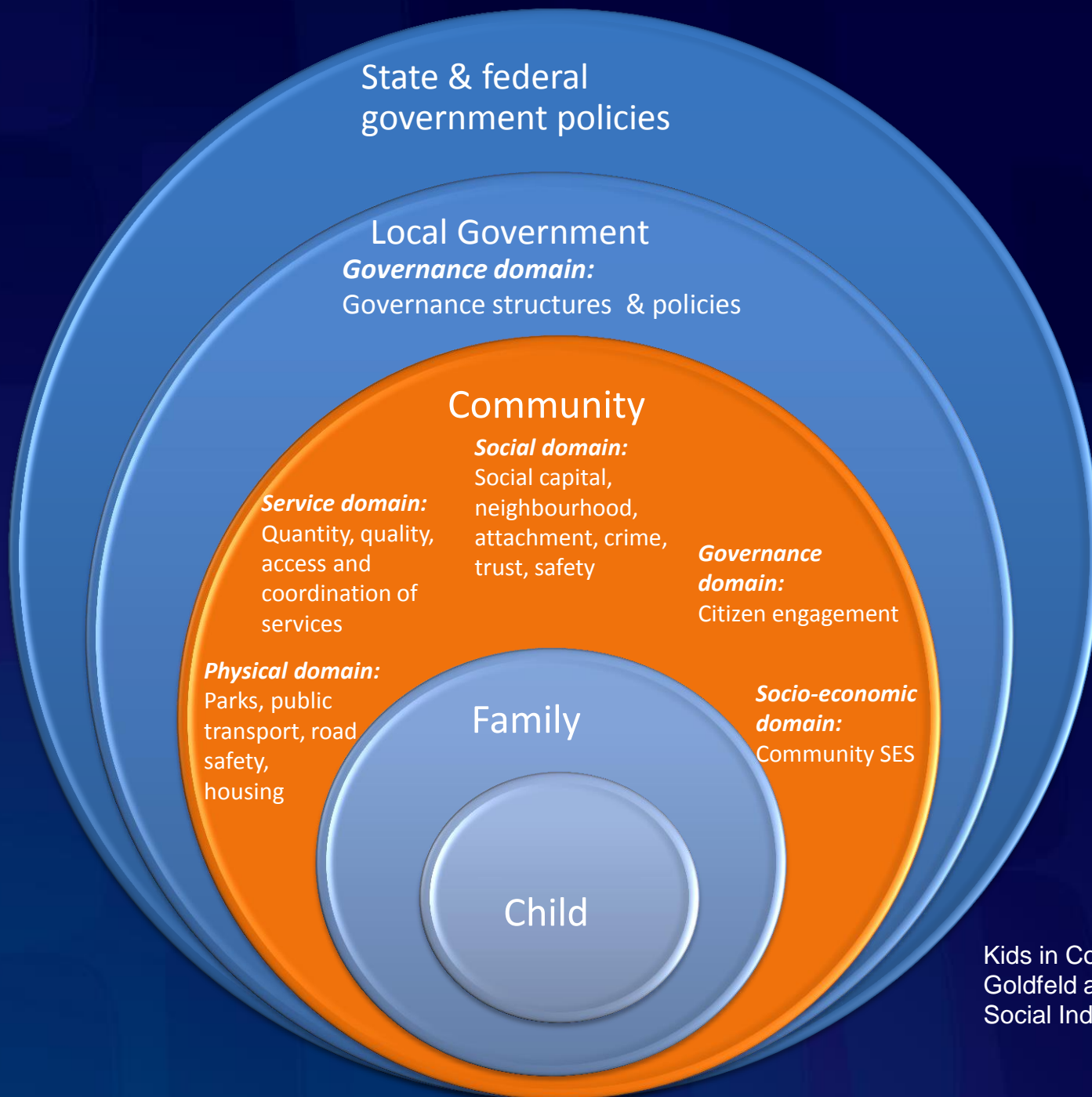


Kids in Communities Study

KICS model

Measuring community level factors that may be influencing children's development in 5 key domains or environments:

- Social capital environment
- Service environment
- Governance environment
- Physical environment
- Socio-demographic environment



Project Partners:



