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**Australian Institute of
Health and Welfare**

*Authoritative information and statistics
to promote better health and wellbeing*

Life expectancy and disability in Australia: appendixes A–C

Australian Institute of Health and Welfare
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Abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
CAL	core activity limitation
DFLE	expected years of life lived without disability
DLE	expected years of life lived with disability
ICF	International Classification of Functioning, Disability and Health
LE	life expectancy
SDAC	Survey of Disability, Ageing and Carers
SPFLE	expected years of life lived without severe or profound core activity limitation
SPLE	expected years of life lived with severe or profound core activity limitation

Symbols

–	nil or rounded to zero
..	not applicable

Appendix A: Additional tables

Table A1: Expected years of life at birth for selected health expectancies, by sex, 2003 to 2015

	Number of expected years					Percentage of total life expectancy				
	2003	2009	2012	2015	Change 2003 to 2015	2003	2009	2012	2015	Change 2003 to 2015 (percentage points)
Males										
With disability (all severity levels)	18.6	17.7	17.5	17.3	-1.3	24.0	22.3	21.9	21.6	-2.4
With severe or profound core activity limitation	5.4	5.5	5.6	5.4	—	7.0	6.9	7.1	6.7	-0.3
Without disability	59.1	61.6	62.4	63.0	3.9	76.0	77.7	78.1	78.4	2.4
Without severe or profound core activity limitation	72.3	73.9	74.2	75.0	2.7	93.0	93.1	92.9	93.3	0.3
Total life expectancy at birth	77.8	79.3	79.9	80.4	2.6	100.0	100.0	100.0	100.0	..
Females										
With disability (all severity levels)	20.7	19.6	19.8	19.3	-1.3	24.9	23.4	23.5	22.9	-2.1
With severe or profound core activity limitation	8.3	7.5	7.8	7.5	-0.8	10.0	9.0	9.2	8.8	-1.2
Without disability	62.2	64.3	64.5	65.2	3.0	75.1	76.6	76.5	77.1	2.1
Without severe or profound core activity limitation	74.6	76.4	76.5	77.1	2.5	90.0	91.0	90.8	91.2	1.2
Total life expectancy at birth	82.8	83.9	84.3	84.5	1.7	100.0	100.0	100.0	100.0	..

Note: Figures in this table are rounded.

Source: AIHW analysis of unpublished ABS SDAC 2003, 2009, 2012 and 2015 data; and of unpublished ABS abridged Australian life tables 2001–2003, 2007–2009, 2010–2012 and 2013–2015.

Table A2: Expected years of life at age 65 for selected health expectancies, by sex, 2003 to 2015

	Number of expected years					Percentage of total life expectancy					Change 2003 to 2015 (percentage points)
	2003	2009	2012	2015	Change 2003 to 2015	2003	2009	2012	2015		
Males											
With disability (all severity levels)	10.0	10.5	10.4	10.4	0.3	57.0	56.1	54.5	53.0	-4.0	
With severe or profound core activity limitation	3.3	3.5	3.7	3.4	—	19.0	18.8	19.4	17.2	-1.8	
Without disability	7.6	8.2	8.7	9.2	1.6	43.0	43.9	45.5	47.0	4.0	
Without severe or profound core activity limitation	14.3	15.2	15.4	16.2	1.9	81.0	81.2	80.6	82.8	1.8	
Total life expectancy at age 65	17.6	18.7	19.1	19.5	1.9	100.0	100.0	100.0	100.0	..	
Females											
With disability (all severity levels)	12.2	12.1	12.5	12.3	0.1	58.2	55.5	56.8	55.3	-2.9	
With severe or profound core activity limitation	6.2	5.6	5.8	5.6	-0.5	29.4	25.8	26.2	25.3	-4.1	
Without disability	8.8	9.7	9.5	10.0	1.2	41.8	44.5	43.2	44.7	2.9	
Without severe or profound core activity limitation	14.8	16.1	16.3	16.6	1.8	70.6	74.2	73.8	74.7	4.1	
Total life expectancy at age 65	21.0	21.8	22.0	22.3	1.3	100.0	100.0	100.0	100.0	..	

