1. **Research**

Three research projects have been completed for the past two years as part of the outputs of the ILC Singapore. These three studies are the following:

1.1 Evaluation of the community development intervention programme as part of ComSA (Community for Successful Ageing) programme of Tsao Foundation in Whampoa community in Singapore. This study was conducted by a research team from the Saw Swee Hock School of Public Health led by Dr. Zoe Hildon, A/P Gerald Koh, Ms Aw Su and Dr Tan Chuen Seng.

1.2 Household budgets for elderly people in Singapore. This study was conducted by the following researchers: Asst. Prof Ng Kok Hoe (Lee Kuan Yew School of Public Policy at National University of Singapore), A/P Teo You Yenn (Sociology, School of Social Sciences at the National Technological University), Dr Neo Yu Wei (Social Service Research Centre, Faculty of Social Sciences at the National University of Singapore), Dr Ad Maloud (Centre for Ageing Research and Education at the Duke-NUS Medical School), and Ms Ting Yi Ting (Social Service Research Centre, Faculty of Social Sciences at the National University of Singapore).

1.3 Financial Security of Older Women: Perspectives from Southeast Asia. This study was done in six countries within Southeast Asia, namely, Indonesia, Malaysia, Myanmar, Philippines, Singapore and Thailand. A policy brief was also produced based on the results of this study. The e-book can be downloaded at this link: [https://asiawomen.org.sg/news-events/financial-security-of-older-women-perspectives-from-southeast-asia](https://asiawomen.org.sg/news-events/financial-security-of-older-women-perspectives-from-southeast-asia)

2. **Dissemination Platforms/ Engagement of Key Stakeholders**

2.1 Tsao Foundation Ageing Research Forum- held last 8 May 2019, the results of the evaluation of ComSA’s two major components and the phase 1 of the realist evaluation study of ComSA were presented to about 100 participants coming from the government and the community.
2.2 The study on the financial security of older women was published as a book and has been disseminated in the following platforms:
   2.2.1 The book was launched last 29 November 2018 as part of the Regional Learning Exchange Network Meeting in Singapore
   2.2.2 A panel was co-organised with UN ESCAP, HelpAge International and MyAgeing (from Malaysia) during the Asia Pacific Forum on Sustainable Development Meeting held last March 2019 in Bangkok.
   2.2.3 A panel was organized during the International Public Policy Conference 2019 held in Montreal, Canada last June 2019
   2.2.4 Susana was invited as a plenary speaker at the ASEAN Regional Forum on Strengthening Social Protection Policy Focused on Elderly Women and Ageing held last 10 October in Bandar Seri Begawan, Brunei

2.3 The evaluation study of the community development intervention had two published articles and had been presented at the following platforms
   2.3.1 Tsao Foundation Ageing Research Forum 2019
   2.3.2 Just Cause organized forum for community development practitioners in Singapore last April 2019
   2.3.3 Novena-Kallang-Rochor Partners’Network forum last April 2019

3. Collaboration and Partnerships
   3.1 The ILC SG is catalyzing the development of a collective research agenda on caregiving of older persons in Singapore. The team has organized and facilitated two workshops with key stakeholders (policymakers, funders, researchers, community partners, caregivers and older persons.
   3.2 ILC SG team joined AWARE (Association of Women for Action and Research) in holding/organizing a series of closed door discussion on the result of the study on the cost of caregiving.

4. Research Projects (ongoing) at the Tsao Foundation level (attached as part of this report is the list with details of the ongoing research being conducted by Tsao Foundation with its research partners.
FINAL EVALUATION REPORT:
Summary of findings

Community Development for Successful Ageing:
From Theory to Implementation Science

Aw Su, Gerald Koh, Tan Chuen Seng, Zoe Hildon
Saw Swee Hock School of Public Health (SSHSPH)
April 2018
1. Background

1.1 Background of ComSA CD Intervention

ComSA CD is a community intervention that uses a community development approach\(^1,2\) to promote successful ageing for community-dwelling older adults, 50 years and above, living in the resident estate of Whampoa. Its programming is led by the Tsao foundation (TF) through two intervention phases (2016-2018), while its outcomes, mechanisms and contexts of implementation are evaluated by the current Saw Swee Hock School of Public Health (SSHSPH) team.

The first phase of individual empowerment targets BioPsychoSocial health of participants in three separate components. ‘Self-care of older adults’ (SCOPE) targets Biological self-care, and Biopsychological perceptions of ageing through 16 weekly lessons about self-care and ageing well. 5 domains of self-care are targeted - healthy eating, exercise, health monitoring, communication with doctor, and coping with stress. ‘Guided-autobiography’ (GAB) targets Psychological self-care in terms of life satisfaction, and Psychosocial Health in terms of interpersonal communication, through 8-weeks of structured sharing of life experiences looking back\(^3\). ‘Self-care and wellness interest group’ (SWING) targets Social Health in terms of social support, and Socio-Communal participation in terms of solving community issues, through an 8-week participatory workshop as well as offering social activities. Thereafter, all SWING groups combine to form a larger BIG SWING group which meet monthly.

The second phase of community empowerment focuses on building the community capacity of BIG SWING participants, to discuss and solve selected community issues in Whampoa. The bottom-up effort consists of training BIG SWING participants to be ‘Champions’ for ComSA, and lead community action and program planning in BIG SWING. Top-down efforts consists of securing support from the Citizen Consultative Committee (CCC) within the People Association in Whampoa to support BIG SWING. The goal of this phase is towards the ideal state where participants can mobilize support from CCC and Tsao foundation to address the needs of their community.

As part of the intervention approach, Tsao foundation will work with the People Association, a grassroots network organization, and other community partners in Whampoa to implement ComSA CD. The role of community partners is to assist in outreach to recruit participants, as well as provide space and operational support to implement the intervention. Within the People Association, the community
club management committee (CCMC) provides access to participants and venue to run the intervention, through its network of resident committee (RCs) that engages with residents in each precinct.

Prior to implementation, the SSHSPH team conducted a baseline community assessment in 2015, with 109 older people from different resident center (RC) zones within Whampoa to explore the participant context, and therefore feasibility of the intervention. The following section 1.2 provides a succinct summary of their views (n=109) about the importance, as well as barriers or enablers for the program.

1.2 Context of Ageing in Whampoa (2015)

Views on Biological Self-Care (SCOPE). With regards to biological self-care, many older people felt that it was ‘good to now, but no necessary to do’, due to the perception that ‘I know my health best’ and the perceived difficulty in changing ingrained self-care habits.

Views on Bio-Psychological Perceptions about successful ageing (SCOPE). Successful ageing was largely seen as continuing to grow despite getting older, through continuity in learning, staying active, or staying socially connected. However, doing so was centred on having the ability to protect oneself in old age- there was pervasive fear of losing control due to age-related declines and lack of financial security. This sense of confidence versus vulnerability, was intertwined with security structures such as family support, as well as the ability of the older person to maintain a positive outlook despite difficult times.

Views on sharing and talking about personal issues (GAB). One barrier was the perception that there was ‘no use to talk about stress’ and personal issues -due to a culture of stoicism, but also the larger fear of losing face, and that their sharing might not be kept confidential in a group setting.

Views on discussing and solving community issues (SWING). There were many suggestions on community issues, particularly ways to improve the physical environment of their neighbourhood. Yet there was a general lack of collective self-efficacy where older people felt ‘we got no power, we got no say’ in influencing community issues and activities, particularly structural issues, because feedback to the Minister of Parliament (MP) and RCs was perceived as symbolic, and not acted upon. The government was perceived as the main agent of change, yet sometimes feared, justifying the need for SWING to set up a platform to empower older people.

Views on sustaining Social Participation (across components). Psychological feelings of emotional safety in the group was found to be crucial in sustaining participation for older people, especially for those who desired more intimacy in social interactions, being around familiar faces, and those they could trust. One factor that influenced emotional safety is the extent to which the activity can facilitate meaningful social interaction and reduce feelings of mistrust engendered through gossip and small talk.

Given these participants’ contexts in 2015, we hypothesize that ComSA CD could improve BPS health if it improves the attitudes, self-efficacy and social norms towards the targeted behaviour in each component (i.e. target barrier of ‘good to now, but no necessary to do’ toward self-care in SCOPE, barrier of ‘no use to talk about stress’ for GAB and barrier of ‘we got no power, we got no say’ for
SWING). Lastly, exposure to BIG SWING would improve the community capacity of participants to discuss and solve community issues, if it increases the capacity of leaders to lead BIG SWING participants in doing so.

However, as ComSA CD is a community-wide intervention, the organizational contexts of Tsao foundation and other community partners involved affect buy-in, and the way they work together to allocate and coordinate resources and appraise the program. These organizational mechanisms in turn affect ComSA CD delivery system, in terms of how SCOPE, GAB and SWING are linked, adopted and adapted, and the delivery conditions for trainers running the classes.

### 1.3 Aim of Evaluation

The objectives of the final evaluation were therefore three-fold:

**Objective 1: Evaluating the intervention’s effect - Did ComSA CD work, and for whom?**

a. At the individual level, did exposure to SCOPE, GAB and SWING improve the 1) BioPsychoSocial Health and 2) Quality of Life of participants, and for whom (participant subgroup)?

b. At the community level, did exposure to BIG SWING and ComSA Champion improve the community capacity of participants to discuss and solve community issues?

**Objective 2: Explaining the intervention effect - How did ComSA CD work?**

a. Which mechanisms used by trainers were effective, and in which participant contexts?

b. What were the positive delivery conditions that facilitated trainers in implementation?

c. How did organizational contexts and mechanisms of Tsao foundation and partner influence the delivery system outcomes? (not focus of this condensed report)

**Objective 3: Exploring the sustainability of the Intervention - Is ComSA CD sustainable?**

a. What are ComSA CD’s staff, partners, and trainer perspectives on sustainability of the ComSA CD intervention? (discussed together with recommendations in section 4.2)

### 2. Methods

#### 2.1 Study Design and Data Collection

A concurrent mixed-methods design (2016-2018) adopting the realist evaluation methodology was used. A similar quantitative survey was administered at baseline (2016-2017) and post 1-year (2017-2018) with participants exposed and not exposed/rejected to the intervention. 75% of participants recruited by Tsao Foundation completed the baseline survey within 3 weeks of starting or rejecting the intervention (n=321); among them, 78% completed the post 1-year survey (n=237). There were 5 treatment groups among these 237 participants- 1) n=55 not exposed 2) n=42 exposed to SCOPE only 3) n=79 exposed to SCOPE and went on to SWING 4) n=5 exposed to GAB only 5) n=36 exposed to GAB and went on to SWING.
Quantitative continuous outcomes assessed in the survey include CASP-19 QoL\(^7\), \((B\) health\) frequency of self-care, \((BP\) health\) perceptions of ageing\(^8\), \((P\) health\) life satisfaction\(^9\), \((PS\) health\) skills for interpersonal communication, \((Social\) health\) quality of social support\(^10\), and \((SC\) health\) solving community issues (only binary yes/no outcome); see appendix section in the full report for details of survey measures.

To triangulate with the quantitative outcomes, qualitative focus groups discussions (n=12 FGDs) and in-depth interviews (n=6 IDIs) were conducted (in 2016 and 2017) with participants, Tsao foundation staff, Tsao foundation trainers and grassroots partners to explore the topic of perceived change in BPS and community health following ComSA CD. In 2016, we recruited participants within 1-2 months of completing SCOPE or GAB and halfway through SWING, as well as SCOPE/GAB/SWING trainers. Trainers and participants recruited in 2017 were those involved in BIG SWING and ComSA Champions. Grassroots partners recruited included resident center managers/volunteers across different Whampoa precinct (2016), and City of All Ages Committee members (2016 and 2017).

To explore the implementation mechanisms and contexts, the qualitative topic of implementation was also asked in 2016 and 2017 with Tsao foundation trainers, staff and grassroots partners, probing their experiences interacting with other partners and participants, challenges faced, adaptation of the intervention, implementation mechanisms that worked, and why. In 2017, the topic of whether they thought ComSA CD should, and could be sustained was added in FGDs and IDIs with three groups.

### 2.2 Integrated mixed-methods analysis

All 18 qualitative transcripts were mixed and were organized into topics on contexts, mechanisms and outcomes about 1) participants, 2) trainers and 3) organizations involved in delivering ComSA CD (i.e. included Tsao foundation, grassroots and other community partners). Using an interpretative approach, we conducted thematic analysis to analyze the data within each topic (C, M and O). Smaller themes and inconsistencies across data sources were discussed with ZH where possible to reach consensus in interpretation. Saturation was judged to have occurred at the top level of thematic coding, with thematic consistency across participants groups. Both minority voices and wider collective themes were accounted for.

Qualitative findings on BPS outcomes were mixed with quantitative findings on the association between the post 1-year outcome (independent variable) and treatment group (5 GAB only participants dropped due to small sample size), to reach a new interpretation at the analysis level. Linear regression was computed for each B, BP, P, PS, S, QoL outcomes (dependent variable) and logistic regression for the binary SC outcome (solving community issues: yes/no), all models adjusted for age, gender, ethnicity, education, functional status, housing and related outcome at baseline. For all outcomes, higher scores indicated high health in that domain, except for ageing perception, where lower scores indicate more positive perceptions of ageing (as the scale assesses negative perceptions of ageing).

Using thematic analysis, constant comparison was conducted to make inferences in two steps:
1. How mechanisms used by trainers (implementation strategies) affected participant mechanisms (pathways leading to changes in BPS health i.e. cognitive reappraisal of one’s life) that explained participant outcomes (i.e. BPS health), given the prevailing participant context.

2. How the use of these trainer mechanisms was affected by their delivery conditions

In this condensed report, we present findings only on effective mechanisms used by trainers (1) and positive delivery system conditions that supported the use of these trainers’ mechanisms (2).

3. Findings

3.1 Did ComSA CD work, and for whom?

3.1.1. At the individual level, did exposure to SCOPE, GAB and SWING improve the 1) BioPsychoSocial Health and 2) Quality of Life of participants, and for whom (participant subgroup)?

Figure 2 compares the qualitative findings on BPS health 1-2 months after participants completed SCOPE/GAB and were halfway through SWING/dropped out, with related quantitative outcomes post-1 year. Qualitative themes (reported in **bold**) were those obtained in FGDS and IDIs with participants, trainers, and staff in 2016 only. Overall, the intervention had the strongest effect post 1-year on (biological self-care frequency) B, (quality of social support) S and (solving community issues) SC outcomes, however the effect on S and SC health was only present in the GAB to SWING group, and not SCOPE to SWING group.

**Figure 2: Synthesis of the Intervention Effect at the Individual level**

<table>
<thead>
<tr>
<th>Did it work?</th>
<th>Quali</th>
<th>Quant</th>
<th>For whom?</th>
<th>What does it mean?</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>√</td>
<td>√</td>
<td>SCOPE</td>
<td>Higher self-care frequency post 1-year in SCOPE &amp; SCOPE to SWING group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SCOPE to SWING</td>
<td>Some change in perceived norms about ageing (1-2 month after program), no effect post 1-year</td>
</tr>
<tr>
<td>BP</td>
<td>√</td>
<td>X</td>
<td>GAB to SWING</td>
<td>Improved life satisfaction (1-2 month after program) no effect post 1-year</td>
</tr>
<tr>
<td>P</td>
<td>√</td>
<td>X</td>
<td>GAB to SWING</td>
<td>Improved interpersonal communication among GAB peers (1-2 month after program) no generalizable effects using skills post 1-year</td>
</tr>
<tr>
<td>PS</td>
<td>√</td>
<td>X</td>
<td>GAB to SWING</td>
<td>Both groups (SCOPE to SWING, GAB to SWING) reported increased social interactions but higher social support in GAB to SWING group</td>
</tr>
<tr>
<td>S</td>
<td>√</td>
<td>√</td>
<td>GAB to SWING</td>
<td>Both groups (SCOPE to SWING, GAB to SWING) participated in community projects but higher collective self-efficacy in GAB to SWING group</td>
</tr>
<tr>
<td>SC</td>
<td>√</td>
<td>√</td>
<td>GAB to SWING</td>
<td>Both groups (SCOPE to SWING, GAB to SWING) participated in community projects but higher collective self-efficacy in GAB to SWING group</td>
</tr>
</tbody>
</table>

**B Health (Biological Self Care) and BP Health (Perceptions of Ageing).** Qualitatively, 1-2 months after SCOPE, many participants reported an increased frequency of engaging in biological self-care which
included monitoring their body: ‘Before, I did not monitor my body daily. Now using the SCOPE diary, I will realize, I need to be aware of my sleep problem […] observe, in a week, how many times I have gone to the toilet’ (FGD, SCOPE/SWING participant), and pushing themselves to do exercise: ‘after SCOPE, I started climbing stairs. I used to say, ‘oh my knee’. But (XX trainer) said how good it was to climb stairs.’ (FGD, SCOPE/SWING participant). This behavior change was due to gains in self-care knowledge, and self-care efficacy as one participant described – ‘When I first come here, I don’t know a lot of things […] now I have learnt a lot, I am very happy.’ (FGD, SCOPE/SWING participant). This may explain why quantitatively post 1-year, there was higher frequency of self-care among the SCOPE (B=0.61; 95% CI= 0.27-0.95, p <0.01), and SCOPE to SWING group (B=0.42; 95% CI= 0.19-0.74, p=0.01), compared to the non-exposed, even after adjusting for the baseline differences between groups. See appendix 1 for the regression table.

In terms of perceptions of ageing, qualitatively, 1-2 months after SCOPE, there was some improvements in ageing perceptions, but there was no effect detected quantitatively post 1-year. Some participants described how SCOPE negated ideas that ageing would lead to stagnation and a lack of growth: ‘here; I learned there is still life, activities, something to learn about yourself after retirement.’ (FGD SCOPE/SWING participant) and changed how they increasingly prioritized leisure and autonomy in old age. For example, one participant wanted her family to moderate her grand-parenting duties so that she could attend SCOPE lessons in the afternoon: ‘I cannot keep taking care of what they (grandchildren) want to eat every day. I will have no free time. I told the mother, I am not going to cook.’ (FGD SCOPE/SWING participant). However, quantitatively, post 1-year, although the negative B value for the SCOPE and SCOPE to SWING group indicate more positive perceptions compared to non-exposed (higher scores indicate more negative perceptions), this clinical difference was not statistically significant (p=0.14-0.69).

