



Geriatric Education &
Research Institute

ANNUAL REPORT 2023/24

HEALTHY AGEING
FOR OUR POPULATION

The **Geriatric Education & Research Institute (GERI)** is a national research institute established in 2015. We conduct health and healthcare research focused on preventing functional decline and implementing integrated care for older adults.

ABOUT GERI

Our evidence-based research outcomes are driven by our multi-institutional research team, which works closely with collaborators across government, non-profit and community spaces.

By translating research knowledge 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 seniors in Singapore through excellence in translational research and education that impact health policy and practice.

VALUES

Respect



Innovate



Teamwork



Excellence



| | |
|---|----|
| Executive Director's Message | 4 |
| Directors and GERI Advisory Committee | 5 |
| Management and Research Management | 6 |
| Joint and Adjunct Faculty | 7 |
| Our Staff | 8 |
| Research Impact | 12 |
| GERI's Research Strategy | 14 |
| Research Projects | 16 |
| Collaborations | 23 |
| Journal Publications | 26 |
| Publications by GERI | 27 |
| Knowledge to Practice Series (KPS) Webinars | 28 |
| GERI News | 29 |
| Life in GERI | 39 |

CONTENTS

16 >> DRIVING IMPLEMENTATION RESEARCH ON AGEING

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



23 >> COLLABORATIONS FOR BETTER HEALTH OUTCOMES

Find out how GERI works closely with and supports our network of partners to improve health programmes and services for older adults.



29 >> JOINING THE CONVERSATION ON HEALTHY AGEING

Delve into GERI's engagements with stakeholders in policy, practice, research and the community through a range of platforms.



EXECUTIVE DIRECTOR'S MESSAGE



Ageing is a serious business, with the lion's share of Singapore's healthcare spending going towards our older population. More than ever, efforts to advance healthy ageing need to be evidence-informed. This allows us not only to do more, but also do better, so that our finite healthcare resources are prudently utilised and older adults receive optimal care.



In this national ageing puzzle, GERI fits in by working to close the research-to-practice gap through implementation research. We do this by partnering stakeholders from across Singapore's healthcare clusters, policy bodies and community spaces to translate research evidence into real-world use.

GERI's Annual Report 2023/24 captures the strides we have made in producing policy- and practice-oriented research that is both relevant – to the older population, health system and decision-makers – and impact-driven.

We have put our expertise into action in a myriad of ways: from co-designing interventions that enhance older adults' health outcomes, evaluating programmes for greater efficiency and scaling up, to refining health policies that address real needs in the community.

While delving more deeply into our research focus areas, which align with and contribute to the national ageing agenda, this year also saw us expand our portfolio in new areas. We were privileged to have international experts come on board to strengthen GERI's capabilities in health policy research and community-engaged research.

You may also notice a new section on Research Impact in this Report. This crystallises GERI's commitment to turn research evidence into products and ideas that shape day-to-day practice and policy on frailty, dementia and more. Please read on for more highlights.

Ultimately, enhancing healthcare effectiveness and efficiency for the older person – while important – are not the only motivators for us at GERI. We hope that our work goes towards helping our older population experience a fuller and truer sense of healthy ageing: to be biologically well, socially fulfilled and thriving psychologically.

I would like to extend my appreciation to the GERI team, our collaborators and our stakeholders as we stay the course in making this happen. ■

ASSOCIATE PROFESSOR DING YEW YOONG

Executive Director
GERI

DIRECTORS

Professor Philip Choo Wee Jin

Professor Chua Hong Choon

Professor Pang Weng Sun *(until Jan 2024)*

GERI ADVISORY COMMITTEE

Professor Chee Yam Cheng

Mdm Zuraidah Abdullah *(until Apr 2024)*

Dr Goh Khean Teik

Ms Ho Weng Si *(until Apr 2024)*

Adjunct Professor Lee Chien Earn

Professor Benjamin Seet

Professor Joseph Sung

Dr Harold Tan *(until Nov 2023)*

Dr Jeannie Tey *(until Jun 2023)*

Professor Teo Yik Ying

DIRECTORS & GERI ADVISORY COMMITTEE

MANAGEMENT



**PROFESSOR
PANG WENG SUN**
Senior Advisor



**ASSOCIATE PROFESSOR
DING YEW YOONG**
Executive Director



**ASSOCIATE PROFESSOR
JAMES ALVIN LOW**
Knowledge Translation Lead



MS KONG LAI HO
Deputy Director
Finance and Administration

MANAGEMENT & RESEARCH MANAGEMENT

RESEARCH MANAGEMENT COMMITTEE

Associate Professor Ding Yew Yoong
Associate Professor Lim Wee Shiong
Associate Professor James Alvin Low

INTERNATIONAL SCIENTIFIC ADVISOR

Professor John N. Lavis

JOINT FACULTY

Dr Chan Ee Yuee (*Adjunct from Jul 2023*)
 Dr Rachel Cheong (*Adjunct from Jul 2023*)
 Associate Professor Ding Yew Yoong
 Associate Professor Lim Wee Shiong
 Associate Professor James Alvin Low
 Associate Professor Ng Tze Pin
 Associate Professor Ng Yee Sien
 Dr Sharon Straus
 Dr Tan Woan Shin
 Associate Professor Laura Tay
 Dr Tew Chee Wee
 Dr Kamun Tong
 Associate Professor Wee Shiou Liang
 Dr Wong Chek Hooi (*until Jun 2023*)
 Associate Professor Philip Yap (*Adjunct from Jul 2023*)

JOINT & ADJUNCT FACULTY

ADJUNCT FACULTY

Dr Lydia Au
 Associate Professor Angelique Chan
 Associate Professor Edwin Chan
 Dr Justin Chew
 Associate Professor Mihir Gandhi
 Dr Allyn Hum
 Dr Lee Eng Sing
 Dr Christopher Lien
 Professor David Matchar
 Dr Mathew Mathews
 Associate Professor Reshma Aziz Merchant
 Dr Raymond Ng
 Dr Noor Hafizah Bte Ismail
 Associate Professor Iris Rawtaer
 Dr Santhosh Seetharaman (*until Jun 2023*)
 Dr Shi Luming
 Associate Professor Tan Hwee Pink (*until Jun 2023*)
 Dr Laurence Tan
 Dr Melanie Tan
 Dr Robyn Tan
 Professor May Wang
 Dr Yong Woon Chai
 Associate Professor Joanne Yoong

RESEARCH



DR JONATHAN GAO
Research Fellow



DR CHARLENE LAU
Research Fellow



DR ZOE LIM
Research Fellow

OUR STAFF



DR SERENE NAI
Research Fellow



DR GRACE SUM CHI-EN
Research Fellow



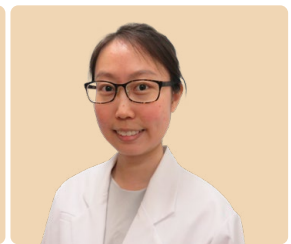
DR TOU NIEN XIANG
Research Fellow



DR YU CHOU CHUEN
Research Fellow



DR MIMAIKA GINTING
Research Associate



FIONA GOH
Research Associate



PENNY LUN
Research Associate



ARAVIINTHANSAI S/O
SUBRAMANIAM
Research Associate



JUNE TENG
Research Associate



IRENE WANG QING
Research Associate



PIRRATHEEP S/O
MOORTHY
Research Officer



BENEDICT PANG
Research Officer



TANG JIA YING
Research Officer



ZOHEY TAN ZHI HUI
Research Officer



ROBIN CHOO
Biostatistician

Knowledge Translation



NONGLUCK
PUSSAYAPIBUL
Senior Manager



NORHIDAYAH ISHAK
Senior Executive



CHARLOTTE ONG
Senior Executive

Research Administration (Support)



DR EDWARD TAN
Senior Manager



KELLY WONG
Assistant Manager



CHANG CHUI RONG
Senior Executive



JASMINE TAN
Senior Executive

Research Administration (Policy & Governance)



QIU SHIJIA
Manager



ISABELLE LIM
Senior Executive



YAP JIA HAO
Senior Executive

CORPORATE

Corporate Communications



CHIAM AI-LING
Senior Manager



JENNY GANESHRAYS
Senior Executive



TERESA ELIZABETH KOH
Senior Executive



**FAHREEQ FATTAH
MEDINA**
Senior Executive

Finance & Administration



KONG LAI HO
Deputy Director



WILLIAM NEO
Senior Manager



STEPHANIE FONG
Manager



TERESA ELIZABETH KOH
Senior Executive



VIVIEN TENG
Executive

RESEARCH



RESEARCH IMPACT

At GERI, we strive to develop significant ideas and products that can improve patient care, health outcomes and contribute to knowledge translation. Here are selected highlights of our real-world impact in the past year.

