

Vision

The vision of ILC-Singapore is for the development of policies and programmes which can support individuals to maximize their full potential throughout their life course.

Mission

ILC-Singapore works towards the development of strong evidence based practice and policy making in Singapore through research and inter-sectoral collaborations.

Strategic Thrusts

1. To stimulate and conduct high impact policy-and-programme-relevant interdisciplinary research on ageing to identify important emerging trends and to generate necessary evidence and knowledge to inform policy and practice
2. To engage with and create stakeholder platforms and networks for ongoing knowledge exchange, discussions on trends, issues and possible solutions
3. To pilot innovations that can serve as catalysts for positive change in how we view and work with older people, identify their needs and address their issues
4. To promote awareness and knowledge of ageing issues in Singapore and the region and learning from the international arena
5. To support policymakers, community leaders and service providers in strengthening service delivery-both in improvement of current models as well as development of new models and systems of effective services
6. To contribute to the development of leadership in the ageing field.

Research

1. Tsao-NUS Ageing Research Initiative

Under the leadership of Associate Professor Angelique Chan as the Director of the Initiative, the following research projects and activities have been accomplished to date.

- a. Healthy Aging
 - i. **Peer reviewed scientific publications produced:**
 1. Malhotra, R., Chan, A., Østbye, T. 2013. "Variation in and correlates of Body Mass of Older Singaporean Men and Women: Results from a National Survey." *Asia Pacific Journal of Public Health* Vol. 25(1) January pp 42-56
 2. Malhotra C, Chan A, Matchar DB, Seow D, Chuo A, Do, YK. "Diagnostic Performance of Short Portable Mental Status Questionnaire for Screening Dementia among Patients Attending Cognitive Assessment Clinics in Singapore." *Annals, Academy of Medicine* (accepted for publication)
 3. Do, YK, Wu, T., and Chan, A. "Intention to re-enter the labour force among older male

Singaporeans: Does health status matter?" *Ageing and Society* (Under review)

4. Malhotra, R., Chan, A., Østbye, T. 2012. "Validity of proxy-reported weight for older adults." (Research Letter). *Journal of the American Geriatrics Society* Vol. 60(1) pp 189-190. Doi: 10.1111/j.1532-5415.2011.03736.x
5. Whitson H, Malhotra R, Chan A, Matchar DB, Østbye T. 2012. "Comorbid Visual and Cognitive Impairment: Relationship to Disability Status and Self-Rated Health Among Older Singaporeans" *Asia-Pacific Journal of Public Health*. Published online: 24 April 2012. DOI: 10.1177/1010539512443698
6. Malhotra, R., Malhotra, C., Chan A., Østbye, T. 2012. "Life-Course Socioeconomic Status and Obesity Among Older Singaporean Chinese Men and Women." *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. Published online: 15 Nov 2012. doi: 10.1093/geronb/gbs102
7. Wu T and Chan A "Families, Neighbors and the Social Network of Older Adults: Evidence from HDB Housing in Singapore" *Journal of Aging Research* Vol 2012 doi:10.1155/2012/659806

b. Long Term Care

i. Peer reviewed scientific publications produced:

1. Chan, A., Athel J. Hu, Shiou Liang Wee, Joel Yong, Wayne F. Chong, and Prassanna Raman. "Singaporeans' Perceptions of and Attitudes Toward Long-term Care Services" *Qualitative Health Research* (submitted for review)

ii. Conference presentations:

1. Chan, Angelique. 2013. "Why Move Health Services Back into the Community? Social Demography and Ageing Well" Presented at the Duke-NUS HSSR Modeling Symposium, Duke-NUS Graduate Medical School, 11-12 April 2013 and presented at the SGH 20th Annual Scientific Meeting, SGH Postgraduate Medical Institute, Singapore General Hospital, 6 April 2013
2. Chan, Angelique. 2013. "Harnessing Research to Inform Policy: Understanding Long Term Care and Frailty" Presented at the forum on 'New Perspectives on Health, Retirement and Successful Ageing;', Faculty Lounge, National University of Singapore, 22 March 2013
3. Chan, Angelique. 2013. "Are we living longer and in better health? Evidence from Singapore and Japan." Presented at the Conference on Healthy Aging in Asia 2013, Grand Copthorne Waterfront Singapore, 4-5 March 2013

c. Caregiving

iii. Peer reviewed scientific publications produced:

