

Improving the lives of older adults through research and its translation to practice

Ding Yew Yoong

Senior Consultant, Geriatric Medicine, TTSH

Executive Director, Geriatric Education & Research Institute

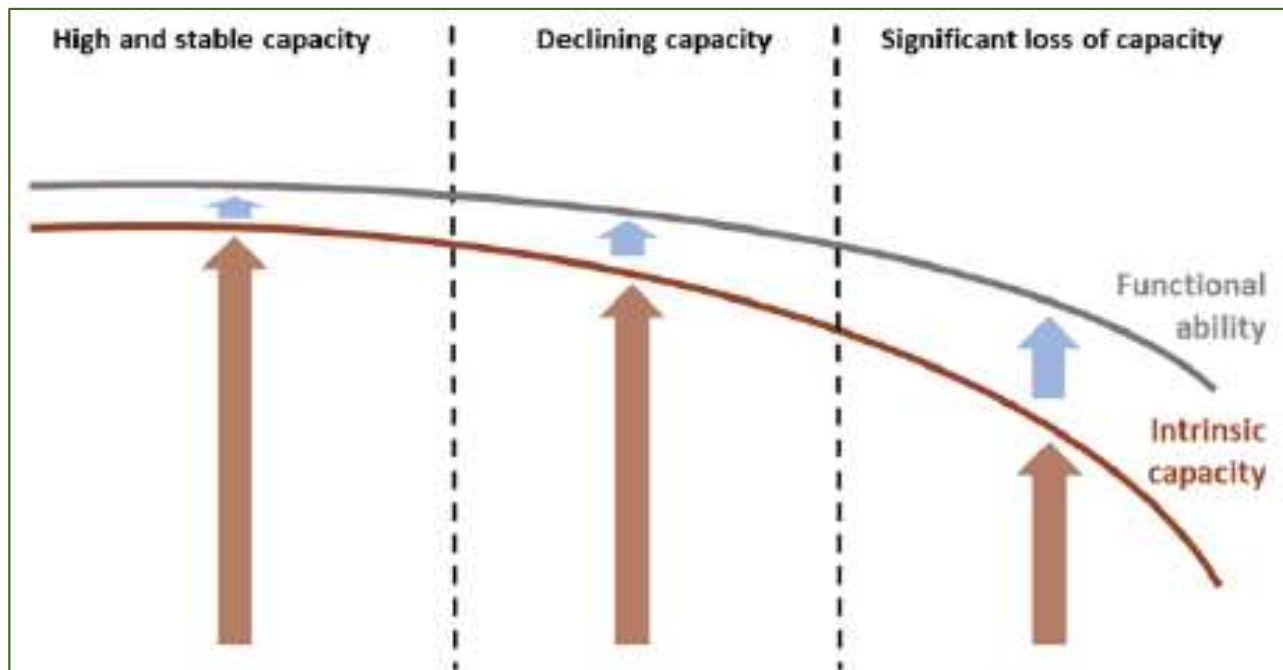
Clinical Associate Professor, NUS

Adjunct Associate Professor, NTU



Healthy Ageing

World report on ageing and health. WHO 2015.



Persons aged 65 years and above in the Singapore population:

~ 1 in 6 (2020)

~ 1 in 4 (2030)

Healthy Ageing:

process of developing and maintaining the functional ability that enables well-being in older age

Research-to-Practice Gap: Wide



“It takes 17 years to turn 14% of original research to the benefit of patient care.”

Balas E, Boren S. Yearbook of Medical Informatics 2000:65-70.

