



Australian Longitudinal Study on Women's Health

SUCCESSFUL AGEING AND LONGEVITY AMONG AUSTRALIAN WOMEN

Professor Julie Byles

Global Innovation Chair in Responsive Transitions in Health and Ageing
The Research Centre for Generational Health and Ageing, The University of Newcastle
Julie.byles@Newcastle.edu.au

Director

Australian Longitudinal Study on Women's Health

With thanks to

Mijanur Raman (statistics)

Jenny Helman and Meredith Taverer (Interviews and Qualitative Analyses)





Funded by the Australian Department of Health in 1995:

To examine social, psychological, physical and environmental factors which determine good health, and those which cause ill-health, in women throughout adult life

- physical and mental health, symptoms, diagnoses
- health service use, access and satisfaction
- health related behaviours
- social factors related to health and well-being
- To contribute to development of policy and practice in key areas for women's health
 - National Health Priority Areas
 - Health Targets e.g. Continence, Quality Use of Medicines, National Tobacco Strategy, Obesity Taskforce, Framework for Physical Activity, Mental Health, Abuse, Dementia, End of Life ...

Australian Longitudinal Study on Women's Health

Four cohorts, over 57,000 women



1989-95

18-23 in 2013

Now 22-27

↑
Recruited through
Social networking



1973-78

18-23 in 1996

now 39-44

← Recruited through
Medicare →



1946-51

45-50 in 1996

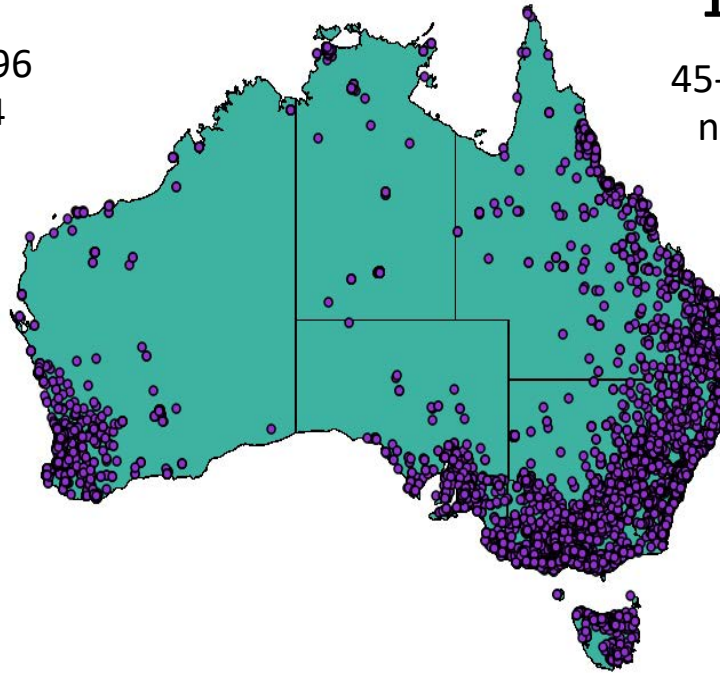
now 66-71



1921-26

70-75 1996

now 92-97



Australian Longitudinal
Study on Women's

1921-26: 3 yearly Postal Surveys 1996-2011 ... 6 monthly

70-75.....85-9090+



Conditions/ symptoms/ procedures, Health Care Use,
medications, health insurance, **SF-36 quality of life,**
depression/anxiety, smoking, alcohol, BMI, physical activity, diet,
sleep, life events, marital status, living arrangements, housing,
abuse, manage on income, caring, support, optimism ...

.. continence, memory, falls, teeth,
services, transport, ADLs, housing,
volunteering, age discrimination, social
activities

Linked to: MBS, PBS, Hospital, Aged
Care, Cancer, Death Data



Surveys and data books www.alsw.org.au

- Free text comments
- **Qualitative data** – allows us to get a sense of how women cope with their everyday, as they age and in relation to life events
- Eg. Kennaugh R, Byles J, Tavenner M. Beyond widowhood: Do prior discovered themes that describe the **experiences of older Australian widowed women** persist over time? Women and Health, 2016; 56(7): 827-42.
- 56% of the women
- 1,239,859 words
- women who wrote tended to have lower physical function, poorer general health and lower social function than women who did not write- except for women > 82-87, where there were no differences.
- Wide range of experiences
- Consistent narrative

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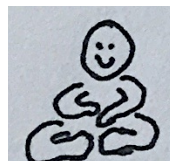
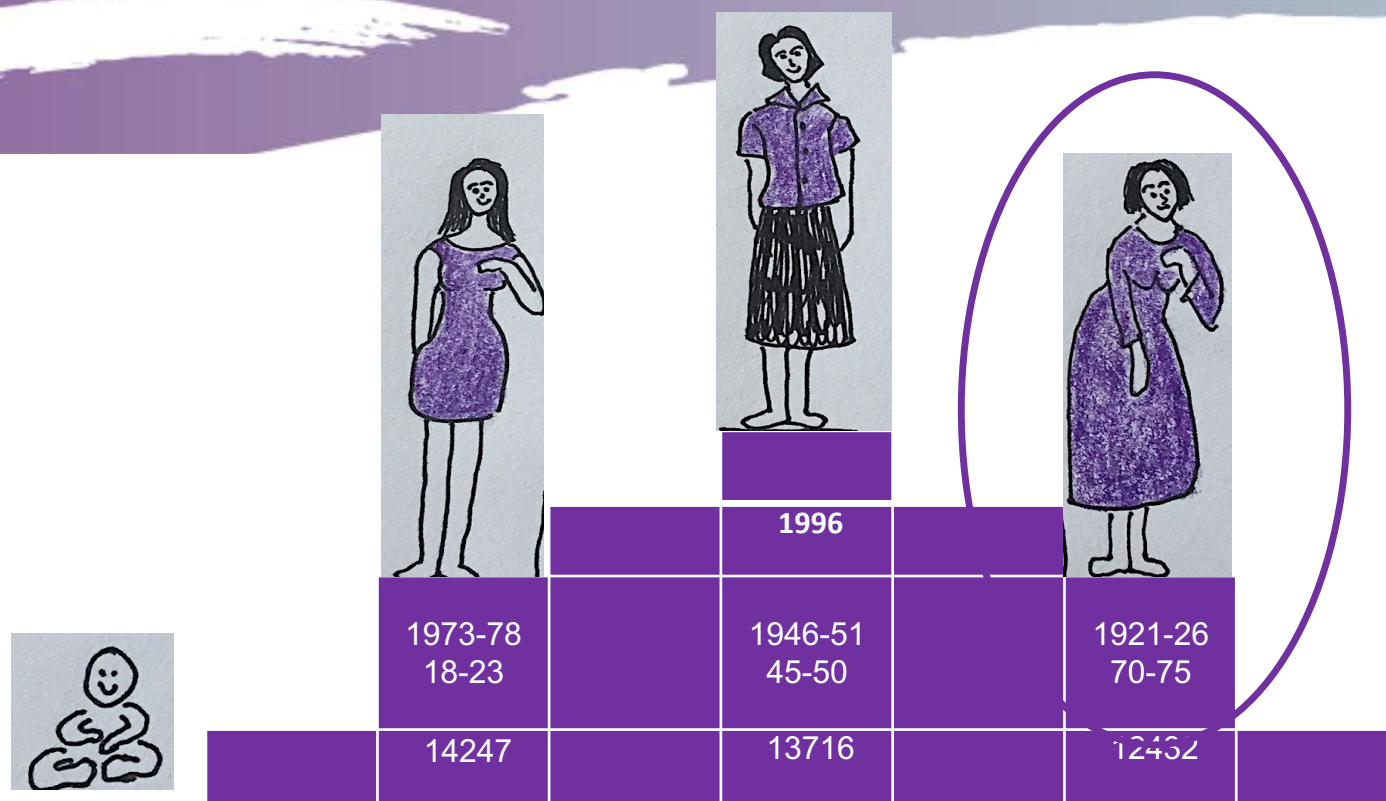
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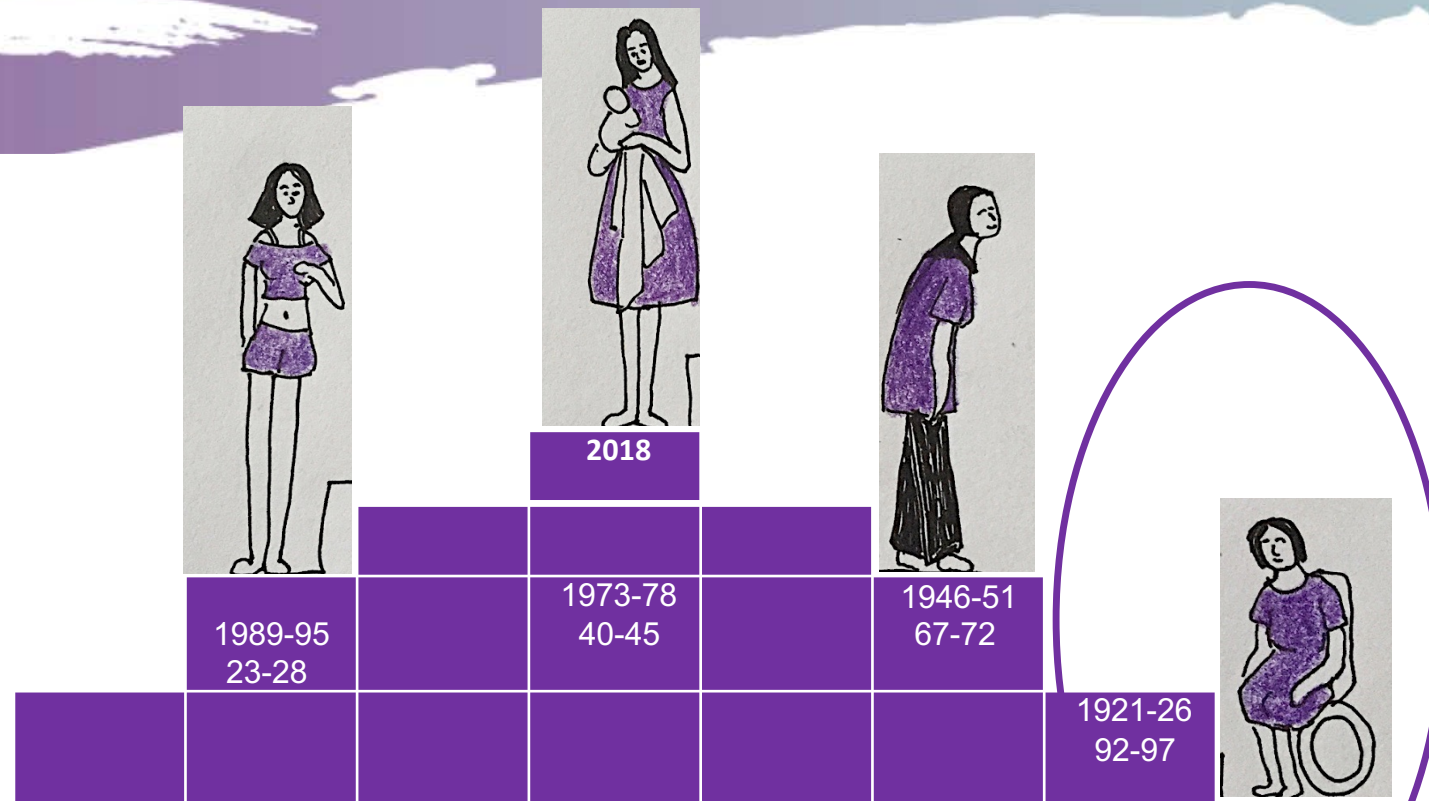
women's health AUSTRALIA