Note: Figures in this table are rounded.

Source: AIHW analysis of unpublished ABS SDAC 2003, 2009, 2012 and 2015 data; and of unpublished ABS abridged Australian life tables 2001–2003, 2007–2009, 2010–2012 and 2013–2015.

Table A3: Life expectancy and selected health expectancies, by age and by sex, 2015 and change between 2003 and 2015 (years)

Age group	2015					Change 2003 to 2015				
	LE ^(a)	DLE ^(b)	SPLE ^(c)	DFLE ^(d)	SPFLE ^(e)	LE ^(a)	DLE ^(b)	SPLE ^(c)	DFLE ^(d)	SPFLE ^(e)
Males										
0–4	80.4	17.3	5.4	63.0	75.0	2.6	–1.3	—	3.9	2.7
5–9	75.7	17.2	5.3	58.5	70.5	2.5	–1.3	—	3.8	2.5
10–14	70.8	16.6	4.9	54.2	65.8	2.4	–1.4	—	3.8	2.5
15–19	65.8	16.0	4.6	49.8	61.2	2.4	–1.3	—	3.7	2.5
20–24	60.9	15.6	4.5	45.3	56.5	2.4	–1.3	–0.1	3.7	2.5
25–29	56.1	15.2	4.3	40.9	51.8	2.3	–1.3	–0.1	3.6	2.4
30–34	51.3	14.8	4.2	36.5	47.0	2.2	–1.2	–0.1	3.4	2.3
35–39	46.5	14.5	4.2	32.0	42.3	2.1	–1.1	–0.1	3.2	2.2
40–44	41.7	14.0	4.1	27.8	37.7	2.1	–0.9	–0.1	3.0	2.2
45–49	37.1	13.5	4.0	23.5	33.1	2.1	–0.8	–0.1	2.9	2.2
50–54	32.5	13.0	3.9	19.5	28.6	2.1	–0.5	—	2.6	2.1
55–59	28.0	12.3	3.8	15.7	24.2	2.1	–0.3	—	2.4	2.1
60–64	23.7	11.5	3.6	12.2	20.1	2.1	—	—	2.1	2.0
65–69	19.5	10.4	3.4	9.2	16.2	1.9	0.3	—	1.6	1.9
70–74	15.6	9.0	3.1	6.7	12.5	1.7	0.3	—	1.4	1.7
75–79	12.0	7.6	3.0	4.4	9.1	1.4	0.3	—	1.1	1.4
80–84	8.8	6.2	2.7	2.6	6.1	1.0	0.3	—	0.7	1.0
85 and over	6.2	4.8	2.3	1.4	3.9	0.6	0.4	–0.2	0.2	0.7
Females										
0–4	84.5	19.3	7.5	65.2	77.1	1.7	–1.3	–0.8	3.0	2.5
5–9	79.8	19.3	7.4	60.5	72.4	1.6	–1.3	–0.8	2.8	2.3
10–14	74.9	18.9	7.2	55.9	67.7	1.5	–1.3	–0.8	2.9	2.4
15–19	69.9	18.6	7.1	51.3	62.8	1.5	–1.2	–0.8	2.8	2.3
20–24	65.0	18.3	7.0	46.7	58.0	1.5	–1.1	–0.8	2.7	2.3
25–29	60.1	17.9	6.9	42.1	53.2	1.5	–1.1	–0.8	2.6	2.3
30–34	55.1	17.5	6.8	37.6	48.3	1.5	–1.1	–0.8	2.5	2.3
35–39	50.2	17.1	6.7	33.1	43.5	1.5	–1.0	–0.8	2.5	2.2
40–44	45.4	16.6	6.6	28.8	38.8	1.5	–1.0	–0.8	2.4	2.2
45–49	40.6	16.0	6.4	24.6	34.2	1.4	–0.9	–0.8	2.3	2.2
50–54	35.9	15.4	6.3	20.5	29.6	1.4	–0.7	–0.7	2.1	2.1
55–59	31.2	14.6	6.1	16.7	25.1	1.4	–0.5	–0.6	1.9	2.0
60–64	26.7	13.6	5.9	13.1	20.8	1.4	–0.1	–0.6	1.5	1.9
65–69	22.3	12.3	5.6	10.0	16.6	1.3	0.1	–0.5	1.2	1.8
70–74	18.0	10.9	5.4	7.1	12.6	1.1	0.1	–0.5	1.0	1.6
75–79	14.0	9.4	5.1	4.6	9.0	0.9	0.2	–0.5	0.7	1.4
80–84	10.4	7.6	4.8	2.7	5.6	0.7	0.2	–0.5	0.5	1.1
85 and over	7.2	5.8	4.1	1.5	3.2	0.3	—	–0.4	0.4	0.8