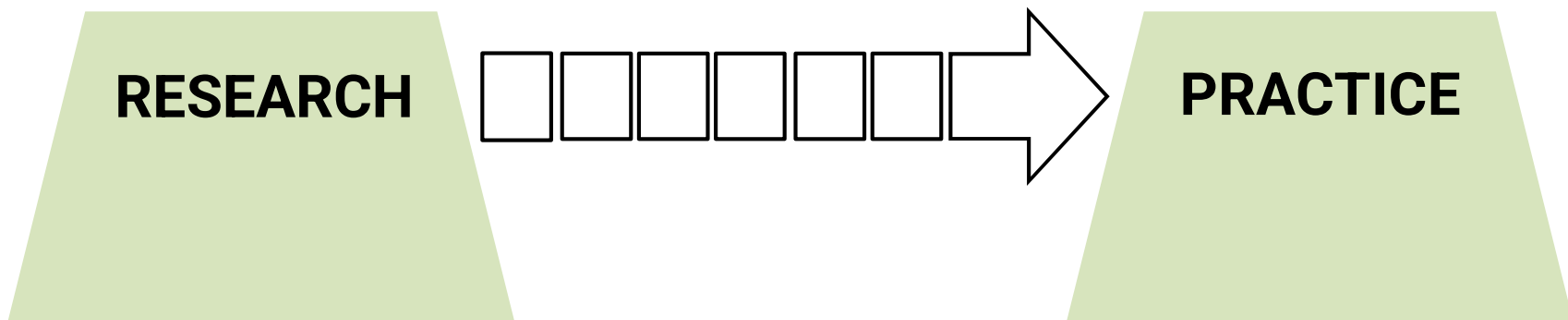
Research-to-Practice Gap: Persistent

The average time to implementation was 15 years for 5 evidence-based practices evaluated. Continued efforts ... to speed research to practice are needed.

Khan S et al. Cancer Causes & Control 2021;32:221-30.

Research-to-Practice Gap: Implications

- Slow or lack of translation of research to practice
- Diminished impact of research on health systems and people needing it



Research-to-Practice Gap: Influential factors

External context

Policy/Legislation, Incentives, Dominant paradigm, Stakeholder buy-in, Infrastructure, Technology advances, Economic climate/Governmental financing, Public awareness

Organization

Involvement, Culture, Resources, Processes/system, Relationship, Skills mix

Profession

Competency, Professional role, Philosophy of care, Attitudes to change

Intervention

Implementability, Nature, Safety/data privacy

Conceptual framework describing key elements that influence implementation of change in primary care.

Lau et al. Implementation Science 2016:11:40.

Research-to-Practice Gap: Closing it

- **Practice-based research**
- **Community-based research**
- **Participatory research**

Green LW. Health Promotion Journal of Australia 2014;25:25-9.

Co-creative approaches:

- **Valuing local knowledge**
- **Brokering connections and building trust**
- **Ongoing collaboration, investment and support**
- **Leadership**
- **Facilitation**

Metz A, et al. Evidence & Policy 2019;15(3):331-7.

Research-to-Practice Gap: Closing it

Knowledge Translation

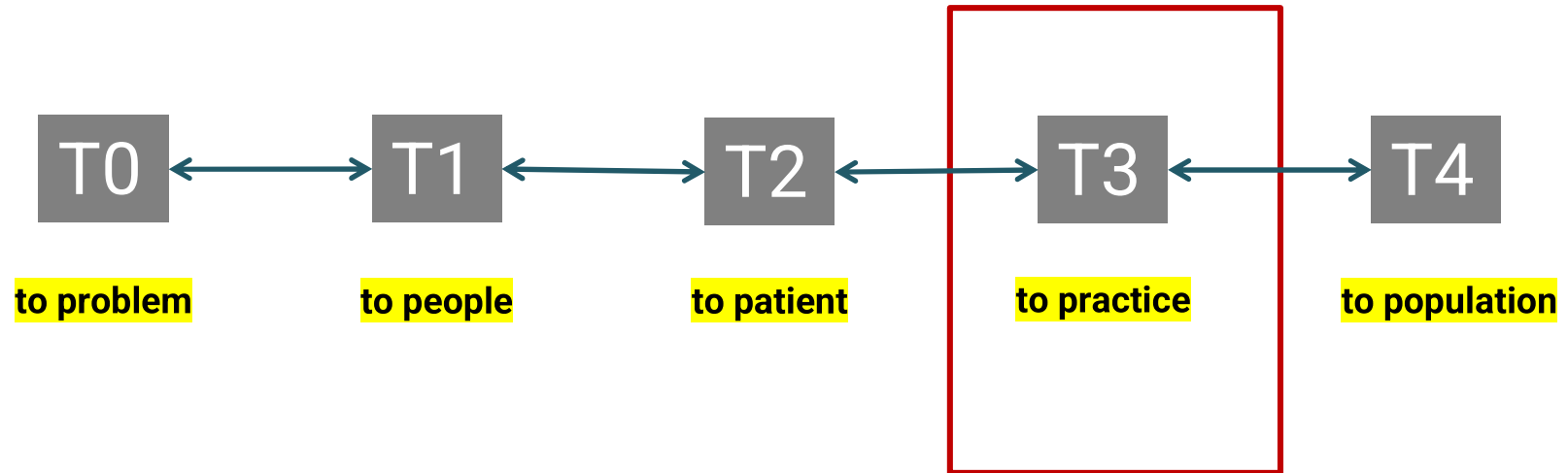
Definition (CIHR):

A dynamic and iterative process that includes the **synthesis**, **dissemination**, **exchange** and ethically sound **application** of knowledge to improve health, provide more effective health services and products, and strengthen the health care system

Straus SE, et al. CMAJ 2009;181(3-4):165-8

Research-to-Practice Gap: Closing it

T3 Translational Stage Research



Research Translational Stages

Research-to-Practice Gap: Closing it

Implementation Science

It Takes an Average of 17 years for Evidence to Change Practice – The Burgeoning Field of Implementation Science Seeks to Speed Things Up.

