Developing a QOL Evaluation Standard for Persons 75 and Over—Key Considerations and Issues

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The number of persons aged 75 and over in Japan is projected to double from 2005 to 2030. While their well being is a growing concern, no evaluation standard currently exists in Japan or elsewhere to measure their quality of life (QOL). Using quantitative and qualitative methods, we attempt to grasp the lifestyles and mental condition of this age segment to develop a conceptual construct for a new QOL evaluation standard.

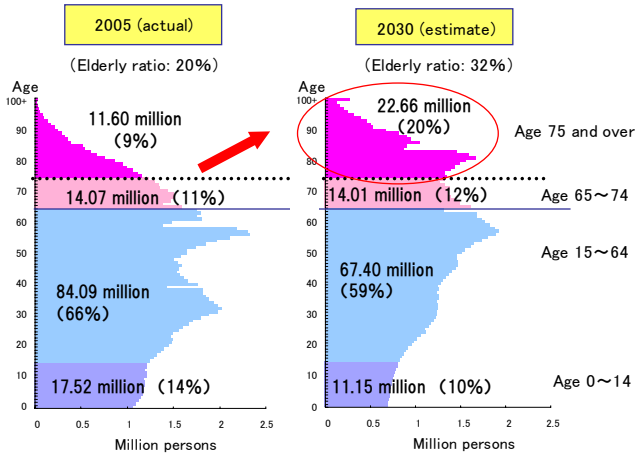
1. The Projected Growth of Persons 75 and Over

From 2005 to 2030, the number of persons aged 75 and older is projected to double in Japan to approximately 10 million persons, bringing the elderly ratio of the population to 20%. The sheer size of this demographic trend makes it the defining characteristic of aging in Japan.

Among other things, persons 75 and over are characterized by a decline in physical functions, separation by death from spouse and friends, and anxiety about the future as they continue to live on.

To construct a safe and prosperous aged society, it becomes increasingly important to develop policies and infrastructure that support the lifestyles and mental condition of persons 75 and over. Toward this end, we must first identify the components that determine quality of life—specifically, factors that provide for the necessary support and motivation in life, and environmental factors that offer peace of mind. However, due to the nascent state of current research, QOL evaluation standards for persons 75 and over do not yet exist in Japan or elsewhere.

Exhibit 1 Projected Population Change (2005 to 2030)



Sources: 2005 data is from Ministry of Internal Affairs and Communications, *National Census*; median population projection is from National Institute of Population and Social Security Research, *Population Projection for Japan*, December 2006.

Thus to develop QOL evaluation standards for persons 75 and over, we first perform a quantitative and qualitative analysis of their current conditions and characteristics, and from this develop a conceptual construct for a QOL evaluation standard.

Ideally, such an endeavor would cover all persons 75 and over, including those with reduced physical functions or senile dementia. However, in this paper we limit the analysis to health persons aged 75 and over.

2. Conditions and Characteristics of Persons 75 and Over

Much of our knowledge of persons aged 75 and over is derived from personal experiences with grandparents or other older persons around town. However, such impressions are anecdotal and do not necessarily provide an accurate picture of their actual conditions and characteristics. To see how persons 75 and over differ from the cohort aged 65 to 74, and to identify changes attributable to

aging, we must adopt a multidimensional approach using both quantitative and qualitative methods.

1. Quantitative Approach

① *Health condition and duration of Independent period*

We begin by looking at data on longevity and the duration of life after retirement. As of 2005, the median age at time of death (which is higher than the mean age) is 85 for men and 90 for women.[1] Thus if retirement occurs at age 65, the retirement period is 20 years long for men and 25 years long for women. During this period, people want to be healthy and independent without needing long-term care for as long as possible. According to a study by the Ministry of Health, Labor and Welfare, both men and women can live independently for approximately 90% of retirement life.[2] In fact, available data shows that only 28% of persons 75 and over need long-term care, while the other 70% continue to live independently. This negates the common perception that older persons in general are not healthy.

Nonetheless, aging clearly has a significant effect on people's health condition. As evidenced by the growing proportion of persons who become ill or injured with age and need medical treatment or hospitalization, health problems are a critical factor in QOL. People must learn to live with age-related health conditions such as senile dementia, poor nutrition, high blood pressure, osteoporosis, hearing loss, glaucoma, and prostate enlargement.