(a) LE = life expectancy.

(b) DLE = expected years of life lived with disability.

(c) SPLE = expected years of life lived with severe or profound core activity limitation.

(d) DFLE = expected years of life lived without disability.

(e) SPFLE = expected years of life lived without severe or profound core activity limitation.

Note: Figures in this table are rounded.

Source: AIHW analysis of unpublished ABS SDAC 2003 and 2015 data; and of unpublished ABS abridged Australian life tables for 2001–2003 and 2013–2015.

Table A4: Gender gap in life expectancy and selected health expectancies, by age, 2003 to 2015 (years)

Age group	Gender gap in LE ^(a)					Gender gap in DLE ^(b)					Gender gap in SPLE ^(c)					Gender gap in DFLE ^(d)					Gender gap in SPFLE ^(e)				
	2003	2009	2012	2015	Diff 2003 to 2015	2003	2009	2012	2015	Diff 2003 to 2015	2003	2009	2012	2015	Diff 2003 to 2015	2003	2009	2012	2015	Diff 2003 to 2015	2003	2009	2012	2015	Diff 2003 to 2015
0–4	5.1	4.5	4.4	4.1	-1.0	2.0	1.9	2.3	2.0	—	2.8	2.1	2.1	2.1	-0.8	3.1	2.7	2.1	2.1	-0.9	2.2	2.5	2.3	2.0	-0.2
5–9	5.0	4.5	4.3	4.1	-0.9	2.0	1.9	2.3	2.1	0.1	2.9	2.1	2.1	2.1	-0.8	3.0	2.6	2.0	2.0	-1.0	2.1	2.3	2.2	2.0	-0.1
10–14	5.0	4.5	4.3	4.1	-0.9	2.3	2.1	2.5	2.4	0.1	3.0	2.3	2.3	2.3	-0.8	2.7	2.3	1.8	1.7	-0.9	1.9	2.1	2.0	1.8	-0.1
15–19	5.0	4.5	4.3	4.1	-0.9	2.5	2.4	2.8	2.6	0.1	3.2	2.5	2.5	2.4	-0.7	2.5	2.0	1.5	1.5	-1.0	1.8	2.0	1.8	1.7	-0.1
20–24	4.9	4.4	4.2	4.1	-0.8	2.5	2.5	2.8	2.7	0.2	3.2	2.5	2.5	2.5	-0.7	2.4	1.9	1.4	1.4	-1.0	1.7	1.9	1.7	1.5	-0.2
25–29	4.7	4.3	4.1	4.0	-0.8	2.5	2.4	2.7	2.7	0.2	3.2	2.5	2.5	2.6	-0.6	2.3	1.9	1.4	1.2	-1.0	1.5	1.8	1.6	1.4	-0.1
30–34	4.6	4.2	4.0	3.9	-0.7	2.6	2.4	2.7	2.7	0.2	3.2	2.5	2.4	2.6	-0.6	2.0	1.7	1.3	1.1	-0.9	1.4	1.7	1.5	1.3	-0.1
35–39	4.4	4.0	3.9	3.8	-0.7	2.6	2.4	2.6	2.6	0.1	3.2	2.4	2.4	2.5	-0.6	1.8	1.7	1.3	1.1	-0.7	1.2	1.6	1.5	1.2	—