THE UNIVERSITY OF
WESTERN AUSTRALIA



UNIVERSITY OF
CANBERRA



UNSW
AUSTRALIA



Australian Government
Department of Education



Department of
Education & Training

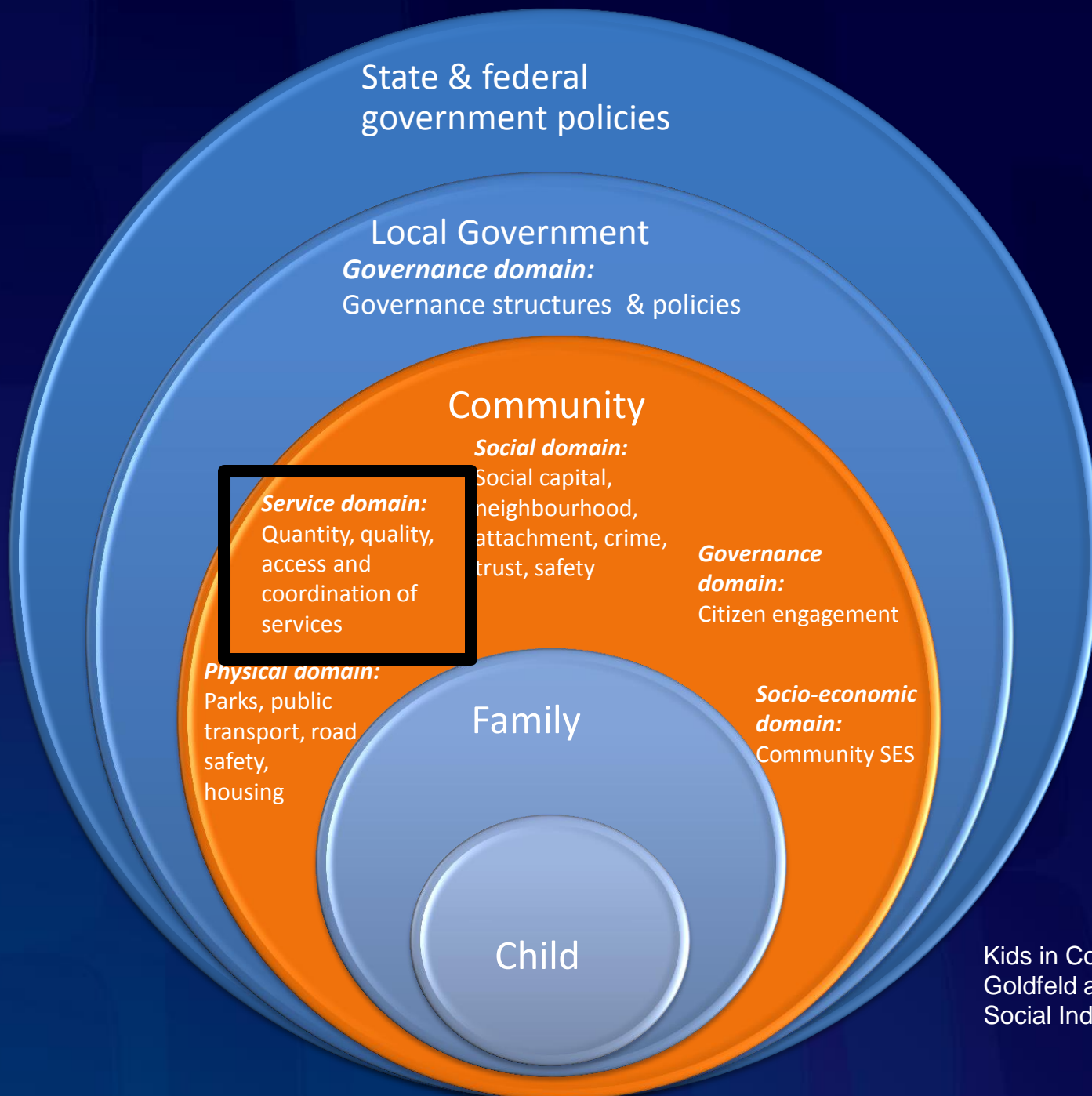
Government
of South Australia
Department for Education
and Child Development



Children's Health Queensland
Service | Integrity | Courage | Innovation | Accountability

