



**HEALTHY AGEING FOR OUR POPULATION** 



## **ABOUT GERI**

The Geriatric Education & Research Institute (GERI) is a national research institute established in 2015 and funded by the Ministry of Health, Singapore. We conduct research on healthy ageing, with a focus on preventing functional decline and implementing integrated care for older adults. GERI's multi-institutional team specialises in implementation research, evidence review, programme evaluation and health policy research, working closely with stakeholders from across Singapore's healthcare clusters, policy bodies and community spaces. By translating evidence-based research outcomes into real-world use to reach decision-makers and practitioners, GERI contributes to health policy and practice to advance healthy ageing for our population.

#### **MISSION**

Improving the lives of older adults in Singapore through excellence in translational research and education that impact health policy and practice.

#### **VALUES**



Innovate

**Teamwork** 

Excellence









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THROUGH RESEARCH

View a snapshot of GERI's real-world impact,

which illustrate how research outcomes have the potential to contribute to and inform healthy ageing practices and policies.



Read about GERI's new, ongoing and completed implementation research and health policy research projects spanning key ageing issues like frailty, dementia and more.



22 COLLABORATIONS FOR BETTER HEALTH OUTCOMES

Find out what our partners have to say about how GERI is supporting their efforts to refine and scale up healthcare innovations across health, social and community care.



#### ASSOCIATE PROFESSOR DING YEW YOONG

Executive Director & Lead Scientist

Closing the research-to-practice gap by moving research evidence into real-world use has always been central to GERI's work since day one. How we do so, however, evolves with the needs of our broader health system and society. A key development in this regard is Age Well SG, a national initiative to help older Singaporeans stay active, connected, and to be cared for within their communities. Now, the hard work is underway: enacting this policy blueprint on the ground.

In support of this, GERI has sharpened its scope of work and approach. Setting our roots firmly in the T3 (translation to practice) and T4 (translation to population) research space, we are shoring up our energies on projects around functional ability and integrated health and social care for older adults, which are "must-haves" for ageing well. Programmes, practices and policies are the keys through which the ideal of healthy ageing is actualised at a population level. GERI continues to support our stakeholders in these dedicated areas, so that implementation efforts are effective, sustainable and scalable at local to national levels.



A key development in this regard is Age Well SG, a national initiative to help older Singaporeans stay active, connected, and to be cared for within their communities. Now, the hard work is underway: enacting this policy blueprint on the ground. In support of this, GERI has sharpened its scope of work and approach.

## **EXECUTIVE DIRECTOR'S MESSAGE**



Our Annual Report 2024/25 highlights some of the fruits borne this past year, as a result of our renewed impactdirected perspective:

- We implemented GERI's first Research Impact Framework to ensure that all our projects are designed to contribute towards positive and meaningful outcomes for society.
- We issued our inaugural Policy Brief to support the Ministry of Health Frailty Implementation Workgroup's broader efforts to assess and manage rising frailty in Singapore, with plans for more briefs to support evidence-informed policymaking.
- We catalysed cross-cluster implementation research collaborations, while partnering policy and community stakeholders in our area of expertise, intervention co-development and programme evaluation, such as for the Live Well, Age Well active ageing programme.
- We expanded into new domains of research within the World Health Organization's Public Health Framework for Healthy Ageing to address local knowledge gaps, kickstarting a project on nutrition for older adults, with another study on social connectedness in the pipeline.

While much work remains to be done, I am heartened by the collective desire, from many quarters, to put knowledge and evidence into action and implement solutions that can enable health and well-being in older age. As GERI commemorates its 10th anniversary in 2025, I would like to express my deep gratitude to the GERI team, all our funders, collaborators and our valued stakeholders for joining us and partnering us on this important journey.

## **GERI ADVISORY**

# **COMMITTEE**

#### PROFESSOR CHEE YAM CHENG (CHAIRMAN)

Emeritus Consultant, Tan Tock Seng Hospital

#### DR GOH KHEAN TEIK

Director, Hospital Services Division, Ministry of Health Singapore

#### **PROFESSOR BENJAMIN SEET**

Group Chairman Medical Board (Research) and Co-Chair, Academic Partnership Office, National Healthcare Group

#### MS TAN ZHI XU

Director, Ageing Planning Office, Ministry of Health Singapore

#### PROFESSOR CHUA HONG CHOON

Chief Executive Officer, Khoo Teck Puat Hospital and Yishun Community Hospital

#### **PROFESSOR LEE CHIEN EARN**

Deputy Group Chief Executive Officer, SingHealth

#### PROFESSOR JOSEPH SUNG

Dean, Lee Kong Chian School of Medicine and Senior Vice President (Health & Life Sciences), Nanyang Technological University, Singapore

#### PROFESSOR TEO YIK YING

Dean, Saw Swee Hock School of Public Health, National University of Singapore

## **MANAGEMENT**



**PROFESSOR PANG WENG SUN**Senior Advisor



ASSOCIATE PROFESSOR DING YEW YOONG Executive Director Lead Scientist Chairman, GERI Research Management Committee



ASSOCIATE PROFESSOR JAMES ALVIN LOW Lead Scientist Member, GERI Research Management Committee



ASSOCIATE PROFESSOR LIM WEE SHIONG Lead Scientist Member, GERI Research Management Committee



**MS KONG LAI HO**Deputy Director,
Finance and Administration



**DR TAN WOAN SHIN**Deputy Director, Research
Scientist



To find out more about our GERI Management, scan the QR code or visit our website.

#### INTERNATIONAL SCIENTIFIC ADVISOR

#### **PROFESSOR JOHN N. LAVIS**

Director, McMaster Health Forum and WHO Collaborating Centre for Evidence-informed Policy

## **OUR SCIENTISTS**

To better align with its evolving research needs, GERI has updated the designations of its Faculty members to Scientists comprising Lead Scientists, Adjunct Scientists and Visiting Consultants.



To find out more about our GERI Scientists, scan the QR code or visit our website.

## ASSOCIATE PROFESSOR DING YEW YOONG

Lead Scientist GERI, Tan Tock Seng Hospital

## ASSOCIATE PROFESSOR LAURA TAY

Lead Scientist Sengkang General Hospital

#### **DR ALLYN HUM**

Adjunct Scientist
Tan Tock Seng Hospital

## ASSOCIATE PROFESSOR EDWIN CHAN

Adjunct Scientist Singapore Clinical Research Institute

#### DR NOOR HAFIZAH BTE ISMAIL

Adjunct Scientist Tan Tock Seng Hospital

#### **PROFESSOR SHARON STRAUS**

Adjunct Scientist Unity Health Toronto, St Michael's Hospital

#### DR RAYMOND NG HAN LIP

Visiting Consultant Woodlands Health

## ASSOCIATE PROFESSOR LIM WEE SHIONG

Lead Scientist GERI, Tan Tock Seng Hospital

## ASSOCIATE PROFESSOR NG YEE SIEN

Lead Scientist
Singapore General Hospital

## ASSOCIATE PROFESSOR ANGELIQUE CHAN

Adjunct Scientist Centre for Ageing Research and Education, Duke-NUS Medical School

#### **PROFESSOR MAY C. WANG**

Adjunct Scientist University of California, Los Angeles

## ASSOCIATE PROFESSOR RESHMA MERCHANT

Adjunct Scientist National University Hospital

#### **DR SHI LUMING**

Adjunct Scientist
Singapore Clinical Research Institute

#### DR TEW CHEE WEE

Visiting Consultant Khoo Teck Puat Hospital

## ASSOCIATE PROFESSOR JAMES ALVIN LOW

Lead Scientist GERI, Khoo Teck Puat Hospital

#### DR TAN WOAN SHIN

Scientist GERI

#### **DR CHRISTOPHER LIEN**

Adjunct Scientist Changi General Hospital

## ASSOCIATE PROFESSOR MIHIR GANDHI

Adjunct Scientist
Singapore Clinical Research Institute

## ASSOCIATE PROFESSOR PHILIP YAP

Adjunct Scientist
Khoo Teck Puat Hospital

#### **DR KAMUN TONG**

Visiting Consultant GERI

GERI would like to thank our outgoing Joint Faculty and Adjunct Faculty members for their contributions to the Institute over the past year.

Dr Chan Ee Yuee, Tan Tock Seng Hospital • Dr Rachel Cheong, Khoo Teck Puat Hospital • Associate Professor Ng Tze Pin • Associate Professor Wee Shiou Liang, Singapore Institute of Technology • Dr Lydia Au, Ng Teng Fong General Hospital • Dr Justin Chew, Tan Tock Seng Hospital • Dr Lee Eng Sing, National Healthcare Group Polyclinics • Professor David Matchar, Duke-NUS Medical School • Dr Mathew Mathews, Lee Kuan Yew School of Public Policy • Associate Professor Iris Rawtaer, Sengkang General Hospital • Dr Laurence Tan, Khoo Teck Puat Hospital • Dr Melanie Tan, Ng Teng Fong General Hospital • Dr Robyn Tan, National University of Singapore • Dr Yong Woon Chai, National University Hospital, Singapore • Associate Professor Joanne Yoong, Research for Impact

## **OUR STAFF**



#### FIRST ROW, LEFT TO RIGHT:

Dr Tan Woan Shin, Deputy Director, Research and Scientist • Professor Pang Wen Sun, Senior Advisor • Associate Professor Ding Yew Yoong, Executive Director and Lead Scientist • Associate Professor Lim Wee Shiong, Lead Scientist and Member, GERI Research Management Committee

#### SECOND ROW, LEFT TO RIGHT:

Ezra Ho, Research Associate • Dr Mimaika Luluina Ginting, Research Associate • Nur Adilah Faizal, Research Officer • Jasmine Tan Shi Hui, Senior Executive • Dr Zoe Lim, Research Fellow • Norhidayah Ishak, Senior Executive • Irene Wang Qing, Research Associate • Natasha Lee, Executive

#### THIRD ROW, LEFT TO RIGHT

Fahreeq Fattah Medina, Senior Executive • Dr Charlene Lau Lay Khoon, Senior Research Fellow • Zoey Tan Zhi Hui, Research Officer • Pirratheep S/O Moorthy, Research Officer • Dr Yu Chou Chuen, Research Fellow • Dr Jonathan Gao Songcheng, Research Fellow • Dr Edward Tan Tzu Kwang, Senior Manager • Charlotte Ong Hui Ting, Senior Executive • Qiu Shijia, Senior Manager • Junn Lim Yi Jun, Executive • Araviinthansai S/O Subramaniam, Research Associate