Appropriate prescribing for older adults with multimorbidity (Pro-M): A feasibility study

- **Gap Identified:** Potentially inappropriate medications (PIMs) is common for older adults with multimorbidity due to a variety of reasons (e.g. concurrent application of multiple single-disease clinical guidelines).
- **Solution:** GERI conducted a feasibility study to test the implementation of an intervention aimed at reducing inappropriate prescribing in geriatric medicine specialist clinics at public hospitals.
- **Impact Made:** Pro-M is being piloted at the outpatient geriatric medicine clinic in Changi General Hospital (CGH), with potential to be scaled up to more outpatient clinics.

ADVANCING KNOWLEDGE



- 1 publication
- 1 presentation to collaborator,
- 2 planned posters at scientific conference
- 1 report (planned)

ECONOMIC / SOCIAL BENEFITS



Conducting a **cost analysis on difference in costs** of PIMs and other medication issues identified under usual treatment conditions when compared to Pro-M (in progress)

HEALTH BENEFITS



Findings from a post-intervention survey focused on patients' experiences and attitudes with medication review (MR) and their willingness to pay for such a service showed that **63% were satisfied with the intervention**, found it useful and were willing to pay some amount (between \$5 to \$50) for the MR.

Principal Investigator: GERI Researcher: Penny Lun, Research Associate

Collaborating Organisations: Dr Christine Chen, Senior Consultant, Department of Geriatric Medicine, CGH; Tan Keng Teng, Principal Pharmacist, Tan Tock Seng Hospital

A rapid review of brief diagnostic tools to identify possible dementia among community-dwelling older adults in Singapore

- **Gap Identified:** Identifying community-dwelling older adults with dementia is a challenging and complex process.
- **Solution:** Through a rapid review of available scientific literature, the study team has identified brief screening tools that can be applied in community settings as well as health systems. Different tools for case-finding were recommended depending on whether informants are available or not.
- **Impact Made:** Contributed to the Ministry of Health Dementia Policy Workgroup for potential strategy formulation at the national level.

ADVANCING KNOWLEDGE 

- 1 publication (in progress)
- 1 presentation to funders and collaborators

Principal Investigator: Dr Lim Jun Pei, Consultant, Department of Geriatric Medicine, Tan Tock Seng Hospital (TTSH)

Collaborating Organisations: Singapore Clinical Research Institute; Lee Kong Chian School of Medicine, Nanyang Technological University; Sengkang General Hospital

Evidence Synthesis: GERI

PROgnostic Model for Advanced DEmentia (PRO-MADe): Prediction of Survival in Advanced Dementia

- **Gap Identified:** 69% of patients with Advanced Dementia (AD) do not receive timely palliative care due to challenges in recognising the terminal phases of end-stage dementia, leading to them dying in hospitals instead of appropriate long-term care facilities.
- **Solution:** By using the PRO-MADe model, clinicians can identify AD patients who are at high-risk of one-year all-cause mortality.
- **Impact Made:** This model facilitates timely referrals to palliative care and has been integrated into the Next Generation Electronic Medical Records (NGEMR) system at TTSH. There are plans to scale up to other institutions in the National Healthcare Group (NHG) and other clusters.

ADVANCING KNOWLEDGE 

- 2 publications
 - 5 presentations at scientific conferences, to funders and collaborators
 - 1 follow-up grant with implementation partner
- >> Read more on page 21-22.

INFORMING DECISION-MAKING 

The PRO-MADe model has informed a new practice as part of a new model of care to encourage early palliative care integration in AD. It has been **translated into bedside clinical practice with its incorporation into NGEMR.**

HEALTH BENEFITS 

Clinical tools developed: The PRO-MADe prognostication tool predicts one-year all-cause mortality in patients with AD presenting at an acute care hospital.

Improved effectiveness and efficiency of services: PRO-MADe allows initiation of care plans for AD patients (symptom support, family education of disease progression, preferred plans with caregivers, engagement of palliative teams).

Principal Investigator: GERI Joint Faculty: Dr Allyn Hum, Senior Consultant, Palliative Medicine, TTSH

Collaborating Organisations: Khoo Teck Puat Hospital; Health Services and Outcomes Research, NHG; TTSH

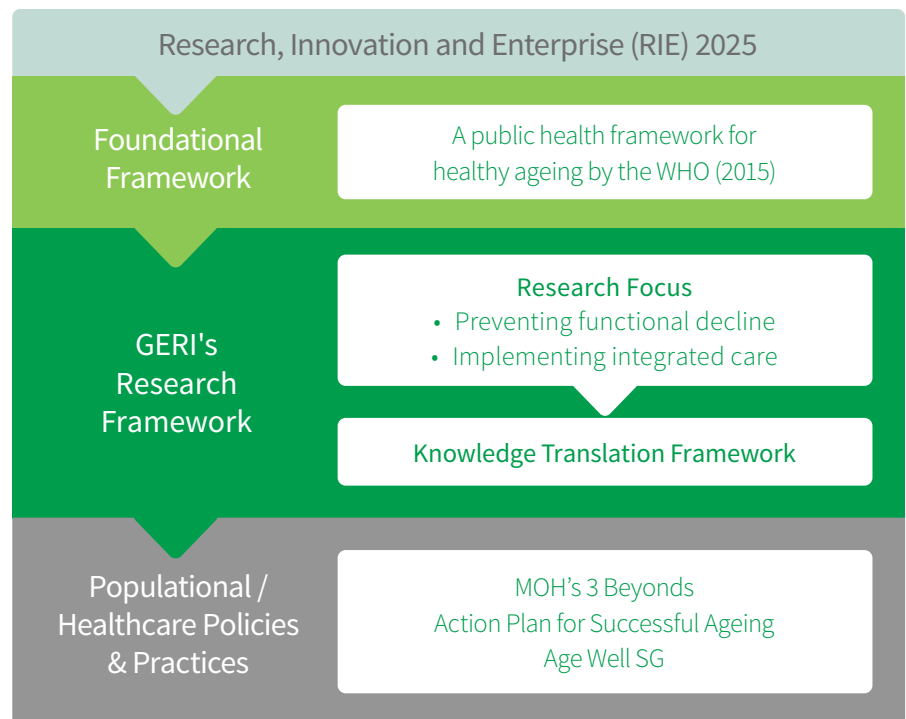
Research Implementation: GERI

GERI'S RESEARCH STRATEGY

Our research is guided by the World Health Organization (WHO)'s Public Health Framework for Healthy Ageing*, which aims to foster the functional ability of older adults at the individual level and environmental level.

*WHO World Report on Ageing and Health (2015): <https://www.who.int/publications/item/9789241565042>

RESEARCH FRAMEWORK



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. Read about our related projects on page 16.

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, multimorbidity, complex needs, dementia and advanced life-limiting illness; incorporating caregiving support. Read about our related projects on page 20.



“Frailty has emerged as a key public health priority due to its high prevalence, impact on the individual's quality of life, and public health impact. The holistic approach towards frailty prevention and management, involving medical, functional, psychosocial and lifestyle factors, more aptly reflects the complexity of the multi-dimensional needs of older persons.”

ASSOC PROF LIM WEE SHIONG
Research Management Committee,
Joint Faculty, GERI
Director, Institute of Geriatrics and
Active Ageing
Senior Consultant, Geriatric Medicine,
Tan Tock Seng Hospital



“Older patients often have multiple health conditions. Existing models for predicting hospital readmission risk amongst this already high-risk group may not always perform well. By studying how specific conditions such as depressive symptoms and malnutrition relate to readmission, our research supports efforts to improve screening programmes and devise more targeted interventions for vulnerable older patients.”

ASSOC PROF LAURA TAY
Joint Faculty, GERI
Head and Senior Consultant,
Geriatric Medicine
Sengkang General Hospital

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



Knowledge Creation

Working with our collaborators, we engage stakeholders to identify issues and conduct evidence-based implementation research. Our methodologies include rapid reviews, Delphi method and mixed methods. Hear what our collaborators have to say on page 23.



Dissemination

Through various channels, such as publications, presentations and Research Briefs, we share knowledge and related evidence-based interventions with healthcare practitioners, policymakers and researchers. Read about GERI's efforts in sharing our research on page 26.