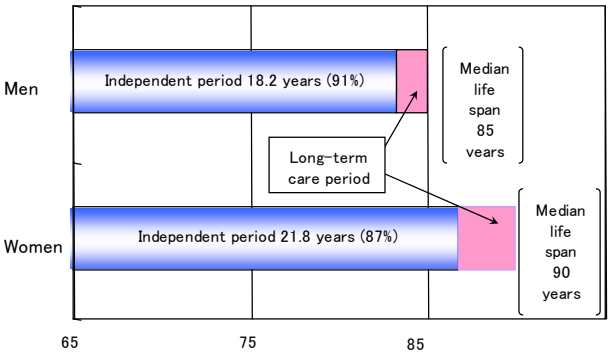
② *Living arrangements*

Approximately 40% of persons 75 and over live in one-person households. Married-couple households, which comprise approximately 30%, often become one-person households when either spouse dies (they may also move in with children). The growth of one-person households is not a problem as long as people are in good health. But when independent living becomes a problem, they will come to need assistance from either the family or society. Thus living arrangements as well as family relations are important factors in the QOL of older persons.

③ *Daily life and social contact*

We next examine the typical daily activity pattern of persons 75 and over. Keeping in mind that individual differences exist due to

Exhibit 2 Independent Period in Old Age



Source: NLI Research Institute

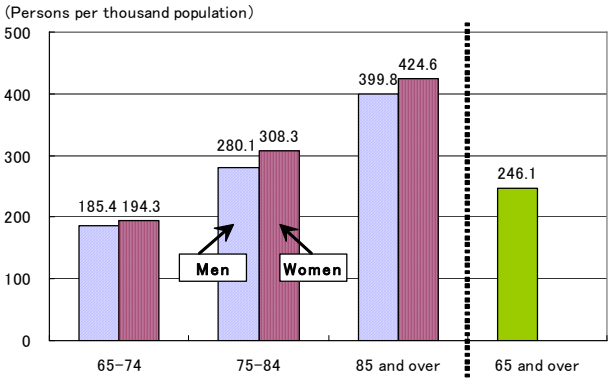
Exhibit 3 Percentage of Persons Needing LTC

(Thousand persons)

Age 65–74		Age 75 and over	
Need assistance	Need care	Need assistance	Need care
174 (1.2%)	480 (3.3%)	835 (6.6%)	2,717 (21.4%)
Total 4.5%		Total 28.0%	

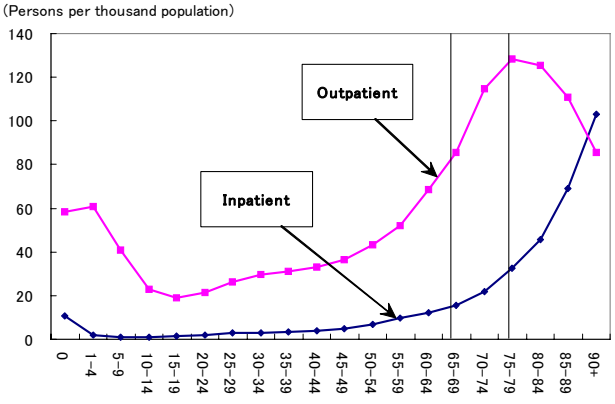
Note: Excludes temporary LTC needs.
Sources: MHLW, *Report on the Status of LTC Insurance Operations (FY 2007)*; MIC, *Population Estimates* (final estimate, October 2007).

Exhibit 4 Rate of Persons with Subjective Symptoms



Note: Shows rate of persons with subjective symptoms per 1,000 population.
Source: MHLW, *Basic Survey on National Life 2004*.

Exhibit 5 Rate of Estimated Patients



Note: Shows rate of estimated patients per 1,000 population.
Source: MHLW, Patient *Survey 2008*

the wide diversity of health conditions, interests and intentions of older persons, an average day of the week is characterized by nine hours of sleep and long hours of watching TV and resting (Exhibit 7).

Moreover, the frequency of outings decreases with age, which is attributable not only to deteriorating health condition but reduced ability to maintain ties with society and other people. In any case, the effect on QOL is significant. Thus improvement of social contact needs to be studied more deeply (Exhibit 8).

④ Financial situation and household budget

The financial situation and household budget of older persons tend to improve moderately with age. This is because aside from individual differences in earned income and pension benefit amounts, the pension income that most people depend on remains stable while expenditures decline with age (the average total monthly expenditure of persons 75 and over is 199,000 yen). However, the decline of expenditures may also reflect the market's failure to supply products and services demanded by this segment (Exhibits 9 and 10).

