

Wellbeing indicators across the life cycle

Appendix 4

Older adult indicators

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Domain: Economic

1. Underemployment

Measurement Options

- Percentage of older people working fewer hours than desired

NSW Domain

Economic

Domains in other frameworks

- N/A

Indicator type

Objective

Time frame

Usually assessed weekly or fortnightly, sometimes annual

Unit of analysis

Individual level

Reliability *(statistical evidence as predictor of wellbeing, validated against other indicators, etc.)*

Medium

Underemployment is relevant for older people or mature age workers (Li et al. 2015)

A few authors (Koeber and Wright 2001; Chan and Steven 2004) suggested that underemployment is likely to be related to age.

Previous research has indicated that mature older workers may be vulnerable to underemployment. Gong and McNamara (2011) focused on the 'baby boomer' population and found that just under 25 per cent of the population aged 45-64 years are part-time workers, who would prefer to work more hours and are likely to experience longer periods of underemployment than younger workers (Spoehr et al. 2009).

Slack and Jensen (2008, 2011) conjectured that the relationship between age and underemployment is an inverted-U shape, with the probability of being underemployed higher at young age ranges, lowest during the prime working age years, but increasing again during the old age, close to the retirement. Wilkins (2006) tests this hypothesis for Australia and finds that across five-year age groups from 15-24 to 55-64, the propensity to be underemployed is lower among 'prime-age' workers than the base category of 15-24 year olds, but higher for the older age of 55-64 for both genders although the impact is not significant.

Friedland and Price (2003) indicated that underemployed workers do report lower levels of health and well-being than adequately employed workers. However, the relationship varies by both type of underemployment and other indicators of health and well-being. Further, Wooden et al. (2009) found that overemployment has a much larger negative impact on life satisfaction than underemployment, but the size of these effects is still quite small in absolute terms.

Sensitivity *(degree to which measures can distinguish between different states of well-being)*

Not enough information in the literature to assess the sensitivity of the indicator

Relevance *(relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 - FACS})*

- Relevant from particularly the end border of the school age onwards
- Relevant across population of interest except for those not in the labour force.

Assessment of Useability: Medium

This assessment was based on three criteria:

1. Frequency used in key frameworks: Low
 2. Reliability: Medium
 3. Availability in NSW data: High
 - ABS Census Population and Housing, 5 yearly data
 - ABS Labour Force Survey, monthly
-

Domain: Social and community

2. Caring duties

Measurement options:

- Percentage of older people who provided care to children who were not their grandchildren
- Percentage of older people who provided care to children who were their grandchildren
- Percentage of older people who provided care to their children and/or grandchildren (daily and several days a week).
- Percentage of older people providing care to others

NSW Domain

Social and Community

Domains in other frameworks

- Participation (NATSEM, Index of Wellbeing for Older Australians (IWOA))
- Social and Economic (AIHW)

Indicator type

Objective

Time frame

Point in time or assessed over a short period (e.g., number of times a week)

Unit of analysis

Individual level

Reliability *(statistical evidence as predictor of wellbeing, validated against other indicators, etc.)*

Medium

We are not able to find any academic papers investigating older people providing care to children who were not their grandchildren. Nevertheless, in terms of the data, the ABS in 2011 calculated that 12% of older persons cared for children who were not their own and a higher proportion of women provided child care than men (13% compared with 10%). This has been used as an indicator in the Index of Wellbeing for Older Australians (IWOA) developed by NATSEM.

Sands et al. (2005) found that a low perception of stress related to caring for grandchildren and resources (e.g. the availability of social workers) were responsible for a higher level of well-being for older people.

Thiele and Whelan (2008) found that increasing levels of generativity predicted greater satisfaction, as did valued elder and centrality meanings.

Hughes et al. (2007) argued that there was no evidence to suggest that caring for grandchildren has a dramatic and widespread negative effect on grandparents' health and health behaviour.

According to the findings of a study by Hagedoorn et al. (2001), caring seems to affect men and women differently. For women, their distress was affected not only by their own health, but also by that of their spouse, while men's distress was associated only with their own health status (Holmen et al. 2000).

Ekwall et al. (2004) found that loneliness was the most important factor predicting low quality of life among caregivers of older people. McConaghy et al. (2005) found that the perceived burden of the carer accounted for 41.7% of the variance in satisfaction with life as a subjective measure of well-being. There were no significant difference between male and female carers. Satisfaction with life was not found to decrease with length of time caring for the dementia sufferers.