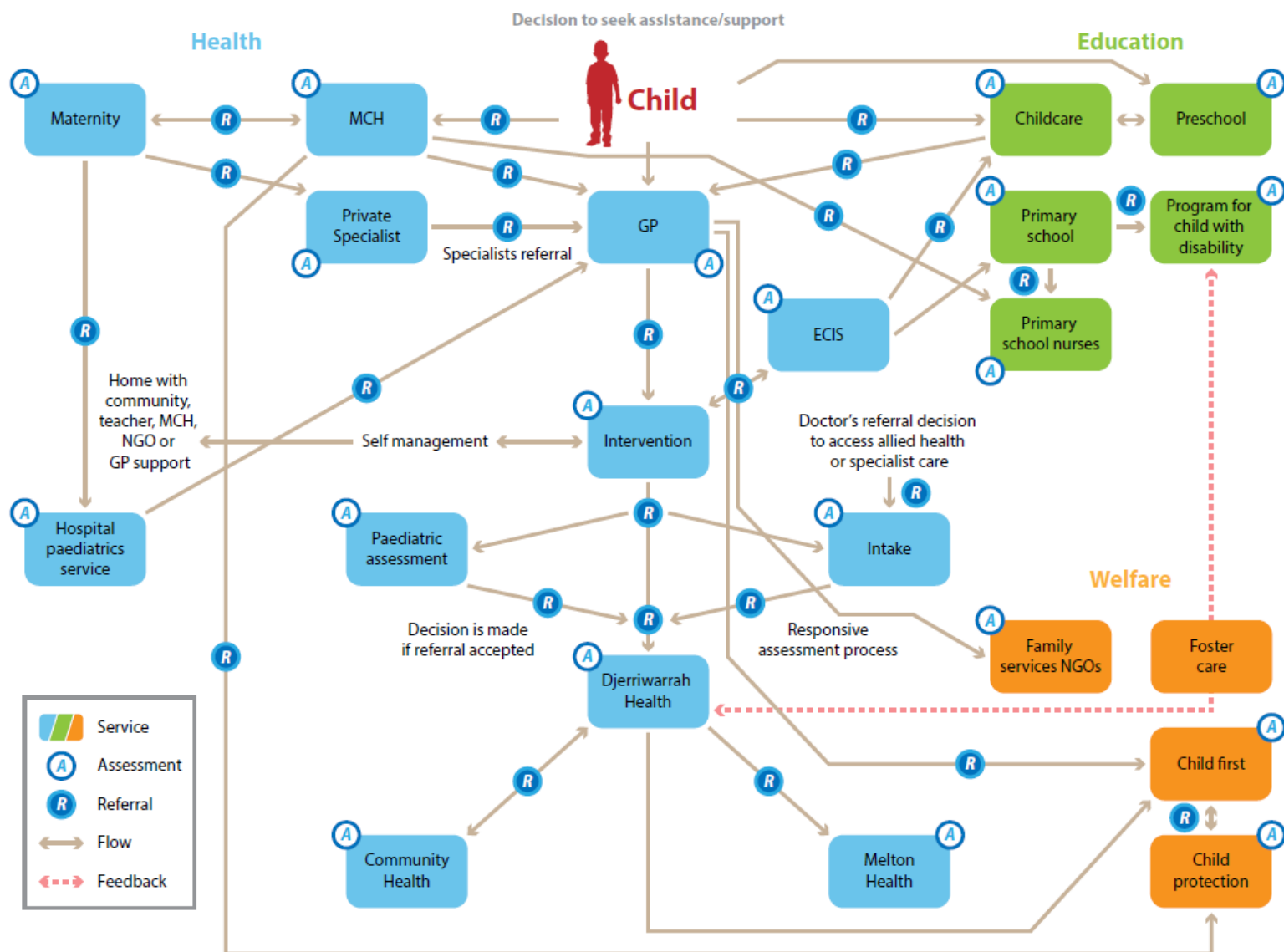
Environments of influence

Domains/ Environments	Key proposed indicator areas
Physical	Parks, public transport, road safety, housing
Social	Social capital, neighbourhood attachment, crime, trust, safety
Socio-economic	Community SES, Community demographics
Service	Quality, quantity, access, coordination
Governance	Citizen engagement, governance structures and policies



Service efficiency: the Blue Sky Project (Vic DET)