**P Health (Life Satisfaction) and PS Health (Interpersonal Communication).** In terms of life satisfaction, qualitatively, 1-2 months after GAB, many participants reported feelings of life satisfaction, through greater emotional acceptance about their life - ‘We have come to accept certain things and feel happier […] In the past, we questioned why we experienced certain things, we ask ‘oh why our life is so hard’. Now we feel less depressed.’ (FGD GAB participant) This process involved cognitive reappraisal, or how participants integrated the good and the bad parts of their life, while accepting certain regrets, sources of unhappiness and shame to see their lives in a more positive light - ‘I saw one participant who was like “oh, my life no good one, no good” but at the end she does see her own contribution to her family.’ (FDG, SCOPE/GAB trainer) However, quantitatively, post 1-year, although the positive B value for the GAB to SWING group indicate higher life satisfaction compared to non-exposed, this clinical difference was not statistically significant (p=0.43).

Similarly, for interpersonal communication, qualitatively, 1-2 months after GAB, participants reported learning new ways of positive peer interaction. These included learning how to listen and provide a safe speak to share - ‘When we first started off, the more vocal ones will tend to drown those that don’t talk with positive psychology. Halfway through the lesson you can see, they learn to listen, to be patient.’ (FGD, GAB/SCOPE trainer), and learning to provide peer affirmation - ‘When others share, they will exclaim, “you have done a great job!” They learnt to give others encouragement and admiration.” (FGD
SCOPE/GAB trainer). However, quantitatively, post 1-year, although the positive B value for the GAB to SWING group indicate higher frequency of using these interpersonal skills compared to non-exposed, this clinical difference was not statistically significant (p=0.69).

**S Health (Social Support) and SC Health (Solving Community Issues).** While both the SCOPE to SWING, and GAB to SWING group reported increased social interactions, quantitatively, there was higher post 1-Year Social support in the GAB to SWING group only, compared to non-exposed (B=1.90; 95% CI= 0.40-3.40; p <0.01) with no statistical difference in social support for the SCOPE to SWING group (p=0.45). This may be due to a cascading effect where improved interpersonal communication (PS health) among GAB peers led to more meaningful bonding, therefore engendering stronger feelings of social support (S health) as described- ‘Now when we talk, our feelings towards one another are different. We feel more comfortable, we know one another’s mentality, stages of life, happiness, and ups and down.’ (FGD, GAB/SWING participant). In comparison, SWING was perceived as more impersonal – ‘there is a barrier – it’s just saying hello.’ (FGD, GAB/SWING participant).

Similarly, although both the SCOPE to SWING and GAB to SWING group participated in community projects, but quantitatively post 1-year, the odds of reporting to have solved community issues was higher in the GAB to SWING treatment group compared to non-exposed (OR=7.50; 95% CI=2.55-22.05; p <0.01), rather than SCOPE to SWING (p=0.22). This suggests a higher sense of collective self-efficacy in the GAB to SWING group. As the range of community projects that both groups worked on were similar (e.g. both worked on structural and social issues), this higher sense of collective self-efficacy is likely due to GAB’s ability to form stronger group dynamics and bonding, therefore enabling group members to voice opinions, and perform better as a group - ‘GAB a lot more sharing. So, after sharing, when they go on to SWING, they tell one another “I know you can do it (voice opinions in SWING), come la!”’ (FGD, GAB/SWING trainer) This sense of ‘performing better in a group’ can lead to feelings of collective efficacy as one trainer described- ‘some groups did say that they like it because they as a group are so cooperative. They can come up with the project and take action on their own.’ (FGD, SWING trainer)

**Overall Effect on Quality of Life**

Overall, there was no statistical difference in post 1-year CASP-19 quality of life score, for the SCOPE only vs non-exposed (p=0.58), SCOPE to SWING vs non-exposed (p=0.08) and GAB to SWING vs non exposed (p=0.98).This may be due to the lack of post-1year effect on ageing perceptions and life satisfaction as these two health domains were the most strongly associated with QoL at baseline (n=321), see section 3.1 of full report.

**Explaining the lack of statistical difference in post 1-year score**

In general, there are 3 possible explanations to account the lack of statistical difference in post 1-year score in ageing perceptions, life satisfaction and interpersonal communication - 1) the lack of statistical power to detect significant change due to small sample size, OR 2) the BPS health domain is more fluid and influenced by other aspects post 1-year, OR 3) variability in implementation such that mechanisms used trainers to improve the BPS health domain were not effectively or consistently implemented across classes (see section 3.2.2 on delivery system setup that affected implementation).
However, qualitative findings using FGDs with trainers (2016) suggested that variability in implementation (reason 3) accounted more for the lack of statistical difference in post 1-year ageing perceptions targeted in SCOPE than reason 1 and 2. Firstly there was a larger number of SCOPE classes compared to GAB (17 versus 5 respectively), and secondly, in terms of training structure, GAB trainers were mostly trained by the same master trainer throughout, with ongoing feedback sessions through the 8 weeks of GAB.

Reason 1 and 2 may account more for the lack of statistical difference in post 1-year life satisfaction and interpersonal communication targeted in GAB. For example, the sample size in the GAB to SWING participants is the smallest, with only 39 participants (reason 1). Moreover, it is possible that life satisfaction is a more fluid construct affected by other aspects of psychological well-being not covered in the SCOPE or GAB intervention (reason 2). One area of psychological well-being which trainers felt particularly affected older people was problems with family and that it would be useful to apply the interpersonal communication techniques learnt in GAB with family members. With regards to interpersonal communication, there may be a need for sustained practice to transfer and enhance these skills across social contexts, particularly in the family setting, where ways of interpersonal communication are more ingrained due to longstanding family dynamics (reason 2).

3.1.2 At the community level, did exposure to BIG SWING and ComSA Champion improve the community capacity of participants to discuss and solve community issues?

The qualitative findings (from FGDs and IDIs in 2017) highlight BIG SWING’s role in reducing top-down resistance and increasing grassroots support for elder-led community action, while improving bottom-up confidence and capacities for volunteering through the Champion component. Regardless of these positive developments, there remained challenges in 1) eliciting bottom-up aspirations for self-governance among participants therefore transiting to an elder-led group, and 2) promoting closer collaboration between grassroots and participants towards a common vision for community action.

Improving confidence and capacity for volunteering. Due to intensive coaching, many Champions described satisfaction from personal development, ranging from gaining public speaking confidence to skills in events planning. From ‘storming’ to ‘norming’ described how team members transitioned from disagreements about their different working styles and personalities (storming), to tolerating and cooperating with one another (norming). Trainers described increased agency among Champions in organizing social events for BIG SWING - ‘Last time, they just tell you the problem (events planning). Now they have ownership in terms of wanting to find solutions and make it better.’ (IDI, Champions trainer)

Difficulties eliciting bottom-up aspirations for self-governance. Despite so, it was apparent that most participants and the Champions perceived themselves as an ‘volunteer’ for ComSA, rather than their intended leadership role to facilitate community action and dialogue. There was an adaptation of the program strategy to focus on events planning to build confidence, before facilitating community dialogue and action - as few elders were willing to sign up as champions in the disempowered context of ‘we got no power, we got no say’. However, the stronger presence of group divisions in BIG SWING may make the intended role of leading community dialogue less culturally attractive. A ‘us’ versus ‘them’
mentality was described among BIG SWING participants coming from their smaller SWING groups, increasing the difficulty of engendering effective community dialogue, and mechanism of ‘performing better in a group’.

**Increased grassroots support** toward actions taken by BIG SWING in 2017 was described as a huge improvement given the grassroots’ mistrust and explicit curation of community issues that could be discussed, just one year ago. Following endorsement from the MP, restriction on structural issues were removed, with increased help from grassroots partners to follow-up with relevant governmental agencies after emailing them. SWING projects which focused on social issues (i.e. befriending isolated neighbours) also increased buy-in from the CCC, given their role to promote social cohesion among residents.

**Promoting closer collaboration between grassroots and participants.** Regardless, grassroots partners emphasized the need to promote mutual understanding and two-way communication about constraints each party may face, to maintain a shared sense of responsibility and counter a prevailing ‘complain can already’ attitude among some members about community action.

### 3. How did ComSA CD work?

#### 3.1.1 Which mechanisms used by SCOPE, GAB and SWING trainers were effective, and in which participant contexts?

Figure 3 presents the effective B, BP, P, PS, S and SC mechanisms (or implementation strategies) used by trainers to elicit necessary mechanisms (or mediating pathways) among participants that explain changes in their BPS health. Each trainer mechanism is unpacked in turn, by first referring to the prevailing participant context highlighted in the community assessment, then explaining how it explained the related BPS participant mechanism, and their interconnections.

**Figure 3: Interconnection of trainers and participants’ mechanisms**
B: Behavioural prompting. Due to the prevailing perception that ‘self-care was good to know, but not necessary to do’, where many older adults felt they know their health best, and there was difficulty changing behaviour, behavioural prompting when SCOPE trainers made effort to remind participants to adopt healthy habit, particularly for exercise, was effective to boost self-care efficacy.

B: Peer learning. Participant reported this made lessons more engaging and was an effective way to absorb self-care knowledge. Participants preferred classes that were relaxing and engaging, hence enjoyed two-way communication with facilitators and among themselves, especially when they were encouraged to express their opinion and experiences about health topics, and how they overcome related health issues.

BP: Intentional role-modelling. Given that some trainers were of the same age as the participants, some SCOPE participants perceived them as inspiring role models in promoting positive ageing norms about continuity in ageing. However, role-modelling was most effective when trainers deliberately referenced themselves as a role model, communicating to the older people how ‘you can be like me’, and ‘why you should be like me’ such that they felt these active ageing models were attainable, and relevant.

P: Explicitly teaching importance of introspection and sharing in GAB was the first step to elicit cognitive reappraisal and emotional acceptance, due to prevailing culture of stoicism, and aversion to looking back on painful memories, thus requiring trainers to emphasize how reviewing their lives would help them discover something new about themselves and resolve buried issues towards better well-being.

P: Facilitating insight about one’s life in GAB was via three ways - (1) reminding participants’ of their former achievements and contributions, (2) allowing them to reflect on negative life events, without providing judgemental inputs (3) hearing their peers reflect about their life. Developing insight was necessary to elicit cognitive reappraisal and emotional acceptance about one’s life, as engendering
feelings of life satisfaction required participants to change how they perceived their life, beyond simply recalling the past.

**PS and S: Establishing positive peer norms.** Due to the prevailing fear of gossip, instilling emotional safety and confidence to share in GAB was crucial. Trainer reported using group consensus in class to set and reinforce these ground rules whenever they were broken, which enabled them to internalize these rules as group norms and instil emotional safety. These included: confidentiality of sharing (no gossiping), listening before speaking, sharing at one comfort’s zone, accepting and respecting others, and learning to affirm others. Establishing positive peer norms not only promoted positive peer interaction and more meaningful bonding among GAB peers, but also ‘performing better in a group’ as they transited to SWING.

**SC: Highlighting importance of community action.** Both the baseline community assessment and process evaluation showed a lack of collective self-efficacy among SWING participants - government was perceived as main change of agent, yet their feedback given was perceived as useless. This contributed to a strong sense of apathy among many members to discuss and solve community issues. Thus, highlighting the importance of empowering others, how skills gained from solving one community issue could be applied to other community issues and providing success stories of community members who managed to solve certain community issues was the first step to reduce feelings of apathy among participants.

**SC: Tapping on positive influencers.** However, towards ‘performing better in a group’, trainers and program staff emphasized tapping onto positive influencers in the group who had a more positive mindset, and sense of wanting to do something/self-help, rather than having a ‘complaint only’ or cynical attitude. These positive influencers tended to be those with some experience doing community work or volunteering formally/informally within their social networks and exerted social dominance in the group to influence members (i.e. set group expectations by reproaching pessimistic members).

**Across programs: Tailoring delivery to suit needs of participants** enabled them to absorb the lessons better, and if done tactfully, helped instil emotional safety, and a stronger group dynamic in class. This was done differently across programs – e.g. adding self-care knowledge for classes where participants already knew the basics for self-care (SCOPE), reading out the assignments in the textbook, and allowing participants to verbally express rather than write if they were illiterate (GAB). However, trainers were also affected by the conditions they were set up to deliver lessons, as addressed in the following section.

### 3.2.2 What were the positive delivery conditions that facilitated trainers in implementation?

**Figure 4: Positive delivery conditions that facilitated trainers’ implementation**
Supportive partners from the RCs, SACs and other partner organizations were highlighted by trainers as facilitating their delivery. If people with influence and close relationships with participants in these centres were physically present during the class, this helped to boost retention because their physical presence sent a message that the program had value. While some partners went out of the way to call up participants personally, and made sure they turned up for the class, for other partners, there were problems even providing the necessary logistic support on time (e.g. space, equipment etc.)

Match in participant to trainer profile increased trainers’ confidence and ability to tailor delivery and engage participants, for example when the class they were allocated spoke a language or were from a cultural background they were familiar with. Beyond language and cultural background, trainers mentioned it would help to know more about participants’ personality, skills and strengths, so they could think about how to leverage on these strengths and personalize the class, before it started.

Good quality training and support was characterised by the presence of 1) experienced and culturally-competent master trainers who could prepare trainers to tackle implementation difficulties in the local elder context and 2) ongoing feedback sessions with master trainers throughout the program (biweekly in GAB). There was a lack of continuity in training, due to the change in master trainers, and perception by trainers that training in the earlier batches was more rigorous. Trainers from the earlier batches generally felt more confident adapting to the different the conditions they were set up in, which can be attributed to their experience, how they identified more with the program, and rigor of their training.

4. Programming Recommendations

Given these findings, the following recommendations are suggested by the SSHSPH team with regards to furthering community empowerment and for program sustainability.

4.1 Recommendations for community empowerment
**Build a strong participant pool which retains to SWING.** Literature on community empowerment show that participation is the basis for community action - members first must be active in community activities before they can move on to higher levels of social participation i.e. community action. Therefore, strong participation in SCOPE and GAB is required to retain participants to SWING.

**Build bonding and positive peer interaction before embarking on community dialogue.** The finding that collective self-efficacy was stronger in the GAB to SWING group shows that meaningful bonding and positive peer interaction are core elements required to facilitate community dialogue. These elements should be fostered before SWING, and again in BIG SWING to counter the ‘us versus them’ mentality and presence of group divisions as SWING participants transit to BIG SWING.

**Build in a longer period of individual empowerment.** As few BIG SWING participants are willing to step out to be champions because they lack confidence, a longer period could be spent on individual empowerment within the smaller groups of SCOPE, GAB and SWING before participants move on to BIG SWING. Rather than coaching selected participants only in the Champion component, some of the team bonding and coaching elements in Champions can be introduced earlier in SCOPE or GAB to assess participants skills and capacities for leadership.

**Build agency by leveraging culturally attractive projects.** Rather than focusing on ‘doing something for the community’ in SWING, the program may elicit stronger agency, if it allows participants to 1) manage an activity that is culturally attractive (i.e. a community kitchen) or 2) address needs/interests they can address on their own or ‘self-help’. A focus on self-help initiatives can help to counter the prevalent ‘complain can already’ mentality of referring problems to government or voluntary welfare organization to solve, thus help builds collective self-efficacy as a group.

**Build bottom-up aspirations for self-governance.** By training the group to manage culturally activities they are genuinely interested in, this creates the platform for informal leaders to step out. Explicit mechanisms then must be set in place for trainers to leverage these informal leaders/positive influencers and encourage the group to elect them as leaders to advance their group agenda. Without doing so, the training of selected ‘Champions’ by Tsao Foundation may just be seen by them as personal development to be ‘volunteers’, rather than leaders.

**Build more two-way communication between grassroots and partners.** Explore ways to promote two-way communication between BIG SWING and the CCC, to promote mutual understanding about the needs and constraints that both sides face, towards community development that is both empowering and promoting social cohesion in the community.

### 4.2 Recommendations for ComSA CD sustainability

**Figure 5: Recommendations for increasing the sustainability of ComSA CD**
Move community partnerships from cooperation to collaboration. As the Ministry of Health is ramping up the Community Network for Seniors (CNS) initiative, there is impetus for the grassroots partners from the City of All Ages Committee in Whampoa to sustain partnership with Tsao Foundation. In view of these initiatives, they have introduced measures to boost their organizational capacity and accountability of RCs managers/volunteers to their roles. However, they stressed the importance of moving from cooperation to collaboration by aligning their long-term program vision and reducing program duplication and competition. With new programs coming up, partners may end up competing for the same participants pool, and space to run programs, if they are not sufficiently differentiated.

Improve volunteer recruitment and management. A large and committed volunteer pool is crucial in sustaining the organizational capacity of non-volunteer organizations such as Tsao Foundation and other community partners. ComSA CD volunteers include trainers, volunteers in partner organizations, as well as the ComSA Champions. For the Champions, trainers stressed the need for clear development pathways and expectations to be communicated at recruitment. As this was not communicated at the start, some Champions have expressed ambivalence about long-term volunteering commitments, at the end of their intensive training. For volunteer management, volunteer care, setting guidelines and continuity in supervision of trainers (i.e. competent and same master trainer, ongoing feedback sessions by master trainers) were identified by SCOPE and GAB trainers as good practices. A more systematic way of participant assessment in SCOPE and GAB is also required to understand and leverage the skills, experiences and capacities of participants earlier for grooming and leadership development. If there are few suitable leaders, and heterogenous profiles, participant stratification is recommended to tailor delivery of the ComSA Champion training, to these different leaders’ profiles and motivations.

Increase program internalization and flexibility. Lastly, to promote retention to SWING, one recommendation is to increase the degree to which participants and partners internalize the overall program goals and structure early in SCOPE and GAB. In terms of delivery, to increase the ease of program adoption across different community sites, the structure and content of the program could be more flexibly adapted - provided the core BPS mechanisms of the program are elicited. Particularly, the PS and S mechanisms should be flexibly embedded across programs (like establishing positive peer norms and instilling emotional safety), be it a biological or psychological program.