Australian Longitudinal Study on Women's Health, 1996

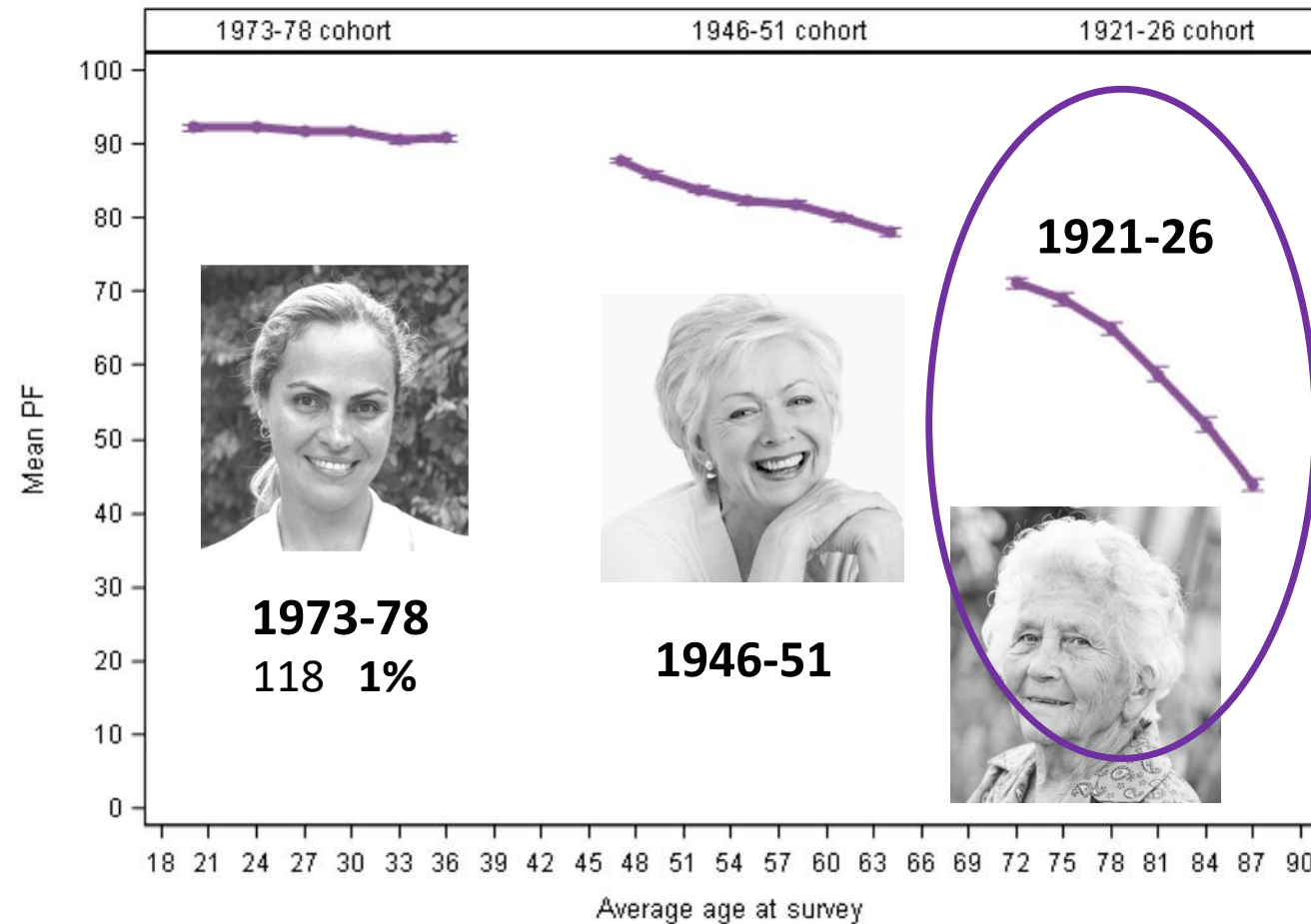


women's health AUSTRALIA

Australian Longitudinal Study on Women's Health, 2018



Change in Physical Function Scores



By 2011:
17% diabetes
70% arthritis
17% asthma
40% heart disease
70% hypertension
12% stroke

Byles et al. Chronic conditions, physical function and health care use. June 2015

www.alsw.org.au

29% dementia
Waller et al. 2017)

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Changes in Physical Function Surveys 1-6 +6MF



1921-26 cohort:

Are these women
ageing well?
Successful Ageing?
Healthy Ageing?

