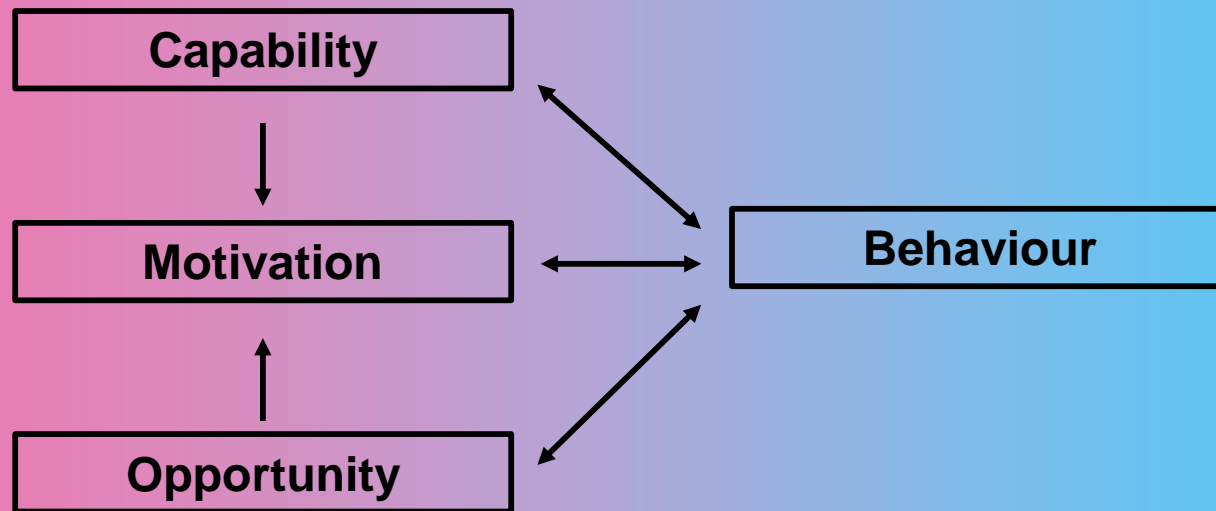


Using the COM-B model for mixed-methods research to understand barriers to influenza vaccination of children



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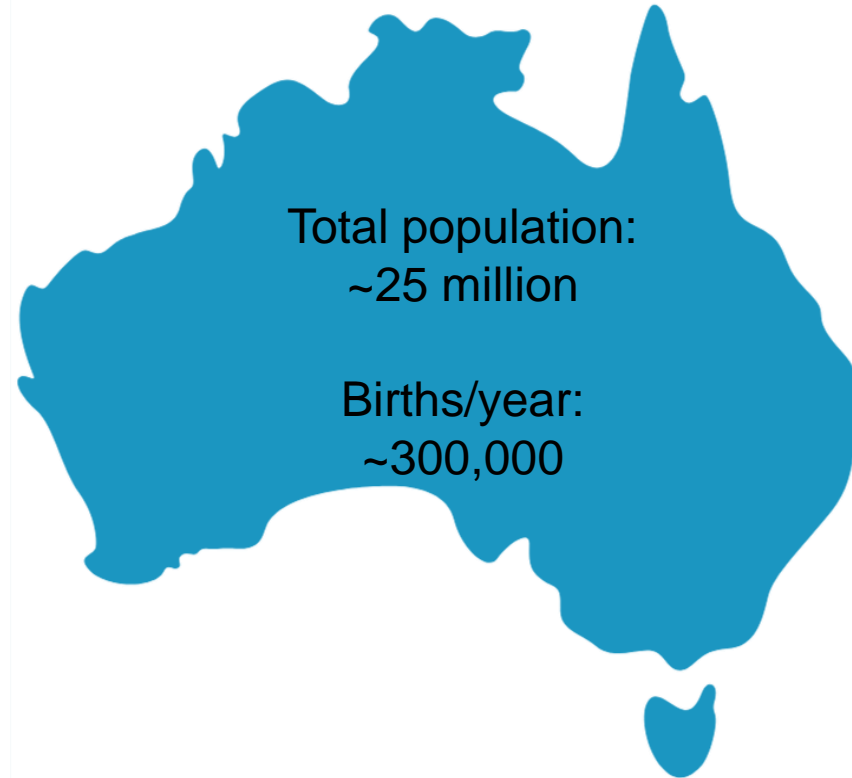
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Burden of influenza in young children in Australia



