**Supplemental File 2: Table S2:** Overview and content of HHCS vignettes used to elicit LTC preferences1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Study**  | **PHS** | **DIS** | **COG** | **SOC** | **ACT** | **NUM** | **Description2** |
| **Qualitative Studies** (n=3) |
| Pope and Riley (2013) | N | N | N | N | Y | 1 | “*Imagine you get to a point in the future where you are unable to care for yourself and need help like your [mother] does now. What would you want that experience to be like for you?”* (p.698) |
| Anderson and Turner (2010) | N | N | N | N | Y | 1 | *“If at some point in the future you were no longer able to care for yourself, who would you like to take care of you?* The interviewer then asked follow up questions to better understand the participant’s desire or openness to residential care placement”. (p.67) |
| Harrefors, Savenstedt and Axelsson (2009) | Y | N | Y | Y | Y | 3 | The scenarios were designed to provide a picture of situations where the participant was in need of care and where the situation was stepwise becoming more complicated. *“****First******step*** *was “little need of care, healthy partner at home” and was presented as a situation “where you are doing fine but cannot take care of personal hygiene”.* ***Second step****, “dependent of care, healthy partner at home” was presented as a situation “with several bodily dysfunctions and totally dependent of care from others”. The* ***last step*** *was “dependent of care, no partner at home” and was presented as a situation “with several bodily dysfunctions and totally dependent of care from others*”.” (p.354-55)  |
| **Quantitative Studies** (n=20) |
| Matsumoto *et al.* (2015) | Y | N | N | (Y) | Y | 2 | The study used two stages of hypothetical frailty to investigate preferences. **Unable to walk vignette**: *“If you cannot walk outside alone, which means you need a wheelchair or another’s assistance to go out, where would you prefer to live?”* Respondents indicating that they would not move were subsequently asked a second question in which the help/care need is increased. **Bedridden vignette**: *“If you are bedridden, which means you cannot sit up alone, where would you prefer to live?”* (p.2)  |
| Werner and Segel-Karpas (2014) | Y | Y | (Y) | N | Y | 2 | The study examined the respondent’s willingness to move to a nursing home or to be cared for at home in relation to two hypothetical situations: *“****becoming permanently physically disabled*** *and* ***being diagnosed with Alzheimer’s disease******(AD)****.”* (p.449) |
| Callan and O'Shea (2015)3 |  |  |  |  |  |  | The study evaluated preferences for five LTC programs, a “*family care program*” (cash payments), a “*home care packages program”* (additional home care services), and three “telecare programs”. All programs aim to allow care dependent persons to remain at home. Respondents were first given a description of the present situation (at present) in Ireland with regard to each of the five programs, after which the new program is proposed. The extracted information is limited to the situation “at present”. As only the telecare programs contain descriptions of health problems and (care) needs, only these three programs were considered HHCS. **Home based technology program (HBTP) 1 (falls):** *“At present: Approximately 1 in 3 older people living in the community fall each year, some significantly which may lead to admission to long-stay care in either a public or private facility”.* **HBTP 2 (cognitive):** *“At present: Approximately 1 in 6 older people have some level of cognitive/mental impairment, including Alzheimer’s disease, which may lead to admission to long-stay care in either a public or private facility.”* **HBTP 3 (social contact):** *“At present: Approximately 1 in 10 older people have minimal social contacts and a limited social network, which may lead to admission to long-stay care in either a public or private facility.”* (Supplementary file A)  |
| Guo *et al.* (2015) | Y | Y | Y | N | ? | 6 | In the elicitation of utilities for LTC options, participants were presented with six different hypothetical health scenarios reflecting varying (increasing) levels of functional and cognitive impairment. **Condition 1 (help with 1 ADL)**: *“Needs help with bathing more than one part of the body, or getting in or out of the tub or shower.”* **Condition 2 (help with 2ADLs)**: Condition 1 plus “*needs help with dressing self, or needs to be completely dressed”.* **Condition 3 (help with 3-4 ADLs)**:Condition 2 plus “*needs help with transferring to the toilet or cleaning self, or uses bedpan or commode”* or “*needs help in moving from bed to chair, or requires complete transfer”.* **Condition 4 (help with 5 ADLs)**: Condition 3 plus *“is partially or totally incontinent of bowel or bladder”*. **Condition 5 (help with 5 ADLs)**: Condition 4 plus “*mild to moderate dementia”*. **Condition 6 (help with 6 ADLs)**: Condition 4 plus “*needs partial or total help with feeding, or requires tube feeding”* plus “*moderate to severe dementia”.* To ensure comparability between setting (i.e. homecare and NH care), respondents were asked to assume: *“1) both types of care would be of average quality, 2) they would entail similar out-of-pocket expenses, 3) sufficient care from family and friends would not be available*.” (p.108)  |