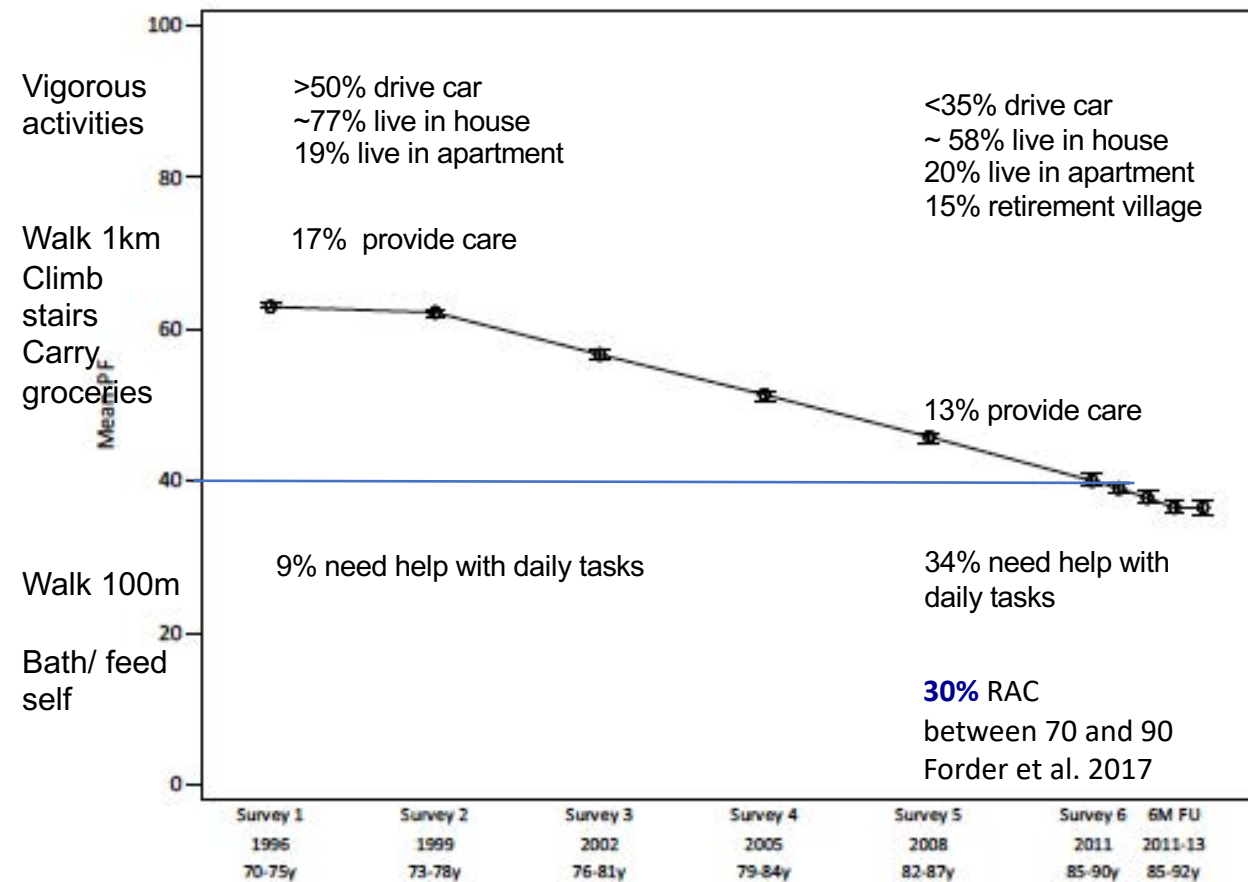
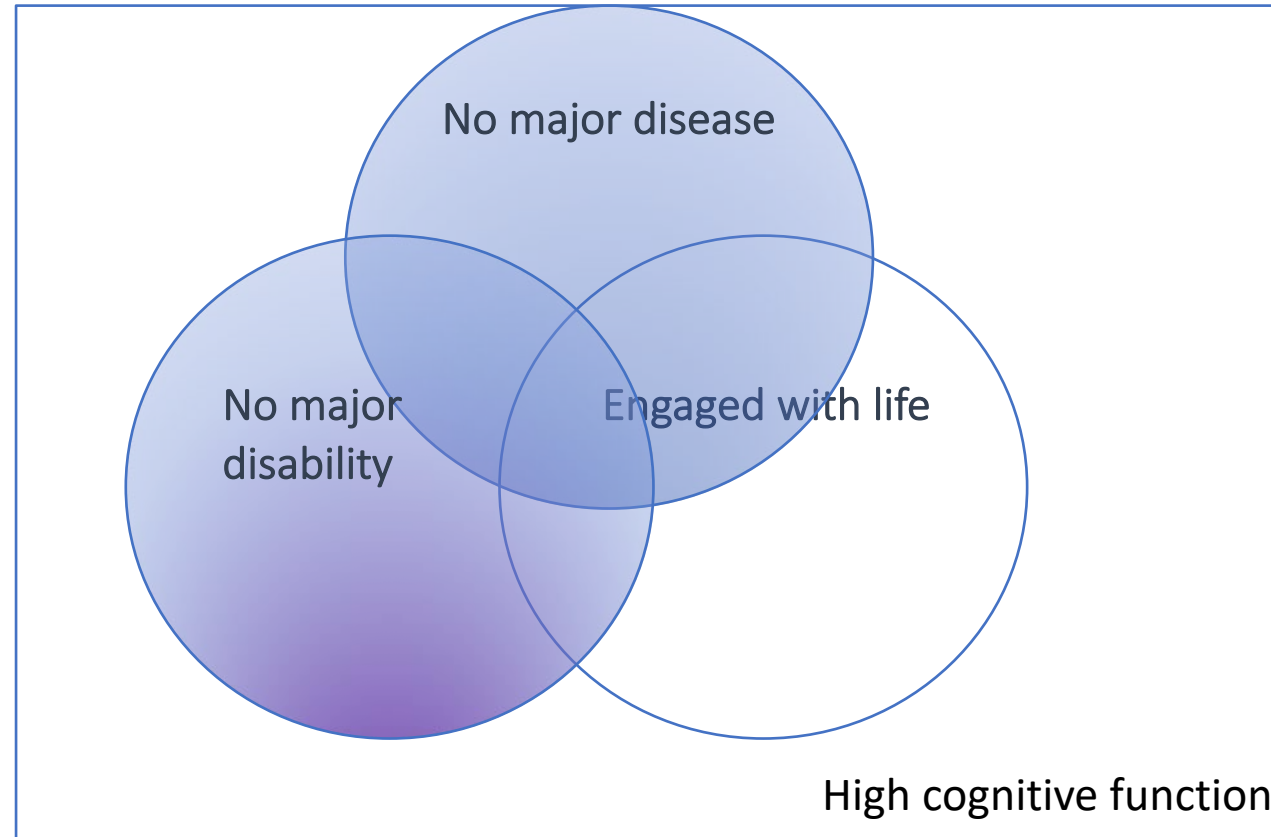


Figure 3-10 Mean physical functioning score from Survey 1 to Six Monthly Follow-Up Survey 4

SUCCESSFUL AGEING



Rowe JW, Kahn RL. Human aging: usual and successful. *Science* (80-). American Association for the Advancement of Science; 1987;237:143–50.

Conditions reported by women at Survey 1 (age 70-75)

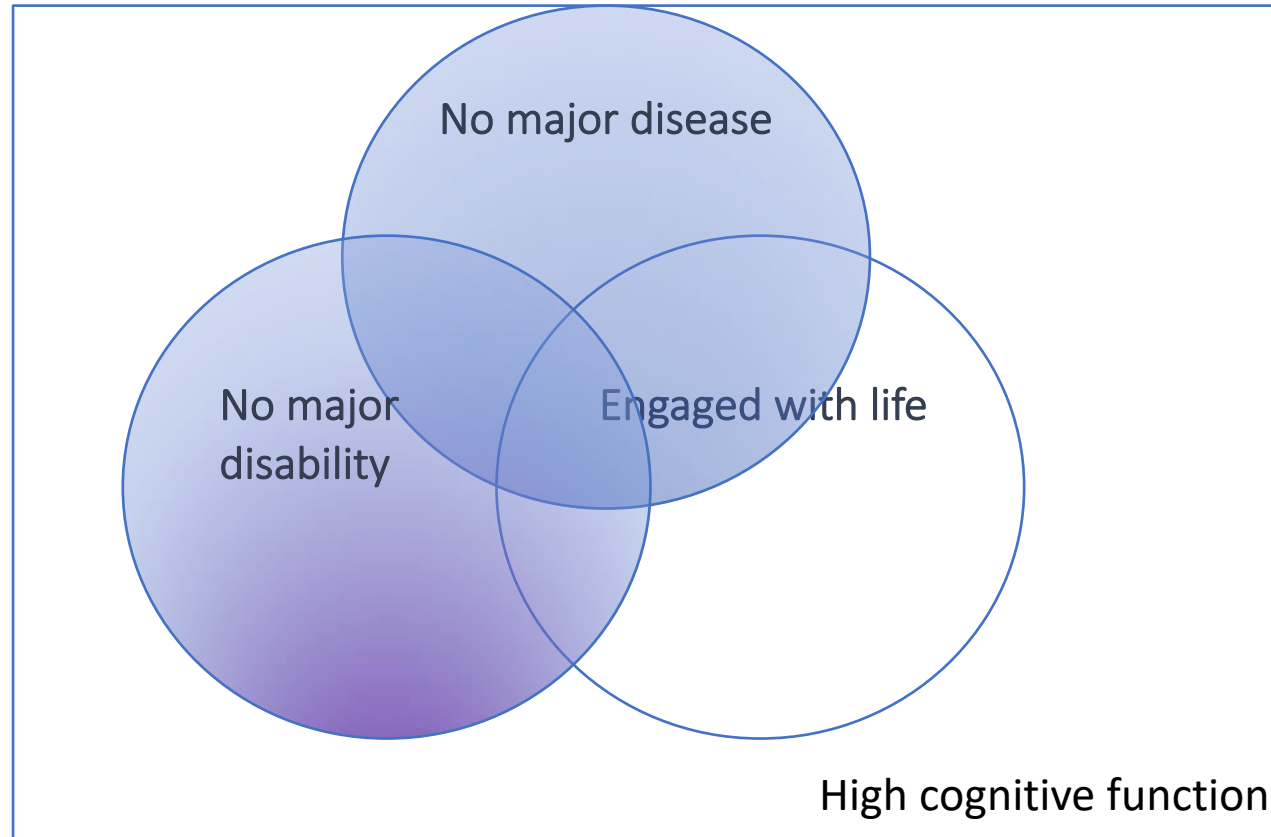
Chronic conditions (Overall %)	Arthritis	Diabetes	Heart disease	Hypertension	Stroke	Thrombosis	Low iron	Asthma	Bronchitis	Osteoporosis	Skin cancer	Other cancer
Arthritis (39%)	5	10	21	53	7	12	18	16	22	29	27	9
Diabetes (9%)	44	1	34	65	11	13	15	15	18	18	23	9
Heart disease (17%)	49	18	1	61	13	16	19	17	23	26	27	10
Hypertension (48%)	43	12	22	9	8	10	15	14	18	21	26	8
Stroke (6%)	47	18	41	69	0	22	20	15	22	27	30	11
Thrombosis (9%)	53	14	31	56	14	0	27	19	27	30	32	13
Low iron (15%)	49	9	22	47	7	16	1	17	27	29	31	10
Asthma (13%)	49	11	23	52	6	12	20	1	48	27	28	11
Bronchitis (17%)	49	10	23	50	7	14	23	36	1	28	31	11
Osteoporosis (20%)	57	8	22	50	7	13	22	18	24	2	30	9
Skin cancer (25%)	42	8	18	49	7	11	19	15	21	24	3	11
Other cancer (9%)	41	10	20	46	7	14	18	17	23	21	32	1

