

What older people need in Singapore: A household budgets study

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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 ¹

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.

¹ There is no agreed age definition for old age or “elderly people” in Singapore. The minimum retirement age is 62, but the law requires employers to offer reemployment to workers up to the age of 67. The national public pension scheme, known as the Central Provident Fund (CPF), pays out from the age of 65. This report uses “elderly” to refer to the first three types of households made up of people aged 65 and older, and “older people” to refer to the participants in the study as a whole, who were all aged 55 and older.

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 flat² (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



- \$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)

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

Low work incomes among older people mean that employment alone does not ensure the achievement of our budgets for basic standards of living.

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).

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.

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.”

Introduction

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.

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."

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.

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).

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(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

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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.”



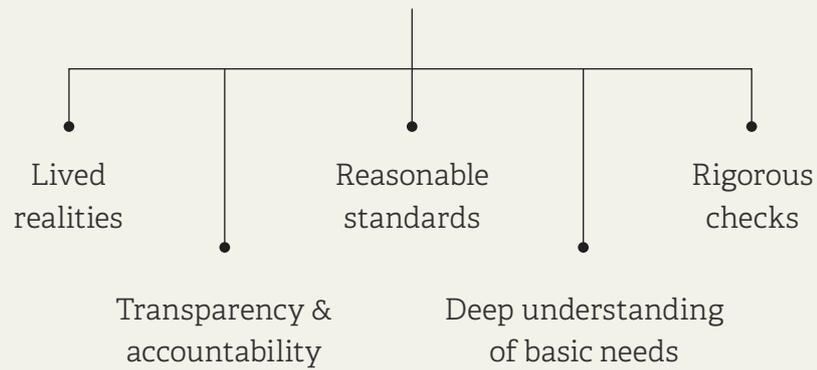
Methodology

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.

ADVANTAGES OF MIS APPROACH



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:

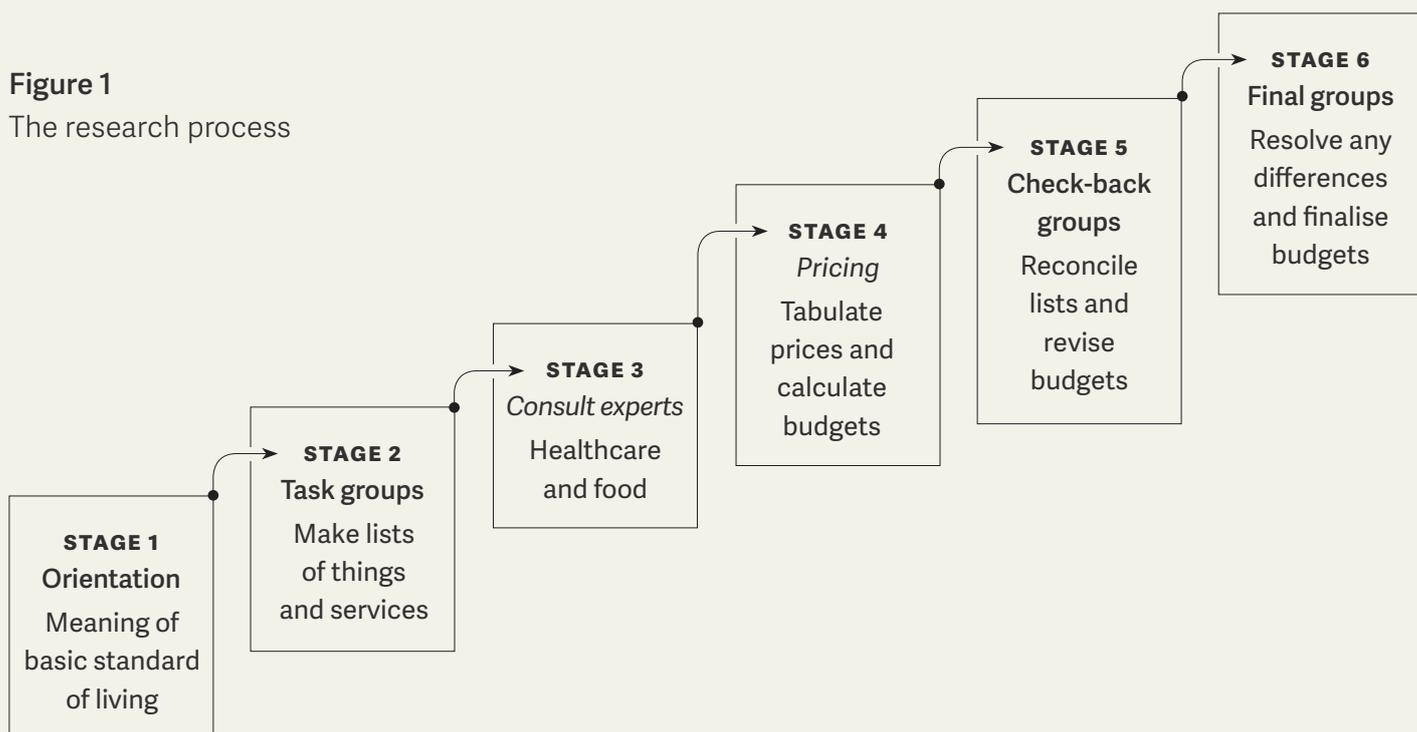
- **Lived realities:** Ordinary members of society are well-positioned to discuss and delineate the specifics of people’s everyday lived needs. Compared to surveys or lists/budgets constructed by researchers, focus group discussions allow for the generation of data that better reflect real habits and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



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.