40–44	4.3	3.9	3.8	3.6	-0.6	2.6	2.4	2.6	2.6	-0.1	3.1	2.4	2.4	2.5	-0.6	1.7	1.5	1.2	1.1	-0.6	1.2	1.5	1.4	1.1	—
45–49	4.2	3.8	3.7	3.5	-0.7	2.6	2.3	2.5	2.5	-0.1	3.1	2.3	2.4	2.4	-0.7	1.6	1.5	1.2	1.1	-0.6	1.1	1.4	1.3	1.1	0.1
50–54	4.1	3.7	3.5	3.4	-0.7	2.6	2.1	2.5	2.4	-0.2	3.1	2.3	2.3	2.4	-0.7	1.5	1.5	1.1	1.0	-0.5	1.0	1.4	1.2	1.0	—
55–59	3.9	3.5	3.4	3.2	-0.7	2.4	2.0	2.3	2.2	-0.2	3.0	2.2	2.2	2.4	-0.6	1.5	1.5	1.1	1.0	-0.5	0.9	1.3	1.2	0.8	-0.1
60–64	3.7	3.3	3.2	3.0	-0.7	2.2	1.8	2.2	2.1	-0.1	2.9	2.1	2.1	2.3	-0.6	1.5	1.5	0.9	0.9	-0.6	0.8	1.2	1.0	0.7	-0.1
65–69	3.4	3.0	2.9	2.7	-0.7	2.2	1.5	2.1	1.9	-0.2	2.8	2.1	2.0	2.3	-0.5	1.2	1.5	0.8	0.8	-0.4	0.6	0.9	0.8	0.4	-0.1
70–74	3.0	2.6	2.5	2.4	-0.6	2.1	1.5	1.9	2.0	-0.2	2.8	2.0	2.1	2.3	-0.5	0.8	1.1	0.6	0.4	-0.4	0.2	0.6	0.5	0.1	-0.1
75–79	2.4	2.2	2.1	2.0	-0.5	1.8	1.3	1.6	1.8	—	2.5	1.9	2.0	2.1	-0.4	0.7	0.9	0.5	0.2	-0.4	0.1	0.3	0.1	0.1	—
80–84	1.8	1.6	1.6	1.5	-0.3	1.5	1.0	1.4	1.4	-0.1	2.4	1.7	1.7	2.0	-0.4	0.3	0.6	0.3	0.1	-0.2	0.6	0.1	0.1	0.5	-0.1
85 and over	1.3	1.1	1.1	1.0	-0.2	1.3	0.7	1.0	1.0	-0.4	2.0	1.4	1.5	1.7	-0.3	0.1	0.4	0.1	0.1	—	0.7	0.3	0.4	0.7	—

(a) LE = life expectancy.

(b) DLE = expected years of life lived with disability.

(c) SPLE = expected years of life lived with severe or profound core activity limitation.

(d) DFLE = expected years of life lived without disability.

(e) SPFLE = expected years of life lived without severe or profound core activity limitation.

Notes

1. Figures in this table are rounded.

2. Gender gap is calculated by subtracting the expected years for males from the expected years for females. If this results in a negative number, the gap is expressed as a positive number.

Source: AIHW analysis of unpublished ABS SDAC 2003, 2009, 2012 and 2015 data; and of unpublished ABS abridged Australian life tables 2001–2003, 2007–2009, 2010–2012 and 2013–2015.