- Influenza:
 - Hospitalises more children than any other VPD¹
 - 50-60% ≠ medical comorbidities^{2,3}
 - ~90% not vaccinated^{2,3}
 - ED visits and hospitalisation highest in <5 years^{4,5}
 - Most common VPD to cause child deaths⁶



¹Brotherton et al *CDI* 2007

²Blyth et al *CID* 2019

³Blyth et al *Euro Surveill* 2016

⁴Muscatello et al *WPSAR* 2017

⁵Li-Kim-Moy et al *CDI* 2016

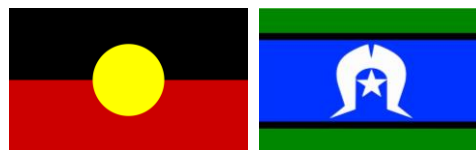
⁶Phillips et al *J Paediatr Child Health* 2018

Influenza vaccine funding and uptake

Children aged 6 months - <5 years



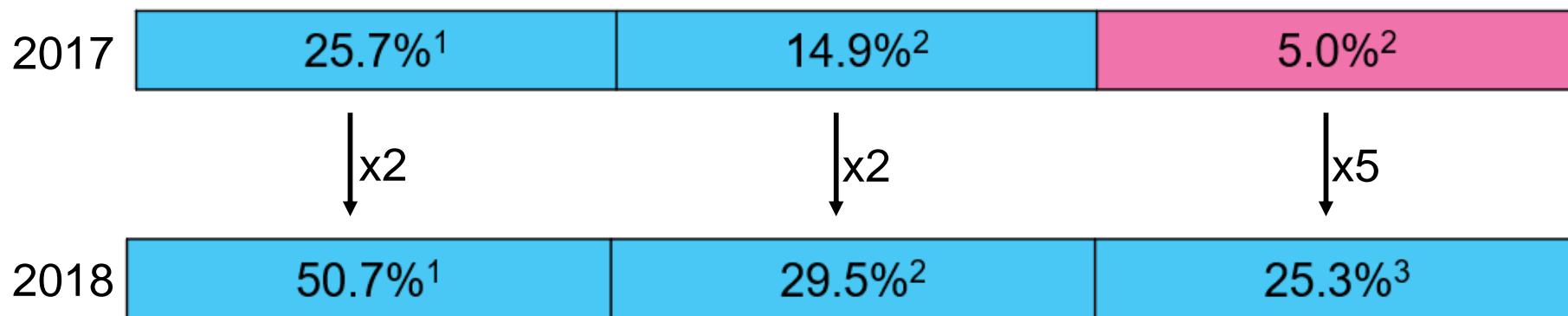
Comorbidities



Aboriginal and/or
Torres Strait Islander



All other children



Funded



Not funded

¹Blyth et al *In press*