SUCCESSFUL AGEING

Arthritis
Heart Disease
Stroke
Diabetes
Asthma
Cancer

SF-36 physical
function scores <40
(difficulty walking 500
m, climbing stairs,
moderate activity)

**Need for help with
daily tasks**

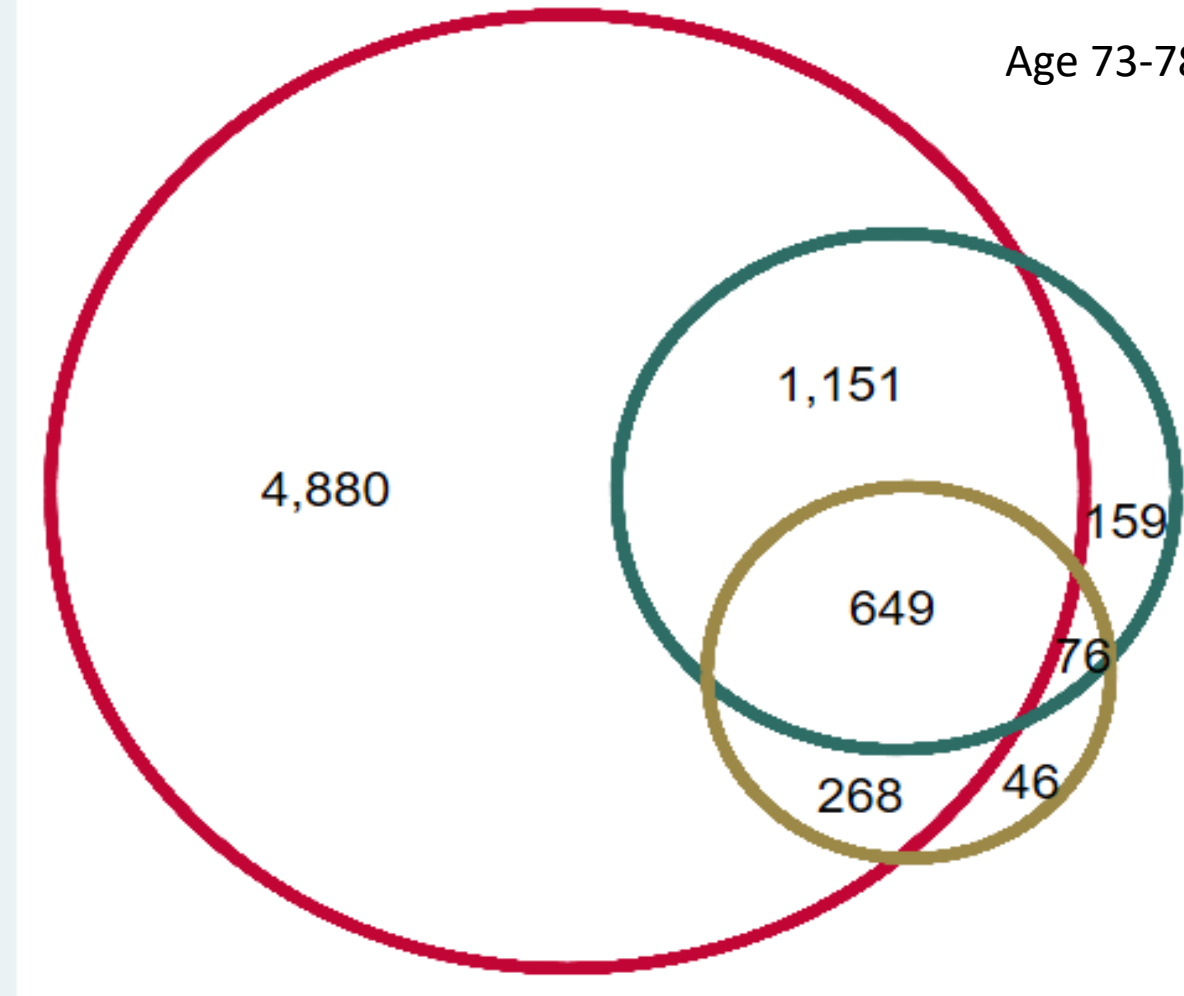


Rowe JW, Kahn RL. Human aging: usual and successful. Science (80-). American Association for the Advancement of Science; 1987;237:143–50.

Disease,
disability,
need help
with daily
tasks

Survey 2
(n=10434
women)