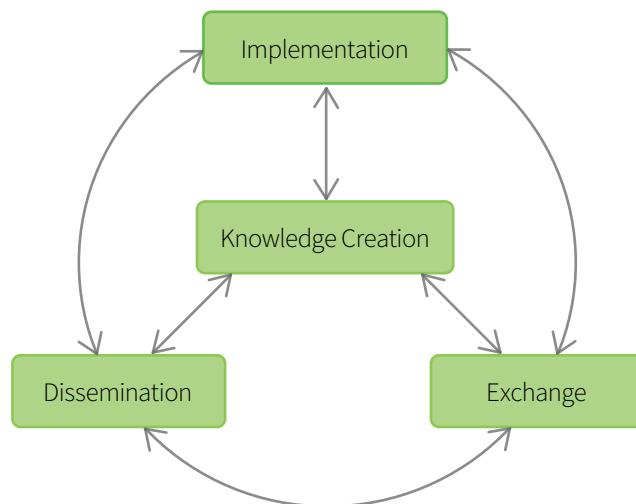
Exchange

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. Through such exchange, new research opportunities may emerge. Read about GERI's contributions to the national Dementia Policy Workgroup on page 13.



Implementation

Research findings may span behaviours, practices, knowledge and attitudes. To help move evidence into 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.



>>

“GERI led the evaluation of the Geriatric Services Hub, a multi-site programme that identifies and manages frailty among older adults in the community. **Central to our approach was the creation of a collaborative platform** involving partners in health policy divisions, as well as programme directors, implementation teams and health services researchers from the acute hospitals in Singapore.

The GERI team shared our evaluation findings to policymakers and programme implementers throughout the duration of the project, as opposed to only at its conclusion. **This enabled adjustments to be made on both sides to support implementation on an ongoing basis.**”

DR TAN WOAN SHIN
Joint Faculty, GERI

PREVENTING FUNCTIONAL DECLINE



RESEARCH PROJECTS

Read about our ongoing, new and completed implementation research projects spanning key ageing issues like frailty, dementia and more.

ONGOING

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

Principal Investigator:
Dr Charlene Lau Lay Khoon

Collaborating Organisation:
Health Promotion Board

This study aims to evaluate:

1. The implementation of a nationwide active ageing programme across 40 community sites in Singapore, and
2. The implementation of referral pathways for identified pre-frail/frail older adults to more targeted interventions within Regional Health Systems.

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

Principal Investigator:
Professor Paulin Straughan

Site-Principal Investigator:
Associate Professor Ding Yew Yoong

Collaborating Organisation:
Singapore Management University (SMU)

Intrinsic capacity captures the physical and mental capacities of an individual and represents the resources a person can tap into during his/her life.

Together, the SMU Centre for Research on Successful Ageing and GERI are studying intrinsic capacity of older adults in the Singapore Life Panel, to gain a better understanding of how individuals can flourish as one ages.

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

Principal Investigator:
Associate Professor Laura Tay

Collaborating Organisation:
Sengkang General Hospital

This study aims to examine the effect of intrinsic capacity assessment and targeted interventions addressing identified domain losses on 30-day readmission in hospitalised older adults admitted to the General Medical department of a restructured hospital.

NEW

Built Environment in Falls and ArthriTis (BE-FIT)

Co-Principal Investigators:

Dr Bryan Tan, Dr Navrag Singh

Lead Organisations:

Woodlands Health, The Singapore-ETH Centre

Implementation Research Partner:

GERI

The BE-FIT study is a collaborative project among multiple academic and healthcare institutions, awarded under the Campus for Research Excellence and Technological Enterprise Network Grant.

This study aims to explore the relationships between the built environment, psychosocial factors on physical activity, social participation and functional outcomes in older adults with osteoarthritis and/or previous falls to guide practice and policy.

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

Principal Investigator:

Dr Yu Chou Chuen

Collaborating Organisations:

National Heritage Board (NHB),
Koo Teck Puat Hospital (KTPH)

With mutual interests in alternative, non-pharmacological approaches towards dementia care, NHB is collaborating with GERI and KTPH to evaluate a dementia engagement programme (DEP) developed by NTUC Health. This DEP consists of conversational as well as interactional activities between professional caregivers and clients with dementia in a group setting that utilises heritage resources provided by NHB.

The aim of the study is to evaluate the impact of utilising heritage resources in a non-pharmacological care programme targeted at people with dementia in day care settings.

PROJECT SPOTLIGHT



>>

“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 people with dementia in senior day care settings in Singapore.**”

Ultimately, I also hope that through the novel and creative use of heritage resources, our caregivers will develop a greater appreciation of the means to engage and enhance the mood, satisfaction and emotional experiences of people with dementia.”

DR YU CHOU CHUEN

Principal Investigator
Research Fellow, GERI

NEW

Inpatient Nursing Frailty Assessment (INFA): Comprehensive Geriatric Assessment (CGA) and multidisciplinary intervention for frail hospitalised older adults**Co-Principal Investigators:**

Dr Justin Chew Linghui, Dr Grace Sum Chi-En

Collaborating Organisations:Tan Tock Seng Hospital (TTSH),
National Healthcare Group

The INFA programme at TTSH targets older adults with mild to moderate frailty who are admitted to general medicine and surgical wards. Key programme components are: 1) a novel geriatric syndrome screening tool on Epic, the hospital electronic health record system 2) empowerment of ward nurses through nurse-led screening and intervention protocols 3) CGA and 4) comprehensive discharge planning.

The study team will conduct implementation research before and during the programme's pilot. Prior to implementation, the team will identify anticipated barriers and enablers to refine the programme and develop implementation strategies. During the pilot, implementation outcomes, sustainability and scalability will be studied.

Additionally, programme effectiveness will be evaluated by comparing outcomes of patients who received it with those who did not, in areas such as function, quality of life, hospital readmission rates and use of healthcare services. Cost-effectiveness will also be examined. Overall, this project contributes to building frailty-ready hospital services and informing practice and policy on frailty management in Singapore.

PROJECT SPOTLIGHT



“For the INFA programme to be useful and succeed in the long run, we are investing time and effort in conducting implementation research prior to piloting it in 2025. We apply qualitative methods to elicit challenges that the frontline staff and hospital leadership anticipate.

The next milestone is to use implementation research tools to systematically select, develop and execute implementation strategies to mitigate the identified barriers.”

DR GRACE SUM CHI-ENCo-Principal Investigator
Research Fellow, GERI

“To ensure that the programme and implementation strategies can sustain the results beyond the testing phase, evaluations alone are insufficient. To reach a larger number of eligible patients, we need to better understand how to expand its reach to benefit a larger group. We need to ensure organisational readiness, and based on our evaluation findings, to anticipate and plan to support its scaling.”

DR TAN WOAN SHINCo-Investigator (Health Economics Methodology)
Joint Faculty, GERI

COMPLETED

Effect of community-based Baduanjin on functional performance in pre-frail/frail older adults: A randomised controlled and implementation research study

Principal Investigator:

Associate Professor Wee Shiou Liang

Collaborating Organisations:

Tsao Foundation, National University of Singapore

This study conducted implementation and effectiveness research on a community-delivered popular intervention to improve/maintain function in frail older adults.

Help Optimise and Mobilise Elders (H.O.M.E.)

Principal Investigator:

Dr Melanie Tan

Site-Principal Investigator:

Dr Charlene Lau Lay Khoon

Collaborating Organisations:

Ng Teng Fong General Hospital,
National Healthcare Group

During hospitalisations, older inpatients commonly face issues such as immobility, loss of independence and functional decline. This leads them down the cascade of dependency with consequent increased risk of adverse outcomes, institutionalisation as well as higher post-acute care costs.

The aim of this study is to implement and evaluate a mobility intervention designed to improve mobility, while optimising reversible factors affecting mobility among inpatients admitted to a geriatric unit in Singapore. Both effectiveness and implementation are tested simultaneously.

>> Read what our collaborator Dr Melanie Tan has to say about working with GERI on page 24.

NEXT >>

MORE RESEARCH ON
IMPLEMENTING INTEGRATED CARE

IMPLEMENTING INTEGRATED CARE



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)

Principal Investigator:

Associate Professor Laura Tay

Lead Organisation:

Sengkang General Hospital

Implementation Research Partner:

GERI

This study is awarded under the National Innovation Challenge (NIC) on Active and Confident Ageing Grant Call on Frailty. Its primary objectives are:

1. To maintain functional independence in older adults, represented by life-space mobility reflecting the older person's community participation, and
2. To implement INFINITY-ICOPE with high fidelity, penetration and sustainability within the community.