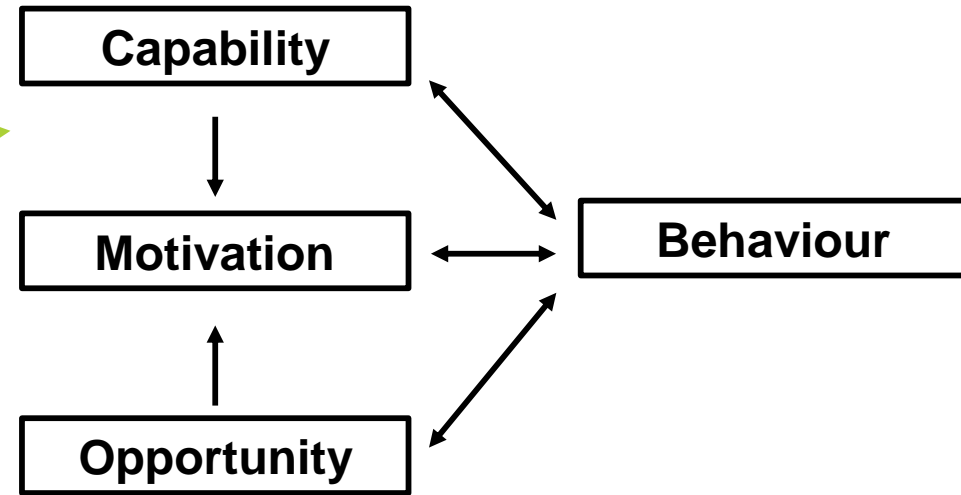
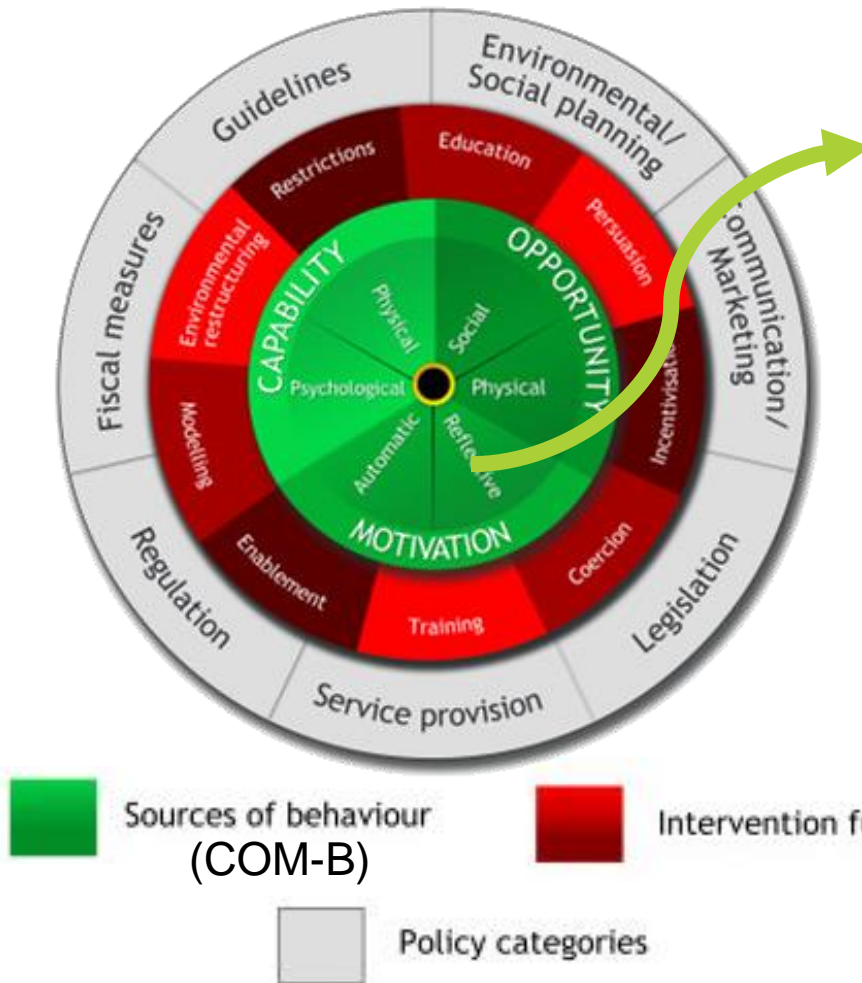
²Beard et al *MJA* 2019

³Hendry (personal communication, July 16, 2019)

***What are the barriers to influenza
vaccination of children in Australia?***



Behaviour Change Wheel

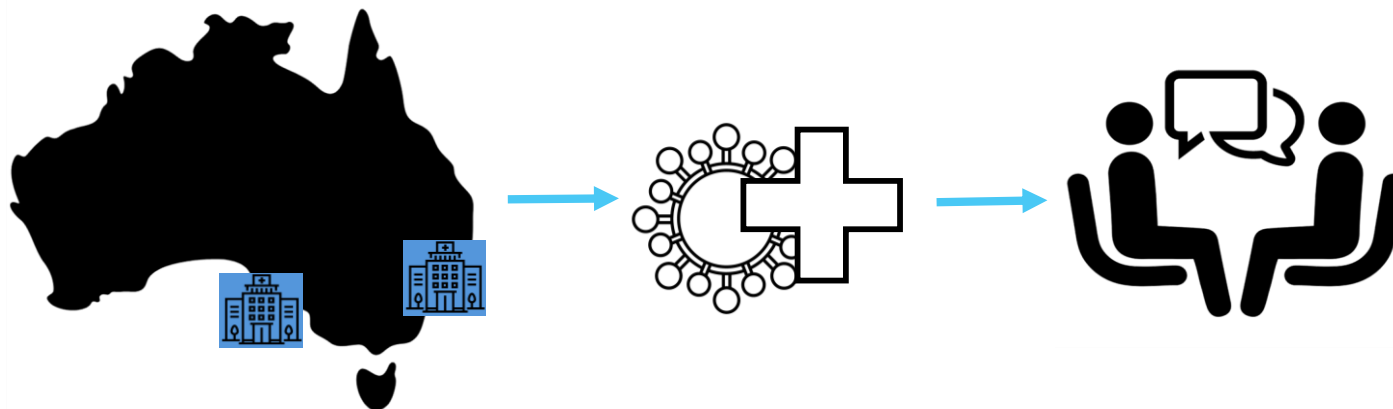


- Strength: systematic, thorough, and tailored
- Weakness: subjective categorisation

Barriers to influenza vaccination in 2017



Method:



Cohort:

Characteristics	Number (%)
Total children	20 (100)
Age at admission	
6 months - <5 years	10 (50)
5 years - <16 years	10 (50)
Comorbidities	11 (55)
Vaccination before hospitalisation	4 (20)

Case example: Susan's* daughter, Tamara*, wasn't vaccinated. Why?