Age 73-78



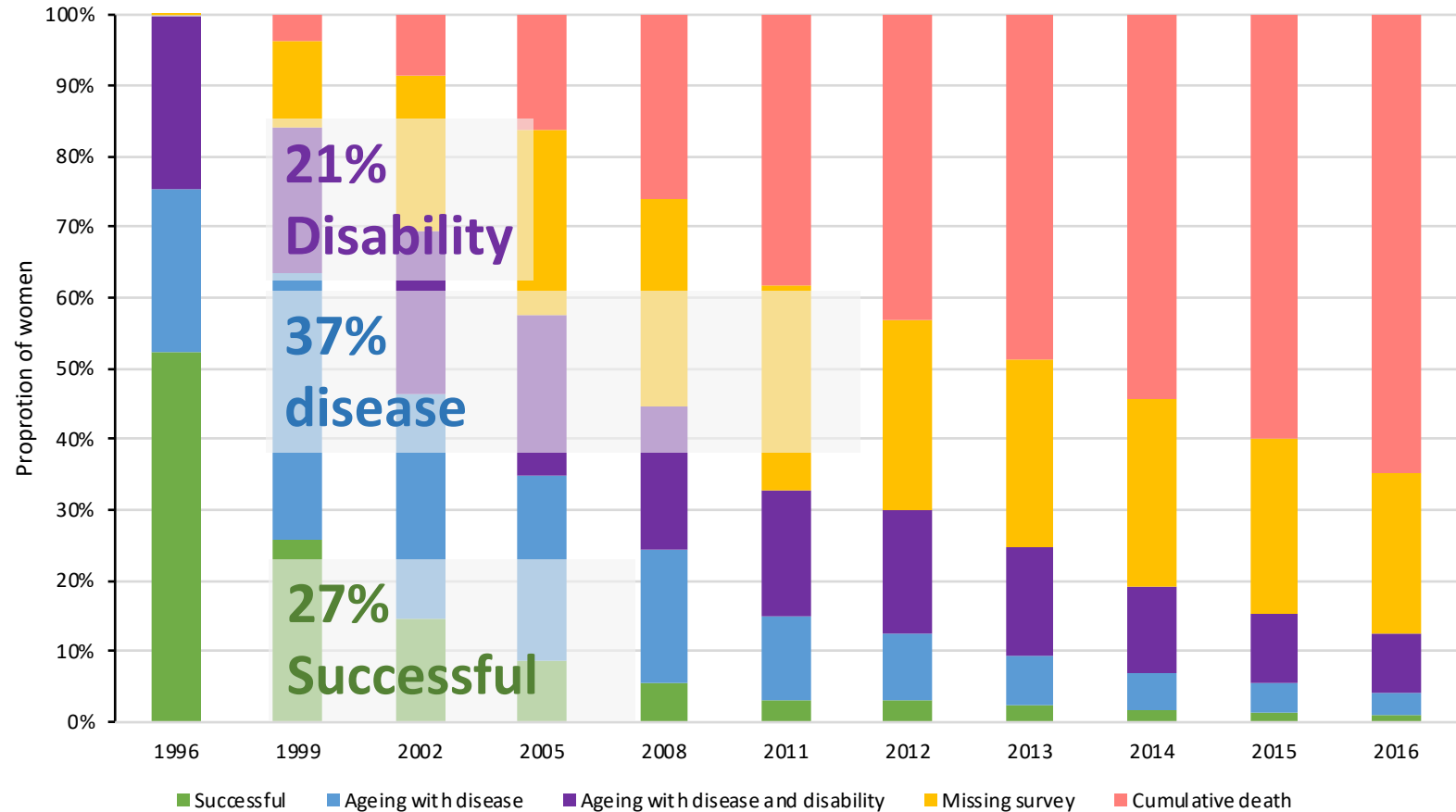
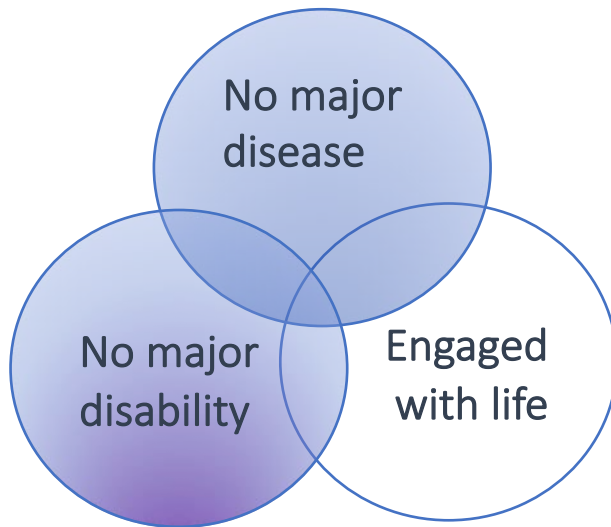
Chronic conditions
Need help with daily task

Physical functioning score <40

SUCCESSFUL AGEING

1921-26 cohort
12432 women

Arthritis (S2)
Heart Disease
Stroke
Diabetes
Asthma
Cancer



73-78

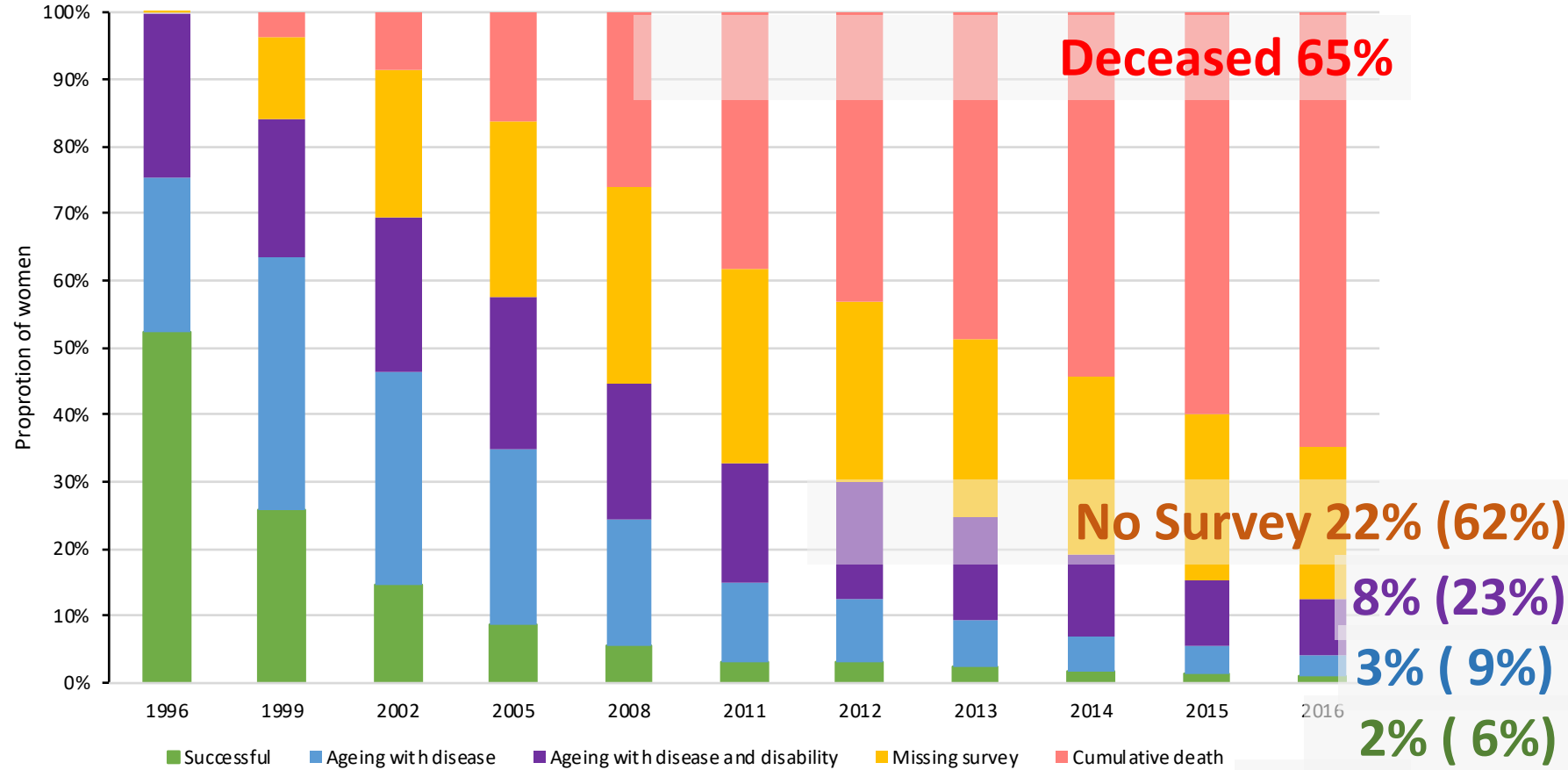
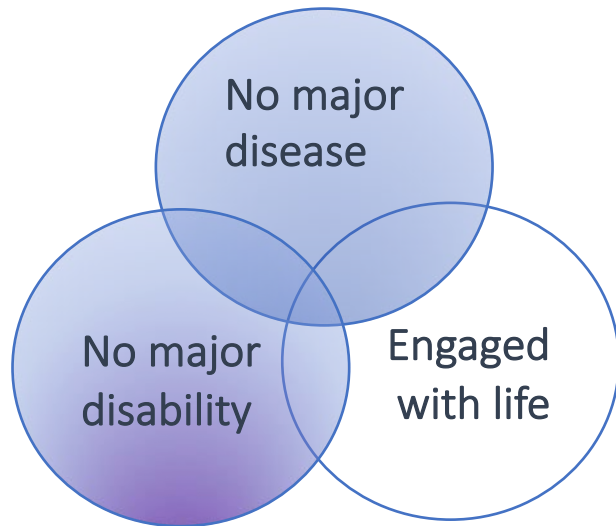
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SUCCESSFUL AGEING

1921-26 cohort
12432 women

Arthritis (S2)
Heart Disease
Stroke
Diabetes
Asthma
Cancer (not skin)