2. Qualitative Approach (Psychological and Cognitive Factors)

① Psychological changes

An understanding of the ordinary thoughts, awarenesses, and values of persons 75 and over can be elusive to people not of that age. One approach is E.H. Erikson's stages of psychosocial development (1963), which holds that failure to achieve ego integrity in the last stage of life will lead to despair. [3] However, this approach is widely considered as being too general. A more practical approach toward the concrete psychological changes that occur in older people was devised by psychiatrist Gene D. Cohen based on extensive clinical experience. [4] Cohen describes four phases of psychological development in the second half of life: (1) the midlife re-evaluation phase in the late 40s, which is "a time of exploration and transition"; (2) the liberation phase in the late 50s, which arouses a desire to experiment; (3) the recapitulation, resolution and review phase in the late 60s, which is a summing-up phase; and (4) the final encore phase, which evokes a desire to do things one last time.

While individual differences exist, Cohen's approach is more likely to reveal the deeper concerns of older persons hidden in their

Exhibit 6 Living Arrangements (by age of householder)

	One-person	Married couple	Married couple with children	Single parent with children	Other
Age 65-74	24%	37%	18%	7%	15%
Age 75 and over	**36%**	**31%**	9%	9%	16%

Source: MIC, *National Census 2005*.

Exhibit 7 Daily Activity Pattern (age 75-84)

(Number of hours)

	Age 75-84	
	Men	Women
Sleep	8.9	8.6
Personal care	1.3	1.6
Meals	2.0	2.0
House chores	0.8	2.7
Shopping	0.3	0.5
TV and reading	4.6	3.7
Rest	2.0	2.1
Active pastimes	1.7	1.2
Medical care	0.4	0.4

Source: MIC Statistics Bureau, *2006 Survey on Time Use and Leisure Activities.*

Exhibit 8 Frequency of Outings

(Percent)

		Almost every day	Sometimes	Seldom
Overall total		59.7	32.9	7.3
Gender	Men	**67.6**	27.0	5.1
	Women	53.2	37.8	9.0
Age group	60-64	71.8	25.3	2.7
	65-69	66.1	31.9	2.1
	70-74	59.5	35.7	4.6
	75-79	54.1	35.6	10.3
	80-84	37.7	43.7	18.6
	85 and over	25.3	36.8	36.8

Source: Cabinet Office, *Koreisha no jutaku to seikatsu kankyo ni kansuru ishiki chosa2006 (Survey of awareness of older persons regarding housing and living environment).*

Exhibit 9 Self-Evaluation of Financial Situation (What is your financial situation like?)

(Percent)

Age	Sample size	Very bad	Bad	Avg.	Good	Very good	Bad (total)	Good (total)
60 +	3,398	7.2	19.2	65.2	7.4	1.1	26.4	8.5
60-64	876	8.8	22.3	61.4	6.4	1.1	31.1	7.5
65-69	870	7.8	20.1	64.7	6.9	0.5	27.9	7.4
70-74	746	7.2	18.4	66.6	6.8	0.9	25.6	7.8
75-79	529	**5.3**	**17.8**	**67.7**	**8.3**	**0.9**	**23.1**	**9.3**
80 +	377	**4.2**	**13.8**	**68.4**	**10.9**	**2.7**	**18.0**	**13.5**

Source: Cabinet Office, *Koreisha no seikatsu jittai ni kansuru chosa 2008 (Survey of living conditions of older persons).*

ordinary conversations.

② Changes in life motivation

Since motivation in life is an important concern up to the very end, gerontology research has recently taken a strong interest in lifestyle and motivation issues.

While motivation can be defined in various ways, we would like to point out some interesting results from a study on the components of motivation such as satisfaction in life, psychological anxiety, and stimulation in life (Exhibit 12). Keeping in mind the limitations of cross-sectional surveys (wherein different age groups are observed at one point in time), the study found that participants maintain a high level of satisfaction as they age even as anxiety rises and stimulation decreases. Interpretation of these results can offer important clues as to how overall satisfaction can be maintained despite the increase of anxiety and decline of stimulation.

3. Focus Group Interview Results

Following on the above results, to obtain a more direct understanding of the situation of persons 75 and over, we conducted focus group interviews of residents of Kashiwa City, Chiba Prefecture.

We interviewed six focus groups consisting of 35 persons (9 men and 26 women aged 65 to 92, average age 76). In the interview, we asked three questions about the normal pattern of daily life: (1) pleasures and motivations, (2) current difficulties and anxieties about the future, and (3) desired improvements in the community to alleviate anxiety about the future. Our main findings and typical comments are listed below (discussion of desired improvements in the community to alleviate future anxiety is omitted here).