| Sawamura, Sano and Nakanishi (2015) | Y | Y | Y | Y | Y | 2 | Participants were presented with a dementia or a fracture vignette. **Fracture vignette**: “*You are 80 years old. You do not need support for eating, personal grooming, using the toilet, dressing, and walking. You bladder control is becoming weaker and you have experienced incontinence lately. You have had difficulty walking since sustaining a fracture and now use a wheelchair. You need support for bathing and outings. Your family is not able to provide sufficient support because of their own health concerns or work commitments.”* **Dementia vignette**: “*You are 80 years old. You do not need support for eating, personal grooming, using the toilet, dressing, and walking. Your bladder control is becoming weaker and you have experienced incontinence lately. You have some symptoms of dementia and it is becoming increasingly difficult to manage medication and home safety. You need support for bathing and outings. Your family is not able to provide sufficient support because of their own health concerns or work commitments*.” (p.350.e12) |
| Robinson *et al.* (2014) | Y | Y | N | Y | Y | 1 | Participants were asked to imagine that they were in the following situation: **Hip fracture and multi-morbid:** “*You are 85-years old. You have heart disease, and your doctors warn that you are at risk for heart attacks and for sudden death. Nevertheless, you have been fully independent and living alone at home until you trip and fracture your hip. Despite surgery and physiotherapy, you do not regain full independence. You now walk with a frame, and have difficulty dressing, going to the toilet and preparing meals. The time comes to leave the hospital. You, your doctor and your only daughter, who lives abroad, discuss the options. The cards represent what might happen. The doctor discusses your future risk of falls: he notes that the risk of falling will be the same at home and in a nursing home; however, in a nursing home, such a fall be detected immediately; at home alone, you will need to use a panic button to call for help if you cannot get up by yourself. The doctor gives his best estimate of your life expectancy, based primarily on your age, your heart condition and the risk of a serious fall. Your daughter tells you what she thinks you should decide. It is, however, your decision in the end. Finally, you can decide either to go back home with support (home help, meals on wheels, panic alarm) or to go to live in a nursing home.”* (p.1166-67) |
| Nieboer, Koolman and Stolk (2010) | Y | Y | Y | Y | N | 4 | The authors distinguished four hypothetical patient profiles: older physically frail and patients with dementia, both groups living either alone or with their partner. **Physically frail (living alone):** *“Try to picture that you are acquainted with an elderly person suffering from various physical problems. Outside of the house he or she cannot walk independently (not even with appliances), and already has experienced several falls. Medications are taken for a number of health complaints. Getting dressed independently is still possible but takes a lot of time and energy. This person lives alone and has contact with only a few people. Although undertaking things alone is out of the question, the elderly person likes to keep active and mean something to others. To help him or her achieve this goal, professional help is being sought.”* The patient profile **Physically frail (married)** differs from the above only in the sentence referring to the living circumstances (5th sentence): *“This person is married, but other than that has contact with only a few people.”* **Dementia (living alone)**: *“Try to picture that you are acquainted with someone who suffers from dementia. This person lives alone and tends to forget things that just happened. For example, a phone call or somebody dropped by in the morning. Daily activities such as making coffee and doing the dishes are still manageable. But gradually he or she becomes more dependent on others for the daily activities. As far as possible neighbors and friends take care, but this is a heavy task also because it requires constant supervision. The dementia patient is depressed and often reacts snappy and angry. To help this person professional help is being sought.”* The patient profile **Dementia (married)** differs from the Dementia (living alone) only in the sentence referring to the living circumstances (2nd sentence): *“This person is married and tends to forget things that just happened.”* (p.1321) |
| Min and Barrio (2009) | Y | Y | N | N | Y | 1 | Study used a hypothetical scenario to elicit preferences for a caregiver: *“This scenario depicted a hip fracture injury situation with a potential ADL limitation from the time of hospital discharge to a 6-month recovery period.”* (p.230) |