Table A5: Age- and sex-specific prevalence rates of disability and of severe or profound core activity limitation, 2003 and 2015 (%)

Age group	With disability (all severity levels)						With severe or profound core activity limitation					
	Males			Females			Males			Females		
	2003	2015	Change 2003 to 2015 (percentage points)	2003	2015	Change 2003 to 2015 (percentage points)	2003	2015	Change 2003 to 2015 (percentage points)	2003	2015	Change 2003 to 2015 (percentage points)
0–4	4.8	4.7	–0.1	4.0	2.4	–1.6	3.3	2.6	–0.7	2.5	1.5	–1.0
5–9	11.7	12.1	0.5	6.4	7.0	0.7	6.5	6.9	0.5	3.3	4.3	1.0
10–14	13.1	11.8	–1.3	8.8	6.7	–2.1	6.3	6.1	–0.2	3.5	2.6	–1.0
15–19	9.0	8.6	–0.5	8.6	6.9	–1.7	2.4	3.7	1.4	2.2	1.9	–0.3
20–24	8.9	9.0	0.1	9.2	8.2	–1.0	2.1	2.5	0.5	2.2	2.1	–0.1
25–29	12.0	8.7	–3.3	8.9	8.1	–0.9	2.4	2.3	–0.1	2.2	2.2	—
30–34	11.4	7.8	–3.6	10.3	8.6	–1.7	2.2	1.4	–0.8	2.4	2.1	–0.3
35–39	14.6	11.8	–2.8	12.5	12.5	—	2.6	2.8	0.1	3.1	3.0	–0.1
40–44	14.4	11.2	–3.1	15.2	12.9	–2.3	3.6	2.3	–1.3	3.8	4.0	0.1
45–49	20.8	14.2	–6.6	19.0	14.0	–5.0	3.8	2.7	–1.1	4.8	3.2	–1.6
50–54	22.2	17.5	–4.7	24.3	20.0	–4.3	4.6	4.1	–0.5	6.3	4.4	–1.9
55–59	28.6	22.6	–6.1	31.9	24.4	–7.5	6.3	5.6	–0.6	8.2	6.4	–1.8
60–64	40.6	31.7	–8.9	37.1	31.4	–5.7	7.6	7.3	–0.3	9.9	8.4	–1.5
65–69	42.5	39.7	–2.7	38.6	36.0	–2.6	9.5	8.4	–1.1	10.4	8.6	–1.7
70–74	49.3	43.9	–5.4	49.8	43.9	–5.9	11.4	9.6	–1.9	17.3	13.7	–3.6
75–79	60.1	51.8	–8.3	57.4	53.7	–3.7	18.7	14.9	–3.8	21.5	16.8	–4.7
80–84	72.9	63.1	–9.8	68.6	66.2	–2.3	27.3	24.0	–3.3	40.5	32.8	–7.8
85 and over	79.1	77.7	–1.4	83.8	79.7	–4.1	44.1	37.5	–6.6	65.0	56.3	–8.8
Total	19.9	18.0	–1.9	20.1	18.6	–1.5	5.4	5.3	–0.1	7.1	6.4	–0.7
<i>Total 0–64</i>	<i>15.4</i>	<i>12.8</i>	<i>–2.6</i>	<i>14.3</i>	<i>12.3</i>	<i>–1.9</i>	<i>3.9</i>	<i>3.7</i>	<i>–0.2</i>	<i>3.9</i>	<i>3.4</i>	<i>–0.5</i>
<i>Total 65 and over</i>	<i>55.0</i>	<i>49.7</i>	<i>–5.3</i>	<i>56.3</i>	<i>51.6</i>	<i>–4.6</i>	<i>17.1</i>	<i>14.7</i>	<i>–2.4</i>	<i>26.8</i>	<i>21.8</i>	<i>–5.0</i>

Note: Figures in this table are rounded and may differ from those published by the ABS because of rounding.

Source: AIHW analysis of unpublished ABS SDAC 2003 and 2015 data.