Blue Sky Project

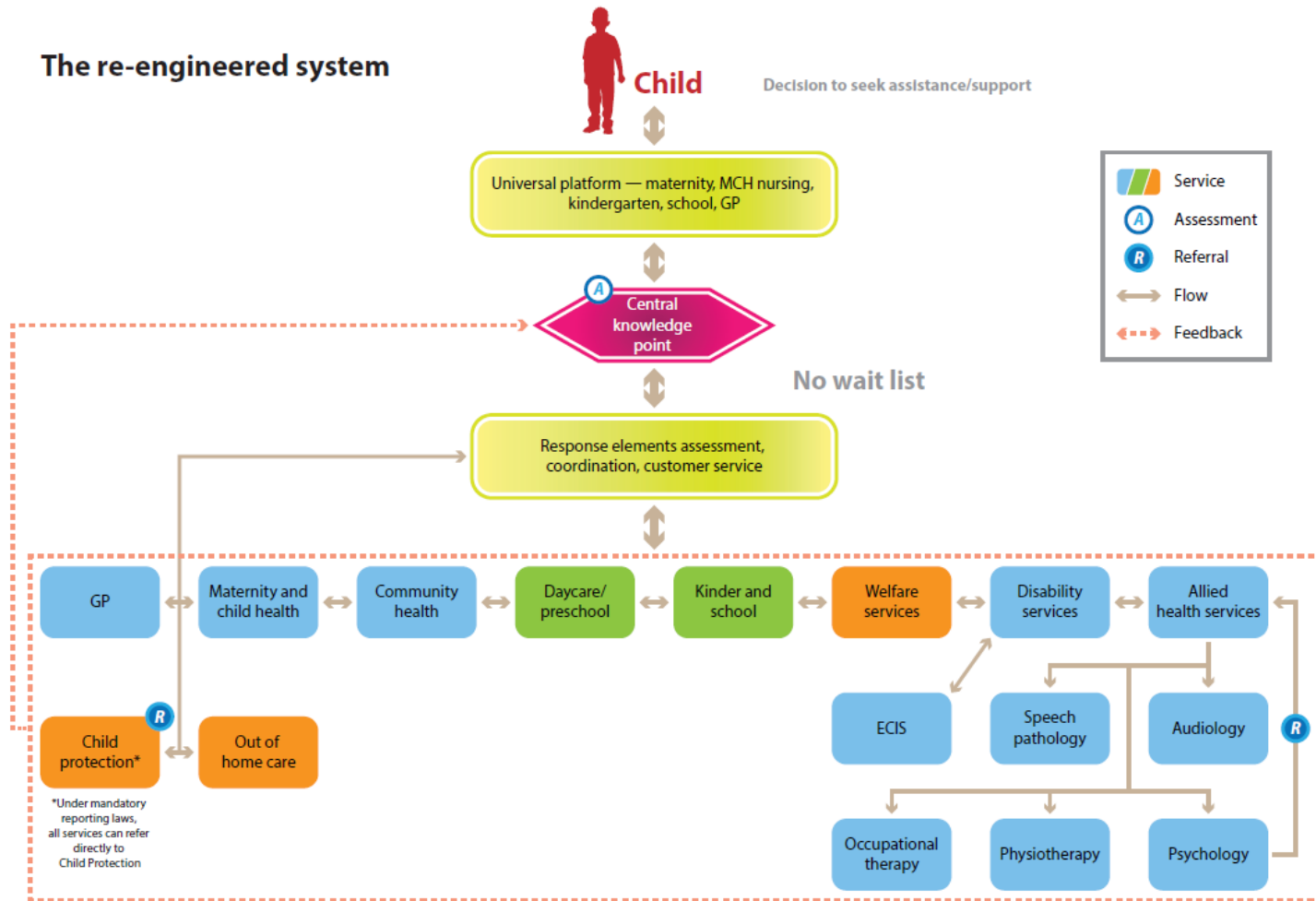


Blue Sky Project



Department of Education and
Early Childhood Development

The re-engineered system



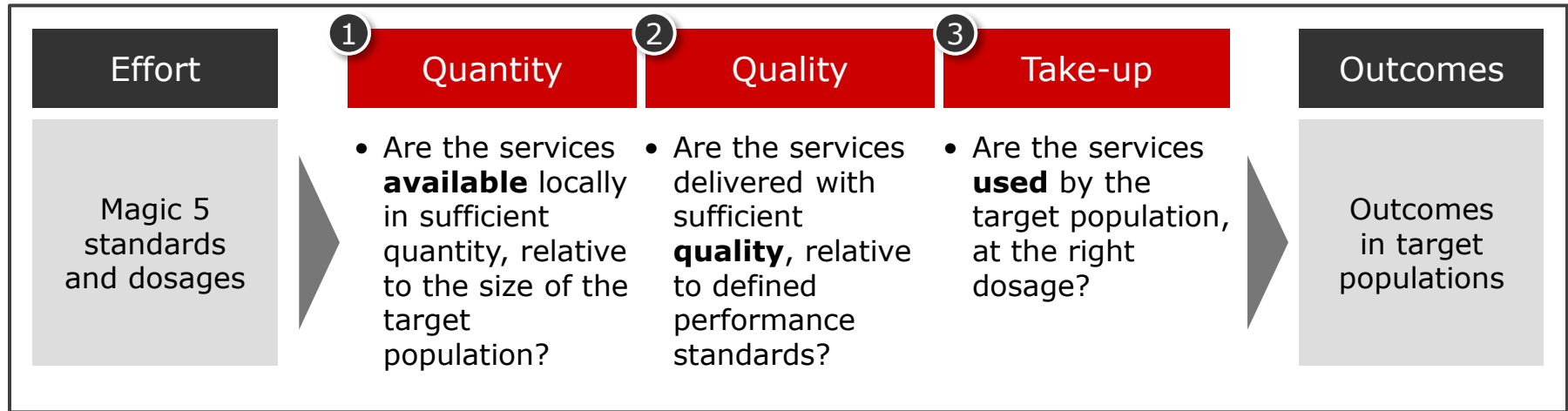


Reducing Inter-generational Social Disadvantage in Australia

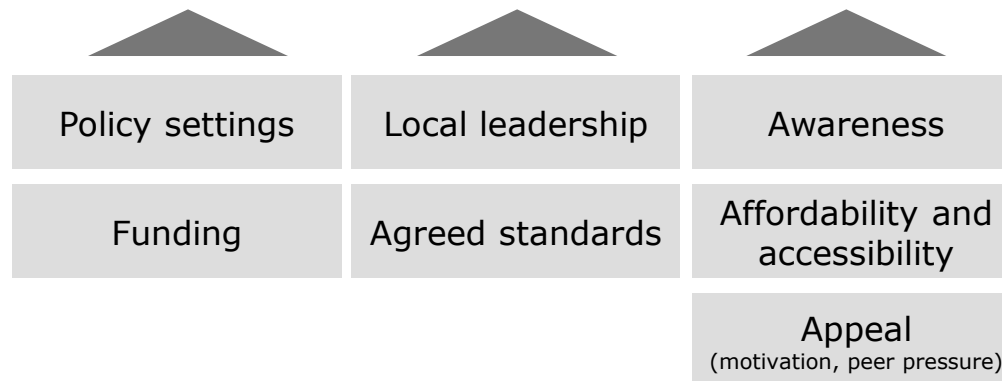
Stacking interventions...

Antenatal		Early childhood		School years
		Birth to 2 years	2 – 5 years	
1 Antenatal support <ul style="list-style-type: none">Targeted at parents-early intervention of modifiable risk factors eg smoking, alcohol, mental healthCentre-basedOutcomes:<ul style="list-style-type: none">Healthy baby weightGood brain healthAppropriate care"Adequate parenting"	3 Early childhood education and care (0-5 years) <ul style="list-style-type: none">Targeted at all kids (in groups)High quality for all childrenDelivered out of home in a "pseudo-home-learning environment"Outcomes: children on optimal developmental (cognitive and social-emotional) pathway - success at school			
2 Sustained nurse home-visiting <ul style="list-style-type: none">Targeted at disadvantaged parents; health and development supportHome-basedOutcomes: parents develop parenting skills		4 Parenting programs <ul style="list-style-type: none">Centre-based programs, targeted at parents whose children have behavioural issues (higher prevalence in disadvantaged families)Delivered in groups or 1:1Outcomes: specific emerging behavioural issues are remedied		
		5 School-based early intervention <ul style="list-style-type: none">Targeted at kids (in groups and 1:1) who are learning-disadvantaged. Target schools and individualsSchool-basedOutcomes: Children on optimal learning pathway by year 3		