Limited
Capability

- **Misinterpretations and Knowledge Gaps:** certain that the vaccine causes influenza

Missing
Motivation

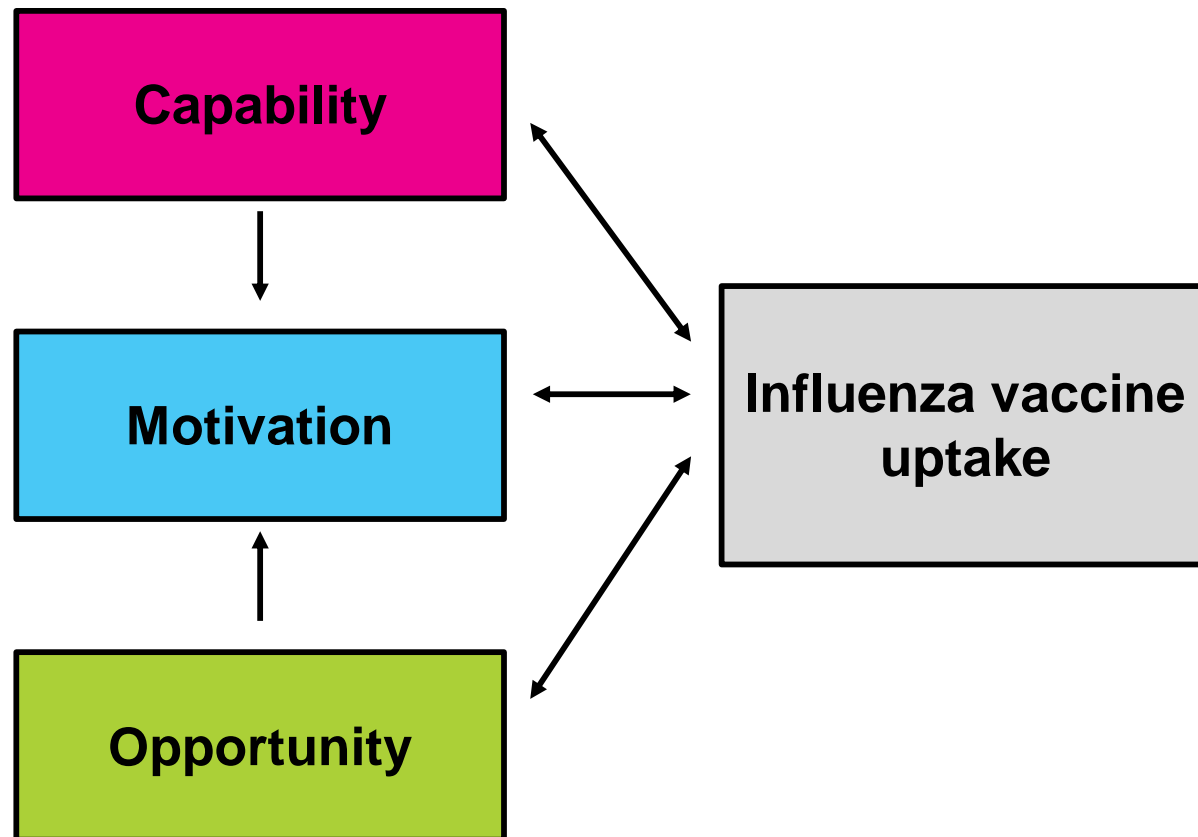
- **Hierarchy of Perceived Seriousness:** *"I'm pro vaccination for everything else."*
- **Safety Concerns:** Concerned about damaging Tamara's* immune system
- **Preference For 'Natural' Ways:** *"I'm sort of sitting on the fence thinking 'okay, do I really want to get it or do I just let nature take its course?'"*

Lack of
Opportunity

- **The Social Norm:** friends discuss negative experiences with influenza vaccination
- **Missing Recommendations:** could not recall ever receiving a recommendation from a HCP to vaccinate
- **(In)Convenient Vaccination Pathway:** frequent interaction with health system due to Tamara's* comorbidities
- **(Absence of) promotion:** communication materials only relevant to those with comorbidities