Rubin R. JAMA 2023;329:1333-6

“...the scientific study of methods to promote the **systematic uptake** of **research findings and other evidence-based practice** into **routine practice** and, hence, to improve the quality and effectiveness of health services.”

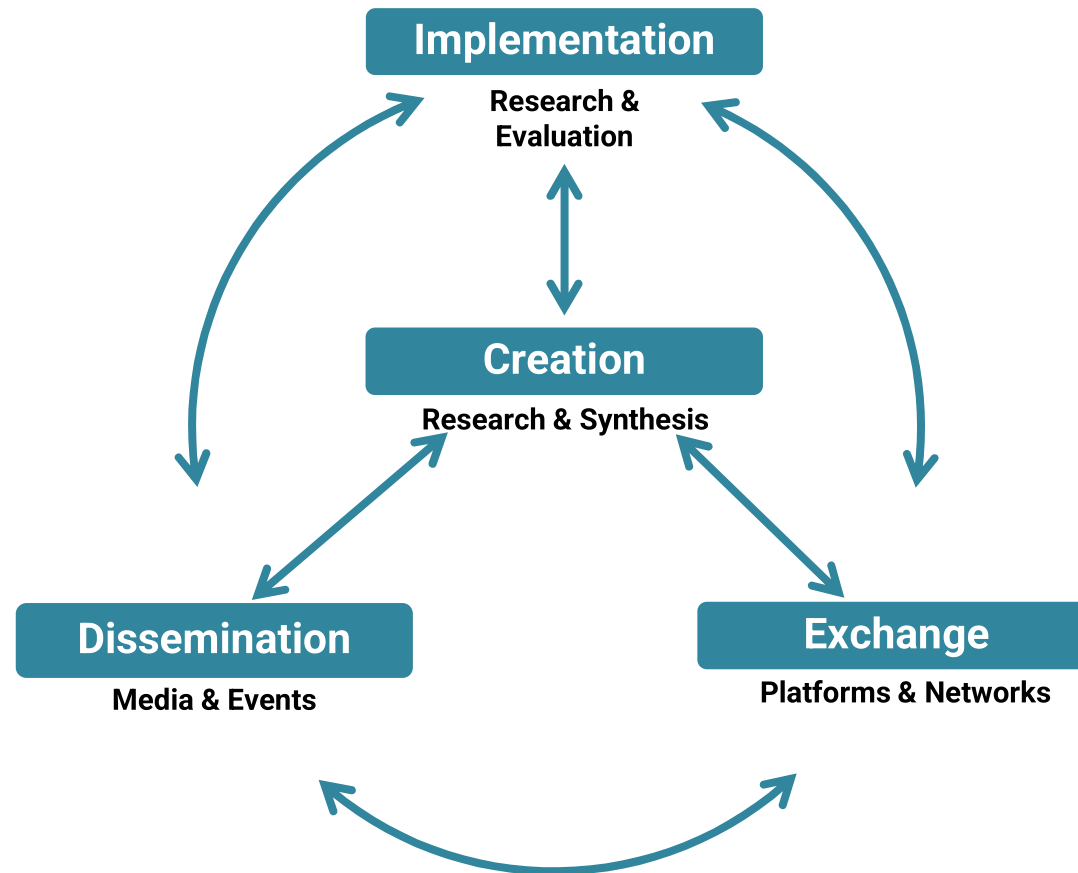
Eccles, M.P. Implementation Science 2006; 1: 1.

Research-to-Practice Gap: Closing it

Approach taken by Geriatric Education & Research Institute (GERI)

- Adopting knowledge translation processes (**System**)
- Conducting research in T3 (to practice) translational stage (**Space**)
- Applying implementation science concepts (**Science**)

Research-to-Practice Gap: Closing it



GERI's knowledge translation framework

Research-to-Practice Gap: Closing it

Two Case Examples

- Physician-pharmacist care collaboration to improve prescribing for older people with multimorbidity
- Community-based complex intervention for frail older people

Closing thoughts

**Accelerating the incorporation of
research evidence into routine practice to
improve the lives of older adults**

**... a valuable opportunity
and
worthy challenge**

Acknowledgement and Thanks

Colleagues at:

Department of Geriatric Medicine, Tan Tock Seng Hospital

Geriatric Education and Research Institute

Collaborating research and community organizations

&

Ministry of Health

National Medical Research Council

for their:

Partnership

Support