#### FOURTH ROW, LEFT TO RIGHT:

Chiam Ai-Ling, Senior Manager • Tang Jia Ying, Research Officer • Dr Serene Nai Ze Ling, Research Fellow • June Teng Poh Hoon, Research Associate • Nongluck Pussayapibul, Senior Manager • Chang Chui Rhong, Senior Executive • Fiona Goh Siew Fong, Research Associate • Dr Grace Sum Chi-En, Research Fellow • Jenny Ganeshrays, Senior Executive

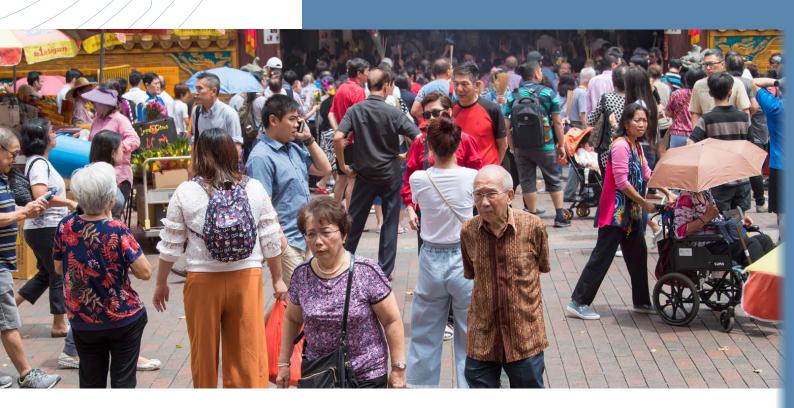
#### ABSENT FROM PHOTO:

Associate Professor James Alvin Low, Lead Scientist and Member, GERI Research Management Committee • Ms Kong Lai Ho, Deputy Director, Finance and Administration • William Neo, Senior Manager • Dr Benedict Pang Wei Jun, Research Fellow • Dr Tou Nien Xiang, Research Fellow • Robin Choo Wai Munn, Biostatistician • Penny Lun Shwu Yee, Research Associate • Kelly Wong Young Lee, Manager • Vivien Shu Wen Teng, Senior Executive • Wong Yock Leng, Senior Executive • Foo Lea Ping, Executive





# **OUR RESEARCH**



## **RESEARCH IMPACT**

GERI implemented its first Research Impact Framework<sup>[1]</sup> (RIF) in 2024. GERI's RIF enables us to gather greater insights from the outcome of research findings, and allows researchers to guide the planning and monitoring of progress in translating findings to practice and policy.

Here is a snapshot of GERI's real-world impact, which illustrates how outcomes have the potential to contribute to and inform healthy ageing practices, policies or further research.



## Health policy research: Brief geriatric assessments (BGAs) for older persons in community settings

## AGE WELL SG STRAND:

Strengthen support for seniors with care needs in the community

#### GAP:

Comprehensive geriatric assessments (CGAs) – the cornerstone of high-quality care for older adults – are resource-intensive. Shorter forms of assessment, such as BGAs, may be useful as an alternative to CGAs in primary and community care settings. However, there is a current lack of consensus on the target population, essential domains, and implementability of BGAs in community and primary care settings in Singapore.

#### **SOLUTION:**

This study identified BGA tools that have been evaluated or implemented in primary and community care settings, obtained local consensus from clinical experts on the key assessment domains and the role of BGAs, and identified implementation considerations from health, social and policy stakeholders to understand the feasibility for implementation. Evidence was triangulated from three study phases to produce a Policy Brief for the Ministry of Health, Singapore (MOH): from a scoping review, a modified Delphi study, and qualitative findings from stakeholder dialogues.

## ANTICIPATED IMPACT:



#### Advancing Knowledge

- 1 Policy Brief for the Ageing Planning Office (APO), MOH (completed)
- 3 Publications (2 published)
- 3 Presentations at scientific conferences, and to funders, collaborators (1 completed)
- 2 Presentations to MOH APO and the MOH Frailty Implementation Workgroup (completed)



## Informing Decision-making

This project can inform policy and practice around implementing BGAs in community and primary care settings. It has generated discussion about the similarities and differences between the World Health Organization Integrated Care for Older People framework (Step 1) and the Community Screener Tool.

Duration: Oct 2023 to Nov 2024

Lead Organisation: Health Policy Research Group, GERI

<sup>[1]</sup> GERI's Research Impact Framework was adapted from the Canadian Academy of Health Sciences Impact framework and the Australian Medical Research Institute's Impact Report, and contextualised for GERI's research work.

#### Implementing the National Frailty Policy in Singapore's primary care: The Intrinsic Capacity ProMotion in PrimAry Care for The Frail Program (IMPACTFrail)

## AGE WELL SG STRAND:

Strengthen support for seniors with care needs in the community

#### GAP:

Early mitigation of declining physical and psychological well-being (known as intrinsic capacity) in older people may help them function well and have good quality of life even as they grow old. Additionally, there is a need for more research projects with three-cluster collaborations from the outset, to facilitate the successful execution of health programmes nationwide.

## PLANNED SOLUTION:

GERI has co-developed the IMPACTFrail programme with three Regional Health System (RHS) polyclinic groups. It is an intrinsic capacity identification and management programme that screens mildly frail older adults on six intrinsic capacity domains in polyclinics and provides coordinated care across health and social services. Implementation research guides the development and feasibility assessment of the new programme among five polyclinics. Subsequently, a scaled-up programme may be evaluated for its effectiveness and implementation.

## ANTICIPATED IMPACT:



#### Advancing Knowledge

- 3 Publications
- 2 3 Conference presentations
- 1 Final report
- 1 Presentation to government and government-affiliated agencies



## Informing Decision-making

Informs the MOH Frailty Implementation Workgroup and polyclinic leadership teams on the feasibility of scaling this programme, and how this programme can directly fulfil their aim of translating national strategies to real actionable change.



#### Impact Practices





#### Health Benefits

Early interventions to impede decline in and to improve intrinsic capacity and functional ability.



## Social and Fronomic Benefits

Optimising intrinsic capacity will facilitate the ability to maintain a socially active life. The cost analysis informs the cost of scaling this new programme to more polyclinics across the 3 RHSes.

Duration:	Mar 2024 to Mar 2026
Principal Investigator:	Dr Grace Sum Chi-En (Research Fellow, GERI)
Collaborating Organisations and Cluster Leads:	National Healthcare Group Polyclinics: Dr David Ng (Head, Special Projects and Deputy Director, Clinical Services) and Dr Jonathan Ng (Family Medicine Clinician)
	<u>National University Polyclinics:</u> Dr Richard Hui (Director, Primary Care Partnerships, Regional Health System Office) and Dr Kwek Sing Cheer (Head, Bukit Batok Polyclinic)
	<u>SingHealth Polyclinics:</u> Professor Ng Chirk Jenn (Senior Consultant) and Dr Sinead Wang Zhen (Senior Consultant)

#### Advance Care Planning (ACP) Quality Implementation (AQI) Knowledge Exchange Platform

#### GAP:

Singapore's ACP 2.0 evaluation highlighted a lack of endorsed implementation consensus and guidelines at the national level, which has resulted in inconsistency and varying standards of ACP practices across settings.

#### **SOLUTION:**

Through the AQI Platform, GERI co-led the creation of the following:

- 1) a national implementation guideline for ACP practitioners and healthcare professionals,
- 2) an implementation action plan for pilot sites, and
- 3) quality indicators to measure the success of ACP implementation.

GERI supported the national workgroup in their adoption of implementation science approaches in the development and testing of strategies to overcome barriers to implementation. The Agency for Integrated Care (AIC) and GERI also co-led an ACP World Café with stakeholders.

## ANTICIPATED IMPACT:



#### Advancing Knowledge

- 2 Publications
- Presentation to government and government-affiliated agencies (completed)
- 8 Presentations at scientific conferences, and to funders and collaborators (completed)
- 1 Report (completed)
- World Café with ACP practitioners (completed)



## Informing Decision-making

The national guidelines were presented to and endorsed by the ACP National Steering Committee, while ACP Quality Improvement initiatives were also shared with the Committee.



#### Impact Practices

The guidelines will guide ACP leaders, trainers, facilitators, administrators and clinicians to enhance ACP quality and quality of care which benefits clients including older persons. It will be subsequently adopted by AIC to guide workstreams and users under the ACP plan. The guidelines will be launched as shared resources by AIC to target users such as ACP leaders, trainers, facilitators, administrators, community care partners and AIC's Quality Improvement Division.

Duration:	Apr 2022 to Mar 2025
Platform Lead:	Dr Raymond Ng Han Lip (Co-chair, National Advance Care Planning Steering Committee; Chief, Palliative & Supportive Care, Department of Integrated Care, Woodlands Health (WH); Visiting Consultant, GERI)
Platform Co-Lead:	Dr Tan Woan Shin (Deputy Director, Research and Scientist, GERI)
Key Collaborating Organisations:	Core Team: AIC and GERI
	National Workgroup: Alexandra Hospital, Changi General Hospital, GERI, KK Women's and Children's Hospital, Khoo Teck Puat Hospital (KTPH), Lien Centre for Palliative Care at Duke-NUS Medical School, National Cancer Centre Singapore, National Heart Centre Singapore, National University Polyclinics, Ng Teng Fong General Hospital, Singapore General Hospital (SGH), SingHealth Polyclinics, Tan Tock Seng Hospital (TTSH)
	<u>Pilot Sites:</u> Six pilot teams from KTPH, SGH, TTSH, WH
Funding:	Co-funded by AIC and GERI

#### Built Environment in Falls and ArthrITis (BE-FIT) study

GERI'S ROLE: GERI is providing the BE-FIT team with implementation science expertise to disseminate and

translate their research findings to practice.

LEAD: Dr Tou Nien Xiang (Research Fellow, GERI)

AGE WELL SG STRAND:

Improve the physical living environment

GAP:

Older adults with osteoarthritis and/or high falls risk may have difficulty navigating and moving around Singapore's highly dense urban built environment. Currently, there is a knowledge gap on how to optimise the built environment to enhance older adults' social participation, life-space, physical safety and psychosocial outcomes.