Zarit et al. (1980) found that caring for a person with dementia in the community had many advantages, but it also often placed a major burden on the carer. Brodaty et al. (1994) similarly found that the burden of dementia is significant for the informal carer and often results in adverse psychological and

physical consequences. Further to this, George and Gwyther (1986) postulated that caregiver burden was synonymous with decreases in well-being and perceived well-being in carers was predicted by feelings of burden. This finding is consistent with those of Milne et al. (1993) and Bell et al. (2001) of statistically significant associations between well-being and caregiver burden.

Sensitivity (*degree to which measures are able to distinguish between different states of well-being*)

Medium correlation with overall wellbeing

Relevance (*relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 – FACS}*)

- Relevant for retirement group.
 - Relevant across population of interest.
-

Assessment of useability: High

This assessment was based on three criteria:

1. Frequency used in key frameworks: High
 2. Reliability: Medium
 3. Availability in NSW data: High
 - ABS Census Population and Housing, 5 yearly data
 - HILDA data, Waves 1-14
 - DSS Survey of Disability, Ageing and Carers, 3 yearly data
-

3. Access to transportation

Measurement options

- Percentage of older people who had no access to car
 - Percentage of older people who access public transport (bus, ferry, rail or taxi)
-

NSW Domain

Safety and/or Social and Community

Domains in other frameworks

- Participation (NATSEM, IWOA)
 - Social participation and community engagement – access and mobility (Brotherhood of St Laurence, Brotherhood's Social Barometer)
-

Indicator type

Objective

Time frame

Point in time

Unit of analysis

Individual level

Reliability *(statistical evidence as predictor of wellbeing, validated against other indicators, etc.)*

Medium

This has been used as an indicator in the Index of Wellbeing for Older Australians (IWOA)

Fobker and Grotz (2006) have indicated that the availability of motorised means of transport (car, public transit) is a precondition for independent life among elderly people in an urban environment.

Comparing the drivers and non-drivers among older people, Liddle et al. (2011) found that in comparison to current drivers, retired drivers had significantly lower life satisfaction. Further, retired drivers may have a reduced life satisfaction as studies have indicated that the amount of choice, control and personal value placed on activities are strongly associated with life satisfaction and wellbeing (Hilleras et al., 1999).

Musselwhite and Haddad (2010) argued that among retired drivers not driving, their self-reported quality of life is lower than retired drivers and this appears to be related to a reduction in affective and aesthetic qualities of mobility that a car affords that walking and using public transport lack.

Sensitivity *(degree to which measures are able to distinguish between different states of well-being)*

Medium correlation with overall wellbeing

Relevance *(relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 - FACS})*

- Relevant across the life cycle
 - Relevant across specific population of interest
-

Assessment of useability: High

This assessment was based on three criteria:

1. Frequency used in key frameworks: High
 2. Reliability: Medium
 3. Availability in NSW data: High
 - ABS Census Population and Housing, 5 yearly data
 - ABS, Household Expenditure Survey (HES), 2003-04, 2009-10
-

Domain: Education and skills

4. Connectivity (access to the internet)

Measurement options

- Percentage of older people who have no Internet in the household
-

NSW Domain

Education and Skills

Domains in other frameworks

- Participation (NATSEM, IWOA)
 - Social participation and community engagement – access to information technology (Brotherhood of St Laurence, Brotherhood's Social Barometer)
-

Indicator type

Objective

Time frame

Point in time

Unit of analysis

Individual

Reliability *(statistical evidence as predictor of wellbeing, validated against other indicators, etc.)*

Medium

Shapira et al. (2006) have found that computer and internet use seem to contribute to well-being and sense of empowerment for older adults by affecting their interpersonal interactions, promoting their cognitive functioning and contributing to their experience of control and independence.

Sum et al. (2009) also found that there was a positive association between a sense of belonging to an online community, sense of community, and well-being. Older people access the internet for communication and information, and the frequency and history of their Internet use were consistently related to a greater sense of community.

There is some evidence that a higher level of social connectivity predicts higher computer use for emailing with a significant correlation coefficient of 0.233 and the use of news service with a significant correlation coefficient of 0.172 (Cody et al., 1999) and the continuation of computer use (Straka and Clark, 2000).

Dickinson and Gregor (2006) argue that computers are unlikely to, themselves, act as tools to reduce social isolation in vulnerable older adults but rather will act as an additional way for those with existing social networks to stay in touch with them.

