Using MABEL data to overcome the rural medical workforce shortage problem

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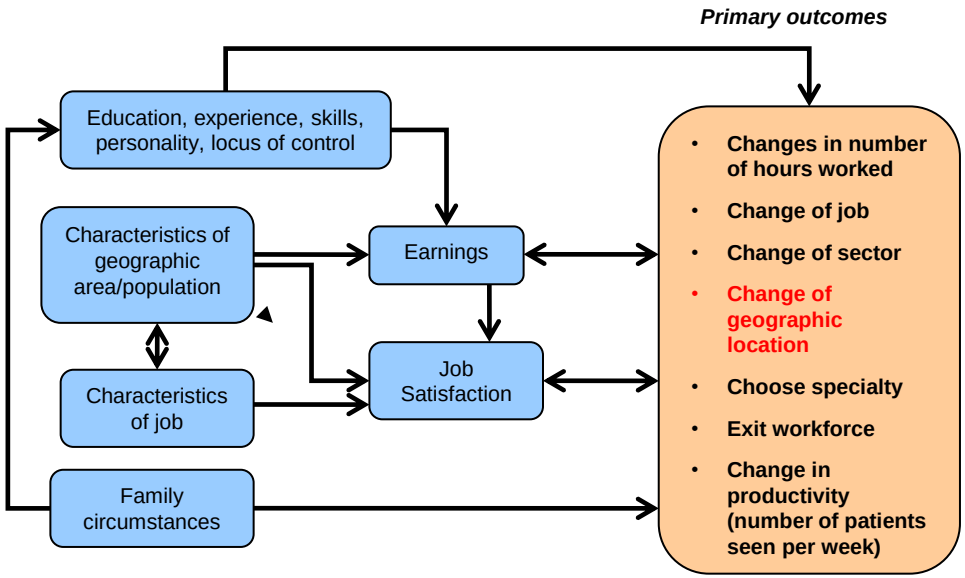
MABEL

Medicine in Australia: Balancing Employment and Life

- **AIM**: “to examine how the determinants of medical workforce decisions impact on workforce distribution and the working patterns of doctors”
- This talk will exemplify how MABEL evidence is helping to address the **rural medical workforce problem**



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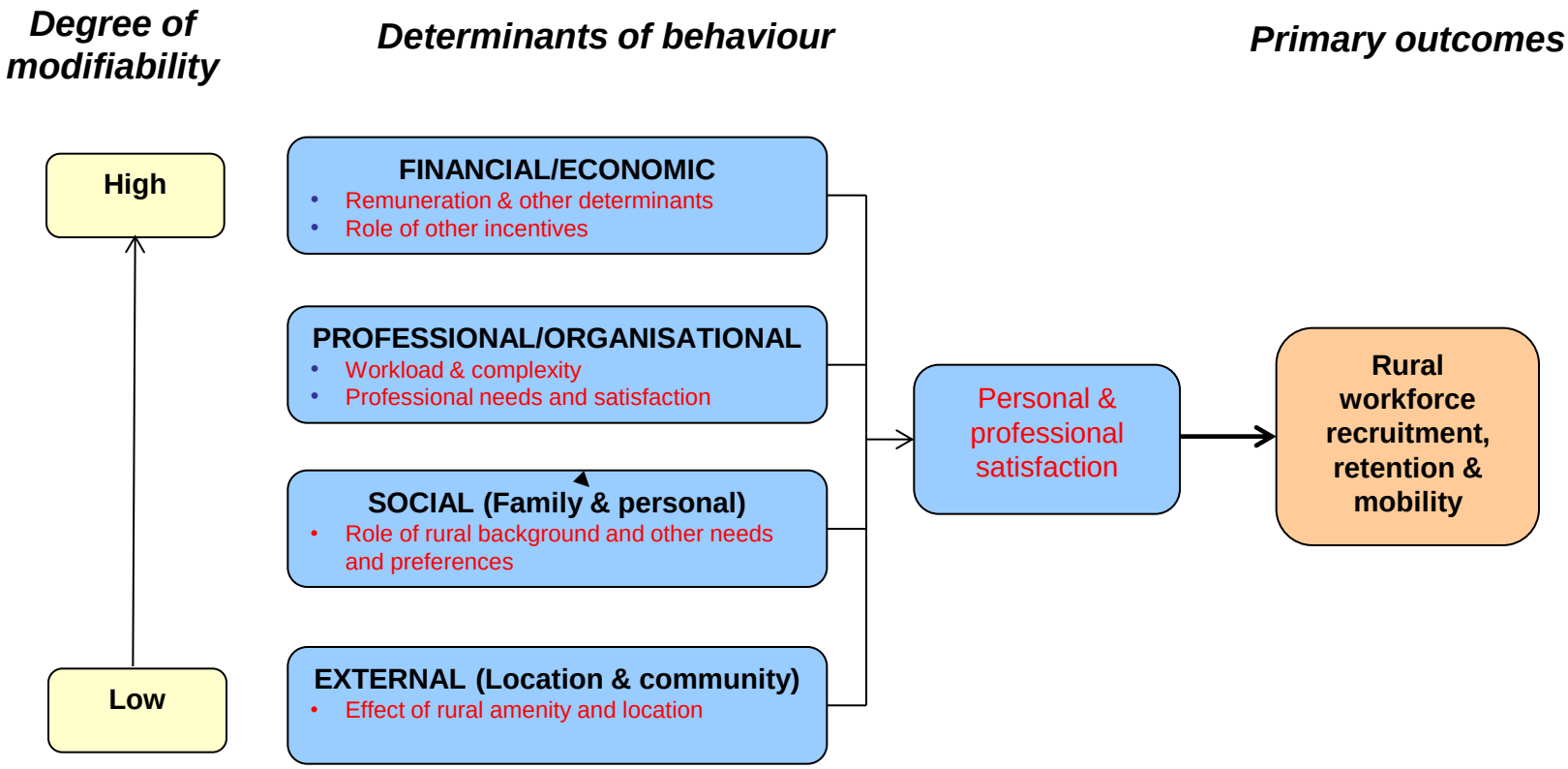
The rural health problem