5. References

1. Golden, S. D. & Earp, J. a. L. Social Ecological Approaches to Individuals and Their Contexts:


Appendix 1: Multivariate Regression Models Comparing Post 1-Year BPS and QoL Outcomes between Treatment Groups \(^a\) (N=232) \(^b\)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T2 Bio Health</td>
<td>T2 Bio-Psych Health</td>
<td>T2 Psych Health</td>
<td>T2 Psychosocial Health</td>
<td>T2 Social Health</td>
<td>T2 Socio-Communal Health</td>
<td>T2 Quality of Life</td>
</tr>
<tr>
<td>Self-Care</td>
<td>Frequency</td>
<td>Ageing Perceptions</td>
<td>Life Satisfaction</td>
<td>Interpersonal Communication</td>
<td>Social Support</td>
<td>Solving Community Issues</td>
<td></td>
</tr>
<tr>
<td>B (95% CI)</td>
<td>(&lt;0.01)</td>
<td>(0.72)</td>
<td>(0.19)</td>
<td>(0.79)</td>
<td>(0.03)</td>
<td>(&lt;0.00)</td>
<td>(0.23)</td>
</tr>
<tr>
<td>(p^a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not-Exposed</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
</tr>
<tr>
<td>SCOPE Only</td>
<td>0.61 (0.27-0.95)</td>
<td>(&lt;0.01)</td>
<td>-0.33 (-0.19-0.12)</td>
<td>0.69</td>
<td>0.52 (-0.63-1.67)</td>
<td>0.38</td>
<td>0.47 (-0.47-1.40)</td>
</tr>
<tr>
<td>SCOPE + SWING</td>
<td>0.42 (0.19-0.74)</td>
<td>(0.01)</td>
<td>-0.13 (-0.30-0.04)</td>
<td>0.14</td>
<td>0.60 (-0.38-1.59)</td>
<td>0.23</td>
<td>0.36 (-0.53-1.25)</td>
</tr>
<tr>
<td>GAB + SWING</td>
<td>-0.04 (-0.34-0.35)</td>
<td>0.83</td>
<td>-0.14 (-0.35-0.05)</td>
<td>0.15</td>
<td>0.49 (-0.07-1.71)</td>
<td>0.43</td>
<td>0.20 (-0.77-1.17)</td>
</tr>
</tbody>
</table>

\(a\) adjusted for age, gender, ethnicity, education, functional status, housing and baseline score of each outcome  
\(b\) GAB only group (n=5) omitted from analysis due to small sample size  
\(c\) Non-exposed are participants recruited through the community survey and not exposed to SCOPE/GAB/SWING  
d higher scores on ageing perceptions scale indicate more negative ageing perceptions  
\(*\)P value testing the overall exposure effect to the non-exposed
policy and practice. Since the neoliberal reforms of the 1980s, the onus of care has increasingly been placed upon friends and families. Societal changes, including ageing in place has resulted in greater pressure on informal caregivers. This research reveals critical success factors that can lead to positive health outcomes for informal caregivers and care recipients who are older adults, people with disabilities and people suffering chronic illnesses. This research employed a mixed methods approach. Data from qualitative interviews informed the development of a New Zealand-wide survey that was conducted in 2013 over 12 months. Six hundred and seventy responses were received from caregivers about ‘best practices’ that would support their provision of care. Caregivers reported on the factors that improved their quality of life that positively affected the people they cared for. The significant factors influencing quality of life included finances, consideration of the positive and negative aspects of caring and practical caregiving support. Measuring quality of life is important as the success of outcomes for care recipients are dependent upon the caregiver’s well being. This research will inform policy and practice that supports informal caregivers and those that are cared for. There is an urgent need to develop best practices associated with positive health outcomes for caregivers that may also improve sustainability of quality care.

EXPLORING PROGRAMS FOR REDUCING SOCIAL ISOLATION AND DEPRESSION IN RURAL AGED CARE CLIENTS

L. Parkinson1, M. McAllister1, N. Molyneux1, L. Franck1, D. Jeffrey1, 1. CQUniversity, Rockhampton, Queensland, Australia, 2. PresCare, Brisbane, Queensland, Australia

The link between social isolation and poor health is well established. However, effective interventions to reduce social isolation in older people, and how to implement these in aged care is less clear. This project, a collaboration between CQUniversity Australia and PresCare aged care, used literature reviews and environmental scans to meet the overall objective of describing how social isolation and depression impact on health and wellbeing of older people living in regional areas, and how to reduce these effects for this group.

There is a lack of evidence for effective interventions to reduce the effects of social isolation and depression in older clients, particularly in regional areas, but a plethora of past projects. The main success factors for successful interventions were enhancing group membership and identification through socialization, providing meaningful activities that enhanced sense of belonging, and using a social identity approach to tailor activities to the client characteristics.

There is a wide range of possible programs and activities to choose from in aged care settings; format and type of activity or program will depend upon the needs, personality and capacities of the individual, the setting, and resources available. Management support is critical, including providing adequate resources of staff, time and funding.

The most mentioned barriers to success were: lack of adequate continuing funding; lack of appropriate transport; lack of adequate time; lack of fundamental management support; lack of willing staff, family and volunteers; the poor health and disability of the clients; and the negative attitudes of the clients themselves.

MAPPING TYPOLOGIES OF SOCIAL PARTICIPATION TO PROGRAMMING FOR ELDERS IN THE CHANGING ASIAN CONTEXTS


This study, informed by the social ecological perspective, seeks to unpack (1) social isolation and related vulnerabilities and (2) social inclusion, and better participation in ‘successful ageing’ program activities, in a multi-ethnic Singapore elder population, over 55 years old. We synthesised qualitative data from 8 focus groups; 4 photovoice sessions; and 6 walk-along interviews. We identified isolated elders living on the margins, for whom subsidies were not working – often because before claims could be made, family needed to be shown legally to not offer support. Elders fallen on hard times wanted to be self-sufficient, doing odd jobs, collecting cardboards, keeping them out of mainstream activities. ‘Closed doors’, characterised mistrust, cited as advised during the cultural shift to an urbanised Singapore; other barriers included hostility, soured relationships. ‘Comfort-zoning’ alone with sedentary routines was common, sometimes explained by traditional norms defining social activities as wasteful. Among more socially included were the very active, repeat attendees to organized activities, and volunteers. More occasional participators sought out ‘safe’ routines within known inner circles. Ethnic minorities were under-represented in mainstream activities, pointing to structural barriers and preference for cultural groupings. At the macro-level subsidies need to be recast as means-tested on elders’ instead of families’ income and assets; the benefits of social contact explicitly taught; and cultural precepts of wasteful activities counteracted. At the meso-level religious institutions can be leveraged to run programs, encouraging natural grouping within them to carry through amidst community activities; while breaking lone routines by trust-building and befriending from the active.

RELATIONSHIP BETWEEN SOCIAL ISOLATION AND SUPPORT EXPECTATION IN THE MARGINAL COMMUNITY

Y. Watanabe, Human Science, Musashino University, Nishitokyo, Tokyo, Japan

Purpose: A marginal community is defined as a community in which over 50% of the population is over 65 years old and facing difficulty maintaining adequate function for their daily lives. Difficulties facing the marginal community can include unemployment, shopping for daily necessities, and others. This situation occurs not only in Japan, but also worldwide, especially in developed countries. This research aims to reveal the relationship between social isolation and support expectation in the marginal community.

Method: Cross-sectional research was conducted in 2015 through questionnaire. The questionnaire was administered to people over 20 years old through visiting all the houses in marginal community. Only the elderly (65+) respondents’ data were used for analysis. The data were analyzed using a t-test. Social isolation was measured by “How many times
What older people need in Singapore:
A household budgets study

MAY 2019

Asst Prof Ng Kok Hoe
Lee Kuan Yew School of Public Policy, NUS

Assoc Prof Teo You Yenn
Sociology, School of Social Sciences, NTU

Dr Neo Yu Wei
Social Service Research Centre, FASS, NUS

Dr Ad Maulod
Centre for Ageing Research and Education, Duke-NUS Medical School

Ting Yi Ting
Social Service Research Centre, FASS, NUS
Contents

Executive Summary 03
Introduction 11
Methodology 16
Findings 34
Concluding Remarks 60
References 64
Acknowledgements 68
About the Authors 68

List of Figures

FIGURE 1 The research process 18
FIGURE 2 Elderly household budget compared to work and retirement scenarios 59

List of Tables

TABLE 1 Participants’ profiles 20
TABLE 2 Final household budgets, S$ 42
TABLE 3 How budgets vary by household size and age 43
TABLE 4 Cost of purchasing public two-room Flexi flats 54
TABLE 5 Composition of actual household expenditures and household budgets 55
TABLE 6 Median monthly work incomes of older workers aged 60 and older 56
TABLE 7 Income measures for older persons 58
Executive Summary

This study addresses the question: How much money do older people need to achieve a basic standard of living in Singapore today?

The study of household budgets is related to an extensive field of research on human needs and social inclusion.

In this study, we conducted focus group discussions to ascertain how ordinary Singaporeans think about what constitutes basic needs in Singapore today, and to determine the household budgets necessary to meet these needs.
What [these ordinary members of society] said about dignity, respect, social belonging, and choice, as well as the items and budget they came up with, reveal norms and values held by people in our society today.

We focused on four household types:

- **Elderly men**
  - 65 years and older living alone
- **Elderly women**
  - 65 years and older living alone
- **Elderly couples**
  - 65 years and older
- **Men or women**
  - 55-64 years old living alone

Participants put together household budgets that:

- Reflect the lived realities and ordinary habits of people living in contemporary Singapore.
- A general public can agree on as basic or minimum—it should be neither extravagant nor inadequate.
- Reflect some degree of diverse needs along ethnoracial and religious lines.
- Embody the values and principles that ordinary Singaporeans identify with, as well as concrete and specific items that map onto those values and principles.

This study reveals that ordinary members of society are able to come to consensus about what a basic standard of living in contemporary Singapore means. What they said about dignity, respect, social belonging, and choice, as well as the items and budget they came up with, reveal norms and values held by people in our society today.

At a juncture of considerable policy activity but also persistent gaps in income provision, income standards can help by translating norms and values in society into unambiguous and substantive benchmarks to aim for. Future steps towards better income security should involve ordinary members of the public setting standards for decent living.
Key findings

1. **A definition for basic standard of living:**
   A basic standard of living in Singapore is about, but more than just, housing, food, and clothing. It is about having opportunities to education, employment, and work-life balance, as well as access to healthcare. It enables a sense of belonging, respect, security, and independence. It also includes choices to participate in social activities, and the freedom to engage in one's cultural and religious practices.

2. **In their discussions, focus group participants:**
   - Made clear that basic needs must go beyond subsistence and should enable "quality of life";
   - Emphasised the importance of independence and autonomy. This means not being a burden to loved ones, and being able to exercise one's preferences and choices;
   - Emphasised that basic needs must enable social participation and connection to others.

3. **Participants discussed and generated lists of items and services related to:**
   - Housing and utilities;
   - Things needed for each area in a two-room HDB flat\(^2\) (living room, kitchen, etc.);
   - Personal care items and clothing;
   - Food;
   - Transport;
   - Leisure and cultural activities;
   - Healthcare.

   Our findings include detailed lists of items and services—including what the item is (e.g. Colgate toothpaste), how much it costs (e.g. $6.40 for three tubes), where it can be purchased (e.g. NTUC), and how long the item should last (e.g. three months).

4. **Participants explained their reasons for including items as basic needs.**
   Their discussions shed light on how things such as travel, gifts, and special-occasion clothing matter for quality of life, independence and autonomy, and social connections.

5. **The total weekly budgets required to meet basic standards of living are:**\(^3\)
   - $317 for single elderly households ($1,379 per month, the average of the budgets for elderly men living alone and elderly women living alone)
   - $541 for coupled elderly households ($2,351 per month)

---

2 This refers to high-rise public housing built and sold by the Housing and Development Board (HDB).

3 Money is expressed in Singapore dollars throughout this report.
TOTAL HOUSEHOLD BUDGET TO MEET BASIC STANDARDS OF LIVING

- **SINGLE ELDERLY**
  - Weekly: $317
  - Monthly: $1,379

- **COUPLED ELDERLY**
  - Weekly: $541
  - Monthly: $2,351

- **SINGLE 55 – 64 YEARS OLD**
  - Weekly: $396
  - Monthly: $1,721

6. Compared to household expenditure data, the overall shape of our elderly household budgets is strikingly similar to retired households’ actual expenditure patterns.

But there are two prominent differences. First, the percentage of actual expenditures on health among retired households is much higher than in our budgets. This may be explained by the assumption of good health for our case studies. As such, our budgets do not account for the cost of treatment for chronic conditions and major illnesses.

Second, our budgets have much larger recreation and culture components than in actual expenditure. This reflects our participants’ strong emphasis on social participation needs and that such needs may not be fully met among the current older population.

7. Certain chronic illnesses are common among older people in Singapore, so the presumption of good health likely underestimates the costs of healthcare.

Indeed, in focus group discussions, participants continually reminded us that health and healthcare costs are very important to them. The costs may vary widely for different health conditions (for example, loss of mobility compared to diabetes) and are difficult to capture accurately in a single study, so we have focused on establishing a baseline that...
presumes no chronic health conditions. Future research can build on this study by comparing the individual budgets for healthy persons with that of persons with particular health conditions and additional needs.

8. Comparing our budgets with work incomes (Table 6):
In 2017, the median monthly work income of full-time workers aged 60 and above was $2,000, about 1.5 times our budget for meeting basic standards of living among single elderly households.

However, there are gender differences: the median earnings of older women come closer to the budget at just 1.3 times, compared to men’s 1.5 times.

There are also concerns with particular occupations. The median monthly work incomes for the three most common occupations among older workers range from 0.9 to 1.2 times of the budget. Almost two-thirds of older workers are employed in these occupations, which are also the three lowest-paying occupations.

The same picture emerges when considering older workers’ educational qualifications. For older workers with lower secondary education or less, median work incomes range from 0.9 to 1.2 times of the budget. About 60% of older workers belong to these educational categories.

Low work incomes among older people mean that employment alone does not ensure the achievement of our budgets for basic standards of living.
Where might the income for a basic standard of living in old age come from? …once household budgets are established, they provide a concrete benchmark and starting point for discussing how people may achieve these budgets.

9. A range of government income measures target older persons who are in employment, retired with Central Provident Fund (CPF) incomes, or retired with low incomes. Coverage depends on many factors such as the individual’s occupation, amount of CPF savings, and qualification through means tests.

Access to these income measures is not assured. Employers may exploit loopholes in the Progressive Wage Model (PWM). The CPF retirement sums remain theoretical targets for many older people.

Moreover, even for people who are covered, the total sums they stand to receive fall short of or just reach the household budgets required to meet basic needs.

Implications

Where might the income for a basic standard of living in old age come from? The study asked participants to consider only what things were needed for a basic standard of living, not their affordability, because needs are different from means. But once household budgets are established, they provide a concrete benchmark and starting point for discussing how people may achieve these budgets.

Incomes for older people may come from market sources (e.g. employment, private pensions, savings), public sources (e.g. public pensions, transfers, subsidies), and informal sources (e.g. family contributions and support from charities).
In Singapore, the overall picture is one of heavy dependence on family contributions with limited support from the state. The most common income source is adult children (78% of elderly people reported such income in 2011), followed by wage work (21%), and the CPF or other annuities (13%). Other sources such as private pensions (4%) and public assistance (2%) are negligible in terms of coverage.

This raises a number of policy concerns:

• Due to rapid socioeconomic development, current cohorts of older people have steep educational and skill disadvantages compared to younger workers. When work incomes and wage interventions fall short, some older people either do not have the means to ever retire or will be permanently dependent on public and informal transfers.

• Even among younger cohorts, lifetime wages can and do vary. With the widening of income inequality in Singapore over the past decades (Ng, I. Y. H., 2015), people will become older with varying levels of savings.

• Moreover, the capacity to maintain full employment during younger years varies: people may not be able to maintain wage work due to health conditions or because of caregiving responsibilities. Many women typically participate less in full-time wage labour because of caregiving work.

• Although CPF participation and savings are projected to increase with future cohorts, the basic retirement payment of less than $800, even after the most recent reforms, is only about half of the household budget for a single elderly person and falls significantly short of what is required for a basic standard of living.
The gaps in people’s capacity to meet basic standards of living must be urgently addressed so that all older people in Singapore can achieve what our participants describe as basic needs for “a sense of belonging, respect, security, and independence.”

- Currently, major public transfer schemes are means-tested and modest. Where these are permanent and automatically issued, they have been incorporated during the pricing process in our study. However, most subsidies are means-tested, one-off, for a limited period, or for limited cohorts. Access is therefore not assured. The fragmented nature of the subsidy regime and schemes that require individuals to put in applications also impose help-seeking costs.

- The current extent of cross-generational family support is demographically unsustainable as family size shrinks—people will have either no or fewer children as sources of retirement income. The reliance on adult children as sources of retirement income may moreover reinforce economic inequality insofar as supporting parents takes up a greater proportion of household costs for the lower- and middle-income compared to their higher-income counterparts. This leaves less for other needs of younger households, such as children’s education.

The gaps in people’s capacity to meet basic standards of living must be urgently addressed so that all older people in Singapore can achieve what our participants describe as basic needs for “a sense of belonging, respect, security, and independence.”
This study addresses the question: How much money do older people need to achieve a basic standard of living in Singapore today?

In the context of an ageing society that will have more older people who live longer and have fewer working-age kin, the income needs of elderly households is a pressing social, economic, and policy concern.

As needs can be precisely defined only in relation to specific household types and sizes, this study approaches the issue by focusing on (i) elderly men aged 65 and above who live alone; (ii) elderly women aged 65 and above who live alone; and (iii) couples 65 years and older. For comparison, we also study the needs of slightly younger households, of (iv) people 55 to 64 years old who live alone.

Although the study focuses on these four types of households, it also lays the foundation for further research on elderly households with more complex needs as well as younger and multi-generational households. Such extensions of the study, if they are repeated over time, will allow us to more fully appreciate basic needs in society and how these vary across ages and cohorts.
Measuring needs and setting standards: historical and theoretical background

The study of household budgets is related to an extensive field of research on human needs and social inclusion. Its theoretical bases stem from early work on the relative and social notions of deprivation. Deprivation reflects social exclusion, as highlighted in Townsend’s (1979) definition that people are in poverty when “their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities” (p. 31, emphasis added). Doyal and Gough (1984) argued that defining universal needs at the individual level was both empirically possible and critical to social welfare development. Amartya Sen (1999) extended these approaches through his work on capabilities where he emphasises the multi-dimensional and relational aspects of poverty.