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

Principal Investigator:

Dr Yu Chou Chuen

Understanding the thinking of Singaporean older adults on vaccination is important as this will allow the tailoring of interventions and campaigns to encourage vaccination. Informed by the Theoretical Domains Framework, this study aims to understand the barriers and facilitators towards vaccination. It will be conducted using a mixed methods design.

Project Carer Matters 2

Principal Investigator:

Dr Chan Ee Yuee

Lead Organisation:

Tan Tock Seng Hospital

Implementation Research Partner:

GERI

This study is awarded under the NIC on Active and Confident Ageing Caregiving Ecosystem Grant. It aims to:

1. Strengthen the caregiving ecosystem and ensure the continuity of integrated and personalised relationship-based care, which enables patient-caregiver dyads to age-in-place, and
2. Examine if implementation of an intervention helps improve patient-caregiver outcomes post-discharge, and understand their perceptions on a mobile app and suitability for their settings.

ONGOING

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

Principal Investigator:

Dr Raymond Ng Han Lip

Collaborating Organisations:

Woodlands Health, Nanyang Technological University, Khoo Teck Puat Hospital (KTPH), National University of Singapore, National University Hospital

Since 2011, the Respecting Choices framework of ACP has been implemented as a nationwide programme named Living Matters.

Through a mixed methods study, relationships among factors in implementing ACP, moral distress and ethical conundrums will be examined and subsequently explored in-depth involving ACP facilitators.

The findings will inform training curricula for ACP facilitators and healthcare professionals.

NEW

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

Principal Investigator:

Dr Tew Chee Wee

Collaborating Organisation:

KTPH

Telehealth support serves as a potential means of supporting patients in care transitions. Moreover, the utility of telehealth is expected to grow given its value in enhancing access to care.

The primary objective of the THINK study is to evaluate the implementation of the telehealth support centre at Yishun Health to identify the barriers and facilitators of implementation. The secondary objective is to study its effectiveness in terms of patient outcomes, resource utilisation and cost benefit.

A subgroup analysis of the aged patient group will be conducted in view of older adults' unique needs and perceptions towards telehealth.

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

Principal Investigator:

Dr Allyn Hum

Lead Organisation:

Tan Tock Seng Hospital

Implementation Research Partner:

GERI

As part of PRO-MADe's effectiveness-implementation mixed-methods research, this study aims to evaluate the implementation, associated strategies and outcomes in relation to the adoption of PRO-MADe in the clinical practice setting. This study is supported by the Temasek Foundation.

Patients with dementia are vulnerable to significant and prolonged disability and dependency, experiencing a mortality two-fold higher than those without dementia. Supporting patients living in advanced stages of this neurodegenerative disease through early palliative care integration could improve symptom suffering and justify healthcare utilisation.

(continued on next page)

NEW

(continued)

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

However, patients with advanced dementia are often referred for palliative support only in the last weeks to months, amid clinical uncertainty in prognostication.

PRO-MADe was developed with the intention of predicting one-year mortality among patients with advanced dementia presenting to a tertiary care setting. It is embodied in an integrated care model that extends to the site of discharge in the community. GERI funded the development and validation of the PRO-MADe tool which formed the foundation for its ongoing deployment and evaluation.

For this present phase of the project, GERI is collaboratively supporting as an implementation research partner, providing expertise specifically in the qualitative evaluation of PRO-MADe's implementation and outcomes.

COMPLETED

Appropriate Prescribing for Older Adults with Multimorbidity (Pro-M): A feasibility study

Principal Investigator:

Penny Lun

Site-Principal Investigator:

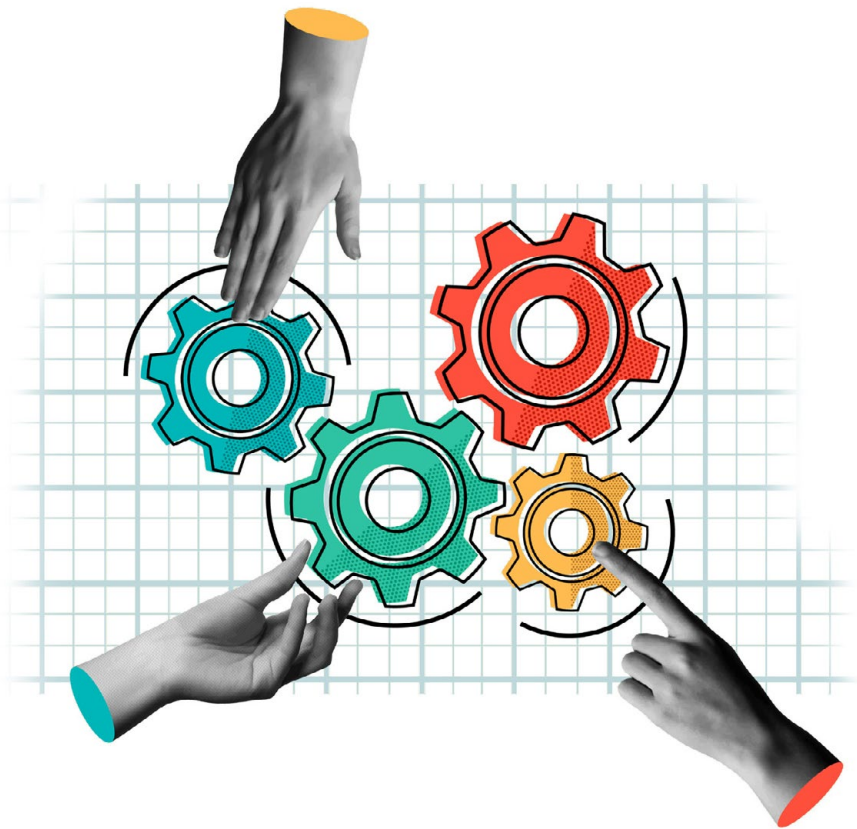
Dr Christine Chen Yuanxin, Tan Keng Teng

Collaborating Organisations:

Changi General Hospital, Tan Tock Seng Hospital

This feasibility study will test the implementation of an intervention that aims to reduce inappropriate prescribing for older adults with multimorbidity in geriatric medicine specialist clinics at public hospitals.

>> Read what our collaborator Dr Christine Chen has to say about working with GERI on page 24.



COLLABORATIONS

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
- Agency for Integrated Care
- Alexandra Hospital
- Changi General Hospital
- Chapter of Geriatricians
- The Singapore-ETH Centre
- Health Promotion Board
- Health Services and Outcomes Research, National Healthcare Group (NHG)
- Khoo Teck Puat Hospital
- Knowledge Translation Program, St. Michael's Hospital, Unity Health Toronto
- Lee Kong Chian School of Medicine, Nanyang Technological University (NTU)
- Ministry of Health, Singapore
- NTU
- NHG
- National Heritage Board
- National University Hospital
- National University of Singapore (NUS)
- Ng Teng Fong General Hospital
- NTUC Health
- Saw Swee Hock School of Public Health, NUS
- Sengkang General Hospital
- Singapore Clinical Research Institute
- Singapore Management University
- Society of Geriatric Medicine Singapore
- Tan Tock Seng Hospital
- Tsao Foundation
- Woodlands Health



SPOTLIGHT ON OUR COLLABORATORS



>>

“Being able to **connect with key partners and stakeholders to cross-share latest developments related to ageing in Singapore**, as well as exchange ideas and learnings through the Knowledge to Practice webinars has been very helpful. We are thankful for the strong partnership with GERI and look forward to more opportunities to work together.”

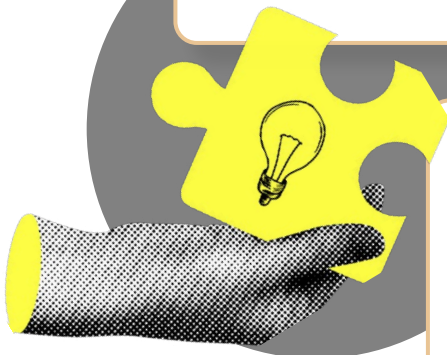
MS SEE YEN THENG
Chief, Caregiving and Community
Mental Health Division
Agency for Integrated Care

>>

“GERI has a very robust and supportive research team and provided ample assistance and good communication where needed for each step, from co-designing the protocol, to the application of the research grant, Domain Specific Review Board application, preparation of research documents, training and publications.