| Spencer, Patrick and Steele (2009) | (Y) | N | N | N | (Y) | 1 | *“ … participants were asked to indicate LTC preferences, if they should someday require assistance to remain independently.”* (p.94) |
| Brau and Lippi Bruni (2008) | Y | N | N | (Y) | ? | 1 | *“ … a condition in which people need help for several hours per day in their activities of daily living and for which both home and residential care can be considered appropriate from a clinical point of view, although they are different with respect to the monetary cost and the burden of care-giving left to the family”* (p.415) |
| Wolff, Kasper and Shore (2008) | Y | Y | (Y) | N | N | 3 | LTC preferences were assessed based on three scenarios. **IADLs**: “*If a person needs help with preparing meals every day, shopping, and housework, is that person better off …”*.**ADLs**: *“If a person needs help with bathing and dressing, in addition to preparing meals, shopping, and housework, is that person better off …”*. **Dementia**: *“If a person has Alzheimer’s disease or dementia which will get worse as time goes by, is that person better off …”.* (p.185) |
| Min (2005) | Y | Y | N | N | ? | 2 | Preferred LTC arrangements were assessed by respondents’ choices in response to two disability scenarios of **hip fracture** and **stroke**. *“Two disability scenarios contained* *two levels of functional limitation at the time of hospital discharge after receiving medical treatment on hip fracture and stroke. Respondents were presented with a situation that describes the needs for assistance when performing various ADL for durations of a minimum of 6 months for hip fracture and 3 years or more for stroke.”* (p.378)  |
| Bradley *et al.* (2004) | Y | ? | Y | N | Y | 1 | The dependent variable, intend to use of informal LTC, was measured in relation a hypothetical scenario, which implies physiological and cognitive impairments: “*Imagine you were unable to take a bath or use the toilet by yourself, and you had problems recalling events and recognizing familiar surroundings and people. How likely would you be to get help from your family members, relatives, friends, or neighbors for assistance with your daily activities*?” (p.41)  |
| Mahoney *et al.* (2004)3 | Y | Y | N | (Y) | Y | 1 | The study uses a hypothetical vignette to explain the consumer-directed cash option for personal care and other services, for which were asked to indicate their preferences (interest): “*Mrs. Green needs personal care because of arthritis and heart trouble. She can do some things for herself, but she needs some help bathing, dressing, and preparing meals. In the Cash and Counselling option, she could choose the services and the workers. For example, if she wishes to, Mrs. Green can use her money to pay her niece to help her bathe and dress in the morning and prepare some meals. She could pay the high school girl who lives downstairs to prepare her dinner and help get ready for bed in the evening. Mrs. Green may also use the money to buy some special equipment like grab bars that will make her more independent. She, not an agency, get to make these decisions about her needs and care.”* (p.644) |
| Chapleski, Sobeck and Fisher (2003) | N | N | ? | N | Y | 1 | “*If you could no longer take care of yourself without help, which housing option would you prefer?* (p.98) |
| Pinquart, Sorensen and Davey (2003) 4 | ? | ? | ? | ? | ? | 2 | The authors differentiate between **short-term care needs** and **long-term care needs** (which can be derived from the results). The elicitation was based on 11 scales of the “Preparation for Future Care Needs” (PFCN) measure. Short term care lasts for days to weeks, while long-term care lasts for months to years. (p.60)  |
| Pinquart and Sorensen (2002) 4 | ? | ? | ? | ? | ? | 2 | Preferences for **short-term** and **long-term personal care** were assessed separately using a subscale of the PFCN measure. Short-term care lasts for days to weeks, while long-term care lasts for months to years. (p.299)  |
| Mahoney *et al.* (2002) 3 | ? | ? | ? | ? | (Y) | 1 | The authors indicate that cash option was explained using a vignette, which described “*a woman who needed personal care services.”* (p.76) See, Mahoney et al. 2004.  |
| McCormick *et al.* (2002) | Y | Y | (Y) | N | (Y) | 2 | Participants were asked to consider *“hypothetical situations in which they became permanently disabled by* **dementia** *or temporarily disabled by* **hip fracture”.** (p.1150) |
| Kasper, Shore and Penninx (2000) | Y | Y | (Y) | N | N | 3 | LTC preferences were assessed based on three scenarios. **First** “*person who needs help with preparing meals every day, and with shopping, housework and transportation, but can take care of basic needs like dressing”*.**Second**: *“person who needs help with bathing, dressing, and moving around in their residence on a daily basis, in addition to preparing meals and other chores”*. **Third**: *“person needs help with personal and household activities and also has Alzheimer’s disease or dementia which will get worse as time goes by”.* (p.143) |