Parallel to conceptual and empirical work on poverty and deprivation, researchers have worked on defining absolute levels of income required for daily living. Such research can and has directly supported the design of policy interventions. Early approaches, known as budget standards, involved enlisting experts to draw up lists of items required for a designated living standard, before pricing these items. By the 1990s, the European Commission began to urge member states to determine the resources required for their citizens to meet basic needs (Veit-Wilson, 1998), and budget standards have since been developed in places such as the United States, Canada, Australia, and Ireland (Fisher, 2007). In the United Kingdom (UK), the Family Budget Unit at the University of York carried out a series of studies to define “low cost but acceptable incomes” for different types of households throughout the 1990s (Bradshaw, 1993), while public health researchers calculated the level of “minimum income for healthy living” in the 2000s based on established nutritional standards and other basic needs (see Morris et al., 2007). A recent survey of European Union member states found that all but three actively make use of budget standards and 12 have been developing new budget standards in the past two years (Storms, Goedemé, Van den Bosch, Penne, Schuerman, & Stockman, 2014). There is also an ongoing initiative to harmonize these into EU-wide “reference budgets.”
In recent years, the Centre for Research in Social Policy (CRSP) at Loughborough University has been leading a project to establish “Minimum Income Standards” (MIS) in the UK. Adopting a consensual approach based on multiple rounds of focus group discussions, the MIS approach establishes the amounts of income and lists of things required for a minimum standard of living in different types of households. They have continued to update these annually since 2008 to take account of price inflation (Bradshaw et al., 2008; Davis, Hirsch, Padley, & Marshall, 2015; Davis, Hirsch, Padley, & Shepherd, 2018). The MIS approach has also been extended to calculate the income needs of households with specific requirements related to disability, old age, raising children, and living in remote rural locations (Hill, Marshall, Hirsch, & Padley, 2016; Hirsch, 2015; Smith, Hirsch, & Davis, 2012). Similar projects using the MIS methodology have since taken off in France, Republic of Ireland, Mexico, Portugal, South Africa, and Japan. With our study, Singapore is now also part of this network.

To date, research on household budgets based on people’s needs has not been done in Singapore. Our project is an initial step to fill this gap.

Measuring needs and setting standards: methodological approaches

Expert-directed budgets
There are several approaches for understanding needs and estimating family budgets. The first is expert consultation, which involves subject specialists setting the minimum requirements for things such as nutrition, commuting costs, healthcare, and so on (Veit-Wilson, 1998). These requirements are then priced.

In general, this approach stems from the belief that there exists an objective minimum cost of living for researchers to discover. This becomes especially problematic for social aspects of living that entail a strong element of choice, such as visiting friends and exchanging gifts.
Public surveys
The second is public survey. These may seek direct attitudinal responses about income requirements or provide information about actual expenditures in society, with the drawback that among the lower income groups, actual spending may fall below basic needs.

Participatory deliberation and consensus-building by members of society
Third, in consensual methods (Walker, 1987), to which the MIS approach belongs, focus groups are convened to deliberate the meaning of an adequate standard of living, draw up lists of items required to achieve this standard, and review the final list of costs. Whereas expert consultation privileges experts’ capacity to arrive at objective criteria and public surveys draw conclusions through aggregation and averages, the consensual approach regards living standards as partially subjective and context-specific. It arrives at “needs” through discussion, negotiation, and consensus-building. In doing so, it draws on ideas of participatory democracy and deliberative approaches in policy making and research (Burchardt, 2014).

This study opts to follow the UK MIS methodology for several reasons:

The approach has been tested in the UK and Ireland repeatedly, and in several other countries around the world (Davis et al., 2014). The consistency in results over time and its usage in diverse cultural contexts attest to the robustness and versatility of the methodology (Hirsch, 2013).

The application of the MIS methodology in multiple national contexts signals rich potential for this study to draw comparative lessons. Given that the Singapore case shares with other wealthy countries similar challenges of inequality and demographic transitions, these comparisons are valuable for reflecting on possible social policy interventions.

The MIS’s consensual strategy recognizes the relational and social characteristics of needs and the limitations of experts in deciphering people’s lived realities of social inclusion. Adequate budgets are therefore more appropriately derived from deep empirical analyses of people’s
The application of the MIS methodology in multiple national contexts signals rich potential for this study to draw comparative lessons. Given that the Singapore case shares with other wealthy countries similar challenges of inequality and demographic transitions, these comparisons are valuable for reflecting on possible social policy interventions.

actual experiences and perceptions. In particular, the detailed and multiple rounds of discussion among focus group participants offer the possibility of constructing highly specific lists of goods and services. This level of detail and precision is rarely attainable by expert consultants.

In the Singapore context, a consensual approach is compatible with the growing emphasis on public participation in governance, as seen in initiatives such as the large-scale citizen dialogue, “Our Singapore Conversation.”
Methodology

Being able to decide for ourselves some basic needs or things that we want to buy. I feel that our society should progress in this direction.
— [R1, OG1]

The MIS UK research is conducted independently of government agencies or advocacy groups. Their findings, which they make available to anyone who wishes to use the data, have been widely referenced and used in public policy discussions in the UK.

In addition to their UK research, CRSP researchers have worked with teams to adapt and use the methodology to conduct household budget research in other countries. Our research process in Singapore has included training in MIS methodology by the UK team, as well as discussions and adaptations of the methodology to better suit our particular socio-cultural context.
Through a series of focus group discussions with members of the public, and using task-specific, consensus-building techniques, the MIS methodology generates both quantitative and qualitative data. These include:

- How people in a given social context think about what basic needs are;
- Detailed lists of items—household goods as well as services—required to meet these basic needs;
- Budgets required to purchase these goods and services to meet these basic needs;
- Rationales for why these items are necessary for meeting basic needs.

The definition reflects several key principles. There was strong consensus that basic needs must go beyond staying alive. Basic standards of living must take into account life-course, emotional, and social participation needs.

The MIS approach offers significant advantages compared to other means of understanding budgets and expenditures that rely on surveys or experts:

- **Lived realities**: Ordinary members of society are well-positioned to discuss and delineate the specifics of people’s everyday lived needs. Compared to surveys or lists/budgets constructed by researchers, focus group discussions allow for the generation of data that better reflect real habits and practices of ordinary members of society.

- **Reasonable standards**: The focus group discussions are designed to get people to think about their own experiences. At the same time, the case study setup encourages them to think not just of their own circumstances but also of people both above and below them in terms of income. Groups are tasked with discussing what might constitute basic needs for anyone in Singapore today. Participants are continually reminded that the list and budget generated should be what an
ordinary person would regard as reasonable needs, rather than either extravagant wants or sub-optimal ways of living.

- **Rigorous checks**: While based on people’s lived realities, the MIS budgets are also checked against certain domain experts, such as dieticians and doctors, to ensure that the needs mentioned in the focus groups meet physiological and health requirements. The combination of lay and expert domains of knowledge in the MIS methodology increases the robustness of the data.

- **Transparency and accountability**: The process and data generated by the MIS UK team have been made open and public, so readers have clear empirical bases for judging and interpreting the data. The Singapore team, too, aims to be open and transparent about our research.

- **Deep understanding of basic needs**: Unlike other ways of developing household budgets, the MIS approach allows us to explain why people include or exclude certain items. Every item can be accounted for in ways that allow us deeper understandings of what the meeting of basic needs in contemporary Singapore entails.

Our research process included four waves of focus group discussions, consultations with healthcare and nutrition experts, and pricing. The major steps in the research process are shown below.

---

**Figure 1**

The research process

---

**STAGE 1**
Orientation
Meaning of basic standard of living

**STAGE 2**
Task groups
Make lists of things and services

**STAGE 3**
Consult experts
Healthcare and food

**STAGE 4**
Pricing
Tabulate prices and calculate budgets

**STAGE 5**
Check-back groups
Reconcile lists and revise budgets

**STAGE 6**
Final groups
Resolve any differences and finalise budgets

---
A basic standard of living in Singapore is about, but more than just, housing, food, and clothing. It is about having opportunities to education, employment, and work-life balance, as well as access to healthcare. It enables a sense of belonging, respect, security, and independence. It also includes choices to participate in social activities, and the freedom to engage in one’s cultural and religious practices.

Each wave of discussions included participants in four household types and each focus group was made up of a unique group of participants (i.e. each participant was involved in only one focus group). Across the four waves, 103 persons in total participated. The profiles of the participants are listed in Table 1.

How we collected data

Stage 1: Orientation Groups (OGs)
During this first wave of focus group discussions, we asked participants to discuss in broad, general terms (without specifying items) how they think about basic needs and basic standards of living in contemporary Singapore.

We conducted three orientation groups—in English, Mandarin, and Malay. This was the only part of the process that included non-English-speaking groups. We expected that there may be differences across linguistic communities in how living standards and needs are conceptualised, and we wanted to ensure that the definition would be an accurate
A basic standard of living in Singapore is about, but more than just, housing, food, and clothing. It is about having opportunities to education, employment, and work-life balance, as well as access to healthcare. It enables a sense of belonging, respect, security, and independence. It also includes choices to participate in social activities, and the freedom to engage in one’s cultural and religious practices.
Stage 2: Task Groups (TGs)
As mentioned, the study is interested in four types of households:

- Male, 65 years old and older, living alone;
- Female, 65 years old and older, living alone;
- Couple, 65 years old and older, living together;
- Male or female, 55-64 years old, living alone

The TGs constructed detailed lists of items for each of the above household types, to meet the Singapore definition of basic standard of living from the OG stage. To facilitate discussions, we constructed four case studies, each representing one of the four household types, to use as discussion devices in the TGs and later rounds of focus groups. How we set parameters for the case studies will be explained later in this report.

Stage 3: Consult experts
Food and healthcare were two areas where we brought expert opinion into the process.

We consulted dieticians to craft the food portion of lists. This was to ensure that nutritional needs are adequately met. Using the information about eating patterns provided by participants in TGs, dieticians constructed a weekly meal plan. We then took these menus to later waves of focus groups, and went back to the dieticians after each subsequent wave to make adjustments. The iterative process ensured that the menus both reflect people’s habits and preferences as well as meet nutritional guidelines for healthy eating.

To discuss the healthcare budget, we first spoke with a doctor regarding preventive healthcare practices among older people in Singapore. We then researched the guidelines as set out by the Health Promotion Board for health screening, and by the Society of Infectious Disease (Singapore) for adult vaccination. We came up with a list of recommended checks and procedures for persons in good health, and used these to guide discussions with the focus groups.

Stage 4: Pricing
With the list of items produced by the TGs, we went (window) shopping. We went to the shops that participants specified (e.g. neighbourhood shops, Daiso, hawker centres) as well as online (e.g. Courts, NTUC, Ikea), and found items that met their specifications of price, quality,
and sometimes brands. Where we used online prices, we checked that they did not differ from the same brick-and-mortar shops. We were careful to price only items from shops that participants agreed were easily accessible to most people. With this, we came up with a list of items that are actually available for purchase, as well as a price list that accurately represents what it would cost to meet the needs specified by participants.

Stage 5: Checkback Groups (CGs)
The purpose of CGs was to verify the lists that had been constructed by TGs. We worked to clarify items where there was no consensus; where there had not been sufficient information for us to find items in shops; or where items in shops did not match TGs’ requirements.

We highlighted unresolved items for deeper discussions. Where relevant, we told them about the items we found in shops, to give them a better sense of what is actually available for purchase.

We showed participants the complete lists, again walking through with them the hypothetical case studies and the rooms in a flat. Participants at this stage identify things they do not agree with, but also anything that might be missing from the original list. We highlighted unresolved items for deeper discussions. Where relevant, we told them about the items we found in shops, to give them a better sense of what is actually available for purchase.

We also began to “harmonise” the lists—to ensure that the differences between men and women, or between single and partnered households, were real differences of needs arising from gender or household size rather than artefacts of the focus group discussion process. For example, men and women living alone are unlikely to need different types of light bulbs (energy-saving or LED), so we asked participants to come to consensus on light bulbs to be included in the budgets of both male and female single elderly households.

Stage 6: Final Groups (FGs)
The final groups are shown the budgets category by category, to address any unresolved differences. The decisions made by this stage of groups are used to amend the budgets for a final time.
Setting up case studies
Over six hours (with a lunch break and lots of snacks), we asked participants to construct lists of items in the following areas: household goods (e.g. flooring, bed, curtains), personal care goods (e.g. toiletries), clothing (e.g. pants for home-wear, pants for attending weddings in), social participation activities (e.g. eating out with friends, birthday gifts), transport, food (dining at home and out), healthcare (e.g. vaccinations, health checks).

For each TG, we showed participants the case study that was relevant to them. Each case study corresponds to one of the four household types in this study:

- Mr M is 70 years old, living alone in a purchased two-room HDB flat. He is in reasonably good health.
- Mdm M is 70 years old, living alone in a purchased two-room HDB flat. She is in reasonably good health.
- Mr and Mrs M are 70 years old, living together in a purchased two-room HDB flat. They are in reasonably good health.
- Mr/Mdm M is 60 years old, living alone in a purchased two-room HDB flat. He/she is in reasonably good health.

Alongside the case study, we showed participants the Singapore definition of basic standard of living derived from Stage 1 of the research. We asked them to "walk through" the various spaces in a flat—such as living room, dining, and kitchen—and list the items that Mr/Mrs/Mdm M would need in order to fulfil the needs as set out in the definition. The participants were also asked to discuss the services that Mr/Mrs/Mdm M would need outside the flat.

The use of case studies in MIS methodology ensures that participants would think about their task not just as reporting what they themselves do or do not have, but what
The use of case studies in MIS methodology ensures that participants would think about their task not just as reporting what they themselves do or do not have, but what ordinary people can agree on as minimum standards and basic levels of need.

ordinary people can agree on as minimum standards and basic levels of need. Since we were not asking them to share what they themselves do or do not have, this approach also assured participants that they could express their opinions relatively freely and candidly without fear of embarrassment or peer judgement.

Listing the items
Participants were asked to provide detailed information so that we could price the items they listed. The details we asked for include: quality, quantity, price range, life-span, and where each item could be purchased.

Building consensus
Participants were asked to reach consensus on every item they put on the list. They were encouraged to discuss and debate when consensus could not be immediately reached. This process is important because the MIS approach aims to capture what most ordinary people would agree on as basic, rather than overly high or overly low estimates of what people need, or idiosyncratic habits or preferences. Where consensus could not be reached at the TG stage, we noted the items and took it to the next wave of focus groups.

By recording discussions over contentious items, we also better understand rationales for why certain items, which are not immediately obvious as needs, might nevertheless be deemed necessary. Through this, we gained insight on how ordinary people think about needs in contemporary Singapore.

Each item on the final list resulted from the process of checks and consensus through three waves of focus group discussions. In other words, all items that are included in the final budget are items that people have been able to agree are needs for meeting the definition of basic standards of living.
Like other items in the budgets, the pricing of cooked food and groceries was done at eateries and supermarkets mentioned by the participants in the focus groups.

For meals eaten outside, the meal plan provides several comparable, including halal, options (e.g. nasi padang or economical rice). Where there are price differences between these options, the higher price is adopted for the budget to ensure that people of all cultural backgrounds can meet needs.

Home-cooked meals were converted into recipes with specific quantities of ingredients so that these could be priced. Most groceries are sold in quantities that exceed what is required for a week of cooking, especially for single-person households. For ingredients that do not keep longer than a week (e.g. fresh vegetables), any leftover portions are considered wasted. For ingredients that keep longer than a week (e.g. oats), we assume leftover portions will go towards meals in the following weeks and therefore be fully consumed. For items that are consumed in very small quantities but keep a long time (e.g. margarine), their lifespan is based on their recommended shelf-life during the budget calculations.

Although the meal plans try to incorporate a variety of options for both home-cooked and bought meals in order to capture cost variations, a one-week meal plan is clearly not exhaustive in its representation of local food options. Nonetheless, during the pricing process, we noted that comparable options often entail minor price differences that should not significantly affect the room for choice within the agreed budget over the long run.
How we selected participants

In this study, a total of 103 participants took part in 12 focus groups, with an average of nine persons in each group. The smallest group had five persons and the largest 10 persons. We ensured the sample as a whole was diverse in terms of gender, ethnicity, education level, and housing type (see Table 1).

The participants who discussed the elderly household budgets were all 65 years and older, those who discussed the budgets for younger households were 55 to 64 years old.

The Orientation Group stage was the only time when participants are not divided by household types and where participants included people below 55 years old. This is because the definition is meant to capture broad notions of basic needs which encompass all people living in Singapore today. This definition will be used in future research on household budgets for younger household types.

Compared to their age cohorts in the general population, the study sample had a larger representation of women, Malays and Indians, people with post-secondary education, and residents in public rental flats and private properties (Department of Statistics, 2017).

Household type

To have participants construct detailed lists in the TGs, the MIS approach uses household type as a main anchor for selecting participants. Each group is asked to discuss needs for a person living within a specific household type. In order to accurately represent the habits and experiences of people living within such household types, the participants themselves are selected on that basis. Hence, all participants discussing budgets for “male, 65 and older, living alone” are men who are 65 years and older who live alone.

Socioeconomic background

Within each group, in order to ensure that the budgets would be neither extravagant nor inadequate, we included people of different socioeconomic backgrounds, who could draw from their diverse lived experiences to inform the discussion. We used housing type and education level as proxies for this.
Recruiting across diverse socioeconomic groups was especially challenging because of our research focus on older person households. For this age cohort, English proficiency is slightly lower than for younger cohorts, and more likely to be linked to higher socioeconomic status. We thus had to pay particular attention to recruiting in middle and lower socioeconomic groups.

**Ethnoracial and religious background**
Within each group, we included Chinese, Malay, and Indian participants. While we did not recruit specifically for religion, participants also came from diverse religious backgrounds—Buddhist, Taoist, Muslim, Hindu, Christian, “free thinkers”—and this became apparent and relevant when they discussed social participation. Because we did not have an OG conducted in any Indian language, we paid particular attention to recruiting Indian participants in the other stages.

**Language**
An additional criterion that was relevant for the first wave of focus groups is language. The task for OGs was to construct a definition of basic needs inclusive enough to apply to everyone regardless of age, gender, class, living arrangements, and other differences. Therefore, participants had to represent diversity along these lines. We held three separate OGs—in Mandarin, English, and Malay. Within each group, there was a range in age, both men and women, both single and coupled, ethnically mixed, and from a range of socioeconomic backgrounds.

The multilingual setup is important for the OGs, since this is where the definitions of needs are carved. People inhabit specific life-worlds and have particular sensibilities that are linked to the language they are strongest in and use the most. In a multilingual and English-dominant society, the lived realities of the non-English speaking are generally underrepresented, and indeed sometimes placed in inferior positions in contemporary Singapore society. We wanted to capture these diversities so that the definition we end up with can, as fully as possible, represent the realities and orientations of a broad spectrum of society and not just the English-speaking.
How are sampling decisions different for qualitative versus quantitative research?