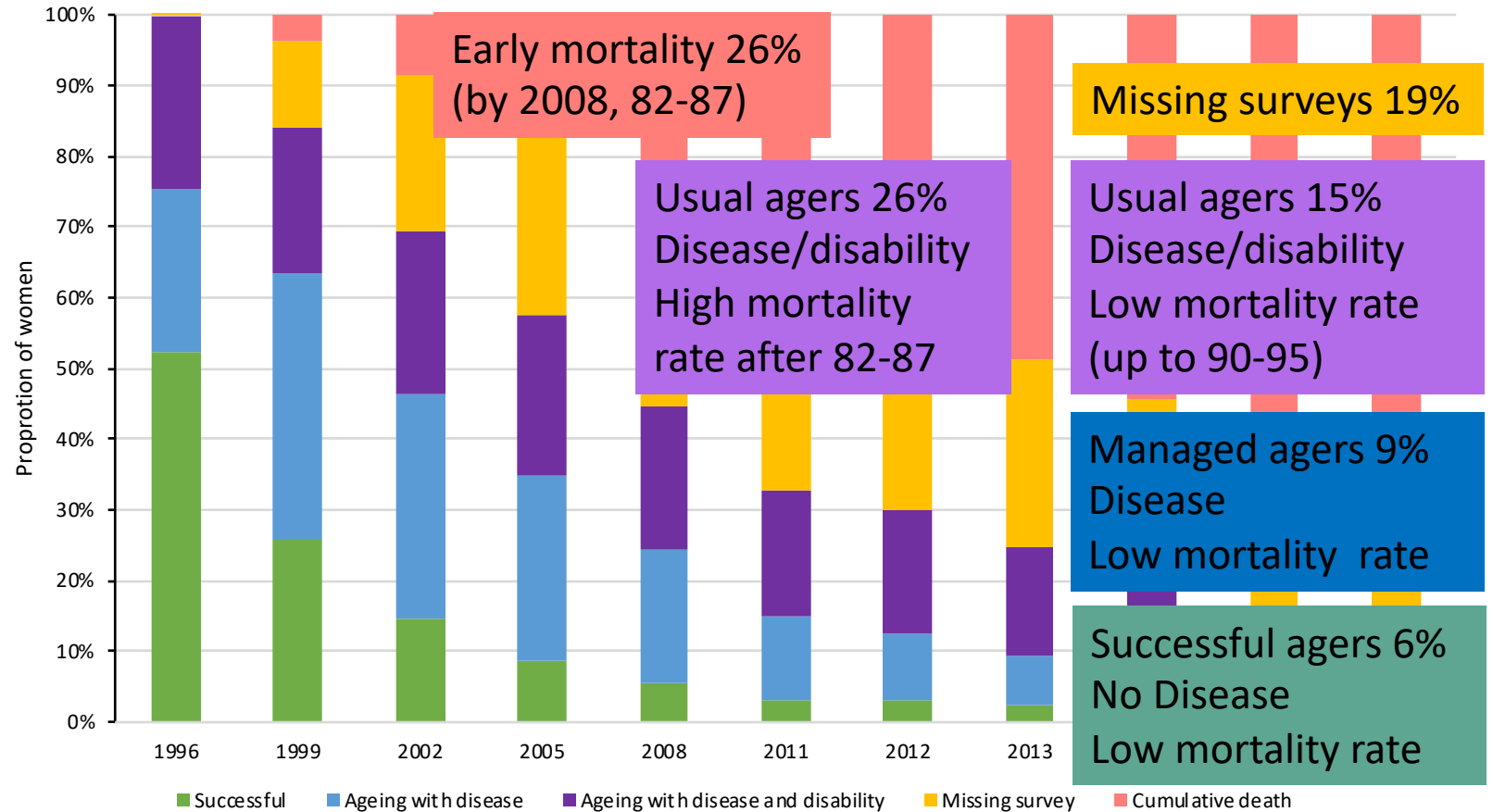
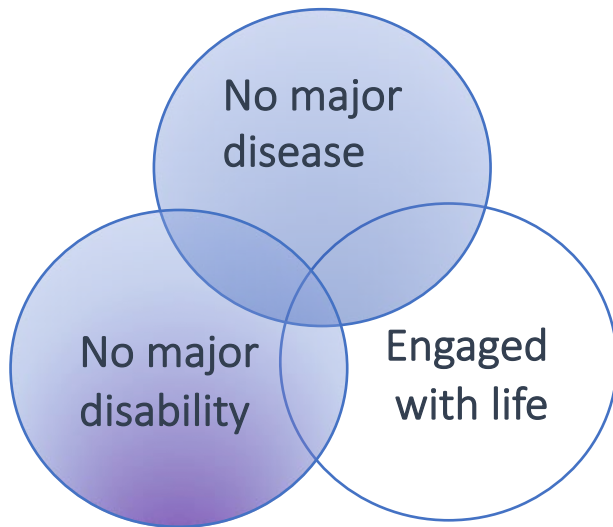
73-78
1999

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90-95

SUCCESSFUL AGEING: LCA

Arthritis (S2)
Heart Disease
Stroke
Diabetes
Asthma
Cancer (not skin)



73-78

Australian Longitudinal Study on Women's Health

90-95

Rowe JW, Kahn RL. Human aging: usual and successful. Science (80-). American Association for the Advancement of Science; 1987;237:143-50.

HEALTHY AGEING

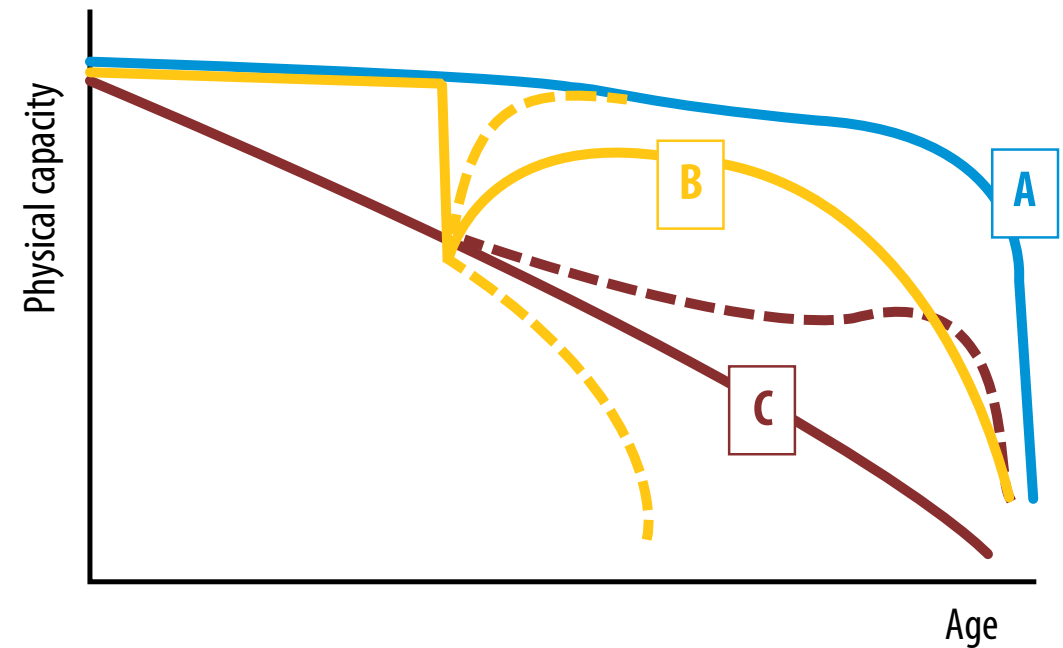


World Health
Organization

“ building and
maintaining for as
long as possible of
the functional ability
that enables older
people to be and to
do the things they
have reason to value”