| McEachreon *et al.* (2000) | Y | (Y) | Y | N | ? | 2 | The study measured preferences for three LTC options in relation to 2 hypothetical diseases and 17 common symptoms in older persons (the latter are not considered in this review). “T*he diseases were* ***Parkinson’s*** *and* ***arthritis****. In an attempt to capture the temporal flow of anticipated help-seeking behaviors, each participant was asked similar questions in response to a vignette that represented four temporal stages involved in the progression of arthritis. Participants did not know that arthritis was the disease being described since only symptoms were described.”* (p.461)  |
| **Mixed Method Studies** (n = 5)  |
| Guo, Konetzka and Dale (2014) | Y | Y | N | N | ? | 3 | In the elicitation of utilities for LTC options, participants were presented with three different health scenarios of functional impairment, leading to disability and LTC need. **Mild (help with 1-2ADLs)**: “*Need help with bathing more than one part of the body, getting in or out of the tub or shower”* and/or “*need help with dressing self or needs to be completely dressed.”* **Moderate (help with 3-4ADLs)**: Mild impairment plus *“need help transferring to the toilet, cleaning self or uses bedpan or commode”* and/or *“Need help in moving from bed to chair or requires a complete transfer”.* **Severe (help with 5-6ADLs)**: Moderate impairment plus *“is partially or totally incontinent of bowel or bladder”* and/or *“needs partial or total help with feeding or requires tube feeding.”* To ensure comparability between settings (i.e. homecare and NH care), respondents were asked to assume: *“1) both types of care would be of average quality, 2) they would entail similar out-of-pocket expenses, 3) sufficient care from family and friends would not be available*.” (p.108) (p.304)  |
| Denson, Winefield and Beilby (2013) | Y | N | Y | Y | N | 1 | “*… vignette which described a hypothetical frail and isolated older woman, “Mrs. Smith”, with declining cognition, limited mobility and several medical problems common in older people. Living alone at home, she refused both residential and home-based LTC at the end of a hospital admission*.” (p.5) |
| Halperin (2013) | (Y) | N | (Y) | N | Y | 1 | *“Supposing you should come to need help on a regular basis, which arrangements would you prefer?”* (p.107) |
| Shin (2008) | (Y) | N | (Y) | N | Y | 1 | *“… participants’ residential and caregiver preferences should their health confine them to bed*.” (p.50) |
| Tse (2007) | ? | ? | ? | Y | Y | 1 | *“Participants were asked whether they would consider nursing home admission, if they were aged and unable to care for themselves, or to be cared for by their relatives.”* (p.913)  |

Note: 1This table summarizes the HHCS vignettes employed in the studies included in this review (note that not all included studies used HHCS to elicit preferences, compare Table 1). Further information on each study/reference can be found the manuscript. The five columns to the right of “Study” indicate whether the HHCS explicitly (“Y”) or implicitly (“(Y)”) comprised COGnitive or PHYsiological impairments, explicitly referred to DISease(s), whether the HHCS was ACTive (i.e. respondents were asked to imagine themselves in the situation described in the HHCS) or passive (i.e. respondents were asked to make a decision for another person described in the HHCS), if SOCial circumstances were explicitly (“Y) or implicitly (“(Y)”) referred to in the HHCS and the NUMber of different HHCS used in a study (often variations of one or two basic scenarios). These evaluations are based on the subjective judgements of authors of this article. Several studies provided insufficient information to make a judgement (“?”).2 Text parts in quotation marks and italics are direct citations from the respective studies, with the page number(s) provided. Bold text parts refer to the different HHCS used to elicit preferences (applies when column “VARiations” is >1). 3 Callan and O'Shea (2015) describe programs which were designed for common health and social needs common in older persons, rather than asking participants to state their preferences (for a LTC program) in relation to an HHCS. Mahoney (2002, 2004) similarly describe a program (cash option in home and community-based care), which, includes an actual HHCS of a hypothetical older person with care needs that can be satisfied via home-based care services. 4 These studies explicitly varied the time period for which care was needed, by differentiating between short-term (for days or weeks) and long-term care (for month or years). ACT = active (vs. passive), (I)ADL = (instrumental) activities of daily living, COG = cognitive impairment, DIS = disease, HHCS = hypothetical health/care scenarios (vignettes), NUM = number (of different HHCS), PHY = physiological (functional) impairments, SOC = social circumstances.