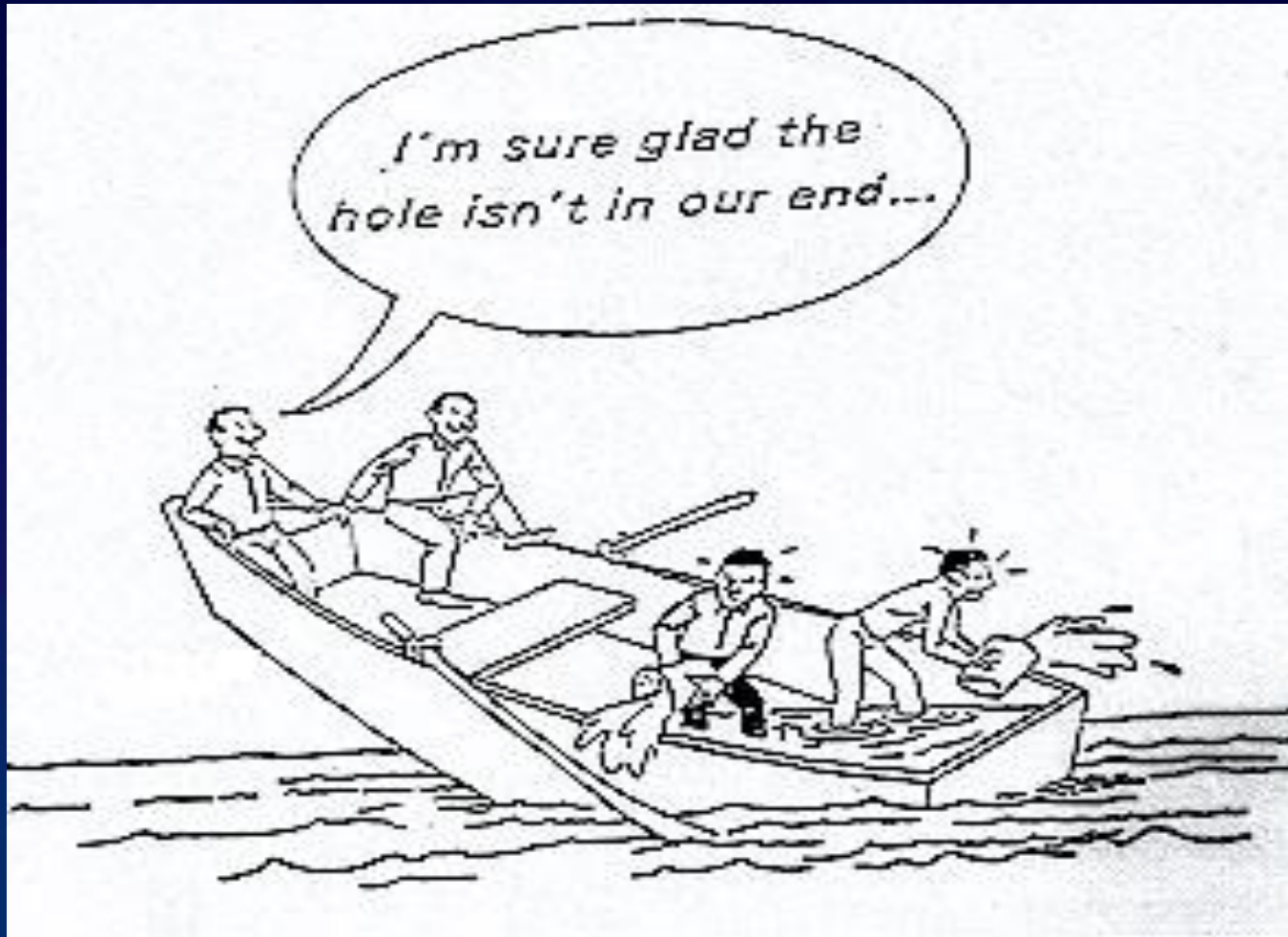
Our intent is to measure which on-the-ground factors are driving the gap between effort and outcomes



Contributing factors:



*I'm sure glad the
hole isn't in our end...*





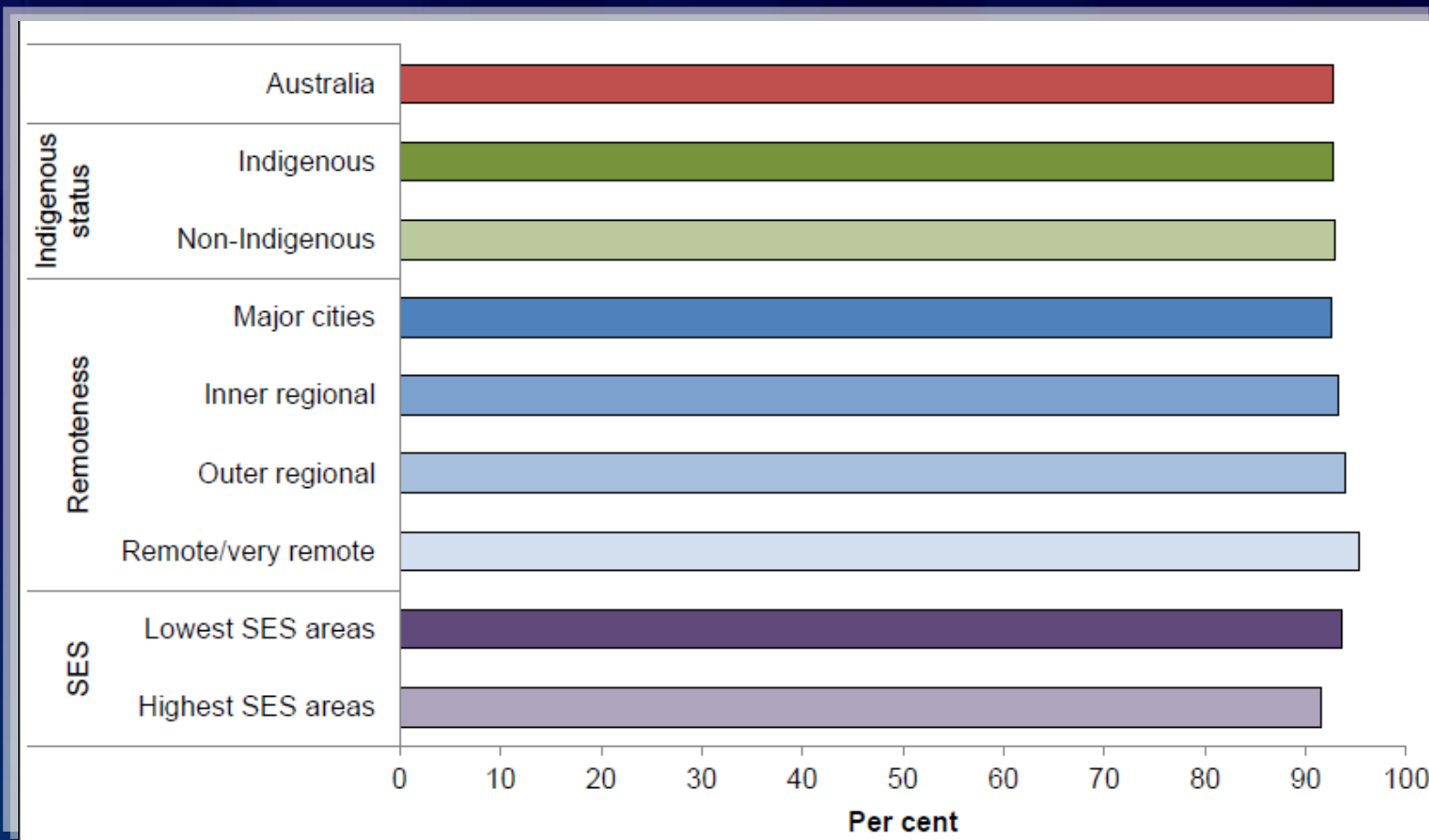
Equality of outcome is possible
in Australia....

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Two-year-old children on the ACIR who are fully immunised, by selected population groups, 2011