Linguistic communities

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

Table 1 Participants’ profiles

	%	N
Sex		
Male	39	40
Female	61	63
Living arrangement		
Partnered	41	42
Single	59	61
Age		
Below 45	6	6
45-54	5	5
55-64	33	34
65 and above	56	58
Ethnicity		
Chinese	65	67
Malay	17	18
Indian	14	14
Others	4	4
Education level		
Secondary and below	50	51
Post-Secondary	50	52
Housing type		
Rental flat	22	23
Owned HDB flat	56	58
Private property	21	22

representation of all Singaporeans regardless of specific linguistic-ethno-cultural backgrounds.

Definition of basic standard of living

From transcripts of the OGs, we did a thematic discourse analysis, drew out strong commonalities across the groups, and devised a definition of a basic standard of living that captures the sentiments of all three groups:

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.

FIND OUT MORE ←
How we facilitated
the Task Groups
 pg 23 – 24

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.

Healthy eating

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.

FIND OUT MORE ←
How we priced food
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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.

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How are sampling decisions different for qualitative versus quantitative research?
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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.

METHODOLOGY

How we facilitated the Task Groups

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.

METHODOLOGY

How we priced food

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.

METHODOLOGY

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.

Confidentiality

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

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.

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Why we used two-room flats in the case studies
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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.

Impact of health costs

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.

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.

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

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,⁴ as well as Article 27 of the UN Convention of the Rights of the Child.⁵ 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.

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).

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.

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.

Furnishings

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.

Visitors 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.

Religious activity 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.

events and services to benefit their patrons or congregation. 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

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%.

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 2 Final household budgets, S\$

	Single, elderly	Coupled, elderly	Single, 55-64 years old
Food and non-alcoholic beverages	45.61	110.56	43.69
Restaurant food	11.51	23.01	11.51
Hawker food	34.95	56.20	51.40
Clothing	11.52	22.92	10.98
Footwear	1.92	3.84	3.34
Public transport	25.32	46.03	46.03
Housing purchase	35.08	41.93	35.08
Housing maintenance	1.89	2.08	3.29
Utilities	18.57	18.57	18.57
Household durables	17.01	17.82	23.19
Household services and supplies	4.57	5.54	7.25
Medical products	0.93	0.93	5.47
Healthcare	17.37	34.74	15.85
Communication	6.52	12.96	6.48
Recreation and entertainment	54.01	84.56	67.01
Newspapers, books, and stationery	0.07	0.07	0.07
Holiday expenses	9.86	19.72	9.86
Personal care	18.58	35.29	18.62
Personal effects	2.07	4.23	3.14
Insurance	0.01	0.01	15.35
Total weekly budget	317.37	541.00	396.18
Monthly budget	1379.04	2350.76	1721.50
Without housing purchase	1226.61	2168.57	1569.07
Without one-off health treatments	1328.47	2304.32	1679.62
Without housing purchase and one-off healthcare treatments	1176.03	2122.12	1527.19

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 How budgets vary by household size and age

	Ratio of coupled to single, elderly households	Change from 55-64 year-old to elderly, single-person households
Food and non-alcoholic beverages	2.4	4.4%
Restaurant food	2.0	0.0%
Hawker food	1.6	-32.0%
Clothing	2.0	4.8%
Footwear	2.0	-42.5%
Public transport	1.8	-45.0%
Housing purchase	1.2	0.0%
Housing maintenance	1.1	-42.5%
Utilities	1.0	0.0%
Household durables	1.0	-26.6%
Household services and supplies	1.2	-36.9%
Medical products	1.0	-82.9%
Healthcare	2.0	9.6%
Communication	2.0	0.6%
Recreation and entertainment	1.6	-19.4%
Newspapers, books, and stationery	1.0	0.0%
Holiday expenses	2.0	0.0%
Personal care	1.9	-0.2%
Personal effects	2.0	-34.0%
Insurance	1.0	-99.9%
Total	1.7	-19.9%

Differences across household types

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

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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.

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.

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.

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.

**Healthcare
services**

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).

GPs and dentists

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,⁶ 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).