PLANNED SOLUTION:

The BE-FIT study aims to understand the relationships between the built environment with psychosocial factors, social participation and functional outcomes in a vulnerable elderly population with osteoarthritis and/or high falls risk.

## ANTICIPATED IMPACT:



#### Advancing Knowledge

- 1 Policy Brief
- 2 Codes/guidelines for built environment design
- 1 World Café to disseminate findings and co-develop recommendations



## Informing Decision-making

The study will identify key built environment factors associated with social participation and physical activity. GERI's knowledge translation efforts are expected to translate study findings into recommendations, which can inform the design of interventions to improve mobility and promote physical activity in older adults with osteoarthritis and/or high falls risk.

Duration:	Nov 2023 to Oct 2026
Co-Principal Investigators:	Dr Bryan Tan Yijia (Consultant, Department of Orthopaedic Surgery, Woodlands Health), Dr Navrag Singh (Lead Principal Investigator and Senior Scientist, Future Health Technologies, the Singapore ETH Centre)
Funding:	National Research Foundation Campus for Research Excellence and Technological Enterprise Network Grant

## **GERI'S RESEARCH STRATEGY**

GERI's research is guided by the World Health Organization (WHO)'s Public Health Framework for Healthy Ageing<sup>1</sup> which aims to foster the functional ability of older adults at the individual level and environmental level.

# Research, Innovation and Enterprise (RIE) 2025 A public health framework for healthy ageing by the WHO (2015) Overarching Goal Optimising Functional Ability Research Focus Preventing functional decline Implementing integrated care Knowledge Translation Framework Ageing Policy: Age Well SG Health Policy and Practice: Healthier SG

From a strategic angle, building supportive environments for older adults can also amplify the outcomes of policy efforts, such as Healthier SG, which seek to improve and maintain older adults' physical and mental capabilities through lifestyle changes and preventive care intervention. By placing this endeavour at the heart of our efforts, we can unlock greater progress in our race against time to uplift the overall health of our older population.

ASSOCIATE PROFESSOR DING YEW YOONG

Executive Director and Lead Scientist, GERI

#### To support healthy ageing in Singapore, our Research Focus areas are:

#### Preventing functional decline

Supporting the functional ability of older adults at the individual level by improving or maintaining intrinsic capacity (the combination of physical and mental capacities). Research topics encompass intrinsic capacity, frailty, physical and cognitive functioning, falls and community mobility.

Preventing functional decline is important for independence, well-being and quality of life in older age. GERI's sustained research in this area dovetails with Age Well SG's aims to encourage active ageing in the community. This research focus area also informs policies and programmes around functional ability, so that older adults can contribute to society and staying socially connected.

#### ASSOCIATE PROFESSOR LIM WEE SHIONG

Lead Scientist and

Research Management Committee Member, GERI Director, Institute of Geriatrics and Active Ageing Senior Consultant, Geriatric Medicine, Tan Tock Seng Hospital

#### Implementing integrated care

Optimising supportive environments by enabling those with decline in capacity to do things that are important to them. Research topics encompass care models for those with frailty, multi-morbidity, complex needs, dementia and advanced life-limiting illness; incorporating caregiving support.

Implementing integrated care programmes is a complex endeavour. GERI's research approach aims to better understand the barriers in doing so, and to develop strategies that enable closer coordination of care between providers. This helps ensure our research is relevant to Age Well SG, strengthens support for seniors with care needs in the community, as well as supports HealthierSG's vision for preventive health and personalised care.

#### DR TAN WOAN SHIN

Deputy Director, Research and Scientist, GERI

» Read about our projects in these areas on page 15.

## Through the four nodes of GERI's Knowledge Translation Framework, we disseminate evidence-based research findings to inform real-world practice and policy.

**Implementation** 

**Knowledge Creation** 

**Exchange** 

Dissemination



#### **Knowledge Creation**

Working with our collaborators, we engage stakeholders to identify issues and conduct evidence-based research, with an emphasis on implementation research, health policy research and interdisciplinary approaches. Our methodological expertise includes rapid

reviews, programme evaluation, Delphi method

and mixed methods.

» Hear what our collaborators have to say about GERI's expertise support on

page 23 and 24.

#### Implementation



Research findings may span behaviours, practices, knowledge and attitudes. To create solutions that can be implemented in practice, we identify and utilise suitable interventions from a range of strategies used in implementation research to enhance the understanding and adoption of a new

idea or practice.

» Read about GERI's contributions to the national Frailty Implementation Workgroup on page 9.



#### Dissemination

Through various channels, such as publications, Research and Policy Briefs, presentations and more, we share knowledge and related evidence-based interventions with healthcare practitioners, community care partners, policymakers and researchers.

» Read about GERI's efforts in sharing our research on page 29.

#### Exchange



Platforms for discourse are intentionally and thoughtfully created to engage our stakeholders on ways to

improve effectiveness, sustain and scale up evidence-based approaches in practice. Knowledge users are engaged before, during and after the project. Through such research-practice-policy exchange, new research opportunities may emerge.

» Read about how GERI co-led a national platform on Advance Care Plannina implementation on page 11.



The key idea is to turn concepts, theories, research findings into real-life, real-time solutions for the betterment of the older human. GERI stands at the forefront of using implementation research and knowledge translation principles to achieve these ideals and quest.

For the Advance Care Planning (ACP) Quality Implementation (AQI) Knowledge Exchange platform, our major stakeholders included policymakers and decision-makers from the three regional healthcare clusters. It was important to garner buy-in from our stakeholders in order to implement, maintain and sustain any knowledge translation efforts. GERI would act as the co-driver, enabler and catalyst for the platform.

#### ASSOCIATE PROFESSOR JAMES ALVIN LOW

Lead Scientist and Research Management Committee Member, GERI

## RESEARCH PROJECTS

Read about the implementation research and health policy research projects led by GERI's researchers and scientists, spanning key issues like frailty, dementia and more.

#### Preventing functional decline

NEW

## Evaluating the implementation of Live Well, Age Well (LWAW) programme in the community

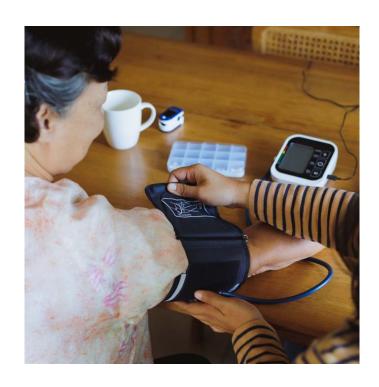
- AGE WELL SG STRAND: Encourage active ageing
- PRINCIPAL INVESTIGATOR: Dr Charlene Lau Lay Khoon (Senior Research Fellow, GERI)
- COLLABORATING ORGANISATION(S): Ageing Planning Office, Ministry of Health, Singapore (MOH), Health Analytics Division, MOH; Health Promotion Board (HPB), People's Association (PA)
- GAP: The LWAW Programme, administered by HPB and the PA, comprises a suite of active ageing programmes to empower older adults to improve and maintain their physical, mental and social health. To better understand the effectiveness of the LWAW programme, GERI is leading an evaluation of the programme, supported by MOH.
- PLANNED SOLUTION: Using a mixed methods approach, the team aims to evaluate the programme's implementation outcomes as well as its immediate and short-term outcomes amongst older adults, such as knowledge, self-efficacy, and stages of behaviour change.
- ANTICIPATED IMPACT: The findings of this study will contribute to the planning, design and implementation of future iterations of active ageing programmes for community-dwelling older adults.
- DURATION: Jul 2024 to Oct 2025

NEW

#### Implementing the National Frailty Policy in Singapore's primary care: The Intrinsic Capacity ProMotion in PrimAry Care for The Frail Programme (IMPACTFrail)

GERI has co-developed the IMPACTFrail programme with National Healthcare Group Polyclinics, National University Polyclinics and SingHealth Polyclinics. It is an intrinsic capacity identification and management programme that screens mildly frail older adults on six intrinsic capacity domains in polyclinics and provides coordinated care across health and social services.

» Read more about the project and its anticipated impact on page 10.



#### NEW

## Improving Diet Quality of Community-Dwelling Seniors using a Community-Based Participatory Approach

- AGE WELL SG STRAND: Encourage active ageing
- PRINCIPAL INVESTIGATOR: Dr Zoe Lim (Research Fellow, GERI)
- COLLABORATING ORGANISATION(S): NTUC Health, Thye Hua Kwan Moral Charities, Agency for Integrated Care, Health Promotion Board
- GAP: Studies in Singapore have reported undernutrition in about one third of community-dwelling older adults aged 60 and above, and obesity in almost 1 in 10 older adults aged 60-74. Diet quality is a common driver in addressing both forms of malnutrition, as it moves away from the focus on single nutrients (e.g. reducing salt). However, local nutrition surveys, food programmes and public health messaging rarely address diet quality.
- PLANNED SOLUTION: The study aims to develop a community-based intervention to improve diet quality, with a long-term goal of decreasing risk of cognitive

- decline and other diet-related non-communicable diseases. The findings will then be used to design a Type 2 hybrid implementation-effectiveness trial.
- ANTICIPATED IMPACT: At an individual level, the intervention hopes to contribute towards improved access to nutritious food, which can improve older persons' diet quality in the short term and health status in the long-term. Community-level impact will be driven by the use of community engagement as a methodological approach, to bring positive outcomes related to social support, social capital and empowerment of community members. At a societal level, the project seeks to reduce health inequity by focusing on isolated seniors whose needs are not adequately met by existing services and programmes.
- **DURATION**: Jan 2025 to Mar 2026

#### ONGOING

## Connecting through reminiscing: Evaluating a dementia engagement programme in two day-care centres in Singapore using multimedia heritage resources

- AGE WELL SG STRAND: Strengthen support for seniors with care needs in the community
- PRINCIPAL INVESTIGATOR: Dr Yu Chou Chuen (Research Fellow, GERI)
- COLLABORATING ORGANISATION(S): National Heritage Board (NHB), Khoo Teck Puat Hospital (KTPH)
- GAP: NTUC Health has developed a dementia engagement programme (DEP) that provides an alternative, non-pharmacological approach toward dementia care. To better understand the implementation of the DEP, NHB is collaborating with GERI and KTPH to evaluate the DEP.
- PLANNED SOLUTION: In this evaluation, GERI will
  examine the impact of utilising heritage resources in
  a non-pharmacological care programme targeted at
  people with dementia in day care settings. This DEP
  consists of conversational as well as interactional