This is especially valuable for clinicians who have aspirations to conduct clinical research studies but may lack the time and expertise to do so. **Such collaborations between GERI and its role as a coordinator for multi-centre studies would definitely be valuable.**”

DR CHRISTINE CHEN YUANXIN
Senior Consultant, Geriatric Medicine
Changi General Hospital



>>

“It has been a pleasure working with GERI’s talented researchers for the Help Optimise and Mobilise Elders project on inpatient mobility. The collaboration has been a very positive and complementary one.

While I provided the ideas and clinical expertise as a geriatrician, the GERI team is **well-versed in research methods such as both qualitative and quantitative data analysis, interviews**, as well as in administrative aspects.

The team has been supportive and approachable, and I look forward to working with them again for future projects!”

DR MELANIE TAN
Consultant, Geriatric Medicine,
Ng Teng Fong General Hospital
Adjunct Faculty, GERI



>> Read more about GERI's **Policy-Practice-Research collaborative platforms** on pages 31-32.

SHARING OUR RESEARCH



JOURNAL PUBLICATIONS

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

Gao J, Lun P, Tang JY, Jabbar KA, George PP, Yap P. The influence of meso and macro factors on caregiving of older persons in Singapore: A narrative review. *Proceedings of Singapore Healthcare*. 2024;33. DOI: 10.1177/20101058241227358.

Ginting ML, Ang YH, Ho SH, Sum G, Wong CH. Understanding the characteristics of high users of hospital services in Singapore and their associations with healthcare utilisation and mortality: A cluster analysis. *PLoS One*. 2023;18(7):e0288441. DOI: 10.1371/journal.pone.0288441.

Kaur P, Kannapiran P, Ng SHX, Chu J, Low ZJ, Ding YY, Tan WS, Hum A. Predicting mortality in patients diagnosed with advanced dementia presenting at an acute care hospital: the PROgnostic Model for Advanced DEmentia (PRO-MADE). *BMC Geriatr*. 2023 Apr 28;23(1):255. DOI: 10.1186/s12877-023-03945-8.

Lau, Lay Khoon PhD; Tou, Nien Xiang PhD; Jabbar, Khalid Abdul MSc; Tang, Jia Ying BSc; Gao, Jonathan PhD; Ding, Yew Yoong MBBS, PhD; Ng, Yee Sien MD. Effects of Exercise Interventions on Physical Performance and Activities of Daily Living in Oldest-Old and Frail Older Adults: A Review of the Literature. *American Journal of Physical Medicine & Rehabilitation* 102(10):p 939-949, October 2023. DOI: 10.1097/PHM.0000000000002246.

Nai ZL, Tan WS, Tov W. Acceptance of communication technology, emotional support and subjective well-being for Chinese older adults living alone during COVID-19: A moderated mediation model. *PLOS ONE* 18(9): e0291806. DOI: 10.1371/journal.pone.0291806.

Sum G, Sim SYH, Chay J, Ho SH, Ginting ML, Lim ZZB, Yoong J, Wong CH. An Integrated Patient-Centred Medical Home (PCMH) Care Model Reduces Prospective Healthcare Utilisation for Community-Dwelling Older Adults with Complex Needs: A Matched Observational Study in Singapore. *Int. J. Environ. Res. Public Health* 2023, 20, 6848. DOI: 10.3390/ijerph20196848.

Tan PJ, Ginting ML, Lim ZZB, Balachandar N, Sultana R, Kadir MM, Xu T, Ismail NH, Yap JKY, Wong SF, Yoong J, Matchar DB, Hill K, Wong CH. Pragmatic multicentre stepped-wedge cluster randomised trial to investigate the effectiveness of community-based falls prevention programme for older adults with falls risk in Singapore: a protocol paper. *BMJ Open*. 2023 Jun 1;13(6):e072029. DOI: 10.1136/bmjopen-2023-072029.

Tang JY, Teng PHJ, Chen CY, Tan KT, Ang W, Lau S, Ang AGC, Kyaw KK, Tay XY, Lim WMS, Espeleta WDV, Lin H, Ding YY, Lun P. Appropriate prescribing for older adults with multimorbidity (pro-M): Protocol for a feasibility study. *Archives of Public Health*. 2024;82:37. DOI:10.1186/s13690-024-01264-x.

Teng PHJ, Lun P, Tang JY, Tan KT, Ang W, Ding YY. Using multiple approaches to develop a physician-pharmacist collaborative care intervention to facilitate appropriate prescribing for older adults with multimorbidity. *Arch Gerontol Geriatr*. 2023 Dec;115:105110. DOI: 10.1016/j.archger.2023.105110.

Yu CC, Tou NX, Low JA. Internet Use and Effects on Mental Well-being During the Lockdown Phase of the COVID19 Pandemic in Younger Versus Older Adults: Observational Cross-Sectional Study. *JMIR Form Res* 2024;8:e46824. DOI: 10.2196/46824.

Yun Ying Ho, Laurence Tan, Chou Chuen Yu, Mai Khanh Le, Tanya Tierney, James Alvin Low. Empathy before entering practice: A qualitative study on drivers of empathy in healthcare professionals from the perspective of medical students. *AIMS Medical Science*, 10(4): 329–342. DOI: 10.3934/medsci.2023026.

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

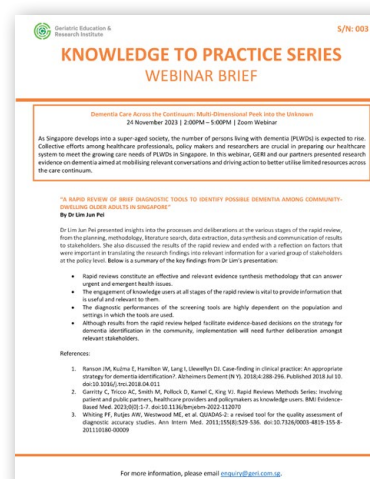
- Fear and stigmatisation during the first year of the COVID-19 pandemic: Lessons learnt for future public health crises
- Prognostic model for predicting mortality: Facilitating palliative care referrals for patients diagnosed with advanced dementia in acute care
- Unravelling patient diversity: Profiling high users of inpatient services based on medical complexity and psychosocial needs
- Unlocking active ageing, even for the oldest-old and frail: A literature review of exercise interventions for two older adult groups



PUBLICATIONS BY GERI

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.

- Frailty Conversations: Intrinsic Capacity Matters
- Dementia Care across the Continuum: Multi-Dimensional Peek into the Unknown
- A Lesson in Holistic Care: Crossing the Chasm between the Humanities and Medicine



Read our publications on the GERI website.

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.

Frailty Conversations: Intrinsic Capacity Matters (25 Jul 2023)

The webinar tapped into the growing policy and public health conversation on frailty and intrinsic capacity in Singapore, bringing together GERI's research findings for timely discussion across topics such as intrinsic capacity measurement, frailty assessment, exercise interventions and more.

Check out event highlights:
>> bit.ly/4bbc5uG

Read speech by Associate Professor Ding Yew Yoong, Executive Director, GERI:
>> bit.ly/3QE3jgm



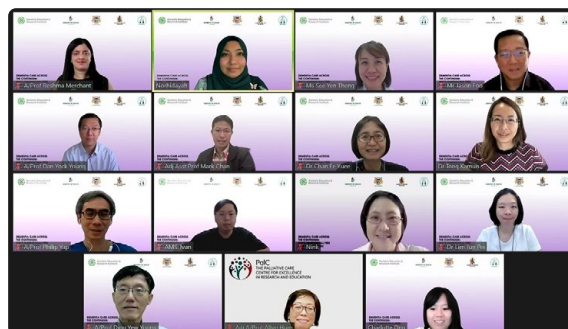
Dementia Care across the Continuum: Multi-Dimensional Peek into the Unknown (24 Nov 2023)

Given the heavy toll exacted by dementia on Singapore's healthcare system, patients and their families and society, managing this condition has become a national priority. The webinar featured presenters and a panel of experts who shared their research findings and expertise spanning dementia identification, assessment and care of persons living with dementia.

Check out event highlights:
>> bit.ly/44RHnEJ

Read speech by Associate Professor Ding Yew Yoong:
>> bit.ly/3USX2QL

Read what the Agency for Integrated Care had to say about working with GERI on page 24.