*pseudonym

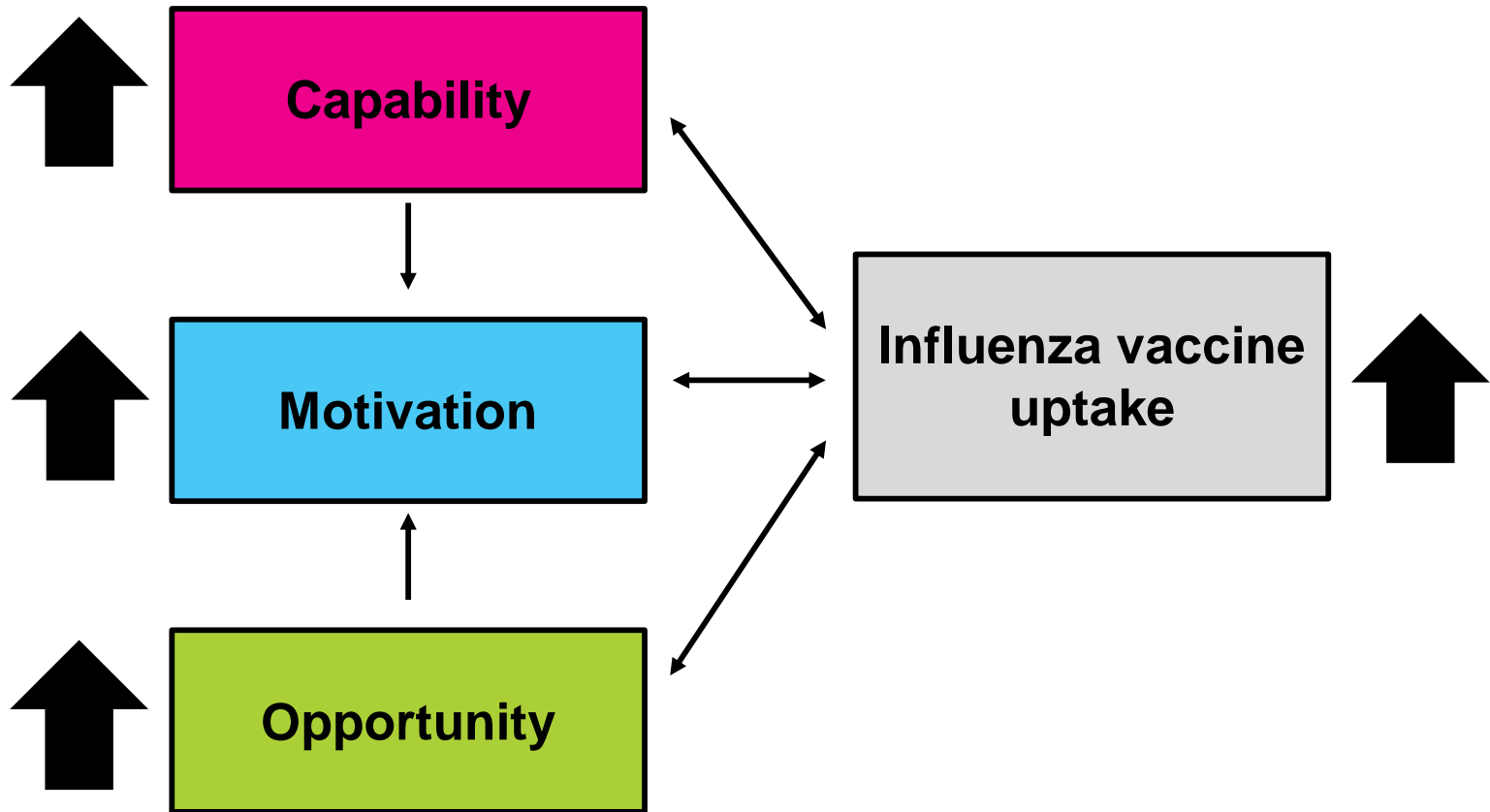
Predictors of influenza vaccination of children in Australia in 2019



Intervention options



		Intervention functions								
COM-B Components		Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental Restructuring	Modelling	Enablement
Capability	Physical					X				X
	Psychological	X				X				X
Opportunity	Physical						X	X		X
	Social						X	X		X
Motivation	Automatic		X	X	X			X	X	X
	Reflective	X	X	X	X					



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- Dr Helen Quinn

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