① Pleasures and motivations

○ Pleasures include meeting with local friends and pursuing favorite pastimes.

- Enjoying karaoke singing and friendly conversation at a friend's house;
- Meeting with old friends to catch up on people's whereabouts and drinking together.

○ Compared to younger days, the objective (challenge) in old age is to continue to live a normal daily life.

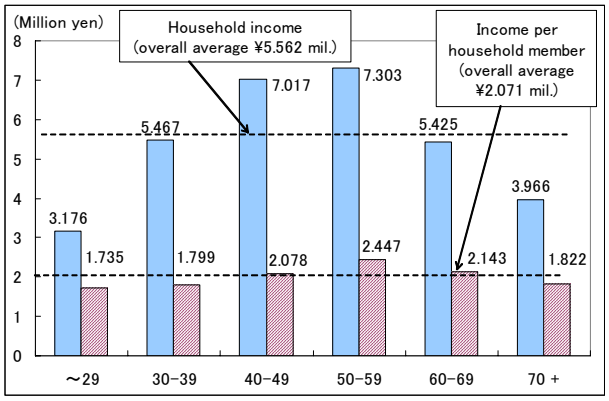
Exhibit 10 Self-Evaluation of Household Budget (How often is your budget in deficit?)

(Percent)

Age	Sample size	Always	At times	Not often	Never	Yes (total)	No (total)
60 +	3,398	13.5	26.9	33.9	25.8	40.4	59.6
60–64	876	16.2	31.1	32.2	20.5	47.3	52.7
65–69	870	15.7	29.2	33.4	21.6	44.9	55.1
70–74	746	11.9	28.3	33.2	26.5	40.2	59.8
75–79	529	**11.3**	**21.4**	**35.3**	**31.9**	**32.7**	**67.3**
80 +	377	**8.0**	**17.0**	**37.9**	**37.1**	**24.9**	**75.1**

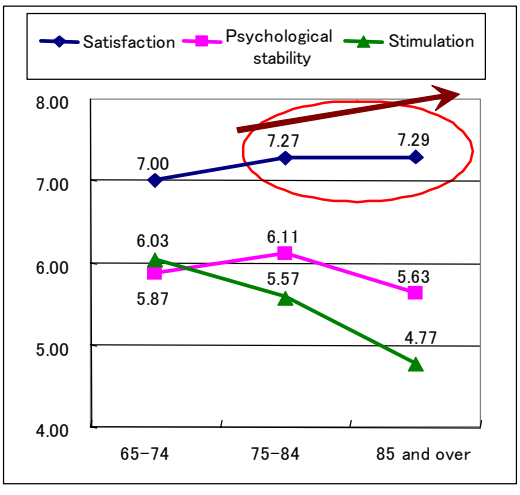
Source: Cabinet Office, *Koreisha no seikatsu jittai ni kansuru chosa 2008 (Survey of living conditions of older persons)*.

Exhibit 11 Average Annual Household Income (and income per household member)



Source: MHLW, *Basic Survey on National Life 2008*.

Exhibit 12 QOL Self-Evaluation of Older Persons



Note: Numbers are average results on an 8-point scale. Results are cross-sectional and not longitudinal.
Source: Norikazu Nagashima, Koreisha no ikigai *to QOL ni kansuru shinrigakuteki kenkyu* (psychological research on motivation and QOL of older persons), *Choju Shakai Kaihatsu Center* (development center for a gracefully aging society), *Ikigai kenkyu* (life motivation research journal) no. 8, 2002.

- It is important to find fulfillment in life every day.
- Traveling to new places once a month motivates me.
- Watching the grandchildren grow up motivates me.
- I try not think too much about the future because it brings me down.
- I try not to complain or grumble about problems or even think about them, and always try to be thankful.

② Current difficulties and anxieties about the future

○ Maintenance of health is a primary concern in old age

- Health is the greatest future concern. Without it, all pleasures are lost, and people will cause stress by telling me what to do and to take it easy.
- Health starts to deteriorate from the legs, and the knees become painful.
- Seeing people who are ill but can live independently reminds me that illness can often make people more positive about life.
- Money is a concern, but I just need enough to keep from going hungry.
- I want a place where I can live comfortably to the end, but moving into one is not easy.
- The care house serves meals and is comfortable and pleasant, but I cannot live there if I become ill. Having nowhere to live out the rest of life is a problem.
- I own my own house (an old and large house), which is difficult to sell or rent. I want to move into a more suitable dwelling, but have given up trying.