- **Rural health status** and **access** to services worse than in cities
- **Workforce** is the key to accessible health care
- Persistent workforce **shortage** & worsening **maldistribution**
- Increasing supply without addressing **recruitment and retention** issues will not solve this problem
- Recruitment and retention is **more difficult** because:
  - rural locations vary in attractiveness
  - general practice is not attractive
  - rural and remote practice is more complex
  - doctors work longer hours & more on-call/ after-hours

Conceptualising the rural workforce problem



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Workforce recruitment

How important is income vis-à-vis other determinants?

- **Focus:** What incentives assist relocation to rural areas?
- **Method:** Discrete choice experiment to ascertain income shift required for doctors to move to alternative rural locations
- **Main findings:**
  - many GPs opt for '***status quo***';
  - **considerable** financial incentives required to relocate to '*areas of workforce shortage*'

Reference: Scott A, Witt J, Humphreys JS, Joyce C, Kalb G, Jeon S and McGrail M, 2013: Getting doctors into the bush: General Practitioners' preferences for rural location, ***Social Science and Medicine***, 96, 33-44.

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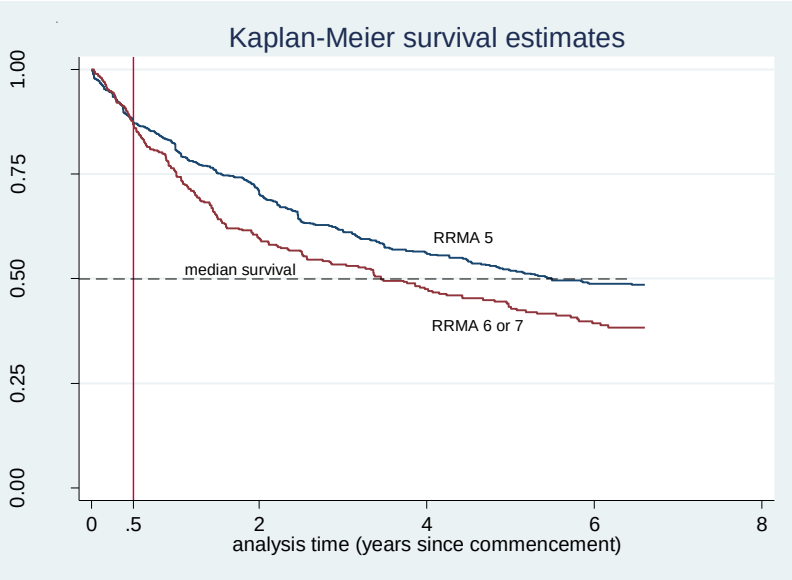
Workforce retention

Key factors contributing to rural workforce retention

- **Focus:** What factors are associated with rural and remote medical workforce retention?
- **Method:** Survival curve analysis and logistic regression
- **Findings:** A **range** of financial, professional and geographic factors contribute to the rural GP retention, (especially primary income source, registrar status, hospital work and restrictions on practice location).