1. Ansah JP, Matchar DB, Love SR, Malhotra R, Chan A, Eberlein R. 2013. "Simulating the Impact of Long-term Care Policy on Family Eldercare Hours." Health Services Research. Published online: 25 Jan 2013. doi: 10.1111/1475-6773.12030
2. Østbye T., Malhotra R., Malhotra C., Arambepola C. and Chan A. "Does support by foreign domestic workers decrease the negative impact of formal caregiving? Results from the Singapore Survey on Informal Caregiving." The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. (Accepted for publication)
3. Chan A, Malhotra C, Malhotra R, Rush J, Østbye T. Health impacts of caregiving for older adults with functional limitations: Results from the Singapore Survey on Informal Caregiving. J Aging Health. (Accepted May 2013)
4. Malhotra R., Chan A., Malhotra C., Østbye, T. 2012. "Validity and reliability of the Caregiver Reaction Assessment scale among primary informal caregivers for older persons in Singapore." Aging Mental Health. Published online: 27 July 2012. doi: <http://dx.doi.org/10.1080/13607863.2012.702728>

iv. Conference presentations:

1. Chan, Angelique. 2013. "Singapore Survey on Informal Caregiving." Presented at the Caregiving Conference 2013, Rendezvous Hotel, Singapore, 15-17 May 2013
2. Chan, Angelique. 2012. "Health Impacts of Caregiving for Older Adults with Functional Limitations: Results from the Singapore Survey for Informal Care." Presented at the Inaugural Signature GAI Conference on 28 June 2012, NUS University Town, Singapore.

d. Programme Evaluation

There are two programmes under this theme that are being evaluated as Community Care.

- i. Singapura Program for All Inclusive Care for Elders (SingaPACE) also known as EPICC is a 3 year demonstration program funded by ToteBoard Singapore. It is an integrated care model for community dwelling frail elderly aged 60+. It is modeled after the US PACE and consists of a day care center and home care provided by a multi-disciplinary team. The effectiveness of this

program is being evaluated using a randomized controlled trial (RCT) design at the individual level of analysis.

- a) Status update: The program started in August 2011. Sample size is 80 participants with 40 participants in each of the two arms. Preliminary results show that the number of A&E events and the number of acute care events for the intervention group is lower than for the control group in the first 6 months of the observation. These results can be generalized to the population. Also the average length of stay across all acute care events is substantially lower for the intervention group compared to the control group. But this result cannot be generalized to the population.
 - b) The preliminary results have been presented to the Ministry of Health as evidence for mainstreaming the integrated care model for long term care in Singapore
- ii. The second programme, Self-Care on Health of Older Persons (SCOPE) is a community development programme to build the self-care capability of elders as well as their health partners in disease prevention and health promotion. The study adopts the Randomized Control Trial (RCT) design. It is used to test the impact of a state-of-the-art self-care training programme focused on preventive care and care management
 - a) Status update: The SCOPE Project team recruited 378 participants from 14 different senior activity centres around Singapore. The third and last wave of data collection will begin November 2013 and end approximately Feb 2014. Analyses are currently underway using the first two waves of data.
 - i. Peer reviewed scientific publications produced:
 1. Chan, A., Tsao, M.A., Harding, S.C., Tay, B., Raman, P., Pietryla, Z., & Matchar, D.B.. “Chronic disease prevalence and Self-Care for Older People (SCOPE): A Randomized Controlled Trial. (Submitted for review)
 2. Chan, A., Tsao, M.A., Harding, S.C., Tay, B., Raman, P., Pietryla, Z., & Matchar, D.B.. “Self-Management Training and Health Outcomes in Low-Income Elderly: Study Design of Self-Care for Older People (SCOPE) in Singapore.” (Submitted for review)
 - ii. Conference presentations:
 1. Chan, Angelique. 2012. “Self Care for Older Persons In Singapore: An Intervention Study (SCOPE).” Presented at the International Alliance of Research Universities (IARU) Faculty Roundtable on 29 June 2012, NUS University Town, Singapore