The criteria of sampling in qualitative research must not be confused with those in survey-based quantitative approaches that are mainly interested in frequencies and associations. Quantitative approaches aim for representativeness and large numbers during sampling: The distribution of different groups within the sample must closely resemble their distribution in the general population so that frequency analyses of the sample are valid, and the sample must be sufficiently large to minimise the likelihood that the relationships found between different variables are due to chance.

Like other qualitative research strategies, the use of focus groups in the consensual method aims to discover the meanings that people bring to their social experiences. This depends on diversity and saturation during sampling and data collection.

Diversity refers to the inclusion of people who may have experiences that vary in ways that bear on the research question, while saturation is achieved by providing ample space and time for people to talk about their experiences so that we may detect patterns. These were the guiding principles for participant recruitment in this study and the basic rationale for conducting multiple rounds of fairly long focus groups.
Recruitment and ethics

Participants were recruited through co-investigators’ community, volunteer, and professional networks in the social service sector and senior voluntary organisations. As broad representation was important, we recruited from diverse circles. To ensure that we did not end up with people who are too closely networked, we tracked the starting “nodes” from which we recruited and avoided using the same recommenders. In our attempt to minimize conformity in group decision-making, which could potentially arise from the desire for harmony, we kept acquainted participants in separate groups. The team also recruited via cold call in residential neighbourhoods and a community library.

To protect the privacy and confidentiality of participants’ research records, we did not collect any identifiable information (e.g. NRIC, address). All participants were briefed about their rights to confidentiality and exit. They signed a confidentiality agreement in the consent form to protect any information that had been shared within the group. Participants were not allowed to disseminate information about the discussion that may link other members to this research. For potential research participants recruited via formal organisations, the investigators ensured they have given their consent for the use of their personal data for recruitment before being contacted by the study team directly.

How we decided on the parameters of the case studies

Several pre-determined parameters define the case studies used in the focus group discussions. They live alone or as a couple; their housing is a purchased two-room HDB flat; and they are in good health.

Household type

Around 24% of people 65 years and older in Singapore live alone (i.e. with neither their spouse nor their children) while 18% live with their spouse (Ng, forthcoming). The majority, 58%, live with their children. However, the prevalence of intergenerational co-residence has been declining rapidly. If recent trends persist, the proportion of elderly people living alone or with their spouse will exceed the proportion in multi-generational households before 2030, according to one set of projections (Ng, K. H., 2015). In other words, the living arrangements depicted in the case studies will become more typical over time and may become the norm in a decade or so.
Focusing on households with no younger adults and children allows us to isolate the needs of older people. Future research can build on the findings here by taking multi-generational households into account.

In other words, the living arrangements depicted in the case studies will become more typical over time and may become the norm in a decade or so.

Multi-generational households with more members will almost certainly need higher budgets than the households discussed in this study. The more pertinent question is whether household size and composition will affect the elderly individual's share of the household budget. For personal items such as clothing, the needs may not be affected by who else is living in the same household. For shared items with a fixed cost such as internet subscription, the individual share of the cost will be lower if the household is larger. Then, there may be needs which vary due to differences in the lifestyle of elderly people who live with younger family members, such as the likelihood of eating out and patterns of social participation. How intergenerational co-residence affects the elderly individual's share of household budget once all these items are added up is difficult to anticipate and requires empirical investigation.

Housing type
The majority of Singaporeans live in public housing, so the main question we faced was what type of public housing to assume for the case studies. Most elderly residents in public housing live in four-room (36%) and three-room (30%) flats (HDB, 2014). However, it did not seem reasonable to adopt these flat types for a basic standard of living as there would be an obvious underutilisation of space, with one to two spare bedrooms in the flat. Social housing, or public rental housing in local terminology, is the cheapest option. We rejected this as it is strictly means-tested (HDB, 2018a), and therefore cannot be reasonably proposed as a housing arrangement for older persons in general.

Two-room flats were the next obvious option for a basic standard of living as they are the smallest type of sold flats. We decided on using two-room purchased flats in our case studies after considering the availability, accessibility, acceptability, choice, and security associated with these flats.

When we presented this housing type in our case study, the participants found it to be reasonable for meeting older people’s housing needs.
Health
The assumption of good health meant the participants only discussed healthcare services that even healthy people need: preventive healthcare, occasional visits to the doctor for minor ailments, dental care, and one-off procedures like cataract surgery. Chronic conditions were not considered.

Even though we set these parameters for the discussions, participants regularly mentioned health problems, noting that many older persons have medical conditions that require special attention. Their anxiety reflects the prevalence of conditions such as hypertension and diabetes among older people in Singapore.

To achieve the basic standard of living, older people with greater health and care needs will require higher budgets. The precise costs of health and care services as well as lifestyle adaptations vary widely for different health conditions (for example, loss of mobility compared to diabetes) and are difficult to capture comprehensively and accurately in a single study. For instance, researchers in the UK studied the income needs due to sight impairment and found that this alone added 41% to the basic budget (Hirsch & Hill, 2016). To understand the implications of health conditions, further research can use the budgets produced in this study as a baseline, and study how they need to be extended under various health and care scenarios.

Even though we set these parameters for the discussions, participants regularly mentioned health problems, noting that many older persons have medical conditions that require special attention. Their anxiety reflects the prevalence of conditions such as hypertension and diabetes among older people in Singapore.

Costs aside, it may be asked if severe health barriers may prevent some people from realising the basic standard of living. A study comparing the income needs for people in their 70s and 80s in the UK found that even as reduced muscle strength, agility, and memory set in at older age, “older pensioners did not need less and there was no evidence that they had lower expectations, or that there were spending economies from life being less ‘full’” (Hartfree, Hirsch, & Sutton, 2013). However, the study was still mainly concerned with healthy older people. It is possible that in cases of severe physical limitations, people are no longer able—or may not expect—to achieve the basic standard of living regardless of financial resources. This, too, should be examined in future research.
Under the HDB two-room Flexi scheme introduced in 2015, the stock of two-room flats has been growing steadily (HDB, 2018b). At least 40% of new two-room flats are reserved for elderly applicants, who have additional priority if they choose to live near their married child. Even though two-room flats do not yet accommodate the majority of older people, its availability and prevalence should increase over time.

Both single (including unmarried, divorced, or widowed) persons and couples may apply under the two-room Flexi scheme, as long as the monthly household income is below $6,000 for singles or $12,000 for couples. These income ceilings are unlikely to prevent older people from accessing the scheme since most of them do not attain these income levels. The median individual income of older people from all income sources in 2011 was $1,000 (Ng, forthcoming); the average monthly household income of retiree-only households in 2013 was $1,735 (Department of Statistics Singapore, 2014); and the median monthly income from full-time work of persons aged 60 and older in 2017 was $2,000 (Ministry of Manpower, 2018a).

Empirically, the scheme has proven to be popular (Boh, 2017). Popularity may continue to grow as there are more single elderly people with no children and who do not need larger living spaces.

Between 2016 and February 2018, two-room Flexi flats were offered for sale in 28 different housing estates in Singapore, including 10 mature estates (i.e. built before the 1980s) and eight younger estates, providing some choice over location (HDB, various years).

The scheme allows persons aged 55 and above to purchase a flat on a shorter lease of 15 to 45 years instead of the usual 99 years (hence “flexi”), as long as it covers all the occupants up to at least 95 years old, which exceeds average life expectancies and should therefore ensure housing security for most residents.

**METHODOLOGY**

Why we used two-room flats in the case studies

Under the HDB two-room Flexi scheme introduced in 2015, the stock of two-room flats has been growing steadily (HDB, 2018b). At least 40% of new two-room flats are reserved for elderly applicants, who have additional priority if they choose to live near their married child. Even though two-room flats do not yet accommodate the majority of older people, its availability and prevalence should increase over time.

Both single (including unmarried, divorced, or widowed) persons and couples may apply under the two-room Flexi scheme, as long as the monthly household income is below $6,000 for singles or $12,000 for couples. These income ceilings are unlikely to prevent older people from accessing the scheme since most of them do not attain these income levels. The median individual income of older people from all income sources in 2011 was $1,000 (Ng, forthcoming); the average monthly household income of retiree-only households in 2013 was $1,735 (Department of Statistics Singapore, 2014); and the median monthly income from full-time work of persons aged 60 and older in 2017 was $2,000 (Ministry of Manpower, 2018a).

Empirically, the scheme has proven to be popular (Boh, 2017). Popularity may continue to grow as there are more single elderly people with no children and who do not need larger living spaces.

Between 2016 and February 2018, two-room Flexi flats were offered for sale in 28 different housing estates in Singapore, including 10 mature estates (i.e. built before the 1980s) and eight younger estates, providing some choice over location (HDB, various years).

The scheme allows persons aged 55 and above to purchase a flat on a shorter lease of 15 to 45 years instead of the usual 99 years (hence “flexi”), as long as it covers all the occupants up to at least 95 years old, which exceeds average life expectancies and should therefore ensure housing security for most residents.
In Singapore, existing data about household budgets is limited to household income and expenditure surveys. This measures what people have and spend, but not what people need. There is no systematic research that has tried to address the question of how ordinary Singaporeans think about basic needs, and how this translates to concrete items and budgets.

In Singapore, existing data about household budgets is limited to household income and expenditure surveys. This measures what people have and spend, but not what people need. There is no systematic research that has tried to address the question of how ordinary Singaporeans think about basic needs, and how this translates to concrete items and budgets. The adoption of the MIS approach in Singapore and the data we have generated through this initial study put us in a better position than before to discuss important questions about basic needs, decent standards of living, and what achieving these might entail.
Findings

Facilitator [FG2]:
*Just now when I said cut [the budget],
then you immediately say, ‘No, no’.*
What would happen if I cut 20% off?
What would happen to Mr or Mrs M?

R1:
*Die faster. Yeah, this is a hand-to-mouth
case already. They’re not going to do
very well.*

R4:
*Government wants longevity,
then must have quality.*

R6:
*Quality is really important.*
A basic standard of living in Singapore

The definition of “a basic standard of living” in Singapore is derived through a series of Orientation Group (OG) discussions conducted in English, Malay and Mandarin.

The main anchoring question for discussion was: what do we mean by basic standard of living and basic needs in Singapore today?

To initiate discussions, we showed the definition generated through MIS research in the UK, as well as Article 27 of the UN Convention of the Rights of the Child. These were simply to start conversations and we made it known to participants that they should not feel bound by these definitions. They were invited to comment generally and to express both agreement and disagreement with the definitions.

The three OGs, though conducted separately, ended up saying many of the same things about basic needs, attesting to the possibility of meaningful consensus despite linguistic variations.

Using thematic analysis of data from OG discussions, the research team crafted this definition:

A basic standard of living in Singapore is about, but more than just, housing, food, and clothing. It is about having opportunities to education, employment, and work-life balance, as well as access to healthcare. It enables a sense of belonging, respect, security, and independence. It also includes choices to participate in social activities, and the freedom to engage in one’s cultural and religious practices.

We took this definition forward to subsequent waves of focus group discussions, and participants deepened our understanding of basic needs through concrete discussions of the goods and services needed to meet these needs.

---

4 A minimum standard of living in the UK today includes, but is more than just, food, clothes and shelter. It is about having what you need in order to have the opportunities and choices necessary to participate in society (Davis et al, 2018).

5 States Parties recognize the right of every child to a standard of living adequate for the child’s physical, mental, spiritual, moral and social development. (OHCHR, 1990).
Participants expressed that meeting the basic needs of older people involves considering their quality of life. Budgets should enable older adults to thrive rather than just stay alive.

Before we present the overall budgets resulting from this study, three key themes that emerged from participants’ discussions are worth highlighting:

- Participants made clear that basic needs must go beyond subsistence and should enable “quality of life”;
- Participants emphasised the importance of independence and autonomy. This means not being a burden to loved ones, and being able to exercise one’s preferences and choices;
- Participants emphasised that basic needs must enable social participation and connection to others.

A key aim in the MIS approach is to translate needs which may come across as abstract—needs for independence or connection, for example—into concrete things which can be clearly and explicitly budgeted for. One way to think about this is to recall the oft-repeated cliché that “money cannot buy happiness.” This may well be true in its most literal and simplistic conception, but ordinary members of the public show through their deliberations that there are many concrete and material things—which require specific sums of money—that are needed to meet people’s needs. While these things cannot guarantee anything as subjective as “happiness,” they are certainly deeply connected to wellbeing.

We illustrate in the following how participants made connections between needs for “quality of life”; needs for independence and autonomy; and needs for social connection, to actual items in household budgets.

**Basic needs must go beyond staying alive and should enable “quality of life”**

Participants expressed that meeting the basic needs of older people involves considering their quality of life. Budgets should enable older adults to thrive rather than just stay alive. They therefore talked about things that bring pride, pleasure, and joy.

Hence, for example, participants emphasised the importance of home aesthetics:
We want to have a nice way of living lah...our remaining years you know? [Decorating a home] is a chance to be distinct [to make it so] somebody [can be] house proud. [R1, TG2]

So Mdm M feels a sense of belonging, a sense of pride of owning her things, calling it her own. [She] can invite friends... [feel] a sense of happiness. [R8, TG2]

Participants thus included household budgets to replace or change old items to reinvigorate the home such that furnishings in the house would look “up-to-date.”

**Food**

Another illustration of participants’ thinking that basic needs should go beyond staying alive is in the area of food. Here they discussed needs for healthy dietary options (this was especially salient among women participants), options and choices, and eating as a social activity. They thus discussed budgets that have components of eating at home as well as eating out, and that would allow people to enjoy occasional treats with loved ones at restaurants.

**Holiday**

A final example that illustrates’ participants emphasis that basic needs should go beyond survival is in the area of holidays. We were somewhat surprised by the lack of controversy and easy consensus participants arrived at in designating an annual holiday as a basic need in Singapore today. They stated that older people need to take a break from the stress and routines of everyday life in Singapore. One articulated that “Singapore is too small” and travel abroad is an escape from the confines of the city. Another said that travel broadens their minds because it exposes them to how people from other cultures live. Participants talked about travel encouraging contemplation and contentment, and enhancing older people’s optimism—giving them “something to look forward to” after years of working hard. Participants thus included in the budget money for passport, luggage, transport, and accommodation, for a holiday to a nearby country each year.

Basic needs must enable independence and autonomy

Participants emphasised that the ability to live independently and not have to rely on others is important. In their deliberations over budgets, they also consistently emphasised the importance of having sufficient autonomy to exercise preferences and choices.
Participants emphasised that the ability to live independently and not have to rely on others is important. In their deliberations over budgets, they also consistently emphasised the importance of having sufficient autonomy to exercise preferences and choices.

**Personal safety**

Participants made connections between independent living and household items that could ensure personal safety. Participants 65 years and older worried especially about falling, and were very aware of age-related safety issues—reduced strength, balance, vision, and hearing. They thus included in their lists stools to be placed near the shoe rack for support and balance. They indicated these must be regular “chair height” such that older people can easily sit to put on their shoes. For the kitchen, participants said that older people need light-weight ceramic bowls and plates, reflecting their concern about reduced physical strength. Older groups also referred to the need to equip homes with grab bars as protection against injurious falls, and for support in anticipation of further losses in physical function over time. Older groups spoke of a need for motion sensor lights, while both older and younger groups insisted on bright light bulbs. These lighting features are important because older people tend to wake up in the middle of the night, and lighting can prevent disorientation as well as falls in the dark that may arise due to “slow eye response.” Safety is also important to enable independent living, so participants spoke of the need for good padlocks for protection against theft or scammers.

**Home maintenance**

Independent living, participants pointed out, involves being able to maintain household items in good condition. They therefore included a budget to pay for maintenance work at home (e.g. removing curtain rods, fixing light bulbs, climbing ladders). When one participant (R5, TG4) suggested that older people should seek help from younger neighbours in such situations, the suggestion was immediately challenged by other participants. There were concerns about appearing dependent or burdening others. Some participants suggested that older people should not always assume that neighbours would be kind or helpful.

**Health**

Another set of discussions that illustrate their emphasis on independence and autonomy can be seen in discussions of health. They highlighted the importance of leading a healthy lifestyle and taking steps to prevent chronic illnesses so that they would not have to depend on others. The budget they drew up therefore considers needs for older people to have balanced and healthy diets, exercise regularly, sleep well, and get regular health screenings.
Their discussions of the quality of things illustrate their thinking that being independent and autonomous also includes the need for options and the capacity to exercise choice. Participants rarely listed the “cheapest” items because they felt it would preclude people from having options. Instead they tended to choose items pegged at the next two price points (“low” or “average”), as this would provide a modest range of options and allow people to make choices about specific household items that would accommodate varying personal preferences.

**Basic needs must enable social connections**

The emphasis on needs for independence and autonomy does not mean that people think older people should live in isolation. Participants emphasised that budgets need to reflect people’s needs for social connections. They should allow for activities that enable self-esteem, respectability, and belonging.

The dual need for independence and social connection is illustrated well in their discussions of items needed to host visitors. A comfortable home was thought of in terms of not just the person living there but also a place to host guests, especially during festive occasions. Participants included an extendable dining table which does not take up too much space and yet can accommodate visitors. They included extra sets of tableware and stackable stools for entertaining friends and family. For occasions with more guests, participants budgeted for disposable cups and plates. One of the funniest discussions centred around deliberations over whether a bigger sofa or sofa-bed was needed for children or grandchildren to stay overnight. They came to consensus that guests are welcome but should not overstay:

> We are all living in Singapore, how far away is it to go back home? [When] it’s time to go home, go home! We don’t let them bother Mdm M. [R1, TG2]

Participants ultimately agreed on a two-seater sofa—satisfying needs for both social connection and independence.

**Social connection needs also translated into budgets to participate in religious activities.** They included budgets for giving alms, which allows older people to feel good that they are contributing members of society. Participants emphasised that donations to the community, particularly places of worship (e.g. temples, mosques, churches) are acts of generativity, as they help allow places of worship to organise religious
Budgets for communication devices were included, also to meet social connection needs. Participants mentioned the need to communicate with loved ones. There was strong consensus that mobile phones are necessary. Giving reinforces older people’s membership in their communities.