A Lesson in Holistic Care: Crossing the Chasm between the Humanities and Medicine (22 Mar 2024)

Integrating the humanities is essential for a holistic approach to patient care, particularly for designing health services that better meet the needs of older adults to facilitate healthy ageing. The research findings presented by GERI and its partners covered themes like clinician empathy, moral distress in advance care planning, person-centred compassionate care in the context of caring for frail older adults with dementia, and more.

Check out event highlights:
>> bit.ly/4dwUhf2



INSIGHTS FROM INTERNATIONAL EXPERTS

Health policy, made better with evidence with Professor John Lavis

On 29 Feb and 1 Mar 2024, we welcomed our International Scientific Advisor, Professor John N. Lavis to the GERI office.

Professor Lavis is a leading expert on evidence-informed policymaking. He directs Canada's McMaster Health Forum and the World Health Organization Collaborating Centre for Evidence-Informed Policy, and also co-leads the Global Commission on Evidence to Address Societal Challenges.

In a Q&A with GERI, Professor Lavis shares his insights on how research evidence can inform and support health policymaking.

Read more here:

>> bit.ly/4dGBLuy

“ Conducting high-quality research on its own isn't enough to influence the 'big bang' decisions made by government policymakers or the 1,001 smaller decisions that determine **whether the right mix of programmes, services and products equitably get to all those who need them.** ”

HEALTH POLICY RESEARCH: Q&A WITH
PROFESSOR JOHN LAVIS



Going deeper into community-engaged research with Professor May Wang

Professor May C. Wang from the University of California, Los Angeles (UCLA) Fielding School of Public Health was in-residence at GERI as a visiting expert from Sep to Nov 2023.

Professor Wang is a senior faculty member at UCLA and has held visiting professor appointments at the NUS Saw Swee Hock School of Public Health (SSHSPH). As an Adjunct Faculty at GERI, Professor Wang's residency at GERI was made possible through a collaboration with NUS SSHSPH.

In an interview with GERI, she discusses the need to go deeper in involving communities in research and to work collaboratively beyond siloes—all for the larger goal of impacting health and well-being.

Read more here:

>> bit.ly/44zmJst

“ **If you are not asking the right questions, you think you have identified the barriers, but you have not gotten to the bottom of what is really affecting people's lives.** Some of these things are so sensitive that you cannot just put it in a question and check a box. ”

IN CONVERSATION WITH
PROFESSOR MAY WANG



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 and social media platforms, GERI has expanded the reach of our research to a broader audience.


MEET OUR RESEARCHERS SERIES

We get to know the people behind GERI's research to advance healthy ageing. Read about their research journey, interests and more on the GERI website.

DR TAN WOAN SHIN
Joint Faculty

>>>


"I feel very fortunate to be able to work at the intersection of policy, practice and research throughout my career."



DR TOU NIEN XIANG
Research Fellow

>>>


"Ageing is a marathon that we are all running, and I hope that my research can help everyone stay ahead in the race."



DR GRACE SUM CHI-EN
Research Fellow

>>>


"I believe the work at GERI is meaningful because we transform research evidence into real actionable changes."



DR SERENE NAI
Research Fellow

>>>


"I hope that my work in GERI can contribute to solutions to improve the well-being of older adults and their caregivers."



DR YU CHOU CHUEN
Research Fellow

>>>

"For researchers starting out, I have the following advice: If all you have is a knife, you can only slice. So build up your kitchenware of research methodology."



LinkedIn HIGHLIGHTS

Here is a curated selection of research and events featured on GERI's LinkedIn page over the past year. Follow us for more updates: bit.ly/48cTrBG


Geriatric Education & Research Institute
523 followers

We were delighted to welcome Professor **John N. Lavis**, our International Scientific Advisor and a leading global authority on supporting **#evidence-informed** policymaking, to our GERI offices recently!

As Director of the **McMaster Health Forum** as well as the Co-lead of the **Global Commission on Evidence to Address Societal Challenges**, Professor Lavis drew on his deep expertise to share **strategies** on informing policy processes through timely and targeted **#research** evidence. Professor Lavis and our researchers also discussed GERI's recent **#healthpolicy** research projects related to **#frailty** and **#dementia**.

Read more here: <https://lnkd.in/g/3pKfj6g>

Read our earlier Q&A with Professor Lavis here: <https://lnkd.in/g/AHXxNnE>



You and 68 others


Geriatric Education & Research Institute
523 followers

As Singaporeans live longer, they may develop multiple illnesses that require many medications. While sometimes appropriate, **#polypharmacy** – or the taking of five or more medications daily – could create more problems than benefits, such as **#druginteractions** and adverse reactions.

To counter this, GERI researchers worked with physicians and pharmacists to co-create an intervention to facilitate appropriate **#prescribing**. Called Pro-M ("Prescribing for **#olderadults** with **#Multimorbidity**"), it aims to encourage physician-pharmacist collaboration and improve how prescribing decisions are documented and communicated at **#outpatient** clinics in Singapore.

For more on how Pro-M was developed, click here to read the paper published in the Archives of Gerontology and Geriatrics journal: <https://lnkd.in/g/Mz6AaQ9>

#healthservices #ageing #interventionresearch #pharmacyresearch #medicationmanagement #integratedcare



You and 35 others

Geriatric Education & Research Institute
522 followers


Combating **#frailty** with **#exercise**: A new GERI study finds that oldest-old and **#frail** seniors can still benefit from exercise **#interventions** that just use simple equipment, such as resistance bands and weights.

While exercise can be transformative for **#olderadults**, specialised equipment and facilities may not always be available. With an eye on the oldest-old and frail, GERI researchers conducted a first-of-its-kind narrative review to examine the effects of exercise without specialised equipment on this vulnerable group.

The evidence suggests that exercise interventions using simple portable equipment could still improve strength and balance amongst the oldest-old and frail. This affirms efforts to enhance the **#affordability**, **#accessibility** and scaling-up of exercise interventions to benefit more seniors in the **#community**.

Read the full paper published in the American Journal of Physical Medicine & Rehabilitation here: <https://lnkd.in/g/H7FPnkt>

#functionality #healthyageing #activeageing #healthspan #extendinghealthspan #physicalactivity #evidencesynthesis



Jenny G. and 42 others


Geriatric Education & Research Institute
523 followers

While studies have untangled personal factors that shape **#caregiving**, less is known about the role played by broader forces such as social norms, community resources and state **#policy** (i.e. meso and macro factors). Such factors, geriatricians say, also are important for **#caregivers**.

Looking closely at the influence of meso and macro factors on informal caregivers in Singapore, a GERI literature review found that social norms such as filial piety could exert stress on caregivers, while interventions and care-services for caregivers reported mixed results.

Click here to read the full findings, published in the Proceedings of Singapore Healthcare journal: <https://lnkd.in/g/9nBpmQq>

#caregiversupport #caregiverburnout #communitycare #ageinginplace #ageing



Al-Ling Chiam and 7 others

RESEARCH HIGHLIGHTS

We take a deep dive into GERI's recent studies, as we hear directly from the researchers behind the projects on how their findings can help our older adults.

Home > About Us > News

News

Systematic integrative review explores the enablers and challenges of conducting Comprehensive Geriatric Assessment in the community



RESEARCH HIGHLIGHT
As Singapore shifts to community care to support ageing-in-place, GERI researchers take a closer look at community-based Comprehensive Geriatric Assessment and provide recommendations for its implementation beyond the hospital setting.

Read more here:
>> bit.ly/44t9cCZ

>>>


"What makes CGA (Comprehensive Geriatric Assessment) effective are the actions that come after it, including the development of a personalised care plan for older persons and linkage to health and social care services that target their specific needs."

DR GRACE SUM CHI-EN
Lead Author
Research Fellow, GERI

Home > About Us > News

News

Improving older patients' journey to recovery in the community by tackling depressive symptoms and malnutrition



RESEARCH HIGHLIGHT
A study by researchers from GERI and Sengkang General Hospital finds that older adults can have a better chance at recovery at home after hospitalisation if their dietary and psychosocial needs are identified and addressed early on.

Read more here:
>> bit.ly/4b4R84F

>>>

"After discharge from hospital, partnerships amongst older patients, their caregivers, and community care and health providers come to the fore. Their proactive involvement is critical for the success of any care management plan."

