

Appendix 5

Summary of measurement options

Wellbeing indicators across the life cycle

Contents

Domain: Economic	4
Domain Economic: All Population (see Appendix 1)	4
Domain: Home.....	7
Domain Home: All Population (see Appendix 1).....	7
Domain: Health.....	8
Domain: Health: All population (See appendix 1).....	8
Domain: Empowerment	11
Domain: Empowerment – All population (See appendix 1).....	11
Domain: Education and skills	12
Domain: Education and skills – All population (See appendix 1)	12
Domain: Social and community	14
Domain: Social and community – All population (See appendix 1).....	14
Domain: Safety.....	16
Domain: Safety – All population (See appendix 1).....	16
Domain: Health – Children.....	17
Domain: Health – Children (See appendix 2).....	17
Domain: Safety – Children.....	19
Domain: Safety – Children (See appendix 2).....	19
Domain: Economic – Children	20
Domain: Economic – Children (See appendix 2)	20
Domain: Education and skills – Children.....	21
Domain: Education and skills – Children (See appendix 2)	21
Domain: Social and community – Children.....	22
Domain: Social and community – Children (See appendix 2).....	22

Domain: Health – Youth.....	23
Domain: Health – Youth (See appendix 3).....	23
Domain: Social and community – Youth.....	27
Domain: Social and community – Youth (See appendix 3).....	27
Domain: Safety – Youth.....	28
Domain: Safety – Youth (See appendix 3).....	28
Domain: Education and skills – Youth.....	29
Domain: Education and skills – Youth (See appendix 3).....	29
Domain: Economic – Older adults	30
Domain: Economic – Older adults (See appendix 4)	30
Domain: Social and community – Older adults.....	31
Domain: Social and community – Older adults (See appendix 4).....	31
Domain: Education and skills – Older adults.....	32
Domain: Education and skills – Older adults (See appendix 4).....	32
Domain: Home – Older adults.....	33
Domain: Home – Older adults (See appendix 4).....	33
Domain: Health – Older adults.....	34
Domain: Health – Older adults (See appendix 4).....	34

Domain: Economic

Domain Economic: All Population (see Appendix 1)

Domain	Indicator	Measure	Evidence
Economic	Household income	Household gross income	Rojas, 2004; Clark Frijters and Shields, 2008; Lucas and Schimmack, 2008; Easterlin, 1995. ONS, 2014; Biddle, 2015.
		Household disposable income	
		Household equivalised disposable income	
		Poverty	
	Individual income	Average gross annual earnings of full-time employees	Kahneman and Deaton, 2010; Brown et al., 2008
		Average gross annual earnings of casual employees	
		Source of main income (for example, superannuation, age pension)	
	Financial hardship	Finding it quite or very hard to get by financially	Yates, 2007; Adler and Ostrove, 1999; Marmot and Wilkinson, 1999; Mirowsky and Ross, 2003; Williams and Collins, 1995; Bradshaw and Ellison, 2010; O'Neill et al., 2006; Chi and Chou, 2000; Chou and Chi, 1999; Krause, 1987; Mendes de Leon, Rapp and Kasl, 1994; Aquino et al., 1996; Krause, 1993. Brown et al., 2005; Bridges and Disney, 2010
		Households spend more money than it gets	
		Could not raise \$2000 within a week	
Could no pay electricity on time			
Could not pay registration insurance on time			
Pawned or sold something			
Went without meals			