Table A6: Age-standardised rates of disability and of severe or profound core activity limitation, 2003 to 2015 (%)

Sex/age group	2003	2009	2012	2015	Change 2003 to 2015 (percentage points)
With disability (all severity levels)					
Males					
0–64	15.3	12.8	12.5	12.4	–2.9
65 and over	56.1	54.3	52.3	50.7	–5.4
Total	20.4	18.1	17.5	17.2	–3.2
Females					
0–64	14.0	12.4	12.1	11.7	–2.3
65 and over	54.5	51.6	52.4	50.7	–3.8
Total	19.1	17.3	17.1	16.6	–2.5
Persons					
0–64	14.7	12.6	12.3	12.1	–2.6
65 and over	55.3	52.8	52.4	50.7	–4.6
Total	19.8	17.7	17.3	16.9	–2.9
With severe or profound core activity limitation					
Males					
0–64	3.9	3.6	3.6	3.7	–0.3
65 and over	18.1	17.3	17.6	15.4	–2.8
Total	5.7	5.3	5.4	5.2	–0.6
Females					
0–64	3.9	3.4	3.6	3.3	–0.6
65 and over	24.6	21.2	21.1	20.2	–4.5
Total	6.5	5.7	5.8	5.4	–1.1
Persons					
0–64	3.9	3.5	3.6	3.5	–0.4
65 and over	22.0	19.6	19.6	18.1	–4.0
Total	6.2	5.5	5.6	5.3	–0.9

Notes

1. Figures in this table are rounded and may differ from those published by the ABS because of rounding.
2. Rates have been directly age-standardised to the Australian population at 30 June 2001. The age categories used in the standardisation were 5-year age groups to 85 and over.

Source: AIHW analysis of unpublished ABS SDAC 2003, 2009, 2012 and 2015 data.

Appendix B: Methods and data sources

Estimates of health expectancies presented in the fact sheet and appendices have been expressed using the following main measures:

- expected years of life lived with disability (all severity levels)
- expected years of life lived with severe or profound core activity limitation (a subset of years of life with disability)
- expected years of life without disability (all severity levels)
- expected years of life without severe or profound core activity limitation (a subset of years of life without disability)
- estimates of each of the above as a proportion of total life expectancy.

These estimates have been calculated using the Sullivan method (Sullivan 1971). Health expectancies calculated by the Sullivan method are the average number of remaining years, at a particular age, that a population can expect to live with different levels of disability or without a disability. In other words, just as with life expectancy, health expectancies are indicators of population health rather than predictions of any individual's experience; and health expectancies at any given age are average estimates for the total population of that age group, including people who already have a disability at the given age.

The Sullivan method requires mortality data taken from period life tables (which show the current probability of death for the population of different ages in a year) and data on the prevalence of health states, such as disability. It modifies the regular life table by applying the age-specific prevalence rates to the number of person years in each age interval of the life table. In this case, unpublished ABS abridged life tables are used together with unpublished age- and sex-specific disability prevalence rates from the ABS Survey of Disability, Ageing and Carers (SDAC) (see Box B1 and ABS 2016a for more information on the SDAC; and ABS 2016b for more information on ABS life tables).

It is important to note that disability does not necessarily equate to poor health or illness, and expected years with disability should not be considered as being of less value than years without disability. For example, in the early stages of disability associated with paraplegia, the person might be considered in poor health, but once their condition is stable, they might enjoy good health, particularly in the sense that they do not require medical services and can participate in many life areas.

Box B1: ABS Survey of Disability, Ageing and Carers definitions of disability

The SDAC generally follows the conceptual framework and major concepts of the International Classification of Functioning, Disability and Health (ICF). (Refer to the ABS website and ABS 2016a for more information.)