ASSOC PROF LAURA TAY
Principal Investigator
Joint Faculty, GERI
Head and Senior Consultant,
Geriatric Medicine,
Sengkang General Hospital

POLICY-PRACTICE-RESEARCH PLATFORMS

Multi-site Evaluation of the Geriatric Services Hub (GSH) Programme: Closure Meeting (27 Jul 2023)

GERI's national evaluation study of the GSH programme culminated in a closure meeting attended by senior representatives from the Ministry of Health (MOH) Health Services Group, Ageing Planning Office and the five participating hospital sites from across all healthcare clusters.

Topics discussed included the role of the GSH within the National Frailty Strategy and how GERI's findings and recommendations could inform policy.



Advance Care Planning (ACP) World Café (28 Jun 2023)

GERI and the Agency for Integrated Care (AIC) convened the ACP Quality Implementation (AQI) Knowledge Exchange Platform to improve ACP adoption in Singapore.

Together with practitioners from three regional healthcare clusters, the community care and long-term care sector and MOH, the AQI team is developing a framework and set of quality indicators aimed at enabling quality implementation of ACP.

Organised by AIC, the World Café brought together diverse stakeholders from the community care and acute care sectors. The objectives were to discuss and agree on the definition, scope, and goals of ACP, as well as agree on and prioritise a list of quality indicators that will support progress monitoring.



Photo: AIC

SHARING OUR RESEARCH

9th Asian Conference on Ageing and Gerontology (31 Mar – 3 Apr 2023)

Dr Yu Chou Chuen presented findings on “Factors Influencing Vaccination Support in Older Adults: A Cross-sectional Survey Based on the Theoretical Domains Framework” as well as “Internet Use and Mental Well-being During the COVID-19 Pandemic: A Quantitative Study on Age Differences”. Dr Yu also chaired a session on Ageing and Gerontology (Health).



National Medical Research Council (NMRC) Research Symposium (27 – 28 Apr 2023)

Associate Professor Ding Yew Yoong, Executive Director, GERI and Dr Sharon Straus, Joint Faculty and Director of the Knowledge Translation Program, St Michael’s Hospital were invited to share their expertise at the NMRC Awards Ceremony and Research Symposium 2023.

Associate Professor Ding led a session on closing the research-to-practice gap. In addition to her keynote speech, Dr Straus also led a session on co-creating research with knowledge users.



Photo: NMRC

8th International Advance Care Planning (ACP-i) Conference (24 – 27 May 2023)

Dr Raymond Ng, Adjunct Faculty, chaired the Scientific Committee while Dr Tan Woan Shin and Dr Yu Chou Chuen served as Committee members.

Associate Professor James Low, Knowledge Translation Lead and Nongluck Pussayapibul, Senior Manager, Knowledge Translation (KT) introduced the ACP AQI project. They also discussed how KT and implementation science principles could be applied to health services and policies.

Research Officers, Tang Jia Ying and Fiona Goh shared findings on the challenges faced by ACP facilitators and healthcare professionals that could lead to moral distress.



International Association for Gerontology and Geriatrics Asia/Oceania Regional Congress (12 – 14 Jun 2023)

Dr Tou Nien Xiang presented findings on the implementation of a community-based Baduanjin exercise intervention for frail older adults. Dr Grace Sum Chi-En shared findings from her narrative review on the World Health Organization’s Integrated Care for Older People framework.



8th Singapore Palliative Care Conference (1 – 2 Jul 2023)

Dr Yu Chou Chuen was invited to present his published research on what empathy means in the clinical context and building empathic healthcare communities. Dr Yu also joined the speaking panel for a concurrent session themed "Research Journeys and Communities".

Dr Raymond Ng participated in the poster presentation where he shared findings on “Understanding Moral Distress and Adaptive Responses of Healthcare Professionals in Advance Care Planning”.



3rd European Conference on Aging & Gerontology London (13 – 17 Jul 2023)

June Teng, Research Associate, presented findings on GERI's national evaluation of the Geriatric Services Hub (GSH) programme, with a presentation titled "Advancing the Implementation of a New Multi-Site Community-Based Frailty Intervention in Singapore: Insights from the Programme Leads".

Photos: The International Academic Forum



Australasian Research Management Society (ARMS) 2023 Sydney Conference (6 – 8 Sep 2023)

Dr Edward Tan, Senior Manager, Research Administration (Support) presented a poster on "Multi-Site Evaluation of the GSH – Shared Learning Through Collaboration". He spoke about the role of research management in ensuring that GERI's national evaluation study was well-planned, operationally sound and risk-managed.

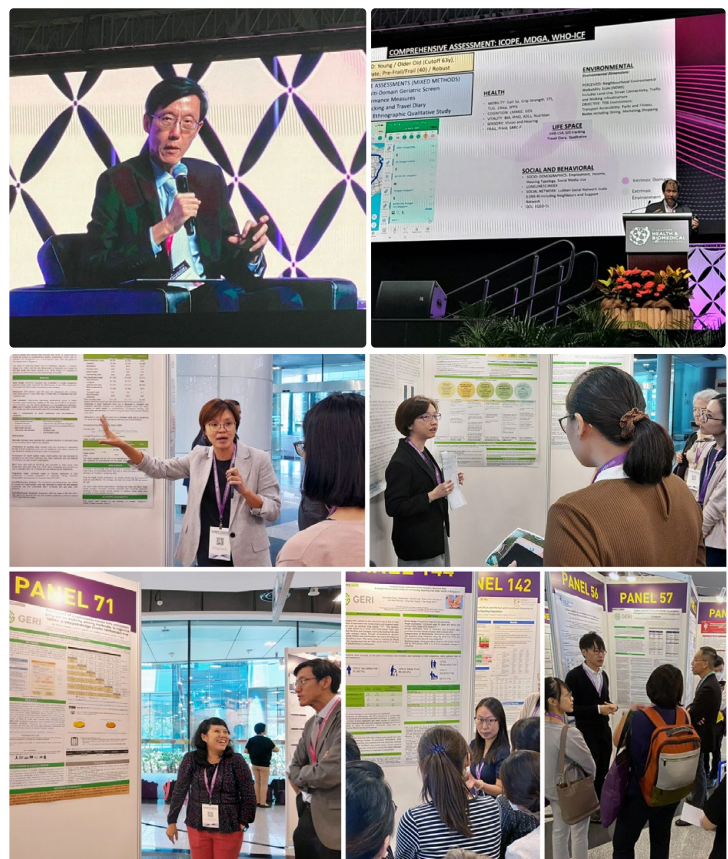


Singapore Health & Biomedical Congress (SHBC) 2023 (12 – 13 Oct 2023)

Associate Professor Ding Yew Yoong was a panellist at the symposium on "Built Environment and Health", where he discussed how environments can be optimised to achieve better health outcomes and the challenge of devising system-implementable solutions.

Joint Faculty member, Associate Professor Ng Yee Sien, Senior Consultant, Sengkang General Hospital presented his research on life space and community mobility of older adults.

Dr Tan Woan Shin and GERI researchers Dr Charlene Lau, Dr Yu Chou Chuen, Dr Mimaika Ginting, June Teng and Fiona Goh also presented scientific posters spanning topics such as polypharmacy, falls and mobility.



Asian Conference for Frailty and Sarcopenia (26 – 28 Oct 2023)

Associate Professor Ding Yew Yoong spoke on the panel on “The Asia-Pacific Clinical Practice Guidelines in Frailty Management (2017) Revisited”, while Associate Professor Lim Wee Shiong, Joint Faculty delivered a plenary session “Forging a Frailty-Resilient Health System”.

Other GERI projects showcased at the conference included a presentation by Dr Tan Woan Shin on the Geriatric Services Hub evaluation study, and poster presentations by Dr Melanie Tan, Adjunct Faculty and Dr Tou Nien Xiang on studies related to inpatient mobility and an exercise intervention for older adults, respectively.



Photos: ACFS 2023

SingHealth Duke-NUS Medicine ACP - NTU Medical Humanities Conference (27 – 28 Oct 2023)

Dr Yu Chou Chuen was an invited speaker at the SingHealth Duke-NUS Medicine ACP - Nanyang Technological University Medical Humanities Conference. He spoke about "Building Empathic Healthcare Communities" and the development of a new scale to measure empathy among clinicians.



Visit by the World Health Organization (WHO), Ministry of Health Brunei and Singapore University of Social Sciences (SUSS) to Sengkang General Hospital (2 Nov 2023)

Dr Grace Sum and Dr Mimaika Ginting, Research Associate, delivered a presentation titled “Are we ready for INFINITY-ICOPE (Integrated Care of Older People) – Insights from implementers” to visiting officials from the WHO, the Ministry of Health Brunei and SUSS. Dr Sum and Dr Ginting shared preliminary findings on the implementation barriers and facilitators of the WHO ICOPE framework from the perspectives of healthcare workers and community partners.