**Communications**

Budgets for communication devices were included, also to meet social connection needs. Participants mentioned the need to communicate with loved ones. There was strong consensus that mobile phones are necessary. One participant likened a mobile phone to a “walking partner” because it is:

> something that is always by your side. And when you need to contact a person, you need help, that's where you go for the phone. If you are outside, you can’t run home to make the call, you see what I mean? [R8, TG2]

Additionally, there was consensus that a landline was important. Some pointed to a hierarchy of social relationships, highlighting the difference between intimate networks and more distant acquaintances. The “home phone” is for family members, such as a sibling or relative, while the mobile phone is commonly used to communicate with friends (R1, R2, TG4). Additionally, a landline serves as a good back-up option for communication, because mobile phones may run out of battery power or be out of range of the network signal.

Participants also included budgets for a laptop and internet connection to browse videos that would teach them skills or look up information. They said these kinds of media consumption reduce social isolation, boredom, and loneliness among older people; they keep them entertained while allowing them to keep up with current knowledge about the world.

**Social gatherings**

A final example illustrating how social connection needs map onto the budget is in the area of social gatherings. Participants highlighted attendance at functions such as birthday parties and weddings as needs. They also talked about social obligations such as attending funerals and visiting friends and family when they are ill. They therefore included budgets for presents (for birthdays) or cash gifts (for weddings and funerals). Going to social events is important to “give face” to friends or relatives and to avoid negative judgment. Budgets are necessary
because arriving empty-handed would not be acceptable. As one participant said, “[When] you attend a party, [if] you don’t bring a present, you are not welcome you know” (R3, TG1). Gifts need not be expensive, particularly if it is intended for children, but they need to be “presentable” to avoid social embarrassment. While some participants mentioned that people may not expect older people to give a lot, the consensus was still that it is not socially acceptable to attend a gathering empty-handed. Social functions are important because they allow older people to fulfil their social obligations as elder kin, maintain ‘face’ in the family and be respected by others.

How much do older people need?

Using data generated from the stages of our research, we present here budgets for three household types.

**Table 2** shows detailed weekly budgets for households made up of single and coupled people 65 years and older, and single people 55-64 years old.

The total weekly budgets required to meet basic standards of living are:

- $317 for single elderly households ($1,379 per month, the average of the budgets for elderly men living alone and elderly women living alone)
- $541 for coupled elderly households ($2,351 per month)
- $396 for single persons aged 55-64 ($1,721 per month, the average of the budgets for men aged 55-64 living alone and women aged 55-64 living alone)

The single-person budgets are the averages of budgets that were initially developed separately for men and women. The table also shows the budgets excluding the cost of housing purchase and one-off health treatments, two major costs. Leaving these out reduces the budgets by 11% to 17%.
<table>
<thead>
<tr>
<th>Category</th>
<th>Single, elderly</th>
<th>Coupled, elderly</th>
<th>Single, 55-64 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and non-alcoholic beverages</td>
<td>45.61</td>
<td>110.56</td>
<td>43.69</td>
</tr>
<tr>
<td>Restaurant food</td>
<td>11.51</td>
<td>23.01</td>
<td>11.51</td>
</tr>
<tr>
<td>Hawker food</td>
<td>34.95</td>
<td>56.20</td>
<td>51.40</td>
</tr>
<tr>
<td>Clothing</td>
<td>11.52</td>
<td>22.92</td>
<td>10.98</td>
</tr>
<tr>
<td>Footwear</td>
<td>1.92</td>
<td>3.84</td>
<td>3.34</td>
</tr>
<tr>
<td>Public transport</td>
<td>25.32</td>
<td>46.03</td>
<td>46.03</td>
</tr>
<tr>
<td>Housing purchase</td>
<td>35.08</td>
<td>41.93</td>
<td>35.08</td>
</tr>
<tr>
<td>Housing maintenance</td>
<td>1.89</td>
<td>2.08</td>
<td>3.29</td>
</tr>
<tr>
<td>Utilities</td>
<td>18.57</td>
<td>18.57</td>
<td>18.57</td>
</tr>
<tr>
<td>Household durables</td>
<td>17.01</td>
<td>17.82</td>
<td>23.19</td>
</tr>
<tr>
<td>Household services and supplies</td>
<td>4.57</td>
<td>5.54</td>
<td>7.25</td>
</tr>
<tr>
<td>Medical products</td>
<td>0.93</td>
<td>0.93</td>
<td>5.47</td>
</tr>
<tr>
<td>Healthcare</td>
<td>17.37</td>
<td>34.74</td>
<td>15.85</td>
</tr>
<tr>
<td>Communication</td>
<td>6.52</td>
<td>12.96</td>
<td>6.48</td>
</tr>
<tr>
<td>Recreation and entertainment</td>
<td>54.01</td>
<td>84.56</td>
<td>67.01</td>
</tr>
<tr>
<td>Newspapers, books, and stationery</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Holiday expenses</td>
<td>9.86</td>
<td>19.72</td>
<td>9.86</td>
</tr>
<tr>
<td>Personal care</td>
<td>18.58</td>
<td>35.29</td>
<td>18.62</td>
</tr>
<tr>
<td>Personal effects</td>
<td>2.07</td>
<td>4.23</td>
<td>3.14</td>
</tr>
<tr>
<td>Insurance</td>
<td>0.01</td>
<td>0.01</td>
<td>15.35</td>
</tr>
<tr>
<td><strong>Total weekly budget</strong></td>
<td><strong>317.37</strong></td>
<td><strong>541.00</strong></td>
<td><strong>396.18</strong></td>
</tr>
<tr>
<td><strong>Monthly budget</strong></td>
<td><strong>1379.04</strong></td>
<td><strong>2350.76</strong></td>
<td><strong>1721.50</strong></td>
</tr>
<tr>
<td>Without housing purchase</td>
<td>1226.61</td>
<td>2168.57</td>
<td>1569.07</td>
</tr>
<tr>
<td>Without one-off health treatments</td>
<td>1328.47</td>
<td>2304.32</td>
<td>1679.62</td>
</tr>
<tr>
<td>Without housing purchase and one-off healthcare treatments</td>
<td>1176.03</td>
<td>2122.12</td>
<td>1527.19</td>
</tr>
</tbody>
</table>

For all household types, food—including home-cooked meals, hawker food, and restaurant meals—accounts for the largest share of the budget. Housing-related items, including the cost of purchasing housing, maintaining the property, and utilities, make up the second largest budget area. Recreation and cultural activities—covering a wide range of items such as leisure, socialising, holidays, festivals, and religious activities—form the third largest budget component. The participants discussed alcohol but eventually decided not to include it in the budgets. Tobacco and private vehicle ownership were not mentioned.
Table 3 shows the ratio of the coupled to single elderly household budgets. As a whole, the couple’s budget is 1.7 times the single’s budget. This ratio reflects economies of scales from living in a two-person household, but to a lesser extent than is assumed by the OECD’s square root equivalence ratio which divides two-person households’ incomes by around 1.4. A number of budget items vary very little between the single and couple households—such as housing maintenance, household durables, and internet subscription—because they can be shared and there is very little difference in cost due to an additional person. On the other hand, items that cannot be shared will double in cost for the two-person household, for example, for example, clothing and footwear, healthcare, holidays, and food. The discussions also reveal possible lifestyle differences. For instance, the participants said that couples are more likely to prepare meals at home.
The inclusion of a 55-64 household type helps to indicate age-related differences in household budgets, even if it is unable to separate out possible cohort-related differences. As shown in Table 3, the budget for people 65 years and older is 20% lower than the budget for people 55-64 years old, when comparing single-person households in these two age groups. The largest differences are in the budgets for insurance and medical products, as the elderly participants said that private health insurance is not necessary and that elderly people should not keep too many types of medicine at home but should visit the GP when unwell. There are other large differences which reflect participants’ views that elderly people have simpler needs for household durables and supplies, and are eligible for public transport concessions. Elderly people have a much smaller budget for hawker food as they are less likely to eat out. On average, each meal consumed or bought outside costs around twice as much as a meal prepared at home. Their recreation budget is also 19% lower, reflecting participants’ observation that family and friends normally have lower expectations for monetary gifts and contributions from them.

**What things do older people need?**

**Flooring, lighting, and curtains**

All the elderly groups chose ceramic tile flooring as it was easier to maintain, stressing the necessity of a non-slip texture to minimise the risk of falls. Only the 55-64 year-olds chose laminate flooring, for the bedroom and living room. For lighting, participants decided on simple casing fixtures and LED bulbs. A common concern was that the bulbs should be as bright as possible to avoid strain on the eyes. The 55-64 year-old participants preferred warm lighting in the bedroom. The elderly groups said that motion sensor lights were necessary to prevent knocking into furniture and tripping when it was dark. These lights could, for instance, be attached under the coffee table. All the groups said that there should be two sets of curtains, with one set saved for special occasions when there are guests. The elderly groups said that the flat should be repainted every 10 years, and there should be a decoration budget of $150 per year for things like ornaments, wall hangings, and cushions. The 55-64 year-old participants said repainting should happen every five years but...
that the decoration budget need only be $100 per year. Other basic items that are needed in more than one room include standing fans and wall clocks. An air-conditioner was suggested but eventually left out of the list as it was not felt to be a basic need.

Living room
For the entrance, the main difference across the groups was that the elderly participants felt that a stool was needed so that an older person could put on their shoes more easily, while the 55-64 year-old participants did not mention this. There was agreement that there should be a sofa, small table or coffee table, television, and television cabinet or console. The elderly groups generally chose furniture bought from neighbourhood furniture retailers, because they were more durable, while the younger participants felt that affordable, flat-pack furniture from large retail chains were acceptable. The participants agreed that a laptop and internet connection were necessary for online transactions, information, and entertainment. A laptop was preferred over a tablet for its physical keyboard and larger screen. The list also includes both a mobile phone—one for each person in the case of the couple—and a landline telephone. The latter could be the cheapest model available, as it served mainly as a “backup” in case of emergencies or if the mobile phone battery is flat.

Kitchen and laundry
The discussions on kitchen appliances and cookware centred on how often and what kinds of food preparation might be necessary. Participants were sensitive to the limited storage space in the small kitchen area. The standard appliances include items such as refrigerator, stove with two hobs, oven toaster, rice cooker, electric kettle, and blender. The elderly participants decided on a gas cooker partly for safety reasons, as they felt that an older person may easily forget an induction cooker is switched on since there is no flame. The microwave oven was discussed but eventually rejected. The cookware includes two pots of different sizes and a wok, and utensils such as scissors, knives, chopping boards, ladles, and spatulas.

For laundry, the participants decided on a washing machine, a foldable drying rack, an electric iron, and an ironing board. The drying rack was explicitly chosen over laundry poles, which they felt were too heavy and less safe to handle. Other cleaning supplies include broom, dustpan, pail, cleaning cloths, sponges, and detergents. There are several differences between the age groups. The 55-64 year-old participants said that a vacuum cleaner is a need, as well as a mop. But the elderly groups said that a vacuum cleaner is not a basic need and that a broom would
suffice. Instead of a mop, they decided on a light-weight mop handle with disposable dry and wet wipes for convenience.

**Dining room**
Dining items include furniture and a range of tableware (e.g. plates and bowls) and cutlery (e.g. spoons, forks, and chopsticks). Mindful of space constraints, all the participants decided that a four-seater dining table was most suitable. The elderly participants also said that the table should be extendable to accommodate six persons when there were visitors. For the same reason, the groups agreed that there should be disposable cups and plates. Ceramic was preferred over melamine for tableware, as some participants felt the latter was less safe for holding hot food. The cutlery had to be made of stainless steel. There was little variation across household types apart from a slightly higher quantity for coupled households.

**Food**
The food budgets combine participants’ views with dieticians’ input in an iterative process. Across the groups, the participants frequently referred to “healthy” and “unhealthy” options. While they were aware of the health implications of food intake, the food options they suggested also reflected that choice and enjoyment are important. They acknowledged that meals sold outside tend to be less healthy, but also said that eating out is cheap, convenient, and a way to meet friends. Eating out means hawker centres and coffee-shops, with occasional outings to restaurants (see below on leisure and cultural activities).

The final food budgets for the single elderly households are based on two days of eating out for breakfast, and three days of eating out for lunch and dinner per week, while the elderly couples eat out twice a week for all meals. This reflects participants’ feedback that singles, particularly men, are less likely to spend time preparing food for just one person, and prefer eating out so that they can meet friends. The 55-64 year-old participants decided on the highest frequency of eating out, four times a week for all meals, because this age group is likely to lead an “active” life and be out often.

Dieticians’ recommendations and the participants’ suggestions diverged on a few issues. While the participants said eating out was very common, the experts generally suggested more home-cooked meals as these allowed greater control over ingredients and therefore fat and sodium content. The compromise was found in simpler home-cooking recipes as well as bulk-cooking and freezing, to minimize hassle. When eating
out, participants accepted the experts’ suggestion of a balance between healthier options like noodle soup and occasional “cheat” meals like laksa. But the idea of requesting more vegetables at hawker stalls, for example cucumber with chicken rice, was rejected as impractical. Calcium intake was a particular concern as most participants felt that older persons do not have a habit of consuming dairy products like milk and cheese. Dieticians’ suggestion of adding low fat milk powder to hot beverages like coffee and tea was not acceptable, so alternatives such as evaporated milk and low fat UHT milk were eventually adopted.

**Bathroom and personal care**
The bathroom fixtures include electric water heater and shower set, bidet spray, wall cabinet with mirror, towel rail, and wall hooks. Plumbing and larger fixtures such as wash basin and toilet bowl are assumed to be provided as part of housing and so are not included in the list. All groups stressed the importance of non-slip tiles and grab bars for safety. These are priced according to the rates under the HDB’s Enhancement for Active Seniors (EASE) scheme, which subsidises these fittings for persons 65 years and older (HDB, 2018d). Participants also agreed there should be a non-slip mat outside the bathroom for drying feet after a shower or when the bathroom floor is wet.

The bathroom fixtures include electric water heater and shower set, bidet spray, wall cabinet with mirror, towel rail, and wall hooks... All groups stressed the importance of non-slip tiles and grab bars for safety.

Personal care products are the first of two budget components, the other being clothing, with obvious differences between men and women. The common items across the personal care budgets include things like towels, shower and dental products, deodorant, haircut, and spectacles. Participants agreed that deodorant is a need because it is important to “smell good to yourself and others” when going out, just as a haircut keeps a person presentable. The men also said they needed a shaver, while the elderly men said that monthly pedicure services were necessary because it can be difficult to bend and reach the toenails as people age. The women had a longer list of additional personal care items such as facial and skin care products, hair products, hair perm, cosmetics, and nail polish. There were no notable differences between the needs of younger and older women.
Bedroom and clothing

The items in the bedroom were broadly similar across the groups. Groups agreed that for a basic standard of living, individuals need a bed, mattress, pillow, bolster, blanket, table lamp on a bedside table, and wardrobe. The elderly participants included a queen-sized divan set because the size makes it safer and more comfortable, and so that people would not hurt themselves by knocking against a bedframe. The 55-64 year-old participants said that a super-single sized metal bedframe would be most appropriate, as metal is less likely to attract bedbugs. All the participants also said that the pillows and bolster had to be replaced every two years for hygiene reasons. Considering the size of the bedroom, they chose a two-door wardrobe, with in-built drawers for storage.

Clothing

There are wide differences in the types of clothing that the participants said men and women need, but only small differences in quantity. For the men, the list includes underwear; homewear such as t-shirts, shorts, and pyjama pants; casual wear such as polo shirts, short sleeve shirts, and bermudas; formal wear such as long sleeve shirts, and trousers; ethnic clothing for festivals; exercise wear such as sports shorts and swimming trunks; and a light sweater. The women's clothing list includes underwear; homewear such as t-shirts and shorts; casual wear such as blouse, pants, skirts, and dresses; formal wear which are the same types of clothing as casual wear but of better quality; ethnic clothing for festivals; exercise wear such as quick-dry sports shirts, track pants, and swim suit; and a light sweater. Apart from small differences in quantity, the clothing choices were similar for younger and older persons.

Footwear and accessories

For men, footwear includes indoor slippers for comfort (considering ceramic flooring may be cold), sandals, casual shoes, track shoes, and formal shoes, as well as socks. The elderly women said that footwear must include indoor slippers, sandals or going-out slippers, casual shoes, track shoes, and low-heel formal shoes or dress flats, as well as socks and stockings. The younger women did not mention indoor slippers and stockings. All the participants stressed that shoes should not be the cheapest as poorly made shoes may hurt the feet. The budget also covers a range of miscellaneous items classified as accessories, like wrist watch, belt, wallet or purse, luggage, umbrella, and water bottle. The main differences are that the women's budget also caters for additional items like shawl and jewellery, and up to six bags for different occasions compared to the men's single multipurpose backpack.
Storeroom
In the storeroom, participants stated that a few large items, like shelving, ladder, and stackable plastic stools, are needed. It also includes items for simple household maintenance such as a toolbox, fire extinguisher, and insecticide. In addition, there are loose items that did not clearly belong to any other category, such as sewing kit and stationery. There were minor differences between the groups. The elderly groups said that there should be an annual DIY budget of $100 that might go towards non-durable supplies like batteries and superglue, appliance repairs, or hiring an electrician or plumber. They also said a small budget for basic gardening was necessary. The 55-64 year-old participants opted for a DIY budget of $200 but did not mention gardening.

Transport
The transport budget covers travel mainly by bus and the MRT, and occasionally by taxi. Participants cited visiting family and friends, going to places of worship, and simply getting out of the house for the day as reasons for travel. They said that the Hybrid Concession Pass would be adequate (costs $60 per month and offers unlimited rides on basic bus services and the MRT for persons 60 years and older). Travel by taxi should only be for contingencies, such as when people are carrying heavy shopping, not feeling well, late for important appointments, visiting unfamiliar or faraway places, or when it is raining heavily. The elderly groups agreed that the monthly budget for this should be $50 for a single person or $80 for a couple. The 55-64 year-old participants decided on a monthly budget of $80 for one person.

Leisure and cultural activities
There was strong consensus in all groups that leisure, educational courses, restaurant meals, and holidays are basic needs. For each of these items, groups were asked to decide on a budget rather than specific things to spend on, to reflect the wide range of options available and the importance of individual choice. Examples of possible activities and how much they cost were given to guide the discussions.

In general, the younger group decided on larger budgets than the older groups.