Sensitivity *(degree to which measures are able to distinguish between different states of well-being)*

Medium correlation with overall wellbeing

Relevance *(relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 - FACS})*

- Relevant across life cycle
 - Relevant across the population of interest
-

Assessment of useability: High

This assessment was based on three criteria:

1. Frequency used in key frameworks: High
 2. Reliability: Medium
 3. Availability in NSW data: High
 - Special data request from ABS Census Population and Housing, 5 yearly data
-

5. Language skills

Measurement options

- Percentage of older people who cannot speak English well or not at all
-

NSW Domain

Social & Community

Domains in other frameworks

- Participation (NATSEM, IWOA)
-

Indicator type

Objective

Time frame

Point in time

Unit of analysis

Individual

Reliability (*statistical evidence as predictor of wellbeing, validated against other indicators, etc.*)

We could not find strong academic literature on the relationship between language skills and wellbeing specifically for older people possibly because the relationship between language skills and wellbeing is through participation in the labour market.

Sensitivity (*degree to which measures are able to distinguish between different states of well-being*)

Not enough information in the literature to assess the sensitivity of the indicator

Relevance (*relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 – FACS}*)

- Relevant from school age
 - Relevant across specific population of interest, particularly for CALD
-

Assessment of useability: Low

This assessment was based on three criteria:

1. Frequency used in key frameworks: Low
 2. Reliability: Low
 3. Availability in NSW data: High
 - ABS, Census Population and Housing, five yearly data
-

Domain: Home

6. Home tenure

Measurement options

- Percentage of older people who are still paying mortgages
- Percentage of older people who are private renters
- Percentage of older people living in public housing

NSW Domain

Home

Domains in other frameworks

- Wealth and Housing (NATSEM, IWOA)
- Housing (Brotherhood of St Laurence, Brotherhood's Social Barometer)
- Social and Economic (AIHW, Older Adults at Glance)

Indicator type

Objective

Time frame

Point in time

Unit of analysis

Individual

Reliability *(statistical evidence as predictor of wellbeing, validated against other indicators, etc.)*

Medium

Gong et al. (2012; 2015) used this variable as an indicator of deep economic disadvantage among older people.

Faulkner et al. (2002) argued that the impact of housing on wellbeing is mostly psychological, affecting areas such as companionship, happiness, depression, morale and ability to cope with life.

Faulkner et al. (2002) argued that wellbeing varies according to the type of housing tenure – public or private renting, or home ownership. This is influenced by the economic and social circumstances of the people living in each tenure, but also by specific features of the home and its wider neighbourhood. Homeowners and people renting privately who can afford to make choices tended to fare better than older people in public rental housing.

Sensitivity *(degree to which measures are able to distinguish between different states of well-being)*

Medium correlated with wellbeing

Relevance *(relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 – FACS})*

- Relevant across the life cycle
 - Relevant across specific population of interest
-

Assessment of useability: High

This assessment was based on three criteria:

1. Frequency used in key frameworks: High
 2. Reliability: Medium
 3. Availability in NSW data: High
 - ABS Census Population and Housing, 5 yearly data
 - HILDA data, waves, 1-15
 - ABS Survey of Income and Housing (SIH), CURF, 2002-2003, 2005-2006, 2007-2008, 2011-2012, 2013-2014, for small estimates for every 5 years when Census data is out
-

7. Rent assistance

Measurement Options

- Percentage of older people receiving rent assistance
-

NSW Domain

Home

Domains in other frameworks

- Wealth and Housing (NATSEM, IWOA)
 - Housing – Housing stress (Brotherhood of St Laurence, Brotherhood's Social Barometer)
 - Social and economic (AIHW, Older Adults at Glance)
-

Indicator type

Objective

Time frame

Point in time

Unit of analysis

Individual level

Reliability (statistical evidence as predictor of wellbeing, validated against other indicators, etc.)

Medium

Faulkner et al. (2002) found that people with few assets, and specifically those who are not homeowners by the time they turn 70 are more likely have lower levels of wellbeing than their richer, home-owning peers. Rent assistance for those with few assets provides a stable basis of support which can reduce other stresses and delay entry into residential care facilities.

Sensitivity (degree to which measures are able to distinguish between different states of well-being)

Not enough information in the literature to assess the sensitivity of the indicator

Relevance (relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 – FACS})

- Relevant from employment age onwards
 - Relevant for specific population of interest except children
-

Assessment of useability: High

This assessment was based on three criteria:

1. Frequency used in key frameworks: High
 2. Reliability: Medium
 3. Availability in NSW data: High
 - ABS Survey of Income and Housing (SIH), CURF, 2002-2003, 2005-2006, 2007-2008, 2011-2012, 2013-2014
-

Domain: Health

8. Assistance needs

Measurement Options

- Percentage of older people who need assistance with core activities
- Percentage of older people who need assistance for 1 to 4 activities of daily living
- Percentage of older people who need assistance for 5 or more activities
- Percentage of older people who have an unmet need for assistance for 1 to 4 activities
- Percentage of older people who have an unmet need for assistance for 5 or more activities