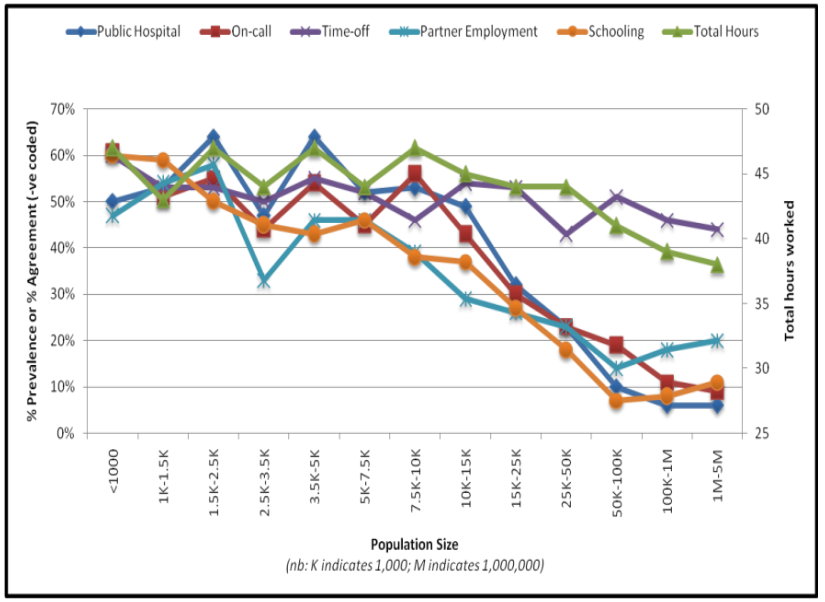


Reference: Russell D, McGrail M, Humphreys JS & Wakerman J., 2012: What factors contribute most to the retention of general practitioners in rural and remote areas? ***Australian Journal of Primary Health***, 18: 289-294.

Workforce retention

Who should get what incentives?

- **Focus:** How should incentives be allocated?
- **Method:** Differentiation of geographic locales using sentinel professional and personal indicators
- **Main finding:** Community size combined with remoteness is **a fairer measure** for allocation than existing ASGC scheme



Reference: Humphreys JS, McGrail M, Joyce C, Scott A & Kalb G, 2012: Who should receive recruitment and retention incentives? Improved targeting of rural doctors using medical workforce data, ***Australian Journal of Rural Health***, 20, 3-10.

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Workforce recruitment & retention

What is the role of rural amenity?

- **Focus:** How does rural amenity contribute to rural medical workforce shortages?
- **Method:** Multivariate regression using key amenity indicators with Districts of Workforce Shortage over ten years.
- **Findings**: Study found only a weak association with a selection of place characteristics descriptive of their isolation, climate, and rural amenity.

Reference: McGrail M, Humphreys JS, Joyce C, Scott A & Kalb G, 2011: Rural amenity and rural medical workforce shortage: Is there a relationship? ***Geographical Research***, 49(2):192-202.

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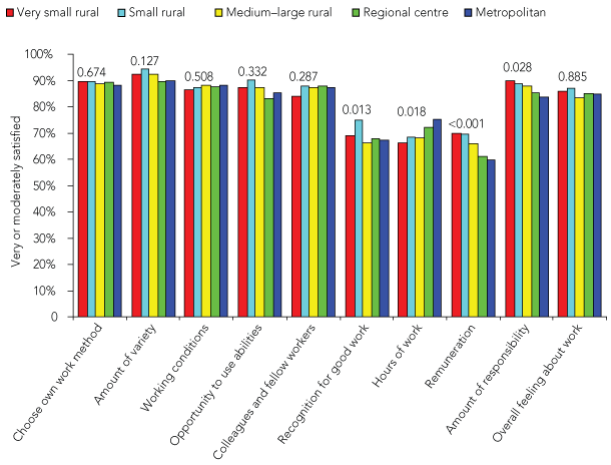
Workforce satisfaction

Myth-busting: Are rural GPs less satisfied?

Workload

Main finding: High level of professional satisfaction across all doctor groups despite perceptions.



IMGs

Finding: IMGs exhibit lower professional and non-professional satisfaction over and above community size.