- activities between professional caregivers and clients with dementia in a group setting that utilises multimedia heritage resources provided by NHB.
- ANTICIPATED IMPACT: The findings from this
   evaluation will potentially improve the delivery and
   guide future iterations of the DEP, contributing towards
   a better understanding of how the programme will
   be able to enhance the caregiving practice for people
   with dementia in senior day care settings in Singapore.
- FUNDING: NHB
- DURATION: Jul 2023 to Dec 2025

#### ONGOING

## Inpatient Nursing Frailty Assessment (INFA): Comprehensive Geriatric Assessment and multidisciplinary intervention for frail hospitalised older adults

- AGE WELL SG STRAND: Strengthen support for seniors with care needs in the community
- PRINCIPAL INVESTIGATOR: Dr Justin Chew Linghui (Research & Innovation Lead, Institute of Geriatrics and Active Ageing and Consultant, Tan Tock Seng Hospital (TTSH)) & Dr Grace Sum Chi-En (Research Fellow, GERI)
- COLLABORATING ORGANISATION(S): TTSH, National Healthcare Group
- GAP: Older adults admitted to hospital wards under General Medicine and General Surgery may miss out on geriatric assessment. There is a need to incorporate systematic screening of geriatric syndromes in those wards. Additionally, there is a growing need to empower nurses to lead the screening and care of patients.
- PLANNED SOLUTION: The INFA programme at TTSH aims to provide geriatric assessment and coordinate care for frail older persons during and after their hospital stay. The study team from GERI and TTSH will conduct implementation research

- before and during the programme's pilot at TTSH. Prior to implementation, the study team will identify anticipated barriers and enablers to refine the programme and develop implementation strategies. During the pilot, implementation strategies and outcomes (adoption, implementation, sustainability, scalability) will be assessed. Programme effectiveness will be evaluated in areas such as function, quality of life, hospital readmission rates and use of healthcare services. Cost-effectiveness will also be examined.
- ANTICIPATED IMPACT: Overall, this project will
  potentially contribute to building frailty-ready hospital
  services and inform scalability and sustainability within
  TTSH and to other hospitals. Research from the project
  has been presented at the 2025 Ageing Research
  Network Symposium and the 11th Asian Conference
  on Aging & Gerontology 2025, with plans for further
  dissemination through conferences and journal
  publications.
- DURATION: Dec 2023 to Mar 2026

#### ONGOING

## Intrinsic Capacity Risk Evaluation – Towards Holistic Assessment and Targeted Management of Elderly in Acute Care (I-CREATE)

- AGE WELL SG STRAND: Strengthen support for seniors with care needs in the community
- PRINCIPAL INVESTIGATOR: Associate Professor Laura Tay (Lead Scientist, GERI; Head and Senior Consultant, Geriatric Medicine, Sengkang General Hospital (SKH))
- COLLABORATING ORGANISATION(S): SKH
- GAP: In an earlier study, depression and malnutrition
   (which fall under the psychological and vitality domains
   of intrinsic capacity) were identified to be associated
   with risk for hospital readmission among older adults.
   The World Health Organization Integrated Care for Older
   People (WHO ICOPE) screening tool could potentially
   be used to guide and facilitate holistic assessment and
   interventions for hospitalised older adults to prevent
   poor health outcomes. More research is required for
   a proof of concept on the use of the WHO ICOPE tool
   contextualised to an acute care setting.
- PLANNED SOLUTION: The I-CREATE study will examine the effect of intrinsic capacity assessment

- and targeted interventions that address identified domain losses on 30-day readmission rates in older adults admitted to the General Medical department of a single restructured hospital. The intervention is modelled after Steps 1 and 2 of the WHO ICOPE tool, but is tailored specifically to address needs in the acute care setting and support physicians in the holistic management of hospitalised older adults.
- ANTICIPATED IMPACT: The findings of this study have the potential to be adopted as standard care in SKH inpatient General Medicine wards, and subsequently, be potentially scaled up across SingHealth institutions. In addition, the intervention may highlight the importance of intrinsic capacity in the healthcare system in Singapore and enable non-geriatricians to provide better care for older adults. Findings will be disseminated through presentations at scientific conferences and presentations to funders and collaborators, with journal publications planned.
- DURATION: Jan 2023 to Mar 2026

#### COMPLETED

## Evaluating the implementation of a nationwide active ageing programme for community-dwelling older adults

- AGE WELL SG STRAND: Encourage active ageing
- PRINCIPAL INVESTIGATOR: Dr Charlene Lau Lay Khoon (Senior Research Fellow, GERI)
- COLLABORATING ORGANISATION(S): Health Promotion Board (HPB)
- GAP: To promote active ageing in Singapore, routine functional assessment, which includes assessments of muscular strength, balance, and endurance, has been implemented alongside community-based exercise programmes to educate older adults about their physical performance. While functional assessment is standard in clinical settings, it is rarely conducted among community-dwelling older adults. Therefore, there is currently limited understanding of the implementation of functional assessment in community settings alongside exercise programmes.
- SOLUTION: The study evaluated the implementation of community-based exercise programmes and routine functional assessment across numerous community sites in Singapore. Semi-structured interviews were carried out on implementers and users to gather their experience and perception about the programmes.
- ANTICIPATED IMPACT: An evaluation report has been submitted to share insights on improving the reach and uptake of community-based exercise programmes and functional assessments. Additionally, the findings will be presented at a conference in June 2025.
- DURATION: Feb 2023 to Jan 2025



#### COMPLETED

# Health policy research: Brief geriatric assessments (BGAs) for older persons in community settings

There is a current lack of consensus on the target population, essential domains and implementability of BGAs in community and primary care settings in Singapore. To address this, GERI conceptualised and led a three-phase health policy research project, producing a policy brief for the Ageing Planning Office and Frailty Implementation Workgroup under the Ministry of Health, Singapore.

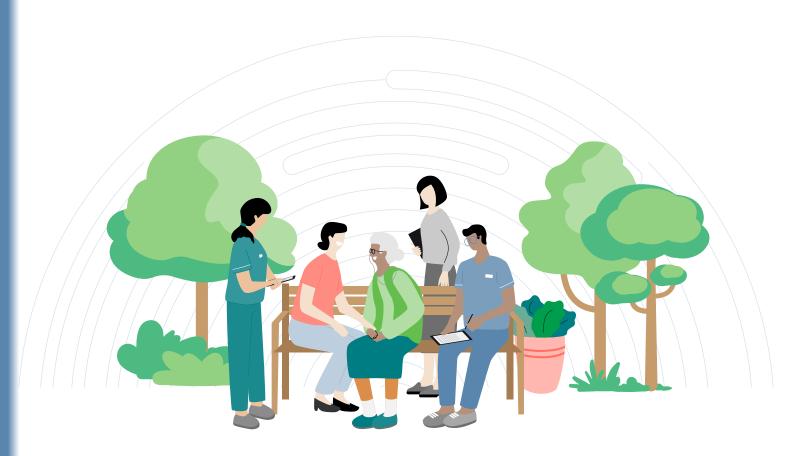
» Read more about the project and its research impact on page 9.

### Implementing integrated care

NEW

## Biosocial outcomes of Community Care Apartments (CCAs): A mixed-method evaluation

- AGE WELL SG STRAND: Improve the physical living environment
- PRINCIPAL INVESTIGATOR: Dr Kamun Tong (Visiting Consultant, GERI)
- COLLABORATING ORGANISATION(S): Ageing Planning Office, Ministry of Health, Singapore (MOH), Vanguard Assisted Living (formerly Atlas Care), MOH Holdings
- GAP: The CCA is the first public assisted-living housing option in Singapore. It was jointly developed by the Ministry of National Development, MOH and the Housing Development Board, and aims to provide seniors with age-friendly housing alongside eldercare support. However, there is a knowledge gap around how CCAs affect biopsychosocial outcomes and support healthy ageing in place. GERI was commissioned by MOH in 2024 to evaluate the first CCA at Bukit Batok.
- PLANNED SOLUTION: Using a mixed methods approach, GERI aims to understand the biopsychosocial aspects of healthy ageing in place, including older persons' perceptions of their living spaces, service utilisation, social networks, well-being and quality of life.
- ANTICIPATED IMPACT: The findings from this
   evaluation will help to guide future iterations of the
   CCA and have the potential to inform future housing
   policies and housing models in combination with
   geriatric care delivery.
- **DURATION:** Oct 2024 to Apr 2027



#### ONGOING

#### Implementation and outcomes of a telehealth centre in a tertiary hospital (THINK)

- AGE WELL SG STRAND: Strengthen support for seniors with care needs in the community
- PRINCIPAL INVESTIGATOR: Dr Tew Chee Wee (Visiting Consultant, GERI and Senior Consultant, Geriatric Medicine, Khoo Teck Puat Hospital (KTPH))
- COLLABORATING ORGANISATION(S): KTPH, Singapore Clinical Research Institute, St Michael's Hospital, Unity Health Toronto
- GAP: Against the backdrop of a rapidly ageing population, hospitals are seeing more elderly patients with more complex conditions, which contributes to the hospital capacity crunch.
- PLANNED SOLUTION: Telehealth support, where nurses and telecare officers support patients' transition back home, can potentially reduce readmission rates and free up capacity for more urgent cases. GERI is evaluating the implementation of the telehealth

- support centre at KTPH to identify the barriers and facilitators of implementation, and its effectiveness in terms of patient outcomes, resource utilisation and cost benefit.
- ANTICIPATED IMPACT: Study findings could support efforts to optimise, scale and sustain telehealth use as an enabler of care provision across care settings, while informing policymakers on health service planning and policy formulation in establishing telehealth services. Findings have been presented at the 11th Asian Conference on Aging & Gerontology 2025, with plans for dissemination through upcoming journal publications, conferences and presentations to government and government-affiliated agencies.
- DURATION: Apr 2023 to Mar 2026