NSW Domain

Health

Domains in other frameworks

- Functional ability (NATSEM, IWOA)
- Physical Health or Mental Health (Brotherhood of St Laurence, Brotherhood's Social Barometer)
- Use of health and aged care services (AIHW, Older Adults at Glance)

Indicator type

Objective

Time frame

Point in time

Unit of analysis

Individual

Reliability *(statistical evidence as predictor of wellbeing, validated against other indicators, etc.)*

Medium

The gap in life satisfaction between those with the highest and lowest degrees of need of care dependency is 1.2 scale points on an 11-point scale (Weick, 2015).

Skinner et al. (1999) found that the presence of need was associated with lower quality of life ratings, and met needs improved those ratings relative to unmet need among those who have severe and persistent mental disorders.

In general life satisfaction decreases as need for personal assistance and care increases (Weick, 2015).

Sensitivity *(degree to which measures are able to distinguish between different states of well-being)*

Medium correlation with wellbeing.

Relevance *(relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 - FACS})*

- Relevant particularly for retirees
- Relevant across specific population of interest

Assessment of useability: High

This assessment was based on three criteria:

1. Frequency used in key frameworks: High
2. Reliability: Medium
3. Availability in NSW data: High
 - ABS Census Population and Housing, 5 yearly data
 - DSS Survey of Disability, Ageing and Carers, 3 yearly data

9. Using aged care services

Measurement Options

- Percentage of older people who use aged care services
-

NSW Domain

Health

Domains in other frameworks

- Functional ability (NATSEM, IWOA)
 - Use of health and aged care services (AIHW, Older Adults at Glance)
-

Indicator type

Objective

Time frame

Point in time

Unit of analysis

Individual

Reliability *(statistical evidence as predictor of wellbeing, validated against other indicators, etc.)*

Medium

Noelker, L and Harel, Z (1978) found that aged care residents' subjective perceptions of the facility and their preference about living elsewhere affected their well-being.

Kane et al. (2004) indicate that elderly residents' quality of life can be influenced by nursing home facilities – comfort, privacy, meaningful activity, food enjoyment, relationships, security, spiritual well-being and autonomy. Donald et al. (2013) also propose that high quality nursing staff will improve residents' quality of life.

Sensitivity *(degree to which measures are able to distinguish between different states of well-being)*

Not enough information in the literature to assess the sensitivity of the indicator

Relevance *(relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 – FACS})*

- Relevant particularly for retirees
 - Relevant across specific population of interest
-

Assessment of useability: High

This assessment was based on three criteria:

1. Frequency used in key frameworks: High
 2. Reliability: Medium
 3. Availability in NSW data: High
 - Census of Population and Housing 2011, five yearly data
-

10. Home and community care

Measurement Options

- Percentage of older people who are home care package clients
-

NSW Domain

Health

Domains in other frameworks

- Functional ability (NATSEM, IWOA)
 - Physical Health (Brotherhood of St Laurence, Brotherhood's Social Barometer)
 - Use of health and aged care services (AIHW, Older Adults at Glance)
-

Indicator type

Objective

Time frame

Point in time

Unit of analysis

Individual

Reliability *(statistical evidence as predictor of wellbeing, validated against other indicators, etc.)*

Medium

Kadowaki et al. (2015) found that older adults who had their home care needs met reported higher levels of life satisfaction, and lower levels of loneliness and perceived life stress, than those with unmet needs, net of co-variables. The results suggest that filling this home care gap would significantly raise quality of life by increasing social and environmental resilience to age in place.

Noelker, L and Harel, Z (1978) found that aged care residents' subjective perceptions of the facility and their preference about living elsewhere affect

Street et al. (2006) found in the case of assisted living program (AL) that a higher resident well-being was associated with facility size, facility acceptance of payment from low income program, and residents' perceptions of adequate privacy

Sensitivity *(degree to which measures are able to distinguish between different states of well-being)*

Not enough information in the literature to assess the sensitivity of the indicator

Relevance *(relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 - FACS})*

- Relevant particularly for retirees
-

Assessment of useability: High

This assessment was based on three criteria:

1. Frequency used in key frameworks: High
 2. Reliability: Medium
 3. Availability in NSW data: High
 - DSS Home and Community Care clients
-

11. Community care hours

Measurement Options

Hours of assistance for home and community Care per older person

NSW Domain

Health

Domains in other frameworks

- Functional ability (NATSEM, IWOA)
 - Physical Health (Brotherhood of St Laurence, Brotherhood's Social Barometer)
 - Use of health and aged care services (AIHW, Older Adults at Glance)
-

Indicator type

Objective

Time frame

Usually assessed over a short period, eg, week or fortnight

Unit of analysis

Hours

Reliability *(statistical evidence as predictor of wellbeing, validated against other indicators, etc.)*

Low

The evidence shows mostly on the relationship between quality of care rather than quantity (number of hours of care) as indicated below.