Key factors associated with high job satisfaction

Job characteristics
- Realistic patient expectations
- Good professional support networks
- Being able to take time off

Geographical factors
- Friends and family in current work location
- Working outside New South Wales

Doctor characteristics
- Being younger or close to retirement
- Good self-reported health
- High household income

References:

- Joyce CM, Schurer S, Scott A, Humphreys JS & Kalb G, 2011: Australian doctors' satisfaction with their work? Results from the MABEL longitudinal survey of doctors, ***Medical Journal of Australia***, 194:1, 30-33
- McGrail M, Humphreys JS, Joyce C & Scott A, 2012: International medical graduates mandated to practice in rural Australia are highly unsatisfied: results from a national survey of doctors, ***Health Policy***, 108: 133-139

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Ongoing MABEL rural workforce research

Currently working on:

1. Rural GPs' preferences for policy incentives

- **Focus:** What types of incentive policies do rural GPs' prefer?
- **Method:** Discrete choice experiment of key factors associated with recruitment and retention & mixed logit regression
- **Main finding:** Locum relief is the most effective incentive to increase length of stay, followed by the retention payments, rural skills loading and family isolation payments.

2. Mobility patterns of GPs within rural Australia

- **Focus:** Who moves, where do they move, how frequently?
- **Method:** Analysis of transition over five years using modified 'Monash model'
- **Main finding:** Work still in progress

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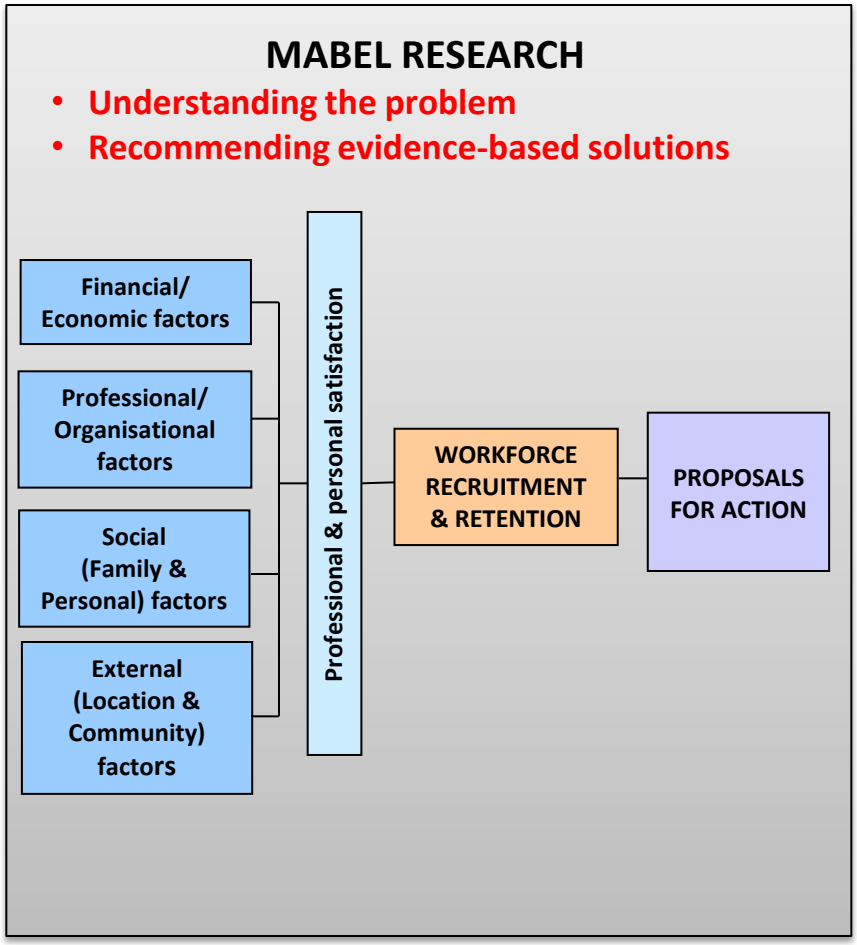
So how has MABEL data helped?