6 Additional CPF Housing Grant (AHG) and Special CPF Housing Grant (SHG).

Table 4 Cost of purchasing public two-room Flexi flats

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

SOURCE: HDB (VARIOUS YEARS)

**Conservancy
and utilities**

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 5 Composition of actual household expenditures and household budgets, %

	Household expenditure					Household budgets		
	Income quintile group				Retired	Single, elderly	Coupled, elderly	Single, 55-64 years old
	1st	3rd	5th	All				
Food and non-alcoholic beverages	14	10	6	9	17	14	20	11
Food serving services	17	17	14	16	11	15	15	16
Clothing and footwear	2	3	3	3	2	4	5	4
Transport	11	17	20	17	8	8	9	12
Housing and utilities	12	8	10	9	16	18	12	14
Furnishings, equipment, maintenance	5	5	6	6	9	7	4	8
Health	7	6	5	6	13	6	7	5
Communication	6	5	3	5	3	2	2	2
Recreation and culture	6	8	10	8	8	20	19	19
Miscellaneous goods and services	10	12	14	12	11	7	7	9
Others	10	9	9	9	2	0	0	0
Total	100	100	100	100	100	100	100	100

SOURCE: DEPARTMENT OF STATISTICS SINGAPORE (2014) FOR EXPENDITURE FIGURES

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.

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COMPARING WORK INCOMES WITH HOUSEHOLD BUDGET

ALL FULL-TIME WORKERS AGED 60 AND ABOVE



MALE FULL-TIME WORKERS AGED 60 AND ABOVE



FEMALE FULL-TIME WORKERS AGED 60 AND ABOVE



- MEDIAN MONTHLY WORK INCOME
- BUDGET FOR SINGLE ELDERLY HOUSEHOLD (\$1,379/MONTH)

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

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

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)

Table 7 Income measures for older persons

	Monthly amount, S\$	Ratio to budget for single elderly household
<i>If working, Progressive Wage Model</i>		
Cleaning	1200-1400	0.9-1.0
Landscape	1300	0.9
Security	1175	0.9
Workfare Income Supplement	120	0.1
<i>If retired, with CPF income</i>		
CPF, Basic Retirement Sum	730-790	0.5-0.6
CPF, Full Retirement Sum	1350-1450	1.0-1.1
<i>If retired, low-income</i>		
ComCare LTA, single	600	0.4
Silver Support Scheme	100-250	0.1-0.2
GST Voucher - Cash	13-25	0.01-0.02

SOURCE: MINISTRY OF MANPOWER (2018B, 2018C, 2018D), CPF BOARD (2018), MINISTRY OF SOCIAL AND FAMILY DEVELOPMENT (2018), MINISTRY OF FINANCE (2018B)

CPF PAYOUTS IN 2018 (AVERAGE PER MONTH)

65 – 69 YEARS OLD
\$450

70 – 79 YEARS OLD
\$290

80 – 87 YEARS OLD
\$220

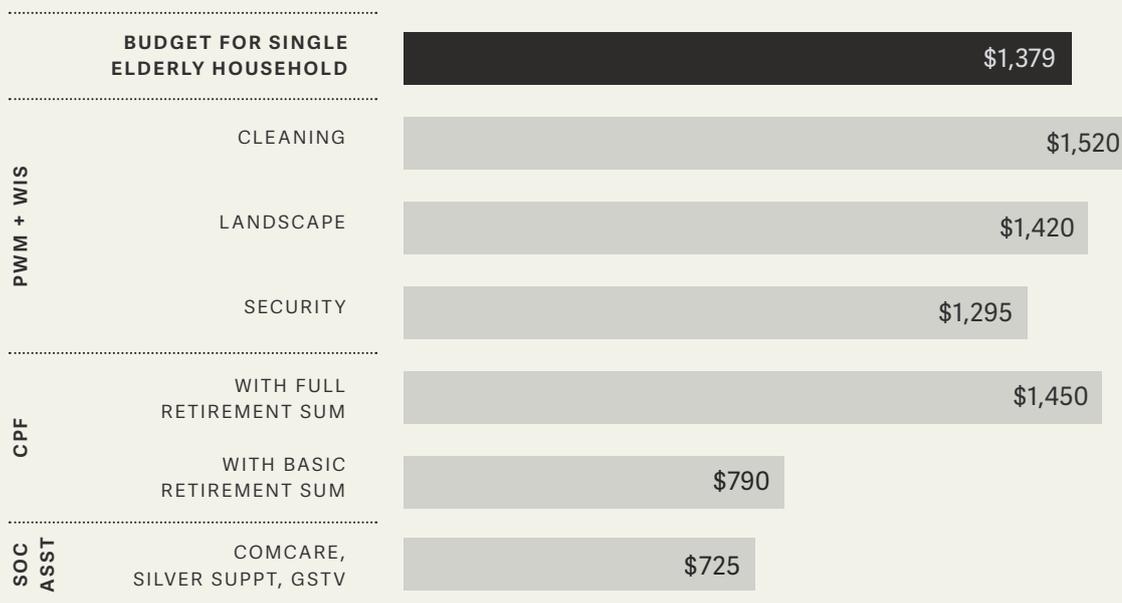
SOURCE: MINISTRY OF
MANPOWER (2019)

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.

Figure 2 Elderly household budget compared to work and retirement scenarios



SOURCE: BASED ON MINISTRY OF MANPOWER (2018B, 2018C, 2018D), CPF BOARD (2018), MINISTRY OF SOCIAL AND FAMILY DEVELOPMENT (2018), MINISTRY OF FINANCE (2018B)

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.

E

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>

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