Travel by taxi should only be for contingencies, such as when people are carrying heavy shopping, not feeling well, late for important appointments, visiting unfamiliar or faraway places, or when it is raining heavily.
The weekly leisure budget, which may cover activities like swimming, dance classes, movies, and day trips with community organisations, is $10 for the elderly women, $20 for elderly men, $40 for elderly couples, and $60 for single people aged 55-64. Educational courses are for older persons to learn new skills or enjoy their interests. The budget ranges from $100 (single, elderly) to $300 (single, 55-64 years old) per year. Participants said that eating at restaurants is an opportunity to meet friends and spend time with family in a comfortable social setting. They agreed that it would be restaurant chains commonly found in shopping malls rather than more expensive options, which can be covered by a budget of $50 per person every month. All the groups decided that older people needed an annual holiday budget of $500, which would allow a short vacation to regional destinations like Malaysia, Indonesia, or Thailand on a twin-sharing basis.

Participants said that eating at restaurants is an opportunity to meet friends and spend time with family in a comfortable social setting.

Participants agreed that taking part in social and cultural occasions is a basic need. For this, they said that budgets for monetary gifts and snacks during festivals, religious contributions, birthday gifts, wedding gifts, and contributions at funerals were necessary. At the same time, they said that it is acceptable for older people to miss certain events, for example, a wedding dinner, if the gift budget has been used up for the year; they said that people may not want to attend every wedding they are invited to. The participants also said that older people need a budget of $60–$120 per year for visiting friends at their homes or the hospital, and that the latter is quite common. This budget might be used to buy fruit, for example. For all these items, the 55-64 year-old participants decided on larger budgets than the elderly participants.

Healthcare

All groups agreed that older people should have some off-the-shelf medical products at home for minor ailments. These include painkillers, medicine for indigestion and diarrhoea, plasters, medicated plasters, antiseptic cream, and ointment. The elderly groups felt that for other conditions like cough and cold, older persons should visit the GP rather than self-medicate. They also pointed out that it would not be prudent to keep a wide range of medicines at home because medicines have short shelf-lives. The 55-64 year-old participants had additional items such as throat lozenges, anti-histamines, multi-vitamins, and omega-3 supplements. The elderly participants, too, discussed health supplements
but eventually decided they were not necessary as long as the older person keeps a healthy lifestyle.

The budgets for health screening, vaccinations, and treatments were developed by combining participant opinion, expert advice, and national guidelines. The researchers first consulted a medical doctor with geriatric expertise about the healthcare services that are recommended and commonly accessed by older people. We also referred to national guidelines for health screening and vaccinations. The information was then used to draw up a list of services, and participants were asked whether each item was a need, how frequently an older person should be able to access it, and where they might obtain the service. Pricing is heavily determined by the choice of private or public healthcare provider.

The budgets for health screening, vaccinations, and treatments were developed by combining participant opinion, expert advice, and national guidelines. The researchers first consulted a medical doctor with geriatric expertise about the healthcare services that are recommended and commonly accessed by older people.

For almost all the items, participants agreed that public polyclinics are suitable. For some services, generous subsidies are available for low-income persons and from the Pioneer Generation Package and the Merdeka Generation Package. Since these means-tested and cohort-limited subsidies are not available to all older persons, and the two packages will cover a diminishing proportion of older persons over time, they are not considered during pricing.

Participants agreed to accept all the national guidelines for health screening and vaccinations. There is screening for colorectal cancer, diabetes, hypertension, high cholesterol, obesity, and cervical and breast cancer (for women). Although the recommended frequency of screening for diabetes, hypertension, high cholesterol, and obesity is every three years, there was strong consensus that it should be done annually instead. The budget also covers vaccinations for flu, pneumococcal disease, and shingles. For vaccinations that need to be done just once in adulthood, the budget calculations are based on the assumptions that the older person is vaccinated at age 60 (for people aged 55-64 and shingles only for elderly people) or 65 (for pneumococcal disease for elderly people) and has
a remaining life expectancy as projected in the Singapore Life Tables 2016-2017 (Department of Statistics Singapore, 2018).

Other services that the participants indicated as needs are GP visits for minor illnesses thrice a year, one visit to the Accident and Emergency department every year, dental check-ups twice a year, and one-off items such as cataract surgery, dentures, dental implants, dental crowns, wisdom tooth extraction, and root canal treatment where necessary. There is little publicly available information on the prevalence of these conditions and one-off procedures. However, reports have highlighted an increase in “age-related” use of dental services including dentures, crowns, and root canal treatments (Khalik, 2017), and that 78% of Singaporeans between ages 70 to 79 have cataract. The prevalence rate increases to 93% above 80 years old (Chua, et al., 2015). For budget calculations, we assume that each of these services is used twice from the ages of 60 (for the 55-64 year-olds) or 65 (for elderly people). They account for a significant share of the healthcare costs and add up to $9.69 (55-64 year-olds) and $11.70 (elderly people) per week. In addition, the 55-64 year-old participants said that there should be money for one dental emergency per year, and hospitalisation insurance under the Integrated Shield Plan for greater peace of mind and to save on co-payments in the event of illnesses requiring expensive hospital care.

Housing and utilities

Compared to other items in the budget, determining the recurring costs of purchased housing can present difficulties because it is normally paid for through a mortgage that incurs interests over time rather than in a lump sum at the outset, and because purchased housing retains value which can later be redeemed by selling the property. Various methods have been proposed to take these factors into account when measuring owner-occupied housing costs (Johnson, 2015).

However, under the HDB’s two-room Flexi scheme, flats must be paid for upfront and in full. Unlike other types of owner-occupied public housing in Singapore, these flats may not be resold or let on the open market, and are therefore not housing assets in the usual sense. Therefore they are akin to rental housing with the rent paid upfront, and their cost in the budget is derived by dividing the housing price over the length of occupancy.

These are the assumptions underlying the budget calculations:
• Following the default scenario in the housing rules, flats are purchased at 55 years old with a 40-year lease. Since any remaining lease upon the owner’s death is refunded on a pro-rated basis by the HDB (2018b), the weekly budget is not affected by actual life expectancy.

• There are two flat sizes—36 and 45 square metres. Prices are higher for the larger flat type. We assume that singles need the smaller flat and couples the larger one.

• Housing prices also reflect location. Flats are considerably more expensive in areas designated as “mature estates,” which may be nearer to the city or have better amenities and transport connections. On average, two-room flats in mature estates cost up to twice as much as in “non-mature” estates. Since this study is concerned with a basic standard of living, we assume that flats in non-mature estates are adequate. Within this geographical category, prices still vary depending on the particular estate and neighbourhood, the level on which the flat is located, and so on. To allow choice, budget calculations use the average upper bound of the price range for flats in non-mature estates, based on price data between 2016 and 2018 (HDB, 2016a, 2016b, 2016c, 2016d, 2017a, 2017b, 2017c, 2018c).

• In addition to the price of the flat, persons who have purchased subsidised housing in the past must pay a levy. Considering the general prevalence of housing ownership in Singapore, this levy is added to the budget. The full levy is $30,000 for a new two-room flat with 99 years of lease, adjusted downwards for flats with shorter leases. But as the rules of adjustment are not disclosed, the calculations here simply reduce the levy proportionally based on a 40-year lease.

• Although housing grants are available, they are only for persons who have not bought a subsidised flat before and have been in continuous employment. In practice, persons with lower or irregular labour force participation, such as women and less-skilled workers, will not be able to satisfy the second condition. Therefore these grants are excluded from the budget calculations.

The results of these calculations are shown in Table 4.

In addition to payment for the price of the flat, the budget also contains other housing-related expenses. These include fire insurance, service and conservancy charges, and utilities (i.e. water, electricity, and gas).
The amounts were not discussed with the participants but are based on published standard rates for insurance, the highest published rate for conservancy charges, and national average utilities usage levels for two-room flats. The pricing for utilities also includes a deduction of $390 per year. This comes from the GST Voucher U-save, a permanent subsidy that makes automatic deductions from utility bills every quarter, with the amount determined by flat size (Ministry of Finance, 2018a).

How do the budgets compare to expenditure data?

Published data from Singapore’s Household Expenditure Survey in 2012/13 allows for limited comparisons between the household budgets our participants constructed and actual expenditure patterns (Department of Statistics Singapore, 2014; Table 5). In the general population, the largest household expenditures are for transport (17%), food serving services (16%), and miscellaneous goods and services (12%) which consist of personal care, personal effects, and insurance.

There are distinct patterns across income groups. For households with lower incomes, larger proportions of spending go towards essential items such as food, health, and communication. The higher income groups have larger shares of spending on luxury items with high income elasticities, such as transport (i.e. personal vehicles), recreation, and personal care. Retired households resemble lower income groups in some respects. Large proportions of their spending are on food, health, housing, and household goods, while smaller proportions are on transport and personal care.

The overall shape of the household budgets in this study is strikingly similar to retired households’ actual expenditure patterns. The food and housing

<table>
<thead>
<tr>
<th>Actual housing prices</th>
<th>Small (36 sqm), for single-person households</th>
<th>Large (45 sqm), for coupled households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-mature estates</td>
<td>$46,389 to $61,056</td>
<td>$58,111 to $75,333</td>
</tr>
<tr>
<td>Mature estates</td>
<td>$92,800 to $105,200</td>
<td>$115,600 to $132,600</td>
</tr>
<tr>
<td>Assumed price</td>
<td>$61,056</td>
<td>$75,333</td>
</tr>
<tr>
<td>Levy</td>
<td>$12,121</td>
<td>$12,121</td>
</tr>
<tr>
<td>Total housing cost</td>
<td><strong>$73,177</strong></td>
<td><strong>$87,454</strong></td>
</tr>
<tr>
<td>Weekly housing cost</td>
<td><strong>$35</strong></td>
<td><strong>$42</strong></td>
</tr>
</tbody>
</table>

SOURCE: HDB (VARIABLE YEARS)
and utilities components are large, while the clothing and footwear, transport, furnishings, and communication components are fairly small.

But there are two prominent differences. First, the percentage of actual expenditures on health among retired households is much higher than in our budgets. This may be explained by the assumption of good health for our case studies. As such, the budgets do not account for the cost of treatment for chronic conditions and major illnesses.

Second, the budgets informed by our participants have much larger recreation and culture components than in actual expenditure. This is logical given participants’ insistence that basic needs should encompass meeting needs for quality of life, independence and autonomy, and social connection.

**How do the budgets compare to work incomes?**

The budgets may also be compared with work incomes (Table 6).

In 2017, the median monthly work income of full-time workers aged 60 and above was $2,000 (Ministry of Manpower, 2018a), about 1.5 times the budget for single elderly households.
In 2017, the median monthly work income of full-time workers aged 60 and above was $2,000 (Ministry of Manpower, 2018a), about 1.5 times the budget for single elderly households.

However, the median earnings of older women come closer to the budget at just 1.3 times, compared to men’s 1.5 times.

There are also concerns with particular occupations. The median monthly work incomes for the three most common occupations among older workers range from 0.9 to 1.2 times of the budget. Almost two thirds of older workers are employed in these occupations, which are also the three lowest-paying occupations.

The same picture emerges when considering older workers’ educational qualifications. For older workers with lower secondary education or less, median work incomes range from 0.9 to 1.2 times of the budget. About 60% of older workers belong to these educational categories.

Low work incomes among older people mean that employment alone does not ensure the achievement of the household budgets.

### Table 6  Median monthly work incomes of older workers aged 60 and older

<table>
<thead>
<tr>
<th></th>
<th>Amount, S$</th>
<th>Ratio to budget for single elderly household</th>
</tr>
</thead>
<tbody>
<tr>
<td>All full-time workers aged 60 and older</td>
<td>2000</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>2058</td>
<td>1.5</td>
</tr>
<tr>
<td>Women</td>
<td>1733</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaners, labourers, related</td>
<td>1200</td>
<td>0.9</td>
</tr>
<tr>
<td>Service and sales</td>
<td>1500</td>
<td>1.1</td>
</tr>
<tr>
<td>Plant and machine operators</td>
<td>1650</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Highest education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary and below</td>
<td>1300</td>
<td>0.9</td>
</tr>
<tr>
<td>Lower secondary</td>
<td>1633</td>
<td>1.2</td>
</tr>
</tbody>
</table>

*Source: Ministry of Manpower (2018a) for work income figures. Data is not available for the 65 and older age group.*
How do the budgets compare to public schemes?

A range of government income measures target older people who are in employment, retired with CPF incomes, or retired with low incomes. While these schemes are available, they do not cover all older people. Coverage depends on many factors such as an individual’s occupation, amount of CPF savings, and qualification through means tests.

Table 7 shows the theoretical amounts available under these schemes for people who are covered, in absolute terms and as a share of the household budget for a single elderly person.

- For employed persons, the Progressive Wage Model (PWM) requires employers to pay minimum wages that increase as workers acquire training and gain promotions (Ministry of Manpower, 2018b). The PWM currently covers three low-paying job sectors – cleaning, landscape, and security. In addition, the Workfare Income Supplement (WIS) provides cash payments to people 35 years and older whose monthly work incomes are not more than $2,000 (Ministry of Manpower, 2018c). Reports suggest that while wages in these sectors have increased since the PWM came into effect, there remain problems with “wage resetting”, where wages are cut back to the minimum when the service contract is renewed (Yahya & Baharudin, 2018).

- Under Central Provident Fund (CPF) rules, people who own housing must set aside a minimum amount of savings known as the Basic Retirement Sum at 55 years old, that will be converted to an annuity upon retirement at 65 (Central Provident Fund Board, 2018). This is supposed to provide a basic level of income for retirees. Those who wish to receive higher payments in their retirement may set aside twice as much savings at 55 years old, known as the Full Retirement Sum. However, in 2013, only 55% of persons turning 55 had enough savings to fulfil the Basic Retirement Sum (CPF Advisory Panel, 2015). In other words, around half of retirees will not receive even the basic annuity of less than $800 per month. Indeed in 2018, the CPF paid an average of $450 per month to persons aged 65 to 69 years old, $290 to those aged 70 to 79 years old, and just $220 to those aged 80 to 87 years old (Ministry of Manpower, 2019).

- For persons who have retired and are low-income, ComCare Long Term Assistance, Silver Support Scheme, and GST Voucher – Cash (GSTV)
offer means-tested cash payments. ComCare requires applications and the criteria are strict, so the scheme reaches less than 1% of the elderly population (based on Department of Statistics Singapore, 2015; Ministry of Social and Family Development, 2016, 2018). Silver Support and GST Voucher are automatically means-tested based on administrative data and aim to cover up to half of retiree households, but pay much lower amounts (Ministry of Finance, 2018b; Ministry of Manpower, 2018d; Shanmugaratnam, 2012).

Figure 2 shows the possible total monthly incomes from adding up these public schemes under several scenarios. For older people working in cleaning and landscaping, the combination of wages and the WIS exceed the single elderly household budget, while the monthly income for older people working in security will fall just short of the budget.

Other non-work scenarios fare worse. For retirees, the CPF Full Retirement Sum will translate into an annuity that surpasses the single elderly household budget. However, this amount of saving remains a theoretical target for many people. For those who are able to meet just the Basic Retirement Sum, they will receive an annuity that is less than 60% of the budget.

<table>
<thead>
<tr>
<th>Table 7</th>
<th>Income measures for older persons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>If working, Progressive Wage Model</strong></td>
<td></td>
</tr>
<tr>
<td>Cleaning</td>
<td>1200-1400</td>
</tr>
<tr>
<td>Landscape</td>
<td>1300</td>
</tr>
<tr>
<td>Security</td>
<td>1175</td>
</tr>
<tr>
<td>Workfare Income Supplement</td>
<td>120</td>
</tr>
<tr>
<td><strong>If retired, with CPF income</strong></td>
<td></td>
</tr>
<tr>
<td>CPF, Basic Retirement Sum</td>
<td>730-790</td>
</tr>
<tr>
<td>CPF, Full Retirement Sum</td>
<td>1350-1450</td>
</tr>
<tr>
<td><strong>If retired, low-income</strong></td>
<td></td>
</tr>
<tr>
<td>ComCare LTA, single</td>
<td>600</td>
</tr>
<tr>
<td>Silver Support Scheme</td>
<td>100-250</td>
</tr>
<tr>
<td>GST Voucher - Cash</td>
<td>13-25</td>
</tr>
</tbody>
</table>


**CPF PAYOUTS IN 2018 (AVERAGE PER MONTH)**

| 65 – 69 YEARS OLD | $450 |
| 70 – 79 YEARS OLD | $290 |
| 80 – 87 YEARS OLD | $220 |

SOURCE: MINISTRY OF MANPOWER (2019)
The package of means-tested transfers for older people offer limited coverage. Yet even for those who qualify, ComCare Long Term Assistance, Silver Support Scheme, and GST Voucher – Cash (GSTV) add up to around half of the single elderly household budget, falling significantly short of what is needed for a basic standard of living.

The implication is that there will be a segment among the older population who do not have the means to retire, and who may have to supplement their incomes through informal transfers and personal savings in order to meet basic needs.
Concluding Remarks

I think it is a bit challenging for society today, especially in the Singapore context where there are high standards for everything – housing, clothing, job qualification, education etc.... Some of us do get ahead, but not all. Some are still left behind so maybe if we can get support in terms of like, was mentioned, education, jobs and all maybe we can achieve the minimum standard. — [R7, OG3]

Where might the income for a basic standard of living in old age come from?

The study asked participants to consider only what things were needed for a basic standard of living, not their affordability, because needs are different from means. But once household budgets are established, they provide a concrete benchmark and starting point for discussing how people may achieve these budgets.

Incomes for older people may come from market sources (e.g. employment, private pensions, savings), public sources (e.g. public pensions, transfers, subsidies), and informal sources (e.g. family contributions and support from charities).
Welfare in Singapore draws on “the family as first line of support.” This means the state expects and encourages—through various institutional mechanisms and public campaigns—older persons to rely on their adult children for income and care (Teo, 2013). In financial terms, the overall picture is one of heavy dependence on family contributions with limited support from the state (Ng, forthcoming). The most common income source is adult children (78% of elderly people reported such income in 2011), followed by wage work (21%), and the CPF or other annuities (13%). Other sources such as private pensions (4%) and public assistance (2%) are negligible in terms of coverage.

This raises a number of policy concerns:

• Due to rapid socioeconomic development, current cohorts of older people have steep educational and skill disadvantages compared to younger workers. When work incomes and wage interventions fall short, some older people either do not have the means to ever retire or will be permanently dependent on public and informal transfers.

• Even among younger cohorts, lifetime wages can and do vary. With the widening of income inequality in Singapore over the past decades (Ng, 2015a), people will become older with varying levels of savings.

• Moreover, the capacity to maintain full employment during younger years varies: people may not be able to maintain wage work due to health conditions or because of caregiving responsibilities. Many women typically participate less in full-time wage labour because of caregiving work.