Better understanding

- Most comprehensive data available to examine the **role** and **inter-relationship** of key variables in explaining rural medical workforce recruitment and retention.
- Enables research analysis to move beyond bivariate associations to model the **complexity** of the issues.
- Better understanding of **how** 'rurality' impacts upon
  - what doctors do,
  - the circumstances in which they do it, and
  - and their decision-making as a consequence of perceived and actual professional and personal satisfaction,

Impact of MABEL research on policy



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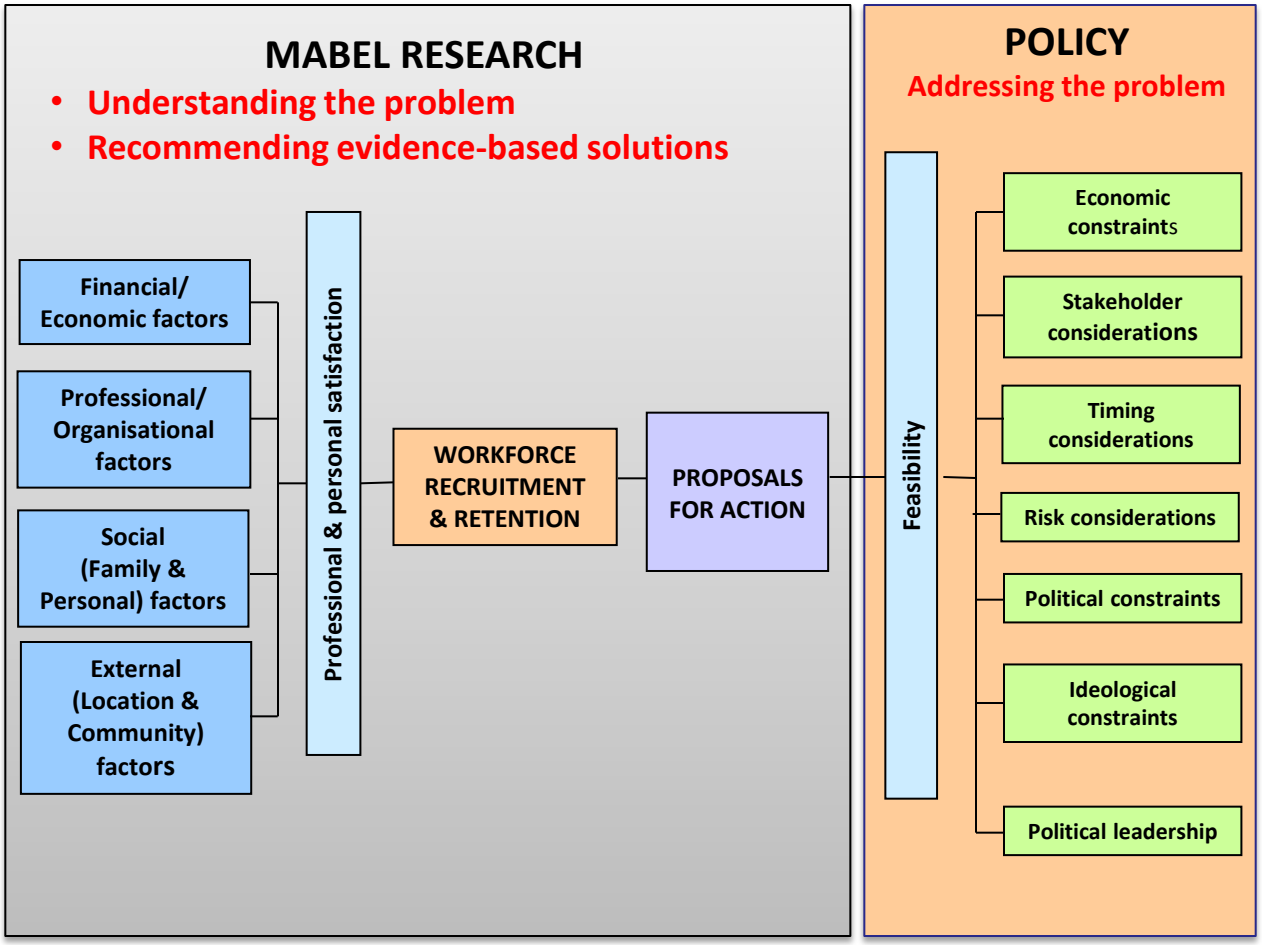