#### ONGOING

## Understanding moral distress and adaptive responses of clinicians in Advance Care Planning (ACP)

- PRINCIPAL INVESTIGATOR: Dr Raymond Ng Han Lip (Visiting Consultant, GERI; Senior Consultant and Head, Palliative & Supportive Care, Department of Integrated Care, Woodlands Health (WH))
- COLLABORATING ORGANISATION(S): WH, Nanyang Technological University, Khoo Teck Puat Hospital, National University of Singapore, National University Hospital
- GAP: Since 2011, the Living Matters programme, based on the Respecting Choices framework for ACP, has been implemented nationwide. More research is needed to understand the moral distress that healthcare professionals face in implementing ACP in real-world settings as well as effective ways to address the ethical challenges that have arisen in practice.
- PLANNED SOLUTION: This mixed-methods study aims to examine the relationships among factors involved in implementing ACP, moral distress, and ethical conundrums. It will involve in-depth interviews, focus

- group discussions and quantitative methods to identify key issues around moral distress faced ACP facilitators and healthcare professionals.
- ANTICIPATED IMPACT: The findings from this study
  will inform the training curricula for ACP facilitators
  and healthcare professionals, as well as highlight
  potential service, knowledge and system gaps within
  the broader ACP service planning and operations
  perspective. Findings have been presented at six local
  and international scientific conferences, most recently
  the 2024 British Geriatrics Society Autumn Meeting
  and Singapore Health and Biomedical Congress 2024.
- DURATION: Mar 2022 to May 2025

#### COMPLETED

## Advance Care Planning (ACP) Quality Implementation (AQI) Knowledge Exchange Platform

Singapore's national ACP 2.0 evaluation highlighted a lack of endorsed implementation consensus and guidelines at the national level, which has resulted in inconsistency and varying standards of ACP practices across settings. To address this, GERI and the Agency for Integrated Care convened the ACP AQI Knowledge Exchange Platform to improve ACP adoption in Singapore through the development of national guidelines.

» Read more about the project and its research impact on page 11.

#### COMPLETED

## Factors influencing the decision to uptake COVID-19 vaccine based on the Theoretical Domains Framework: A mixed methods study of older adults in Singapore

- AGE WELL SG STRAND: Strengthen support for seniors with care needs in the community
- PRINCIPAL INVESTIGATOR: Dr Yu Chou Chuen (Research Fellow, GERI)
- GAP: Vaccine hesitancy is a major barrier that all governments are facing, especially in the light of the past COVID-19 pandemic. Understanding the perspectives of Singapore's older adults regarding vaccination is crucial, as it can inform the tailoring of interventions and campaigns to encourage vaccine uptake.
- SOLUTION: This mixed-methods study, guided by the Theoretical Domains Framework, aimed to identify the barriers and facilitators influencing vaccination decisions among older adults in Singapore. It examined perceptions and attitudes of older adults, and their outlook on COVID-19 vaccination support and anti-vaccination concepts.
- ANTICIPATED IMPACT: Study findings have been presented at six scientific conferences and presentations to funders and collaborators; in addition, it will also be disseminated in an upcoming journal article. These insights from the study can be used to tailor and design more effective health behaviour messaging in future pandemics, such as in campaigns to encourage vaccine uptake among older adults.
- DURATION: Dec 2021 to May 2024

## **RESEARCH COLLABORATIONS**

Read about how GERI is supporting our partners across health, community and social care to refine and scale up their healthcare innovations through GERI's expertise in implementation research and knowledge translation.

## Preventing functional decline

NEW

ADL+ 2.0: Enhanced Al-assisted multidomain digital intervention for prevention of cognitive decline in community-dwelling older adults

GERI'S ROLE: GERI is providing implementation science and health economics expertise across both phases of

the project.

LEAD: Dr Tan Woan Shin (Deputy Director, Research and Scientist, GERI)

- AGE WELL SG STRAND: Encourage active ageing
- PRINCIPAL INVESTIGATOR: Associate Professor Lim
  Wee Shiong (Lead Scientist, GERI; Director, Institute of
  Geriatrics and Active Ageing; and Senior Consultant,
  Geriatric Medicine, Tan Tock Seng Hospital)
- GAP: The number of people living with dementia is expected to rise in Singapore. While multidomain non-pharmacological interventions show promise in addressing various risk factors for dementia prevention, practical barriers, cost-effectiveness, scalability and sustainability concerns remain as significant challenges.
- PLANNED SOLUTION: The ADL+ 2.0 programme will be conducted in two phases and aims to employ innovative technologies and evidence-based strategies to create a robust and scalable intervention model for early detection of cognitive decline, preservation of cognitive health, and the delay of cognitive decline and onset of dementia. GERI is conducting the implementation evaluation and cost effectiveness analysis of the ADL+ 2.0 intervention.
- ANTICIPATED IMPACT: The ADL+ 2.0 intervention has the potential to be a cost-effective and sustainable population-level programme for preventing cognitive decline and dementia, when implemented

- at scale. GERI's research will identify factors on the implementation, scaling and sustainability of ADL+ 2.0, as well as its estimated costs, supporting potential plans for it to be scaled nationally. Findings will be disseminated through journal publications and presentations at scientific conferences, and to government-affiliated agencies.
- FUNDING: National Innovation Challenge Grant Call on Healthy and Meaningful Longevity
- **DURATION:** Oct 2024 to Sep 2029

#### ONGOING

#### Built Environment in Falls and ArthrITis (BE-FIT)

GERI is the knowledge translation partner for the BE-FIT study. The study aims to understand the relationships between the built environment with psychosocial factors, social participation and functional outcomes in a vulnerable elderly population with osteoarthritis and/or high falls risk.

» Read more about the anticipated translation impact from this project on page 12.



The BE-FIT team and I have enjoyed our collaboration and partnership with our co-investigators at

**GERI.** They provide interesting and insightful input particularly from an implementation perspective. This entails how we could use various knowledge translation and implementation frameworks to turn our research findings into actual actionable impact at both a policy level and also on the ground, in partnership with all our important stakeholders.

#### DR BRYAN TAN YIJIA

Co-Principal Investigator Consultant, Department of Orthopaedic Surgery, Woodlands Health

#### ONGOING

Optimising INtrinsic Capacity for Functional INdependence and to Impede FrailTY in Older Adults: Adaptation of the World Health Organization Integrated Care for Older People (WHO ICOPE) for Healthy Ageing in Singapore (INFINITY-ICOPE)

GERI'S ROLE: GERI leads the implementation research for this study, focusing on adoption, implementation,

sustainability and scaling of the INFINITY-ICOPE programme.

Dr Grace Sum Chi-En (Research Fellow, GERI) LEAD:

- AGE WELL SG STRAND: Strengthen support for seniors with care needs in the community
- PRINCIPAL INVESTIGATOR: Associate Professor Laura Tay (Lead Scientist, GERI; Head and Senior Consultant, Geriatric Medicine, Sengkang General Hospital)
- GAP: With the potential rise in disability prevalence of activities of daily living and instrumental activities of daily living in Singapore's ageing population, it is important to maintain functional independence in older adults in the community. There is a need to optimise efforts in assessing and preventing declines in intrinsic capacity, to facilitate the proactive diagnosis and management of frailty.
- PLANNED SOLUTION: The INFINITY-ICOPE programme integrates concepts of frailty and intrinsic capacity to facilitate entry to comprehensive geriatric assessment for frail seniors, while monitoring intrinsic capacity trajectories for the early detection of frailty. GERI is evaluating INFINITY-ICOPE's implementation outcomes of fidelity, penetration and sustainability within the community, alongside the development and

- operationalisation of the programme's implementation strategies.
- ANTICIPATED IMPACT: INFINITY-ICOPE seeks to reorient health and social services towards personcentred care to optimise the functional ability of older adults in the community. GERI's research will inform implementation strategies and potential future scaling of the programme, with findings-to-date published in a journal publication and presented at the 24th International Conference on Integrated Care 2024 and the 2024 Society for Implementation Research Collaboration Conference.
- FUNDING: National Innovation Challenge on Active and Confident Ageing Grant Call on Frailty
- DURATION: Jan 2023 to Jan 2028



Our collaboration with GERI will strengthen the implementation research capabilities for the conduct of INFINITY-ICOPE. This is essential for a complex programme such as this. The pre-implementation qualitative study conducted by GERI has identified key barriers and enablers among stakeholder implementers, which have guided the selection and development of implementation strategies according to evidence-based frameworks. GERI's support has been instrumental in ensuring rigour to the implementation science, bringing in appropriate theory and frameworks to account for contextual factors.

#### **ASSOCIATE PROFESSOR LAURA TAY**

Principal Investigator

COMPLETED

#### Intrinsic capacity in the context of population health for older adults in Singapore

GERI'S ROLE: GERI advanced the understanding of intrinsic capacity by providing and supporting

comprehensive statistical analyses, and examined the relationship between intrinsic capacity and

social participation.

LEAD: Dr Charlene Lau Lay Khoon (Senior Research Fellow, GERI)

- AGE WELL SG STRAND: Strengthen support for seniors with care needs in the community
- PRINCIPAL INVESTIGATOR (PI): Professor Paulin
   Straughan (Director, Centre for Research on Successful Ageing (ROSA), Singapore Management University)
- SITE PI: Associate Professor Ding Yew Yoong, Executive Director and Lead Scientist, GERI
- GAP: Intrinsic capacity captures the physical and mental capacities of an individual and represents the resources a person can tap into during his/her life, and there is currently a knowledge gap on how declines in intrinsic capacity affect older Singaporeans as they transition through the ageing process.
- SOLUTION: Together, ROSA and GERI studied intrinsic capacity of older adults in the Singapore Life Panel, to gain a better understanding of how individuals can flourish as one ages. The team conducted the construct development of five intrinsic capacity domains (cognition, locomotion, sensory function, vitality and psychological well-being) and subsequently examined its association with social participation, mediated by activities of daily living.
- ANTICIPATED IMPACT: Findings from the panel survey will provide insights into how Singaporeans

fare as they age. GERI's contributions have aided the development of a self-reported measure of intrinsic capacity. In addition, findings on the association between intrinsic capacity and social participation have been disseminated in a journal publication.