• Although CPF participation and savings are projected to increase with future cohorts, the basic retirement payment of less than $800, even after the most recent reforms, is only about half of the household budget for a single elderly person and falls significantly short of what is required for a basic standard of living.

• Currently, major public transfer schemes are means-tested and modest. Where these are permanent and automatically issued, they have been incorporated during the pricing process in our study. However, most subsidies are means-tested, one-off, for a limited period, or for limited cohorts. Access is therefore not assured. The fragmented nature of the subsidy regime and schemes that require individuals to put in applications also impose help-seeking costs.
• The current extent of cross-generational family support is demographically unsustainable as family size shrinks—people will have either no or fewer children as sources of retirement income. The reliance on adult children as sources of retirement income may moreover reinforce economic inequality insofar as supporting parents takes up a greater proportion of household costs for the lower- and middle-income compared to their higher-income counterparts. This leaves less for other needs of younger households, such as children’s education.

In a context of high wage inequalities; absence of universal provisions in healthcare and retirement support; and modest levels of redistribution on a societal level; we can expect that the meeting of basic needs will be uneven. The demographic outlook indicates that there must be a decisive shift away from a dependence on family as the main response to this challenge.

If continued employment is considered an important channel by which older people will meet their income needs, then measures to tackle unequal wage and work conditions must go much further. These should be accompanied by more extensive interventions to mediate the reproduction of wage inequalities in public pension payments and other provisions outside the labour market for costly needs such as healthcare.

The things that participants said were fundamentally important—quality of life, independence and participation—offer a direction for future policies. They also closely align with the Singapore government’s “Action Plan for Successful Ageing” (Ministry of Health, 2016), which envisions opportunities for growth, ageing with confidence, and inter-generational harmony within a cohesive community.

This research on household budgets provides a benchmark of older people’s needs and makes explicit the material resources that members of the public consider necessary for a basic standard of living in Singapore today. Future research will be extended to other household types, so that we can better understand needs for people at different stages of the life course.

MIS research has great value for policy discussions. We aim for research implementation to be independent and nonpartisan, the process kept transparent, and our findings made accessible to the public, policymakers, researchers, and civic organisations interested in economic security and social wellbeing.
In the UK, the MIS has been funded since 2007 by an independent foundation with a longstanding commitment to supporting social research. The research methodology is clearly documented and the detailed findings are published online. Annual revisions of the MIS are covered in the media and attract public interest. In recent years, the MIS has provided data for the derivation of the UK living wage, a voluntary wage level slightly higher than the statutory minimum wage, now adopted by more than 4,000 employers and benefiting over 150,000 employees (Living Wage Foundation, 2018).

In 2018, the country teams currently conducting research using the MIS method, including our team from Singapore, started a Global Network that will set up a common online repository for research publications and other resources, meet periodically to share research experiences, and provide an avenue for collaboration.

This study reveals that ordinary members of society are able to come to consensus about what a basic standard of living in contemporary Singapore means. The parameters of what they said about dignity, respect, social belonging, and choice, as well as the items and budget they came up with, reveal the norms and values held by average persons in our society. At a juncture of considerable policy activity but also persistent gaps in income provision, income standards can help by translating norms and values in society into unambiguous and substantive benchmarks to aim for. Future steps towards better income security must involve ordinary citizens setting standards for decent living. The gaps in people’s capacity to meet basic standards of living must be urgently addressed so that all older people in Singapore can achieve what our participants describe as basic needs for “a sense of belonging, respect, security, and independence.”

For more information about this research:
https://whatsenoughsg.wordpress.com
References


Acknowledgements

We thank the International Longevity Centre (ILC) Singapore at Tsao Foundation and the Centre for Ageing Research and Education (CARE), Duke-NUS for their funding support, the Centre for Research in Social Policy (CRSP) at Loughborough University for their ready advice, as well as research participants for their insightful contributions. Initial findings were presented at several seminars, and we appreciate the critiques and suggestions of audiences from the Ministry of Health, the Ministry of Manpower, the Ministry of Social and Family Development, as well as numerous voluntary welfare organisations, which have helped us refine the report. We are also grateful to Michele Wong and Charmaine Toh from NutriWerkz Pte Ltd and Ng Wai Chong from Tsao Foundation for expert advice on nutrition and healthcare.

About the authors

NG Kok Hoe is Assistant Professor at the Lee Kuan Yew School of Public Policy, National University of Singapore (NUS). He received his PhD in Social Policy from the London School of Economics and Political Science (LSE) where he was a UK Commonwealth Scholar and won the Titmuss Prize. He was previously in the Singapore civil service and has since consulted for the government and NGOs on social policies and social services. Kok Hoe conducts research on poverty and income security among elderly people, public housing policy, and homelessness. He has contributed press commentaries and given public lectures on these topics. He co-edited the book *They told us to move: Dakota—Cassia* (Ethos Books, 2019).

TEO You Yenn received her PhD in Sociology from the University of California at Berkeley. She is Associate Professor and Provost’s Chair in Sociology at Nanyang Technological University, Singapore. Her research focuses on poverty and inequality, governance and state-society dynamics, gender, and class. She is the author of *Neoliberal Morality in Singapore: How family policies make state and society* (Routledge, 2011) and *This is What Inequality Looks Like* (Ethos Books, 2018). Apart from academic writings, she has over the last decade contributed regularly to public debate through public lectures and commentaries. She is recipient of NTU’s Nanyang Education Award (2013), and the American Sociological Association Sex and Gender Section’s Feminist Scholar Activist Award (2016). For her contribution to igniting a national conversation on poverty and inequality with the book *This is What Inequality Looks Like*, she was named a Finalist in the 2018 Straits Times Singaporean of the Year Award.
NEO Yu Wei is a research fellow at the Social Service Research Centre at the National University of Singapore. She completed her PhD in Public Policy at the Australian National University. Her research focuses on issues related to poverty and the social exclusion of marginalised groups. She has collaborated with academics from different disciplines, social service professionals, and government agencies on various research projects related to improving access to services for low-income families in Singapore. She runs a popular 13-week training programme for social service professionals, to equip them with research skills that can be applied to their work. She is author of the essay, “Reclaiming the Community Spirit in the Iron Cage,” in *They Told Us to Move*, edited by Ng Kok Hoe and The Cassia Resettlement Team.

Ad MAULOD holds a PhD in Cultural Anthropology from Purdue University, USA. Ad is a Research Fellow at the Centre for Ageing Research and Education, Duke-NUS Medical School. Ad’s primary research on participatory action research with vulnerable older persons has been published in the British Medical Journal (Open). In 2019, Ad was awarded a research grant by the World Health Organization Centre for Health Development to conduct a mixed-methods study exploring the social and health empowerment of older adults with complex care needs living in public rental housing in Singapore. Ad is also the Principal Investigator on two other funded projects investigating reflexive longevity among centenarians in Singapore and Sydney (USyd-NUS Partnership Collaborative Award) and intergenerational/ community befriending through an asset-based approach (Community Foundation Singapore).

TING Yi Ting graduated from the National University of Singapore with a Bachelor of Social Sciences (Honours), where she majored in Social Work. She received the Ministry of Health’s Health Science Scholarship. She is a registered social worker with previous experience as a Medical Social Worker, where she led a team specialising in work with patients with neurological conditions and contributed chapters to a resource book on Parkinson’s Disease. She most recently worked as a Research Executive in the Social Service Research Centre, National University of Singapore, where she was involved in research related to social policies and programme evaluation of social services and assistance for the marginalised. She has also contributed as co-author to roundtable reports on social housing, as well as conference proceedings on low-income families.
The rapid pace of ageing in Asia has a distinctly female face. By 2050, more than half of the estimated 1.3 billion older persons in the Asia-Pacific region will be women.

To assess the status of the financial security of older women, the Regional Learning Network on Women’s Financial Security conducted a research study based on secondary sources in 6 Southeast Asian countries - Indonesia, Malaysia, Myanmar, Philippines, Singapore, and Thailand between 2017-2018. The study finds that the financial status of women in old age is the cumulative outcome of gendered inequalities in access to assets and opportunities throughout women’s lives. It underlines the need for a life-course approach to policy-making, and in particular, targeted interventions at key risk-points in women’s life trajectories.

Are Women Financially Less Secure than Older Men?

Driven by declining fertility rates and increasing life expectancy, older women outnumber older men in all 6 countries, particularly among the ‘oldest-old’ (80 years and over). In this group as a whole, women comprise 55% of the population aged 60 years and over, and over 60% of the population aged 80 years and over.

The first challenge faced in undertaking a comprehensive assessment of the status of financial security is the lack of gender and age disaggregated data on indicators such as income, pensions and government benefits. Also, data on income and expenditure is based on the household as the unit of analysis. This does not provide an accurate picture of financial status, as household level data can mask intra-household inequalities in the distribution of resources. The absence of a common definition of older persons also hindered inter-country comparisons.

Nevertheless, despite geographical, social and economic diversity in the 6 countries, some common threads can be discerned.

First, in general, older women receive less income than older men. For instance, in Indonesia, 33% of older women earned less than USD36 per month, compared to 18% of older men.

Second, on average, women have less savings. For example, in Singapore, in 2017, the average retirement (Central Provident Fund) savings at age 60 was about S$22,000 lower than men’s.

Third, women are also less likely to receive pensions or have lower levels of pension benefits than men. For example, in Philippines, in 2015, the proportion of female old-age pension beneficiaries was almost half (29%) that of men (53%).

Consequently, in all 6 countries, children are cited as the main source of income in old age for older women.

The Pathways to Financial Insecurity

Older women’s lower levels of financial security are the result of the cumulative and intersecting disadvantages that women face throughout their lives in education, employment, access to assets and health care, income and other opportunities. One of the main causes can be traced to gendered differences in labour market participation and care work. Women not only participate less in the labour market, even when they do work, women often have interrupted careers, work part-time, or are disproportionately represented in the informal sector or in home-based work.
These patterns are primarily due to women’s greater involvement in caregiving. For instance, in 2015, 64% of the women who were not in the labour force in Myanmar cited domestic responsibilities (which includes unpaid care work) as the main reason for not working.

The end outcome is clear: women are penalized for their care responsibilities in the form of foregone earnings, or lower earnings. Since pensions are often tied to earnings from work, this directly translates into lower levels of savings and pension benefits. Such differences in earnings, savings and pension benefits then translate into differential levels of financial security for older women and men.

Why is this important?

Policy makers have been slow to recognise and respond to these trends. Unless adequately addressed, a large proportion of the older population will continue to be vulnerable to poverty and financial insecurity. The declining size of families makes this an even more pressing issue as it is doubtful that older women can continue to rely on family as an adequate source of income in old age. If older women continue to face financial insecurity, governments will fall short on achieving the Sustainable Development Goals of Gender Equality (Goal 5), No Poverty (Goal 1) and Decent Work (Goal 8).
RECOMMENDATIONS

There is no universal panacea to address the financial security needs of older women, but policy measures need to target the root cause – gender inequalities in care and paid work – over the life course. The paper proposes some key actions, both at country and regional level to improve the lives of older women:

- Collect disaggregated data by gender and age to understand the situation of older women, identify areas where there are gaps, and to track progress.
- Reduce the gender gap in education to ensure more girls enroll and remain in school, and also provide girls with more job-relevant skills demanded by employers.
- Improve female labour force participation, by targeting the correlation between care work and paid work. Measures include increasing maternity and paternity leave, increasing access to childcare facilities, implementing family-friendly work arrangements and supporting back-to-work initiatives.
- Provide support for unpaid caregivers through for instance, special pension programmes or matched savings schemes.
- Enhance social protection by implementing universal social pensions.
- Change social norms about unpaid care through public awareness campaigns and changes in the education curriculum.
- Empower women with the knowledge, confidence and skills for financial planning and money management through financial literacy training.
- Ensure women become more visible in policy circles through strengthening institutional support for older women, through for instance, the establishment of National Commissions on Older Women.
- Enable older women to reduce their reliance on family support by strengthening community ties and expanding the scope of non-family support systems such as non-governmental organizations or neighbourhood associations.
- Within each country, ensure that there are specific policies that target and reach the most vulnerable groups of older women.

The following partners from the Regional Learning Network on Women’s Financial Security were involved in the research and publication:

- Association of Centre for Women Resource Development (Association of PPSWI), Indonesia
- Centre for Ageing Studies, University of Indonesia
- Citi Foundation
- Coalition of Services of the Elderly (COSE), Philippines
- Department of Family and Consumer Sciences, Faculty of Human Ecology, Bogor Agricultural University, Indonesia
- Foundation for Older Persons’ Development, Thailand
- Foundation for Women, Thailand
- HelpAge International
- International Longevity Centre Singapore
- Research Institute on Ageing (MyAgeing), Universiti Putra Malaysia

If you would like to find out more, or get involved with the activities of the Regional Learning Network on Women’s Financial Security, please contact: ilcsingapore@tsaofoundation.org

This policy brief synthesizes the findings from the publication “Financial Security of Older Women: Perspectives from Southeast Asia.” Download a copy of this book at http://asiawomen.org.sg/news-events/financial-security-of-older-women-perspectives-from-southeast-asia or scan via the QR code:
<table>
<thead>
<tr>
<th>S/N</th>
<th>Project Title</th>
<th>Summary and Purpose of Study</th>
<th>Research Partner</th>
<th>Status</th>
<th>Expected End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Community for Successful Ageing (ComSA) Patient-Centered Care (COPACC) Study: Utilization, Health and Economic Evaluation of a Community-Based Primary Care Geriatric Hub at Whampoa</td>
<td>The purpose of the study is to evaluate the impact of a primary care model for older persons with complex care needs in Singapore, in terms of healthcare cost and utilization.</td>
<td>Geriatric Education and Research Institute</td>
<td>Data collection and analysis</td>
<td>September 2020</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Principal Investigator: Dr Wong Chek Hooi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Caring for Persons with Dementia and their Caregivers in the Community: Towards a Sustainable Community Based Dementia Care System</td>
<td>This study is an evaluation of our Hua Mei Dementia Care System service, which caters to older persons and their family caregivers. Through this study, we hope to develop a blueprint for community-based dementia care in Singapore and explore the Scaling and replicability of the service in community settings across Singapore.</td>
<td>Duke-NUS Medical School</td>
<td>Data collection</td>
<td>February 2021</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Principal Investigator: Associate Professor Angelique Chan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Self-Care for Older People with Diabetes Mellitus (SCOPE-DM): Live Well with Diabetes Programme</td>
<td>This is an evaluation study of the SCOPE DM diabetes management programme for community-dwelling older persons, which emphasizes <em>self-care</em> as a way to control and manage this chronic condition. Based on the findings, we hope to explore the replicability of SCOPE DM across Singapore and advocate for this type of programme to be</td>
<td>National University of Singapore Saw Swee Hock School of Public Health</td>
<td>Data collection</td>
<td>June 2020</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Principal Investigator: Dr Lim Boon Tar Raymond</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>A Realist Evaluation of the Development and Implementation of an Integrated Health and Social Care Programme to Promote Health Over the Life Continuum and Ageing in Place</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Community for Successful Ageing (ComSA) is a complex, multi-component intervention model for older persons throughout their life course. This ‘Realist’ evaluation method highlights factors for success and areas of improvement as ComSA develops, and important learning points for other communities looking to adopt a similar model.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Panaxea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Principal Investigator: Dr Bert Vrijhoef</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Study complete, pending publication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5</th>
<th>Effect of Community-based Baduanjing on Functional Performance in Frail Older Adults in Singapore: A Randomized Controlled Trial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This evaluation study is of a pilot Baduanjing ‘qigong’ or exercise routine in <em>Traditional Chinese Medicine</em> to address frailty for community-dwelling older persons. It consists for 8 simple slow movements with focus on muscular contractions, balance and mindfulness. The preliminary findings found positive effects on <em>Baduanjing</em> both on frailty (fall risks), functional performance, exhaustion, as well as indicators of psycho-emotional well-being such as depression and cognition. A fresh grant has been applied to evaluate this programme under RCT conditions.</td>
</tr>
<tr>
<td></td>
<td>Geriatric Education and Research Institute</td>
</tr>
<tr>
<td></td>
<td><em>Principal Investigator: A/Professor Wee Shiou Liang</em></td>
</tr>
<tr>
<td></td>
<td>Pilot complete, final analysis and publication in progress</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6</th>
<th>Evaluation of the Long-Term Impacts of the Citi-Tsao Foundation Financial Programme Programme for Mature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Launched in 2008, the Citi-Tsao Foundation Financial Education Programme Programme for Mature</td>
</tr>
<tr>
<td></td>
<td>Center for Economic and Social Research (CESR)</td>
</tr>
<tr>
<td></td>
<td>Data collection in progress</td>
</tr>
</tbody>
</table>

<p>|   | December 2019 |</p>
<table>
<thead>
<tr>
<th>#</th>
<th>Programme/Project</th>
<th>Description</th>
<th>Principal Investigator</th>
<th>Conceptualization and proposal submission</th>
<th>Participant recruitments/ongoing baseline qualitative interviews</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Education Programme for Mature Women</td>
<td>Women targets low income women above 40 years of age, seeking to address their financial vulnerability. This evaluation seeks to assess the impact of the programme 10 years on, to advocate for avenues to have it more widely available across Singapore.</td>
<td>Dr Joanne Yoong</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>International Longevity Centre Global Alliance Research Workgroup on Long Term Care Systems</td>
<td>The aim of this research is to develop an international framework for describing and classifying Long Term Care (LTC) systems in different countries according to their ability to meet the needs of older people. The participating ILC GA members further aim to use this framework to identify examples of best practice and innovation in LTC systems, and to identify potential to transfer specific elements of LTC across different settings.</td>
<td>Geriatric Education and Research Institute Dr Wong Chek Hooi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Evaluation of the Enriching and Mobilising Participation of Whampoa’s Elder Residents (EMPOWER) Community Development</td>
<td>The EMPOWER (Enriching and Mobilising Participation of Whampoa’s Elder Residents) intervention aims to train and develop community advocates of</td>
<td>Jasmine Lee, Yuet Chun, Raksha, Susana Massey University: Mohan Dutta</td>
<td></td>
<td>Participant recruitment and ongoing baseline qualitative interviews</td>
<td>Dec 2021</td>
</tr>
<tr>
<td>Intervention</td>
<td>older persons in Whampoa, Singapore as guided by the Culture-Centred Approach framework. The research component will evaluate the effectiveness and impact of the programme on the elderly participants through interviews and focus group discussions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>