Disability

In the SDAC, a person is said to have disability if they have at least 1 of a list of limitations, restrictions or impairments that has lasted, or is likely to last, for at least 6 months and that restricts everyday activities. People with disability, so defined, are asked further questions about core activity limitations and schooling and employment restrictions. Those reporting a core activity limitation or a schooling or employment restriction are the population with disability and a specific limitation or restriction; the remainder is the population with disability and no specific limitations.

New modules have been added to the SDAC over the years. For example, in 2015, additions were made to identify people with social and behavioural difficulties, memory loss and periods of confusion and dementia. The number of additional people identified as having a disability is not considered significant, and the disability prevalence data are considered comparable over the years presented here.

Core activity

People who were identified as having disability were asked about their need for assistance with the core activities of self-care, mobility and communication. 'Core activities' comprise the following tasks:

- self-care – bathing or showering, dressing, eating, using the toilet, and bladder or bowel control
- mobility – getting into or out of a bed or chair, moving around at home and going to, or getting around, a place away from home
- communication – understanding and being understood by others: strangers, family and friends.

Core activity limitation

Four levels of core activity limitation were determined based on whether a person needs personal assistance with, has difficulty with, or uses aids or equipment for any of the core activities. A person's overall level of core activity limitation was determined by the highest level of limitation experienced in any of the core activity areas. The 4 levels of core activity limitation are:

- profound – always needs assistance from another person to perform a core activity
- severe – sometimes needs assistance from another person to perform a core activity; or has difficulty understanding or being understood by family or friends; or can communicate more easily using sign language or other non-spoken forms of communication
- moderate – does not need assistance, but has difficulty performing a core activity
- mild – has no difficulty performing a core activity but uses aids or equipment because of disability; or cannot easily walk 200 metres, walk up and down stairs without a handrail, easily bend to pick up an object from the floor, or use public transport; or has difficulty or needs help using public transport.

Appendix C: Selected health scenarios and measures of health expectancies

The relationships among mortality, morbidity and disability are complex. Three broad health scenarios that have been used in various studies to describe the evolution of mortality, morbidity and disability and thus the health consequences of increasing life expectancy at older ages are:

- Compression of morbidity – in this scenario, the period living with ill-health and disability before death is shortened because of a delay in onset of chronic disease or disability and a slowdown in the rate of increase in life expectancy. If the number of expected years of life with disability falls, there is an absolute compression of morbidity. If the proportion of expected years of life with disability falls without the number of expected years of disability decreasing (it could even rise), there is a relative compression of morbidity.
- Expansion of morbidity – in this scenario, increasing longevity is accompanied by more survivors who are frail and suffer from chronic conditions, resulting in a longer period living with disability before death. If the number of expected years of life free of disability falls, there is an absolute expansion of morbidity. If the proportion of expected years free of disability falls without the number of expected disability-free years decreasing (it could even rise) there is a relative expansion of morbidity.
- Dynamic equilibrium – in this scenario, the overall level of diseases or disability increases largely due to the increase of less severe diseases or disability, while the prevalence of severe diseases or disability falls or remains stable, due to the rate of progression of disease or disability slowing down. If the ratio of disability-free life expectancy to total life expectancy is constant, there is an equilibrium. For the severity of disability, if the number of years with disabilities – all levels combined – increases, while the number of years with severe disability remains constant or even falls within life expectancy, there is said to be ‘dynamic equilibrium’ (Howse 2006; Robine et al. 2000).

The three scenarios have been expressed in terms of changes in various relationships between life expectancy and the expected years of life with disability. Any particular situation can be classified as a combination of absolute compression or expansion of morbidity (according to the change in the number of years lived with or without disability), combined with relative compression or expansion of morbidity (according to changes in the proportion of expected life lived with or without disability).

The data presented indicate that there is no single scenario that applies in Australia over the study period. Rather, a combination of positive and negative changes is evident, with the gains in life expectancy for older Australians accompanied by increases in expected years both with and without disability. This is consistent with conflicting evidence in international literature indicating that measuring the relationship between longevity, morbidity and disability is much more complicated than each of the basic scenarios might suggest.

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