The meeting was hosted by Associate Professor Laura Tay, the Principal Investigator of INFINITY-ICOPE.

Duke-NUS Centre for Ageing Research and Education Experts Webinar: Frailty, Intrinsic Capacity and Functional Ability – Linkages and Implications for Healthy Ageing in Singapore (19 Jan 2024)

During the hour-long webinar, Associate Professor Ding Yew Yoong shared three key ideas:

1. Intrinsic capacity is useful for health promotion efforts when community-dwelling older adults are still in good health. Frailty becomes more useful in guiding care efforts for older adults in health systems, when their health declines.
2. In addition to maintaining their physical and mental reserves, older adults need supportive environments to continue doing the things that matter to them.
3. Systematic and intentional knowledge translation is needed to create research impact and change—for GERI, this is done through its Knowledge Translation Framework.

Frailty, Intrinsic Capacity, and Functional Ability: Linkages and Implications for Healthy Ageing in Singapore

Dr Ding Yew Yoong
Senior Consultant, Geriatric Medicine, TTSH
Executive Director, Geriatric Education & Research Institute (GERI)
Clinical Associate Professor, NUS
Adjunct Associate Professor, NTU

19 January 2024

Connection between intrinsic capacity and functional ability

Idea 2

The diagram illustrates the relationship between intrinsic capacity and functional ability. A green curve labeled 'Intrinsic capacity' starts high and gradually declines. A red curve labeled 'Functional ability' starts lower and declines more sharply, eventually reaching a point labeled 'Frailty'. A red arrow points from the 'Frailty' point back to the 'Intrinsic capacity' curve. A box labeled 'Environment' is positioned between the two curves, with arrows indicating its influence on both. Below the diagram is a flowchart showing 'Health condition' leading to 'Functional ability', which then leads to 'Participation'. 'Body functions' and 'Activity' are also shown as components of 'Functional ability'. 'Environment' and 'Personal factors' are listed as 'Contextual factors' that influence the process.

Environment refers to:

- natural or built environment
- social support/networks
- enabling technology
- health/social services, systems and policies
- attitudes

Figure 1. The ICF model as basis for the development of the construct of intrinsic capacity. ICF = International Classification of Functioning, Disability and Health.

GERI

AWARDS SPOTLIGHT

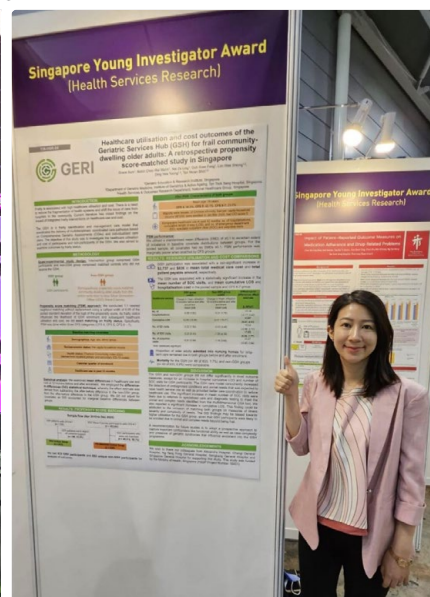
Singapore Health & Biomedical Congress 2023 (12 – 13 Oct 2023)



WINNER - GOLD

SINGAPORE YOUNG INVESTIGATOR AWARD
HEALTH SERVICES RESEARCH

Dr Grace Sum Chi-En won Gold in the Singapore Young Investigator Award (Health Services Research) category, for her poster on “Healthcare utilisation and cost outcomes of the Geriatric Services Hub for frail community-dwelling older adults: A retrospective propensity score-matched study in Singapore”.



**Singapore Health & Biomedical Congress 2023
(12 – 13 Oct 2023)**



WINNER - MERIT
BEST POSTER AWARD
HEALTH SERVICES RESEARCH

Dr Yu Chou Chuen clinched Merit in the Best Poster Award (Health Services Research) category for his poster on “Understanding Moral Distress and Adaptive Responses of Healthcare Professionals in Advance Care Planning: Qualitative Findings from a Sequential Exploratory Mixed-methods Study”.



**9th Asian Conference for Frailty and Sarcopenia
(26 – 28 Oct 2023)**



WINNER - GOLD
POSTER COMPETITION

Dr Tou Nien Xiang clinched Gold for Best Poster at the conference, on the implementation of a Baduanjin exercise intervention programme for frail older adults in the community.

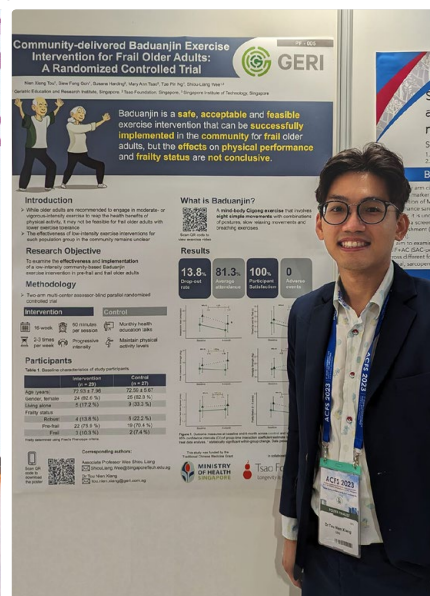
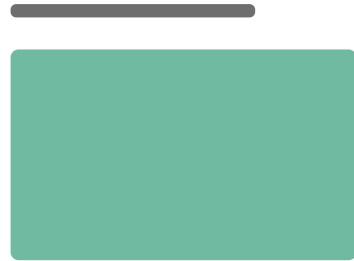


Photo: ACFS 2023

LIFE IN GERI





CAPABILITY-BUILDING

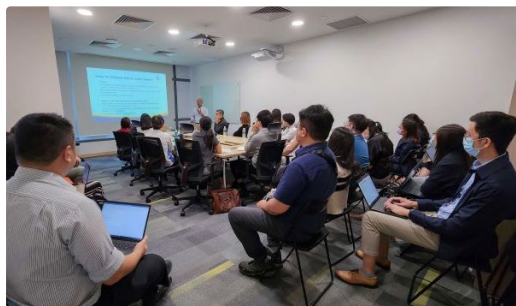
Equipping Researchers with Effective Grant Writing Skills (18 and 25 May 2023)

The Singapore Clinical Research Institute (SCRI) held its Grant Enhancement Training workshop aimed at helping researchers and research support staff gain in-depth knowledge about grant writing and grant application.

Highlights included opening remarks from Associate Professor Edwin Chan, Chief Scientific Officer, SCRI, on persuasive proposal writing.

Associate Professor Mihir Gandhi, Head of Biostatistics, SCRI also led a session on methods.

Both professors are Adjunct Faculty members at GERI, working with our researchers to deepen capabilities in biostatistics and evidence synthesis.

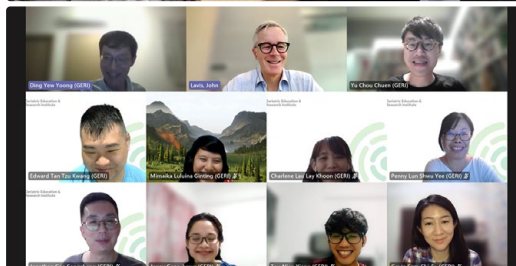


Photos: SCRI

Health Policy Research Reading Group

GERI started its first reading group on health policy research to provide an overview of how GERI's work can support evidence-informed policymaking.

From May to Nov 2023, researchers and staff convened fortnightly to unpack Dr Erica Bell's book "Research in Health Policy". and engage in open discussion with GERI's International Scientific Advisor, Professor John Lavis.



LIFE IN GERI

STAFF WELFARE

Annual Staff Lunch and Long Service Awards (18 Jan 2024)

GERI staff gathered to unwind and socialise over a leisurely lunch, followed by the presentation of Long Service Awards to Dr Charlene Lau, Penny Lun and Dr Yu Chou Chuen by Associate Professor Ding Yew Yoong. Congratulations to all three recipients of the award!



Geriatric Education & Research Institute Limited

 2 Yishun Central 2, Singapore 768024

 www.geri.com.sg

 Geriatric Education & Research Institute

 enquiry@geri.com.sg