e. Ageing Research Network

2. Other Research Projects from Tsao Foundation

- i. Evaluation of the Working to Enhance the Care and Resilience of Elders (WECARE) program. WECARE consists of primary care, health education and exercise that targets community dwelling elders who are at risk of chronic disease. This program is running from Dec 2011 – Jun 2014. There are 23 participants and this small sample is being used to fine-tune the intervention to ensure that older persons are responsive to such an intervention and will make the health and lifestyle changes. Preliminary results over 8 months show improved BP / lung / cholesterol control; improved physical fitness; and improved knowledge in managing chronic disease after attending SCOPE health education classes.
- ii. Linguistic validation and acceptability of use of the EASY-Care geriatric assessment tool in Singapore. This project is running from Dec 2012 – Jun 2013 where EASY-Care is being tested for linguistic and cultural use within the context of Singapore and whether it is valid for use as a screening tool in a community setting. 132 older persons aged 60+ were interviewed using EASY-Care and the final report is being written to confirm that it is linguistically valid and acceptable for use in Singapore. It is likely to be adopted by MOH and AIC as a screening tool and for care service referral.
- iii. End of Life Care (EOL) home care pilot program for terminally ill patients with chronic disease. This program ran for 20 months and was the first EOL community based program for non-cancer patients in Singapore. A paper describing the pilot program is currently being written for submission to peer-reviewed journals.

Collaborative platforms & Capacity Building

Events organized to date included the following:

a. Caregiving Conference 2013

The conference was designed to train elder care professionals on the multi dimensional approach to caregiving as well as the broad based knowledge and specific skills to strengthen their capability to help family caregivers in their caregiving role and self care. It offered a capacity building program *beyond* the sector's current standard training framework (which focuses primarily on physical care giving and with insufficient attention to the care of the caregivers' themselves), and provided an entirely new perspective and practice based on a person-centered care model.

Four focal areas in caregiving for older people as well as caring for the care giver were explored in-depth and practice tools were shared: building positive caregiving experience, financing old age needs, meeting legal challenges, and optimizing the care management approach in effective caregiving delivery. More than 50 participants attended the conference.

3. Civil Service College Strategic L.E.A.D. Programme

The Civil Service College is a statutory board under the Office of the Prime Minister which provides a broad range of training programmes and services relevant to public administration

and governance facilitated by respected thought leaders and experienced practitioners to develop first-class public servants.

The Strategic L.E.A.D. Programme is designed for selected middle manager of the civil service to have a good understanding of the complexities of policy issues and challenges and the need for whole-of-government approach. It also studies developments and trends in the region and global environment, and their implications for Singapore. It has identified ageing issues as priority in the social service sector.

Tsao Foundation, through the ILC-Singapore and formerly, the Interagency Collaboration Division has been conducting the session on ageing since 2006. In the past year, 101 senior civil servants attended the session which includes a briefing and a site visit to community-based old-age service facilities.

4. Civil Service College Governance and Leadership Programme (GLP)

The Governance and Leadership Programme (GLP) is at senior public servants (director level and higher) to examine Singapore's fundamental realities and principles of governance and how they are an integral part in public policy formulation and implementation, including public consultation and policy communication.

Similar to Strategic L.E.A.D, ILC-Singapore has been providing session on ageing issues through a briefing and site-visit to community-based old-age service facilities. It conducted one session for 14 participants in the recent year.

Publications

Long term care financing: a cross country comparison, for final edit before publication.