Kane et al. (2004) indicate that elderly residents' quality of life can be influenced by nursing home facilities – comfort, privacy, meaningful activity, food enjoyment, relationships, security, spiritual well-being and autonomy. Donald et al. (2013) also propose that high quality nursing staff will improve residents' quality of life.

Kadowaki et al. (2015) found that older adults who had their home care needs met reported higher levels of life satisfaction, and lower levels of loneliness and perceived life stress, than those with unmet needs, net of co-variates. The results suggest that filling this home care gap would significantly raise quality of life by increasing social and environmental resilience to age in place.

Sensitivity *(degree to which measures are able to distinguish between different states of well-being)*

Not enough information in the literature to assess the sensitivity of the indicator

Relevance *(relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 – FACS})*

- Relevant particularly for retirees
 - Relevant across specific population of interest
-

Assessment of useability: High

This assessment is based on three criteria:

1. Frequency used in key frameworks: High
 2. Reliability: Low
 3. Availability in NSW data: High
 - DSS Home and Community Care clients
-

12. Community packaged care

Measurement options

- Percentage of older people with high level of care
 - Percentage of older people with medium level of care
 - Percentage of older people with low level of care
-

NSW Domain

Health

Domains in other frameworks

- Functional ability
 - Physical Health
 - Use of health and aged care services
-

Indicator type

Objective

Time frame

Point in time

Unit of analysis

Individual

Reliability (*statistical evidence as predictor of wellbeing, validated against other indicators, etc.*)

Medium

Lee et al. (2009) argued that quality of life is determined by the older people's independence, individuality and autonomy. So, this implicitly this means the higher the level of care provided, the lower the level of independence and may imply the quality of life is lower, nevertheless it is not clear.

Gallagher et al. (2008) indicated that specific care activities, such as bathing, toileting, feeding care for the highly dependent patient which may be equal to level 3 care, contributes to older people dignity and respect.

Sensitivity (*degree to which measures are able to distinguish between different states of well-being*)

Not enough information in the literature to assess the sensitivity of the indicator

Relevance (*relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 – FACS}*)

- Relevant particularly for retirees
 - Relevant across specific population of interest
-

Assessment of useability: High

This assessment was based on three criteria:

1. Frequency used in key frameworks: High
 2. Reliability: Medium
 3. Availability in NSW data: High
 - DSS Ageing and Aged Care Data Warehouse
-

13. Dementia

Measurement Options

Prevalence of Dementia

NSW Domain

Health

Domains in other frameworks

- Mental Health (Brotherhood of St Laurence, Brotherhood's Social Barometer)
 - Health and functioning (AIHW)
-

Indicator type

Objective

Time frame

Point in time

Unit of analysis

Individual

Reliability *(statistical evidence as predictor of wellbeing, validated against other indicators, etc.)*

Medium

Those who have dementia have been reported to have a lower life satisfaction than those with who do not (John and Montgomery, 2010)

The literature on the perspective of the patient gives no solid support to the widespread assumption that dementia is necessarily a state of dreadful suffering. Although the impact of dementia and the experiences of loss resulting in multiple "negative" emotions cannot be denied, findings also indicate that people do not undergo the disease passively and use both emotion-oriented and problem-oriented coping strategies to deal with its challenges (de Boer et al., 2007)

Sensitivity *(degree to which measures are able to distinguish between different states of well-being)*

Not enough information in the literature to assess the sensitivity of the indicator

Relevance *(relevance across the life cycle {Q2 -FACS} and relevance across specific population of interest {Q3 – FACS})*

- Relevant for retirement age
 - Relevant across specific population of interest.
 - Prevalence among Indigenous Australians is substantially higher than is found in non-Indigenous Australians and all other studied populations (Smith et al., 2008).
 - Dementia incidence rates are rapidly increasing among culturally and linguistically diverse (CALD) Australians (Boughtwood et al. 2011).
-

Assessment of useability: High

This assessment was based on three criteria:

1. Frequency used in key frameworks: High
 2. Reliability: Medium
 3. Availability in NSW data: High
 - Australian Institute of Health and Welfare 2012. Dementia in Australia. Cat. no. AGE 70. Canberra: AIHW.
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