WORLD REPORT ON **AGEING AND HEALTH**

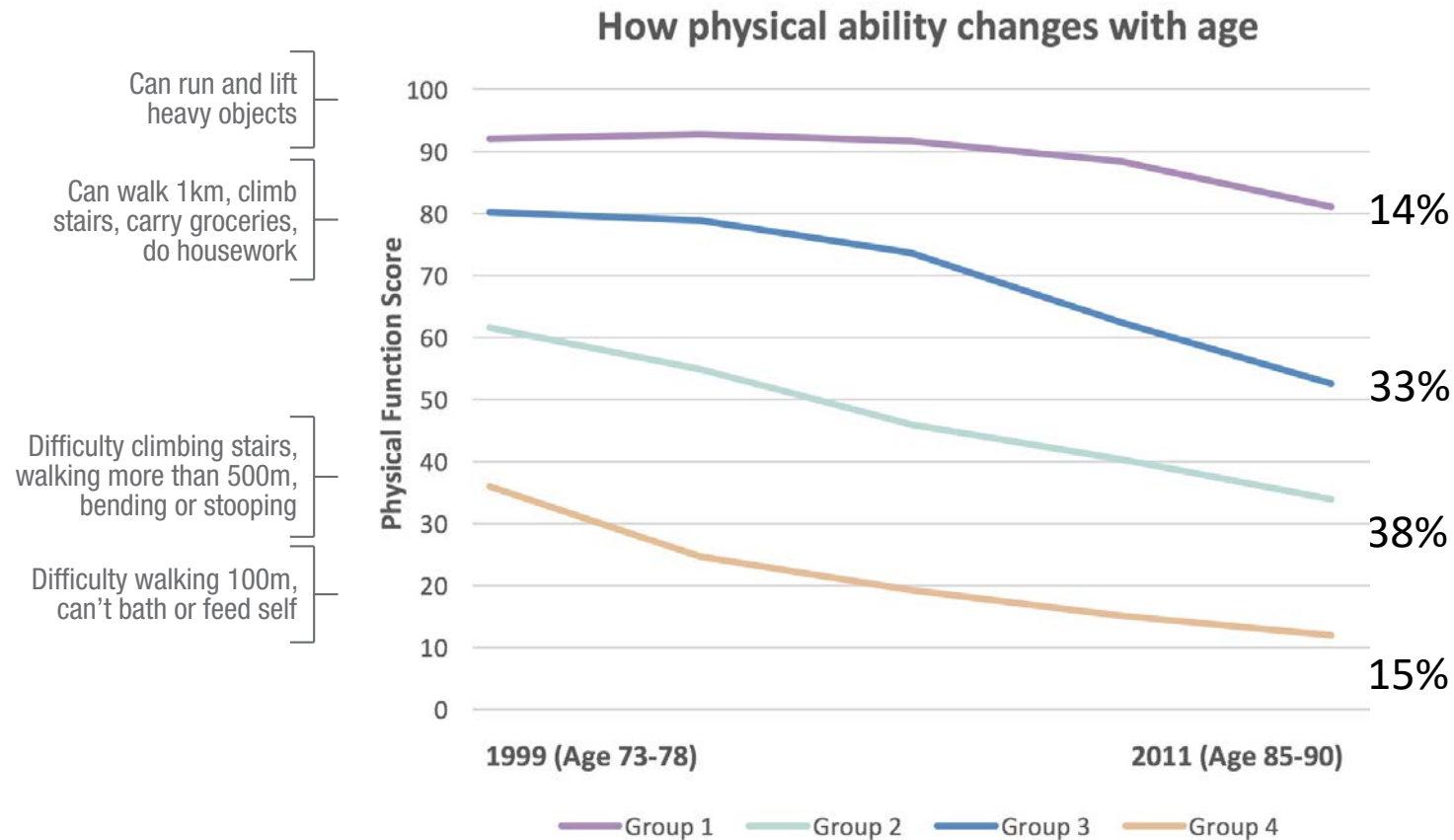
Fig. 2.2. Three hypothetical trajectories of physical capacity



- A. Optimal trajectory, intrinsic capacity remains high until the end of life.
 - B. Interrupted trajectory, an event causes a decrease in capacity with some recovery.
 - C. Declining trajectory, capacity declines steadily until death.
- The dashed lines represent alternative trajectories.

Patterns of change in physical function

(n= 5928 surviving women)



Baseline factors associated with POOR Physical Function (Odds Ratio)

DISEASE

Arthritis (OR 11.1),
Stroke (OR 4.4),
Osteoporosis (OR 4.3),
Heart Disease (OR 4.9),
Diabetes (OR 3.5),
Hypertension (OR 3.2),
Bronchitis/emphysema (OR 2.4)
Asthma (OR 2.0).

COMORBIDITY OR ~ 3.0

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Leigh, Byles, Mishra 2016

Patterns of change in physical function

(n= 5928 surviving women)

Baseline factors associated with POOR Physical Function (Odds Ratio)

EDUCATION

- Higher education (OR 0.38)
62% less likely to have poor PF

EXERCISE

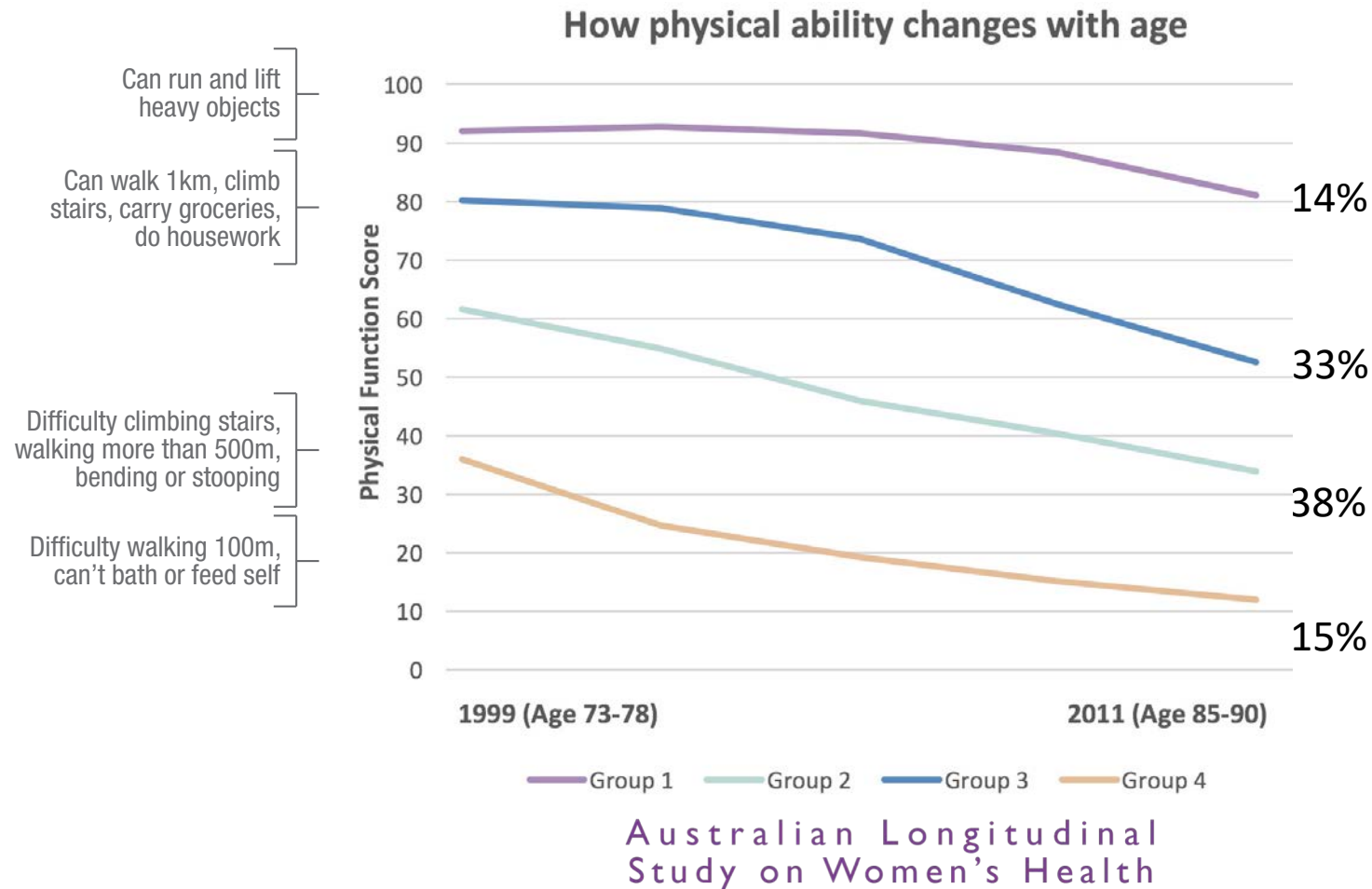
- Highest PA class (OR 0.04)
96% less likely to have poor PF
- Low PA class (OR 0.19)
81% less likely to have poor PF (OR 0.19)

BMI

- Overweight (OR 5.02)
- Obese (OR 26.2)

SMOKING

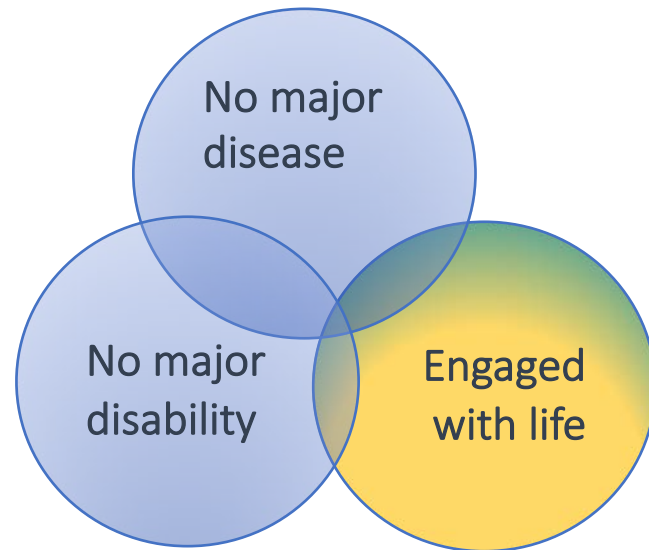
- Current smoker (OR 2.9)



Leigh, Byles, Mishra 2016

Engagement with life

to do the things they have
reason to value



Interviews with women aged
92-97 – 18 to date

Funded by: Australian Research Council

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Free-text comments

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How would you rate your health?