Pilot Testing of Programmes

1) Financial Education Programme for Mature Women

- i) Developed in 2007, this programme has been running as a pilot for the past four years and has since reached out to about 1,400 women, aged 40 to 60 from lower income families (household income of between S\$1,500 to S\$3,500 per month) as participants. More than 5,000 women also benefited from various short talks promoting financial security.
- ii) In March 2012, a formal partnership was launched between the People's Association's Women's Integration Network (PA WIN) and Tsao Foundation to make the program available in 105 Community Clubs all over the country. To build its capacity as a programme implementer, ILC-SG trained PA WIN's pool of trainers.
- iii) The first round of programme replication in Indonesia for the same target group, women from lower income families, has reached out to 720 women by end of 2012. ILC-Singapore facilitated the research and development of adapted modules, trained its pool of trainers, and built the capacity of the local implementing partner NGO in

- program monitoring and evaluation. It has also provided an advisory role in developing their policy advocacy plans. The Indonesian programme is currently being rolled out to reach out to 1,020 women in six provinces around the country.
- iv) The programme will soon be launched for replication in the Klang Valley of Malaysia.
 - v) Grant proposals have been submitted to further strengthen the capability of PA WIN and the Community Clubs. At the regional level, the programme will initiate a high-level intergovernmental meeting on the financial security of older women in Southeast Asia. It aims to bring together key policymakers from the 10 member countries and 3 country partners of the ASEAN Plus Three, relevant NGOs, policy think tanks and international organizations to bring attention and action on the issue.
 - vi) The programme has also been selected by the Ministry of Finance in Singapore to be used as a test bed for the conceptualization of a new national matched savings scheme to encourage savings behavior among lower income, mature women to buffer their retirement savings. 700 graduates of the programme will be participating in the first pilot of the demonstration study and its results will be used to support the targeted launch of policy on the national matched savings scheme for all low income, mature women in Singapore in May 2015.

2) Self Care on Health of Older People (SCOPE) Singapore

- vii) Developed in 2009, this programme has just started in August 2011 and will run until December 2013 as an RCT project with 400 Singaporeans aged 55 and over (200 will be intervention group and 200 will be control group).
- viii) The program completed its training intervention in April 2013 which covered 7 months of weekly training and 6 months of fortnightly support group facilitated by community trainers (also called community health workers). A graduation ceremony was initiated in recognition of the participants' commitment and efforts.
- ix) Preliminary observations and interviews seem to indicate positive impacts among the participants. In a survey conducted by student interns, most participants found their SCOPE training sessions: clear & easy to follow, practical, enjoyable, well-presented by trainers, made a positive impact in their lives and needed by ageing Singaporeans.
- x) Through interviews with the volunteer Community Trainers, it was reported that the participants now have increased concern and support for their cohorts and neighbours; expressed shared responsibility over the program and its impacts; became highly committed to self-care; have happier disposition, became more open in sharing and to new ideas; have more optimistic outlook; have expressed preparedness for visit to doctors; showed increased interest in SAC activities; more mindful of their medication; attended exercise sessions more regularly; cut down on smoking and more conscious about having vegetables and fruits in their daily diet.
- xi) The partner Senior Activity Centres also observed the following outcomes among the participants: more confidence, comfortable and happy in the sessions; increased sense of belongingness; showed discipline & commitment to the program, more active in morning exercises, more stable emotionally and more connected with other participants; showed positive changes in attitude and outlook – about themselves & ageing and broke down cliques within the centres.

- xii) Given all these early positive impacts, ILC-Singapore, the program partners and more importantly the older persons, believe that SCOPE should be scaled-up and be made available to more number of older persons and establish its sustainability in the community. ILC-Singapore has submitted a funding proposal for SCOPE Phase 2 which main aims are to effectively reach out to 1,200 older people and 80 community partners and build the capacity partners for program institutionalization. The Ministry of Health and Health Promotion Board has expressed support in mainstreaming and rolling-out the program.
- xiii) The programme has also developed materials for 3 different levels of learners: (1) Lite caters to participants 65 years and older, (2) Intermediate targets the 50 to 64 age group, and (3) Advance targets the 40-49 age group. The materials differ in approach and level of complexity to respond effectively to the various profiles.
- xiv) The SCOPE Program Advisory Committee has been organized with representatives from relevant government agencies, partner centres, ILC-SG and its research partner for the program. It has been a critical platform to discuss program plans, to provide support in implementation challenges and surface creative ideas to further develop and ensure SCOPE's impact at the policy and program implementation levels.