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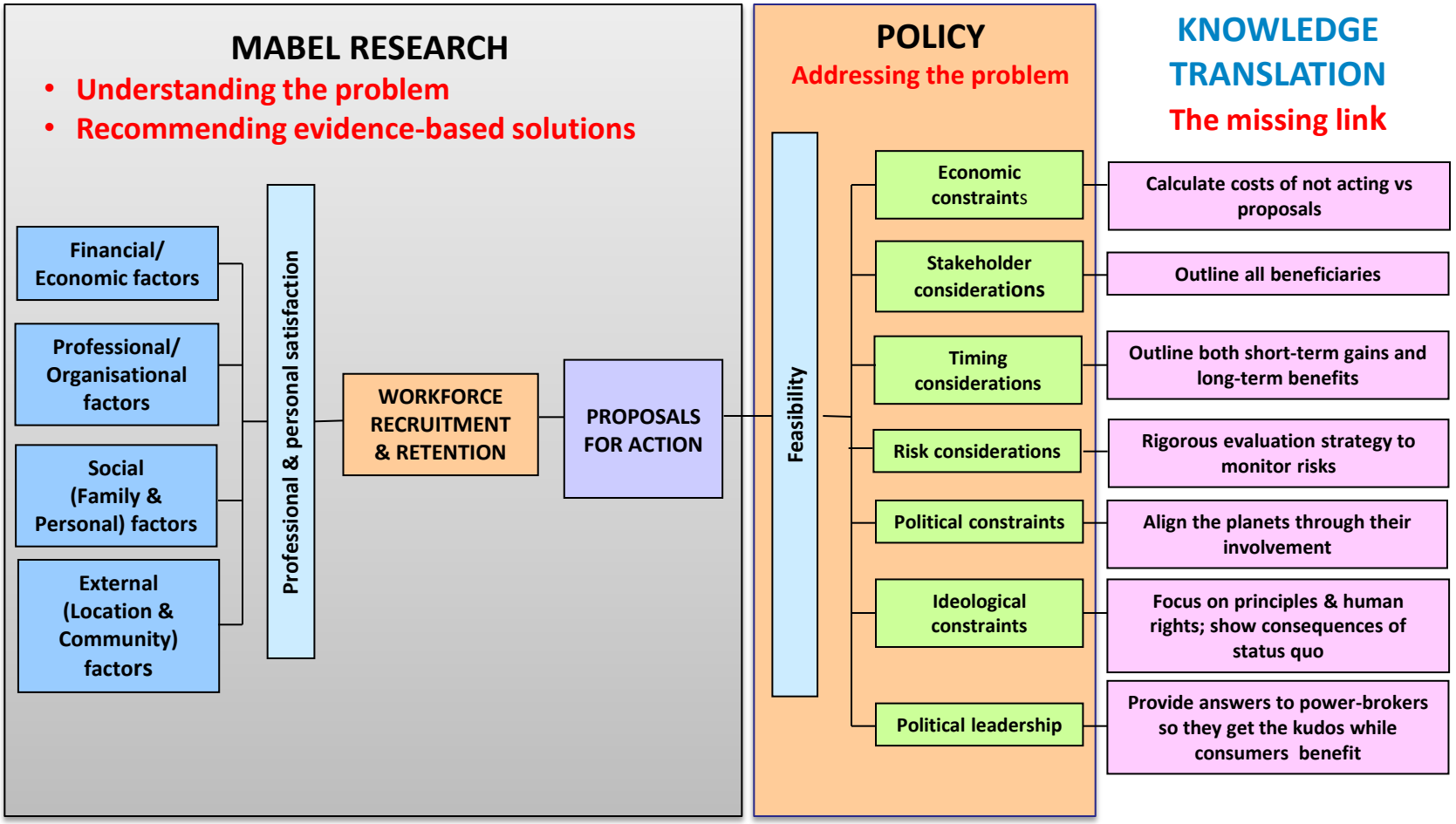

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Impact of MABEL research on policy

Always difficult to ***attribute*** policy change to research evidence but MABEL is ***contributing*** to workforce policy

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- "The committee was impressed with the comprehensive nature of the model … and … is supportive of the methodology and data utilised." **(Australian Government Senate Enquiry, 2012)**
- "The enhancement …is a valuable one … based on reasonable evidence derived from data generated through the MABEL Study ... A modification to the "model" is recommended as the approach most likely to provide positive enhancements to current systems. **(Mason Review, 2012)**
- "The model provides a sound and practical basis on which to move forward, and the RDAA has joined other stakeholders – including United General practice Australia – in supporting this model in-principle." **(RDAA, 2013)**

So how has MABEL data helped?

Helps ensure effective rural workforce policies

- Identifies the **role** of incentives and **which ones may work best** in different locations.
- Presents a better basis for the **equitable distribution** of incentives
- Enables **monitoring** of the effect of rural medical workforce policies on workforce supply and distribution in rural and remote areas

An indispensable resource for rural workforce planning

THANK YOU

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