DURATION: Dec 2021 to Dec 2024



Our partnership with GERI has certainly been important in bridging interdisciplinary research between medical practitioners and the social sciences. Leveraging the GERI team's domain and methodological expertise, we have developed and validated a self-reported measure of intrinsic capacity, which has enabled us to keep our research efforts in tandem with the World Health Organization's healthy ageing directives. This measure has been fielded to members of the Singapore Life Panel, allowing us to track and better understand how well-being can be ensured for older Singaporeans.

#### PROFESSOR PAULIN STRAUGHAN

Principal Investigator

#### Implementing integrated care

ONGOING

Integration of a PROgnostic Model for Advanced Dementia (PRO-MADE) into tertiary clinical care using the implementation research logic model: A qualitative analysis

GERI'S ROLE: GERI is PRO-MADE's implementation research partner, providing expertise in the qualitative

evaluation of PRO-MADE's implementation and outcomes. GERI funded the development and validation of the PRO-MADE tool which formed the foundation for its ongoing deployment and

evaluation.

LEAD: Dr Tan Woan Shin (Deputy Director, Research and Scientist, GERI)

 AGE WELL SG STRAND: Strengthen support for seniors with care needs in the community

- PRINCIPAL INVESTIGATOR: Dr Allyn Hum (Adjunct Scientist, GERI; Head and Senior Consultant, Department of Palliative Medicine, Tan Tock Seng Hospital (TTSH))
- GAP: Almost 70% of patients with advanced dementia do not receive timely palliative care due to challenges of recognising the terminal phases of end-stage dementia, leading to them dying in hospitals instead of their own homes or appropriate long-term care facilities. While the PRO-MADE prognostication model has been developed to identify patients with advanced dementia who are at high-risk of one-year all-cause mortality, there is a need to integrate the model into routine clinic workflows.
- PLANNED SOLUTION: This project aims to translate and integrate the PRO-MADE model into the electronic medical records system (NGEMR) for widespread use by clinicians in tertiary clinical practice settings at TTSH. GERI is the implementation research partner on this project.
- ANTICIPATED IMPACT: PRO-MADE's integration into the NGEMR will allow clinical care to extend from tertiary care to their site of discharge in the community, which then allows healthcare providers to prompt the initiation of palliative care plans for deteriorating patients with advanced dementia. GERI's research will guide the development of implementation strategies for the potential expansion of PRO-MADE into other non-geriatric settings in TTSH, such General Medicine, with potential plans for external validation and scaling up of PRO-MADE. Findings by GERI on identifying implementation strategies will be presented at a scientific conference in June 2025.
- FUNDING: Temasek Foundation
- DURATION: Jul 2023 to Jun 2026

#### ONGOING

#### Project Carer Matters 2 (PCM2)

GERI'S ROLE: GERI leads the implementation research for this project to identify barriers and facilitators that

could influence programme implementation.

LEAD: Dr Tan Woan Shin (Deputy Director, Research and Scientist, GERI)

- AGE WELL SG STRAND: Strengthen support for seniors with care needs in the community
- PRINCIPAL INVESTIGATOR: Dr Chan Ee Yuee (Deputy Director of Nursing, and Head of the Nursing Implementation, Translation and Research Office, Tan Tock Seng Hospital)
- GAP: Singapore's ageing population has placed an increasing burden on caregivers to assist with the daily needs of older persons. However, caregivers often lack support (informational, emotional, social, and financial), respite, and access to appropriate facilities to cope with caregiving, resulting in caregivers suffering from poor physical and mental well-being. This leads to adverse outcomes in the form of hospitalisation or institutionalisation.
- PLANNED SOLUTION: The PCM2 project aims to support patients and caregivers through a threepronged approach including
  - 1. activating patients, caregivers, and families to empower better self-management;
  - 2. creating a safer home environment that enables dignified and holistic ageing-in-place; and
  - 3. forging deeper connections between the caregivers and the community.

GERI's research will identify facilitators and barriers for successful programme implementation, as well as examine caregivers' perceptions of the intervention and how PCM2 has helped improve patient-caregiver outcomes.

- ANTICIPATED IMPACT: The project aims to create an ecosystem to support caregivers and reduce their feelings of burden, reduce caregiving time and work productivity loss through provision of resource information, and care provision in the home. GERI's research in identifying barriers, facilitators and other operational/contextual factors will support successful programme roll-out. Findings from a Delphi study and the protocol paper for the qualitative systematic review conducted by GERI have been published, which another planned publication on findings from the systematic review.
- FUNDING: National Innovation Challenge on Active and Confident Ageing Grant Call on Frailty
- DURATION: Jun 2022 to May 2027

NEW

#### **GERI's Clinical Expert Panel**

GERI's Clinical Expert Panel was established this year to enhance the Institute's access to clinical domain knowledge in topics like dementia and frailty. Consisting of 17 clinicians from the three healthcare clusters and community health, their expertise is crucial for GERI's implementation research and health policy work. Members of the Panel are available to GERI researchers as Co-Investigators or consultants, to support various research projects.



GERI continued to build on existing collaborations and partnered with new organisations with a focus on harnessing expertise from different domains, creating and translating knowledge.

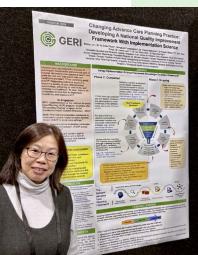
#### Our partners

- · Academy of Medicine, Singapore
- Ageing Planning Office, Ministry of Health, Singapore
- Ageing Research Institute for Society and Education, Nanyang Technological University
- · Agency for Integrated Care
- · Alexandra Hospital
- Centre for Ageing Research & Education, Duke-NUS Medical School
- Centre for Behavioural and Implementation Science Interventions, National University of Singapore
- Centre for Research on Successful Ageing, Singapore Management University
- CENTRES, Centre for Biomedical Ethics, National University of Singapore
- Changi General Hospital
- Chapter of Geriatricians
- Health Analytics Division, Ministry of Health, Singapore

- · Health Promotion Board
- · Institute of Geriatrics and Active Ageing, Tan Tock Seng Hospital
- Khoo Teck Puat Hospital
- KK Women's and Children's Hospital
- Knowledge Translation Program, St. Michael's Hospital, Unity Health Toronto
- Lien Centre for Palliative Care, Duke-NUS Medical School
- MOH Holdings
- National Cancer Centre Singapore
- National Healthcare Group
- National Healthcare Group Polyclinics
- National Heart Centre Singapore
- National Heritage Board
- National University Hospital
- · National University Polyclinics
- Ng Teng Fong General Hospital
- NTUC Health
- People's Association
- The Palliative Care Centre for Excellence in Research and Education
- Saw Swee Hock School of Public Health, National University of Singapore
- Sengkang General Hospital
- The Singapore-ETH Centre
- Singapore Clinical Research Institute
- Singapore General Hospital
- SingHealth Polyclinics
- Society of Geriatric Medicine Singapore
- Tan Tock Seng Hospital
- Thye Hua Kwan Moral Charities
- Vanguard Assisted Living (formerly Atlas Care)
- Woodlands Health







# SHARING OUR RESEARCH



## **JOURNAL PUBLICATIONS**

Our researchers continued to have their research findings published in internationally established journals such as the *Journal of the American Geriatrics Society*. Through such publications, we hope to contribute meaningfully to the existing wealth of knowledge on healthy ageing.



View more journal publications on our website.

Cheong G, Tov W, Choo RWM, Tan M, Lau LK, Lim WS, Ding YY, Straughan PT. Exploring the relationship between intrinsic capacity and social participation in healthy ageing: Evidence from Singapore. *The Journal of Nutrition, Health and Aging.* 2025;29(5):100524. doi: 10.1016/j.jnha.2025.100524.

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## **PUBLICATIONS BY GERI**

#### NEW

GERI is producing **Policy Briefs** to support evidence-informed policymaking and contribute towards population health impact in Singapore.

In Oct 2024, GERI's first Policy Brief was issued to support the Ministry of Health Frailty Implementation Workgroup's broader efforts to assess and manage rising levels of frailty in Singapore.

Developed by GERI's Health Policy Group, the Brief is the culmination of a multi-stage study around brief forms of geriatric assessments for older adults in the community. Findings from a scoping review, Delphi panel outcomes as well as engagements with health, social and policy stakeholders are captured in the Brief.

» Read more about this study on page 9.

Geriatric Education & Research Institute

GERI Policy Brief No. 2024-091
01 10 2024

Brief geriatric assessments for older persons in community settings

Note: This Brief is for intended stateholders only and should not be disseminated.

The chief aim of GERI's **Research Briefs** is to disseminate findings from our collaborative studies as two-page briefs in more accessible language, targeted at practitioners, policymakers as well as researchers.

- Translating evidence into practice: A multi-approach methodology for developing a complex intervention to facilitate appropriate prescribing
- Use of communication technology, such as phone calls and text messages, supports well-being of older adults living alone
- Evaluating the implementation process and health and cost outcomes of a multi-disciplinary care model for identifying and managing frailty among older adults in the community: A study protocol
- A case-finding approach using a brief cognitive screening tool to identify possible dementia among Singaporean older adults



Published after each Knowledge to Practice Series (KPS) webinar, the **KPS Webinar Brief** serves as a potential catalyst to help participants translate key research findings into practice.

- Making It Safe for Older Adults in Hospitals: A Quality Paradigm
- Advance Care Planning Quality: A Learning Journey of Continuous Improvement
- Care of Older Persons in the Community: Plugging the Gaps in the Healthy Ageing Landscape





## **KNOWLEDGE TO PRACTICE SERIES (KPS)**

## **WEBINARS**

KPS webinars provide a regular forum for the sharing of research outcomes and best practices, that spark discussions and collaboration opportunities.



Making It Safe for Older Adults in Hospitals: A Quality Paradigm (24 May 2024)

The webinar brought together research aimed at addressing challenges faced in the hospital setting. Topics discussed included modifiable risk factors of unplanned readmissions, inappropriate prescribing, and interventions that improve mobility during a hospital stay.



) Discover more <u>here</u>.



Advance Care Planning Quality:
A Learning Journey of Continuous Improvement
(9 Oct 2024)

Practicing quality advance care planning (ACP) is challenging and multiple barriers have been identified at different stages of the ACP process. This webinar featured a series of insightful presentations from experts, including ACP Quality Implementation teams, who shared their experiences and potential strategies for overcoming these challenges.



Discover more here.