○ Retirement significantly affects spousal relationships. And for better or worse, the spousal relationship is critical to satisfaction in life for both husband and wife.

- My husband is at home all day and complains constantly, so I try to get away as much as possible. That way, he can relieve his stress at home, and I can do so outside.
- When I was still working, I was in charge at home as well. But when I retired, my wife took control. It has to be that way for things to go well between us.
- I hate being told what to do by my son, so I take care of myself.
- I want to be independent for as long as possible so that I do not burden my son or need to be cared for by my daughter-in-law.
- Having someone to depend on in case of an emergency greatly relieves anxiety about the future.
- Living alone, I worry about what to do if anything happens in the future. I wish my children lived nearby.
- Having neighbors makes me feel safer. But if an emergency happens in the middle of the night, I may not be able to ask them for help under some circumstances, and I do not want to impose on them.

3. Developing QOL Evaluation Standards

In developing a comprehensive and multidimensional QOL evaluation standard, the range of concerns generally includes the physical domain (health), psychological domain, social relationships, and local environment. [5]

In the physical domain, we know that health is the primary concern of persons 75 and over. As such, QOL maintenance hinges on how well individuals can accept and adapt to deteriorating physical functions as they age. Studies have shown that older people actually do try to control their feelings on this matter and adapt to inconveniences (Baltes & Mayer, 1999; Heckhausen & Shulz, 1995). The degree of adaptation to changing physical functions is thus an instrumental component of QOL evaluation.

In the psychological domain, where adopting a comprehensive perspective is crucial, we note a study showing that persons 75 and older are likely to maintain a high level of overall satisfaction with life. A key factor behind this tendency appears to be continuity. As people age, they increasingly emphasize continuity of their present situation over improvement (Brandstadter & Grave, 1994).

Since persons 75 and over have achieved adequate self expression over their lifetime, they would rather maintain their present identity and lifestyle than seek further self expression. In fact, when we asked in our focus group interview about their dreams or objectives for the future, one of the most telling responses was, "All I want to do is take a trip once a year together with old friends." In other words, having (or being able to have) continuity in daily life's pleasures contributes significantly to the quality of life. Disruption of continuity whether due to deteriorating health or loss of family and friends tends to diminish the quality of life.

With regard to social relationships, the key factor is to maintain contact with society and other individuals. As health deteriorates, people venture outside less frequently, and daily life takes place more and more at home. Social participation thus relies less on contact with people outside the home, and more on the type and amount of contact with people who come to visit. For example, family members and acquaintances can contribute significantly to the QOL of persons 75 and over simply by dropping by for a friendly chat.

With regard to the local environment, while greater barrier-free access is important in all areas, a key factor is the availability of support for persons 75 and over in case of emergency. Such support provides peace of mind, which is crucial to the maintenance of QOL.

Lastly, another factor in the psychological domain might be called "generational disposition"—the growing desire with age to pass on or contribute things to future generations. As other studies have also pointed out, aging tends to enhance the idea of contributing not only to one's own children and grandchildren, but to the whole society and future generations. [6] Thus whereas middle-aged persons tend to focus on nurturing the next generation of their own family, older persons are more likely to expand the scope of concern to the greater society. Inability to fulfill such generational concerns could diminish QOL, especially if opportunities for contribution remain limited in contemporary society. The fulfillment or frustration of this generational disposition thus should be an important component of QOL.

By adopting the unique perspective of persons 75 and over as described above, we hope to further develop the conceptual construct for a QOL evaluation standard.

Endnotes

1. Ministry of Health, Labor and Welfare, *Complete Life Table*, 2005.

2. Data was obtained from the 2000 Health and Welfare White Paper, *Hoken iryo fukushi ni kansuru chiiki shihyo no sogoteki kaihatsu to oyo ni kansuru kenkyu* (Research on the comprehensive development and application of community indicators of health, medical care and welfare).

3. Ego integrity refers to the capacity to acknowledge the meaning of one's life, and accept the good as well as bad qualities without fear.

4. Gene D. Cohen, *The Mature Mind: The Positive Power of the Aging Brain.* University of Chicago Press, 2006.

5. Akihiro Maeda, *QOL kenkyu no choryu to tenbo* (Major currents and prospects in QOL research), *NLI Research*, December 2009.

6. Sheung-tak Cheng, "Quality of Life in Old Age: An Investigation of Well Older persons in Hong Kong," *Journal of Community Psychology*, Vol. 32, 2004.