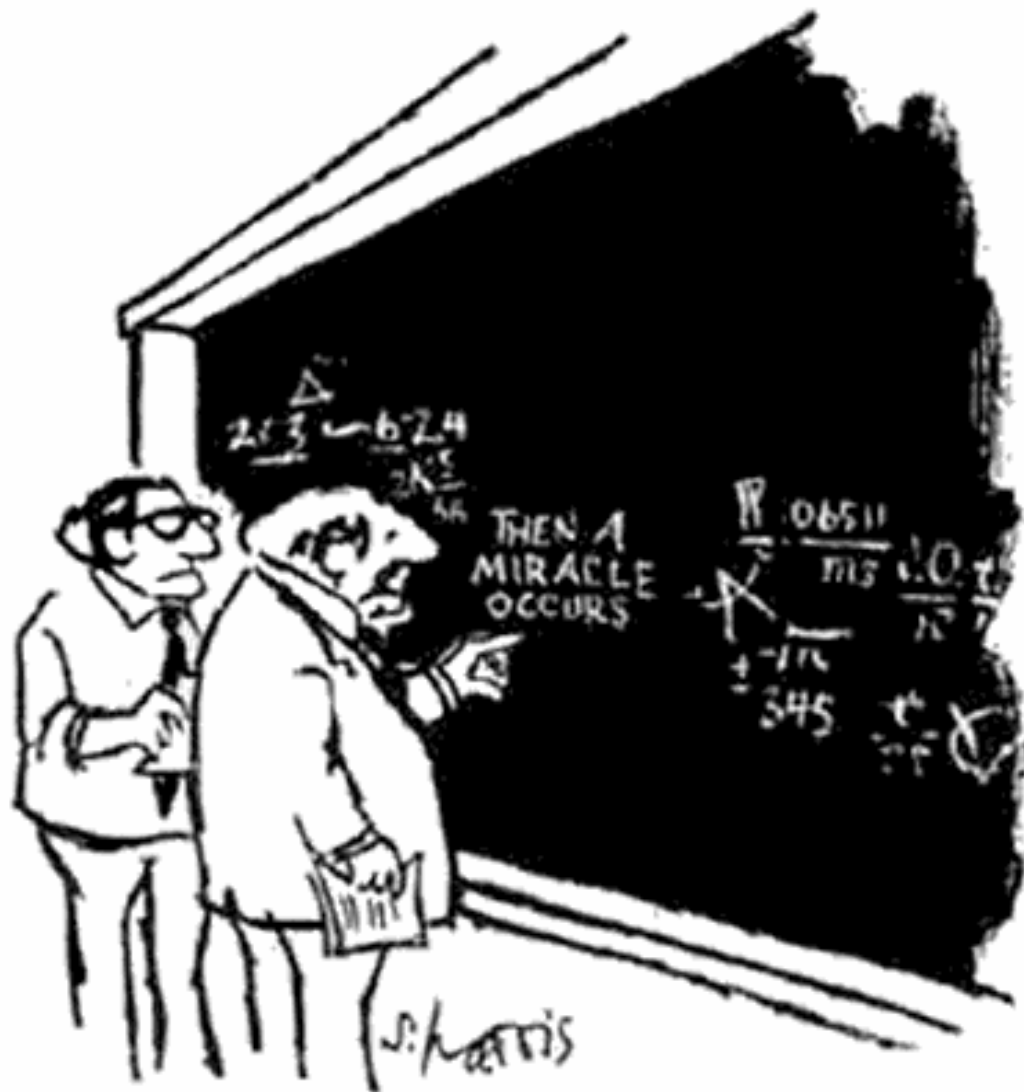


Source:
A Picture of Australia's Children 2012
Australian Childhood Immunisation Register,

**Not everything that seems
good...is good**



"My question is: Are we making an impact?"



"I THINK YOU SHOULD BE MORE EXPLICIT
HERE IN STEP TWO."

..but some things are!



PILLARS OF GROSS NATIONAL HAPPINESS.

- A. EQUITABLE SOCIO - ECONOMIC DEVELOPMENT.**
- B. GOOD GOVERNANCE.**
- C. PRESERVATION OF CULTURE.**
- D. PRESERVATION AND ENHANCEMENT OF ENVIRONMENT.**

HELP US DEVELOP OUR GNH COUNTRY.

‘It is the burden on good leadership to make the currently unthinkable thinkable, to question the obvious, to make the present systems unavailable as options for the future. The boundaries in our minds create fear about the consequences of crossing over to the undiscovered country. But the possibilities we really need do not lie on this side of our mental fences. Once crossed, these fences will look as foolish in retrospect as the beliefs of other times now often look to us.’

Don Berwick - 1998

Many things we need can wait, the child cannot. Now is the time his bones are being formed, his blood is being made, his mind is being developed. To him we cannot say tomorrow, his name is today.

**Gabriela Mistral
(1889-1957)**



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