Care of Older Persons in the Community: Plugging the Gaps in the Healthy Ageing Landscape (7 Mar 2025)

The webinar gathered speakers to present research findings on ageing well, informed by a translational and implementation research approach. These include research on frailty, Comprehensive Geriatric Assessment, exercise interventions in the community, and more.



Discover more here.

## **GERI NEWS**

In the past year, our researchers have participated in conferences and exchanges, joining national conversations to advance healthy ageing. By featuring our work and our people across online platforms, GERI has expanded the reach of our research to a broader audience.

#### GERI in the news



The Straits Times, 19 Oct 2024: "Young caregivers: Balancing the stress, developing empathy"

Araviinthansai Subramaniam, Research Associate was quoted in *The Straits Times* on the rise of younger caregivers amidst the backdrop of an ageing society. Sharing insights from his Master's thesis, Araviin highlighted unique challenges faced by Gen Z caregivers and the potential for them to develop skills like problem-solving, leadership, as well as qualities like empathy through their caregiving experience.

For young caregivers, role conflict and emotional strain can result as they balance the challenges of caregiving with striving for typical milestones in their late teens and 20s, such as entering tertiary education, beginning their careers, growing their autonomy or wanting to leave the parental home to start a family upon marriage.



*The Straits Times*, 31 Jan 2025: "Ageing in Singapore: It takes a village to support our seniors"

Associate Professor Ding Yew Yoong, Executive Director, GERI's op-ed for *The Straits Times* discusses the importance of building supportive environments for older adults so that they can live well and age well. The op-ed also shares fresh perspectives on how to foster buy-in around this shared agenda from diverse stakeholders, plus the role of implementation research in creating better policies and programmes for our older population.



Social factors can account for about 60 per cent of health outcomes. Known as social determinants of health, ... the crux is that many of these social factors are embedded in our environments. Far from being insurmountable, they can be addressed and modified, offering valuable opportunities for positive change. By converging our efforts around building supportive environments, we can target and strengthen many of these elements that affect older adults' well-being.



Scan to read the full story or click here. Scan to read the full story or click here.



#### Insights from international experts

GERI Adjunct Scientist and renowned expert in knowledge translation, Professor Sharon E. Straus delved into best practices to enhance the adoption of research evidence into routine care and practice, during her Knowledge-to-Practice Series seminar "Practical Tips in Implementation Science: From Theory and Evidence to Real-World Application" on 24 Jul 2024.



Professor Straus is the Director of the Knowledge Translation Program and Unity Health Toronto's Executive Vice-President, Clinical Programs and Chief Medical Officer. She is a Professor in the Department of Medicine, University of Toronto and holds a Tier 1 Canada Research Chair in Knowledge Translation and Quality of Care.

It is rare for most projects to immediately go on to implementation," Professor Sharon Straus observed. "Usually our first step is around dissemination, and really thinking about that." This means understanding how each target audience group receives and uses research evidence, and tailoring key messages and translation strategies for each audience type. "It is about thinking what the barriers and facilitators (to dissemination) are," Professor Straus said.

Read the full story on our website.

#### Meet our researchers series

#### An integrated approach to managing frailty and intrinsic capacity

Our Lead Scientist, Associate Professor Laura Tay (Head & Senior Consultant, Geriatric Medicine, Sengkang General Hospital) and Research Associate, Dr Mimaika Luluina Ginting speak to us about the INFINITY-ICOPE<sup>[1]</sup> programme, which aims to implement the World Health Organization's Integrated Care for Older People (ICOPE) framework locally. Associate Professor Tay is the Principal Investigator of the project, while Dr Ginting is part of the GERI team leading implementation research for the roll-out of INFINITY-ICOPE.



Intrinsic capacity may be viewed as a natural evolution of frailty. Declining levels of intrinsic capacity ... increases the risk of developing frailty and contributes to negative health events such as disability, falls and increased healthcare utilisation. Hence, integrating intrinsic capacity and frailty presents a valuable opportunity.

#### **ASSOCIATE PROFESSOR LAURA TAY**



Adapting and implementing an innovation into local practice is challenging. Factors such as constraints in resources, complexity, and the compatibility of the innovation (with local systems, processes and target users) can all play a part. It is important to leverage on known motivating factors and enablers for adoption, to minimise trade-offs and improve feasibility.

#### DR MIMAIKA LULUINA GINTING

<sup>[1]</sup> Optimising INtrinsic Capacity for Functional INdependence and to Impede FrailTY in Older Adults: Adaptation of the WHO-ICOPE for Healthy Ageing in Singapore. Supported by the National Innovation Challenge on Active and Confident Ageing

#### Guiding the quality implementation of Advance Care Planning (ACP)

Lead Scientist, Associate Professor James Alvin Low and Research Associate, Penny Lun share insights from working on the ACP Quality Implementation Knowledge Exchange Platform, as well as their reflections on closing the research-to-practice gap through implementation research and knowledge translation strategies. This is the first national-level platform convened by GERI in collaboration with the Agency for Integrated Care aimed at enabling quality ACP implementation in Singapore.

We applied our knowledge translation and implementation research expertise and skills in guiding the major stakeholders. It was an interactive process that evolved as the project progressed and was adapted to the needs of the stakeholders. We also possessed some core knowledge

ASSOCIATE PROFESSOR JAMES ALVIN LOW

of the whole ACP ecosystem and framework that

helped us customise the platform accordingly.

 $\frac{1}{2}$ 

In knowledge translation, it is especially important that knowledge users are involved from the beginning during the problem identification phase, and through to finding the appropriate solution or implementation strategy. This way, they are invested in the problem and are also in the best position to judge if a strategy is feasible and sustainable in the long run, if implemented.

**PENNY LUN** 

#### Meet GERI's Health Policy Group

The recent formation of the Health Policy Group brings together a dedicated team of GERI researchers who go beyond traditional research. Engaging stakeholders from across Singapore's health, policy and social care sectors, the Health Policy Group squares research evidence with hard questions—what aspects of potential policy could work and what would not, given contextual factors and older adults' complex needs.



Conducting

Conducting health policy research and supporting evidence-informed policymaking are overlapping activities that have the potential of impacting population health in Singapore. They comprise a major component of GERI's efforts in the T4 (to population) translational stage. It is my hope that the Health Policy Group's work will grow to be effective in addressing contemporary policy issues across Singapore's ageing landscape.

#### ASSOCIATE PROFESSOR DING YEW YOONG

Executive Director and Lead Scientist, GERI

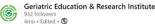


#### LinkedIn highlights

Another channel of engagement with GERI's external stakeholders and the wider community is our LinkedIn page. Reaching over 900 subscribers and counting, our page provides regular updates on recent publications, research findings and researchers' dissemination activities.

Scan to follow us for more updates or click here.





A collaborative research project by GERI, National University Polyclinics (NUP), National Healthcare Group Polyclinics (NHGP) and SingHealth Polyclinics (SHP), called IMPACTFrail, aims to translate the National #Frailty Policy into realworld practice by piloting a new #healthyageing programme at five polyclinics.

The National Frailty Policy was introduced in 2023 to address frailty by optimising older adults' #intrinsiccapacity (their physical and mental capabilities) and #functionalability (their ability to do the things that are important to them).

"IMPACTFrail screens mildly frail older adults for vision, hearing, nutrition, mobility, memory and mental health, and provides coordinated care across health and social services. Implementing this programme in the #primarycare setting is strategic, as it serves older adults who may not be participating in screening programmes at active ageing centres and community centres," shared Dr Grace Sum Chi-En, PhD, Research Fellow, GERI and the study's Principal Investigator.

On 7 Jan, the IMPACTFrail study team and stakeholders – including cluster leads from NHGP (Dr David Ng, Dr Jonathan Ng), NUP (Dr Richard Hui, Dr Sing Cheer Kwek) and SHP (Prof Chirk Jenn Ng, Dr Sinead Wang Zhen) – gathered for a virtual kick-off meeting to mark the programme's roll-out around Mar 2025. GERI's Executive Director and Lead Scientist, Associate Professor Ding Yew Yoong, gave the

"This is an exciting milestone, representing the culmination of hard work in codeveloping the programme and implementation strategies. Next, we will apply #implementationresearch concepts and a multi-methods approach to conduct a feasibility study. By involving three healthcare clusters from the outset, we increase the likelihood of successfully scaling up, informing #policymaking on frailty and promoting healthy ageing in Singapore," said Dr Sum.

Stay tuned as we bring you more updates on IMPACTFrail and other GERI research





As we mark World Sarcopenia Day, it is crucial to recognise the significant impact #sarcopenia has on #frailty among Singapore's ageing population

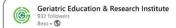
Sarcopenia, characterised by the loss of muscle mass and strength that comes with ageing, is a major contributor to frailty—a condition that can drastically affect the

One of the ways of preserving independence is through physical activity, and findings from a recent GERI study found that exercises using simple equipment were beneficial to frail older adults.

A summary of the findings can be found in our Research Brief "Unlocking #activeageing, even for the oldest-old and frail: A literature review of #exercise interventions for two older adult groups". Click here to read more: https://lnkd.in/gPms\_GHr

#physicalactivity #functionalability





Today, we commemorate International Day of Older Persons (#IDOP), which shines a spotlight on the challenges and opportunities faced by #ageing populations

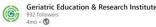
There is growing momentum to achieve the vision set out in the United Nations Decade of #HealthyAgeing (2021-2030)—to foster not just longer, but healthier lives. Here at GERI, our researchers continue to contribute to this endeavour creating and translating evidence on strengthening #intrinsiccapacity and supportive environments for older adults.

It is easy to get caught up in the buzzwords and lose sight of the essence of healthy ageing, as perceived by younger and older generations alike. Our Research
Associates Araviinthansai Subramaniam and Fiona Goh took a moment to reflect on what healthy ageing means to them and their older family members, and how this

Read their reflections below!