Good Health

Poor Health

Health – not without physical problems	
Injuries – brought on by their own activities Setbacks- likely to improve. Conditions described as minor (even if not) Positive outcomes of health care	Longstanding health problems. More pessimistic about getting over events and illnesses.
Vitality – Active and fit	
Some slowing down with ageing.	Slowing down “everything is gradually wearing out” (s3)
Participation _Active	Passive
Dancing, gardening, volunteer work	reading
Life satisfaction and Identity	
Generally satisfied with life. Belief in themselves and proud of achievements whether maternal, domestic or professional	Content “Pathetic” Not bored.

Good Health

Poor Health

Health Care – Active and involved	Less active
<p>Generally satisfied with health care</p> <p>Trust doctors, health care systems, and therapies.</p> <p>Some concern with access to health care.</p> <p>Some: “seek natural therapies”</p>	<p>Difficulty accessing health care.</p> <p>Difficulty affording health care.</p> <p>Mistrust.</p>
Mobility and physical function – Can do	Can’t do
<p>Adapt to increasing difficulties and limitations to physical function.</p> <p>Generally still able to drive</p>	<p>Describe what they can’t do (rather than what they can do or hope to do)</p> <p>Talked about not being able to drive</p>
Social	
<p>Positive relationships, supportive family, good friends</p> <p>May be caring for husband</p>	<p>Negative as well as positive relationships</p> <p>Difficulty maintaining relationships</p> <p>Carer burden / Loss of spouse.</p>
Optimistic	Less optimistic
<p>Internal locus of control “I keep well”</p> <p>“I don’t sit and wait for things to happen”</p> <p>“you reap what you sew”</p> <p>“hope” “grateful” “Lucky” “Fortunate”</p>	<p>“I hope I will not be around for the next survey. I have no desire to stay alive when I can no longer function independently” (s3)</p>

Engagement with life (surveys)

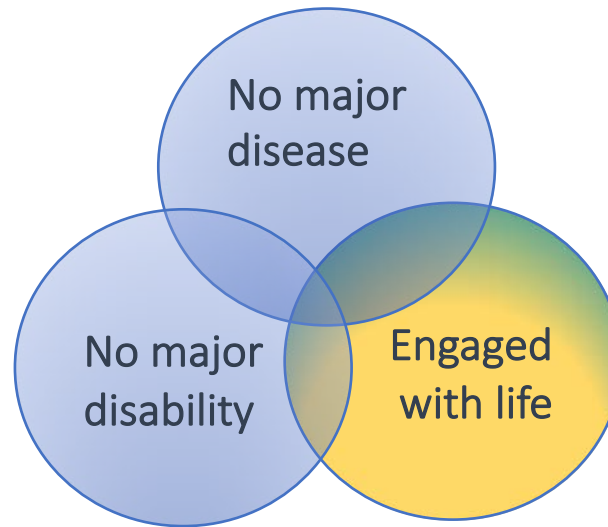
FEW DISEASES, GOOD HEALTH, GOOD PF

Survey 4 (79-84): I still manage to go on bus tours, ... over the last 14 years I have seen a fair portion of Australia doing bus tours.

(88-93): I have just come home from a 9 day road trip to Alice Springs and surrounds with family a lovely time, I feel a bit tired and have developed a cold - otherwise very grateful that I can still do these things.

FEW DISEASES, POOR HEALTH, POOR PF

(91-96): I am healthy but cannot walk without help. This stops me from doing a lot of activity I have lots of friends & family so get help. A lot to be thankful for



MANY DISEASES, GOOD HEALTH, GOOD PF

Survey 2 (73-78): I feel I am genuinely lucky with my health and my life. I play bridge three or four days a week and love my weekly golf day. I have a wide circle of very good friends and have a very busy life. I feel very blessed!!

(89-94): I have a very supportive family who regularly keep in touch. My daughter-in-law is a wonderful friend. .. I feel very lucky I can still have a busy social life playing bridge.

(91-96): I have not been well this year. I now have carers coming morning & night to help me. So I am in very good hands, as well as wonderful family support.

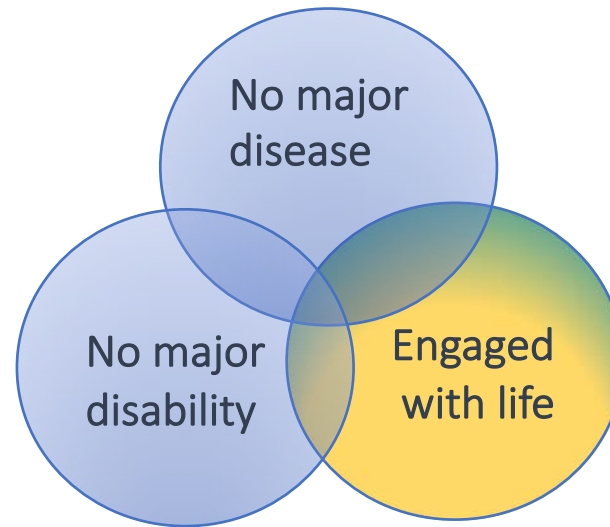
Engagement with life (Surveys)

MANY DISEASES, POOR HEALTH, POOR PF

*ANGINA, DIABETES, DIVERTICULITIS,
ARTHRITIS, HYPERTENSION,
OSTEOPOROSIS, HIP FRACTURE, SCIATICA*

(88-93): I'm sure my health is mainly due to old age. My memory is excellent & I'm am able to knit for the local op shop which I enjoy. I'm lonely at times but prefer my own home. I love company but not all day, I find talking all day very tiring. Don't see family as much as I would like But they are all working & busy which I understand. We all get on well together. I am 91 years old and had a good life.

(89-94): I am suffering from a painful condition with my jaw bone, result of taking a tablet once a week which specialists tell me can't be treated. Extremely painful. Tablet apparently inhibits jaw bone healing. Don't know why I had to reach 92 to have this.



MANY DISEASES, POOR HEALTH, POOR PF

(86-91): I am just so grateful that I feel as well as I do. Am able to read do puzzles, drive, ask for no help, except mowing and that is how I would like it to be until I die. Living by myself is lonely, but as long as I have book and can read I am content. I take pride in my housework. Furniture always polished, but I do have someone twice a year to do my windows. I don't sew crochet or knit as I did, but I have the evidence of those things and it's good to know that once I did them.

(87-92): I'm still here.

(88-93): A year older - I can feel the downhill pull now - and am content - I have lived a long life and many operations. One thing I have found out, is that it is up to myself how I live. I can be happy, I can be miserable. It's all up to me. I choose happy! I hope I have been helpful.

Interviews to date (age 92-97):

- Most “pretty well” or fantastic
- But .. (cancer, blindness, mobility problems)
- Everything is an effort
- Frustrated cant do things
- “I like being here”
- I’ve got my marbles
- Lonely
- Will anyone come to our funerals
- Lucky, lucky, lucky – good genes
- Still driving
- Travel (past)
- Roles
- Housework with help
- Puzzles, social outings, gardening, cooking, quilting, snooker, reading, TV, computer
- Pets
- Family – important but often distant

I am still here. I get up, I think, I reason, I move about.
I feel like I am on holiday. I can please myself.

Conclusion

- Successful ageing is a tall order, most will not achieve it
- Longevity is its own success
- Healthy ageing allows for age-associated changes, for management of conditions, and to support people to do the things that give life meaning
- Help with, not doing for
- Loneliness, social interaction, participation
- Transport
- Hobbies
- Gardening
- Pets
- Family – particularly children

**The women talk of enjoyment and quality of life, and engagement,
in spite of conditions and disabilities:
This should be the goal of healthy ageing.**

Thank you

ALSWH is conducted by staff at the University of Newcastle and the University of Queensland. We are grateful to the Australian Government Department of Health for funding and to the women who provided the survey data.

We acknowledge:

- Department of Health and Medicare Australia for providing the PBS and MBS data, and the Aged Care Data.
- Australian Institute of Health and Welfare (AIHW) as the integrating authority for these data.
- assistance of the Data Linkage Unit at the Australian Institute of Health and Welfare (AIHW) for undertaking the data linkage to the National Death Index (NDI).



Australian Government
Department of Health



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