#IDOP2024 #UNIDOP #research #ageingresearch #translation





Happy New Year from GERI! 2025 marks the halfway point of the Decade of Healthy Ageing led by the World Health Organization. We kick off this exciting year with an update from our Research Fellow, Dr Chou Chuen Yu on a study that he is leading relating to the care and well-being of persons with #dementia

Senior day care centres play a significant role in supporting #AgeWellSG's vision to anchor care for older adults in the community. Against this backdrop, the Nation. Heritage Board (NHB) is collaborating with GERI and Khoo Teck Puat Hospital to evaluate a dementia engagement programme (DEP) developed by NTUC Health Co-

"I hope that through this study, we can better understand how the DEP, which utilises NHB's heritage resources, will be able to enhance the caregiving practice for eople with dementia in senior day care settings in Singapore," said Dr Yu, Principal Investigator

For more, click to read Dr Yu's update below 🧠

#research #ageingresearch #communitycare #caregiving #cognitivedecline #implementationresearch #impsci



Chou Chuen Yu - 1st

Photos with the implementation team we have been working closely with to kickstart our study at NTUC Health Day centers. We are using implementation science principles to examine the delivery of a reminiscence-based programme that has been developed using resources from National Heritage Board. The progamme aims to improve the mood and engagement of persons with cognitive impairment in the day care setting. Special thanks to A/Prof Philip Yap, A/Prof James Low and Dr Rachel Cheong for providing their clinical expertise our study. Geriatric Education & Research Institute Pirratheep Moorthy Zoey Tan Zhi Hui Jasmine Tan Kelly Wong Rachel Chin Yee Cheong



#### Sharing our research

1. International Conference on Integrated Care 2024, Belfast (22 – 24 Apr 2024)

Research Associate Dr Mimaika Ginting presented a poster titled "Barriers and enablers of a community-based integrated frailty and intrinsic capacity management for older adults: a rapid qualitative approach." This was based on a GERI study done for INFINITY-ICOPE, a project supported by the National Innovation Challenge on Active and Confident Ageing, on the implementation of the World Health Organization's Integrated Care for Older People (ICOPE) framework.

2. Australian & New Zealand Society for Geriatric Medicine Annual Scientific Meeting 2024, Christchurch (22 – 24 May 2024)

Research Associate Penny Lun gave a poster presentation titled "Changing advance care planning practice: developing a national quality improvement framework with implementation science". The presentation highlighted the novel way of using the Knowledge-To-Action model to pioneer a national framework to guide how Advance Care Planning is carried out in Singapore.

3. 2024 Society for Implementation Research Collaboration Conference, Denver (28 Sep 2024)

Research Fellow Dr Grace Sum delivered an oral presentation titled "Selecting and specifying implementation strategies for an integrated community-based frailty and intrinsic capacity management program for older adults in Singapore: using the CFIR-ERIC matching tool and stakeholder-driven approach". Her presentation highlighted the value of adopting a systematic implementation science approach to mitigate contextual barriers to implementation.

4. 22nd Singapore Health & Biomedical Congress (SHBC) 2024 (10 – 11 Oct 2024)

GERI researchers delivered a series of poster presentations at SHBC 2024, the National Healthcare Group's flagship medical conference. Highlights include:

• two feasibility studies examining the impact of a pharmacist-led medication review and assessing the implementation of a physician-pharmacist collaborative care intervention;

- a study on using the Knowledge-To-Action model to pioneer a national framework to guide advance care planning;
- developing a Delphi consensus on the domains and conduct of Brief Geriatric Assessments;
- identifying intrinsic motivators that drive non-healthcare professionals to participate in community-based interventions, as well as
- examining the influence of older adults' trust in the medical community on vaccine acceptance during the COVID-19 pandemic.

Read our two-part recap of GERI's presentations, or scan to find out more.



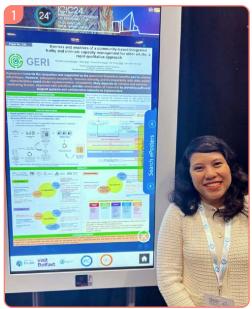


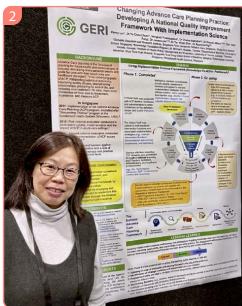
Part 1

Part 2

5. 10th International Society for Physical Activity and Health Congress, Paris (28 – 31 Oct 2024)

Senior Research Fellow Dr Charlene Lau presented findings from a GERI-funded study, carried out in collaboration with Ng Teng Fong General Hospital and National Healthcare Group Health Services and Outcomes Research, evaluating the effectiveness and implementation of a mobility-focused intervention for older adults in an acute care setting in Singapore.

















#### 6. British Geriatrics Society Autumn Meeting 2024, London (20 – 22 Nov 2024)

Research Fellow Dr Yu Chou Chuen highlighted findings from a GERI study that surveyed ACP facilitators and frontline clinicians in Singapore. The study found that those who engaged in ACP-related work encountered a wide variety of morally challenging scenarios but will engage in positive coping strategies to navigate them. Dr Yu's conference abstract was featured in a supplement in the *Age and Ageing* journal.

## 7. Asia Pacific Population Health Conference and the 2nd Asia Pacific Social Prescribing Conference, Singapore (28 – 29 Nov 2024)

Research Fellow Dr Tou Nien Xiang's conference poster showcased key findings from a systematic review and metaanalysis on the effects of exercise interventions using minimal low-cost equipment for community-dwelling adults with dementia. Outcomes such as cognitive function, caregiver burden, quality of life and more were identified. Findings were also shared with Dementia Singapore.

#### 8. Ageing Research Network Symposium, Singapore (14 Feb 2025)

Dr Tan Woan Shin, Deputy Director of Research and Scientist disseminated findings from GERI's national evaluation of the Geriatric Services Hub programme. Dr Tan discussed its implementation experience, its impact on patient outcomes, as well as the team's insights on how to better ensure the success and sustainability of comprehensive care models for frail older adults.

Research Fellow Dr Grace Sum Chi-En and Dr Justin Chew, Consultant, Geriatric Medicine at Tan Tock Seng Hospital (TTSH), co-presented on an ongoing joint study to implement and evaluate the Inpatient Nursing Frailty Assessment programme. They highlighted how effectiveness research needs to be combined with implementation research to facilitate the sustainability and scalability of healthcare programmes.

#### 9. 11th Asian Conference on Aging Gerontology, Tokyo (24 – 29 Mar 2025)

Research Fellow, Dr Benedict Pang, presented results from a GERI scoping review on community-based Active Ageing Programmes. Research Associate, Araviinthansai Subramaniam presented a study done during the development of the Inpatient Nursing Frailty Assessment programme at Tan Tock Seng Hospital. Research Officer, Tang Jia Ying discussed findings from a feasibility study on the implementation of an intervention to reduce potentially inappropriate medication among older adults with multimorbidity. Research Officer, Zoey Tan, provided updates from a recent GERI study on the effectiveness of a hospital-based post-discharge telehealth service.

#### GERI Scientists are among the world's top 2% most-cited researchers in 2024!

Congratulations to our Executive Director and Lead Scientist, Associate Professor Ding Yew Yoong (Senior Consultant, Tan Tock Seng Hospital) and Lead Scientist, Associate Professor Lim Wee Shiong (Director, Institute of Geriatrics and Active Ageing) for being recognised in Stanford and Elsevier's global round-up of distinguished scientists and most-cited researchers globally in 2024.





# LIFE IN GERI





## Research impact at GERI

In a series of talks throughout the year, Associate Professor Ding Yew Yoong, Executive Director highlighted the importance of GERI's focus on research impact, highlighting its purpose, development, and implementation. "GERI's priority on research impact represents a sharpening of focus rather than a pivot from the work we have been doing. We will have an intentional focus on addressing the gaps in care for older persons in Singapore to deepen the impact of our work," said Associate Professor Ding.



Over two sessions held on 30 Jul 2024 and 15 Oct 2024, Dr Edward Tan, Senior Manager, Research Administration engaged all GERI researchers on the Institute's Research Impact Framework (RIF), as well as the subsequent development of research impact indicators. These interactive sessions aimed to help researchers orient and clarify their application of the RIF, as well as elicit their





## Capability building

#### **Research Sessions**

GERI's Research Sessions are a platform for sharing and discussion for our researchers. The aim is to deepen capabilities in health policy research, programme evaluation, implementation research and research methods through a collaborative, peer-learning format. Held regularly throughout the year, GERI researchers gather to present updates from their ongoing projects, creating opportunities for discussion in areas such as how to go about selecting implementation strategies, and best practices in knowledge translation and evidence synthesis. On occasion, external speakers are also invited to engage our researchers.

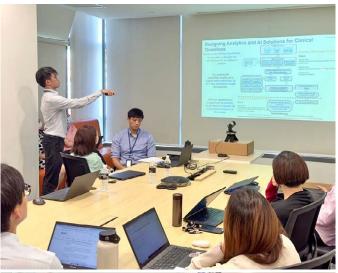
## R (Programming Language) Interest Group at GERI (11 Sep 2024)

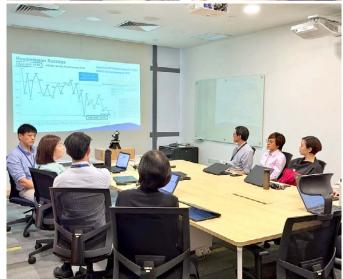
Initiated by Research Fellow Dr Tou Nien Xiang, the group aimed to foster a collaborative learning environment to explore the fundamentals of R programming language in bite-sized segments. While it is known for its statistical analysis capabilities, R can also be useful for research as it can be harnessed for data visualisation, reporting and automation, and developing dashboards.



## Using Big Data to Improve Healthcare Services (30 May 2024)

The Health Services Research and Analytics team from Ng Teng Fong General Hospital (NTFGH) visited GERI and shared valuable insights regarding the use of big data to improve healthcare services at NTFGH. Comprising Christine Wu, Assistant Director, Wesley Teo, Assistant Manager, and Jonathan Yeo, Data Analyst, the team demonstrated their use of big data to develop and evaluate predictive models.







#### Monthly Birthday Celebrations

GERI's monthly birthday celebrations offer a pause from our busy schedules, as we take time to appreciate the people who make our organisation special, while bonding over cake and treats. Recognising these personal milestones together helps us build a workplace that values both professional growth and personal connections.



#### Annual Staff Lunch and Long Service Awards (27 Feb 2025)

It was all smiles as management and staff gathered for GERI's Annual Staff Lunch. We also recognised our colleagues Dr Edward Tan, Senior Research Manager and Tang Jia Ying, Research Officer, who received their Long Service Awards from our Executive Director, Associate Professor Ding Yew Yoong.