	Could not afford to heat home	
	Sought assistance from welfare/community organisations	
	Sought financial help from friends/family	
	High household debt	
Employment	Ratio of the employed to the working age population (15-64 years age)	Tait et al., 1989; Dockery, 2005; OECD, 2011; 2013; Bardasi and Francesconi, 2004; van Campen and and Iedema, 2007.
	Employment rates for older people	Hao, 2008; Bossé, Aldwin, Levenson, Workman-Daniels, and Ekerdt, 1990; Calvo, 2006; Duncan and Whitney, 1990; Erikson, Erikson, and Kivnick, 1986; Herzog and House, 1991; Lemon, Bengtson, and Peterson, 1972; Hayward, Friedman, and Chen, 1998; Su and Ferraro, 1997; Wethington, Moen, Glasgow, and Pillemer, 2000.
Unemployment	Unemployment rate / Ratio of the employed to the working age population (15-64)	Human capital estimates, 2015; Creed et al. 2003 cited in Proctor et al. 2009; Cole et al., 2009; Theodossiou, 1998, Goldsmith et al., 1997a, Goldsmith et al., 1997b, Layard et al., 2005, Morrell et al., 1998, Flatau et al., 2000, Creed et al., 1999, Shamir, 1986, Murphy and Athanasou, 1999 and Clark, 2003; Milner, Page and LaMontagne, 2013; Carroll, 2007; Stutzer, 2004; Frey and Stutzer; Boyce et al., 2010; Lucas et al. 2004; Winkelmann and Winkelmann, 1998.
	Long term unemployment rate (Those who have been unemployed for one year or more over the labour force of the same age)	
	Probability of becoming unemployed (The annual inflow into unemployment)	
Working hours	Percentage of employees working more than a specific threshold in a week (for example 50 hours)	Meier and Stutzer, 2008; Schaufeli and Taris, 2008; Caruso, 2006; Golden and Wiens-Uers, 2006.
Job satisfaction	Self-reported satisfaction with work	Faragher et al., 2005; OECD, Measuring National Well-Being, 2013; Pugliesi, 1999.
	Satisfaction with component of jobs such as:	

	(pay, hours of work, future prospect such as promotion and job security, difficulty of the job, job content such as interest, prestige and independence and interpersonal relationships (with co-workers and with management)).	
Household Wealth	Net household financial wealth/net worth per capita	Brandoloni, Magri and Smeeding, 2010; Headey, Muffels and Wooden, 2008; Headey and Wooden, 2004; Roszkowski and Grable, 2007; Senik, 2014; Plagnol, 2011
	Median wealth per household, including pension wealth	
Inflation rate	Inflation rate (as measured by the Consumer Prices Index)	Di Tella et al., 2001; Welsch., 2007.

Domain: Home

Domain Home: All Population (see Appendix 1)

Domain	Outcome	Measure	Evidence
Home	Overcrowding	Average number of rooms per person	Marsella et al., 1970; Hassan, 1977; Gove and et al., 1983; Gabe and Williams, 1987; Jain, 1987; Evans et al., 1989; Lepore et al., 1991; Solari and Mare, 2012; Bradshaw et al., 2007; Currie and Yelowitz, 2000; Evans, 2003; Newman, 2008; Booth and Carroll, 2005.
		Ratios of persons to rooms	
		# more bedroom required (usually one more or two more bedrooms required)	
Housing affordability		Housing expenditure	Rowley et al., 2015; Heylen and Haffner, 2013; Leventhal and Newman, 2010; Coley et al., 2013; Harkness and Newman, 2005; Burke, 2007; Lester et al., 2013; Rowley and Ong, 2012; Yates, 2007; Deidda, 2015; Chen et al., 2010; Haffner and Heylen, 2011; Hancock, 1993; Hulchanski, 1995; Stone, 2006
		Percentage of household gross adjusted disposable income spent on housing and house maintenance	
		Housing stress	
Homelessness		Homeless rate (all population)	Smith et al., 2008; Shelter, 2004; Moore et al. 2007; Vostanis 2002; Molnar, Rath, and Klein, 1990; Rafferty and Shinn, 1991; Masten, Miliotis, Graham-Bermann, Ramirez, and Neemann
		Youth homelessness (12-18, or 12-24 years);	
		% of population in Transitional Housing	
Sanitary facilities		Dwelling without basic sanitary facilities	Minujin et al. 2006; Roelen et al. 2010; Delamonica and Minujin, 2007
Access to key services		Average minimum travel time to reach the nearest key services	Ettema et al., 2007.

Domain: Health

Domain: Health: All population (See appendix 1)

Domain	Outcome	Measure	Evidence
Health	Life expectancy	Life expectancy at birth	Perenboom et al., 2002; D'Acci, 2011; Berenger and Verdier-Chouchane, 2007
		Healthy life expectancy at birth (male/female)	
	Self-reported health status	Percentage of people reporting excellent/very good/good/fair/poor	Benitez-Silva et al., 2004; Anger et al., 2009; Stutzer, 2004; Dolan et al., 2008; Okun et al., 1984; Measuring National Well-Being – What Matters Most to Personal Well-Being? 2013; Sibthorpe et al. 2001; Ahn 2002
	Disability	Proportion of population who reported a disability	Oswald and Powdthavee, 2006; Dolan et al., 2008; Freedman et al., 2012; Tinghög et al., 2007.
		Proportion of population who reported profound or severe disability	
		Labour force participation rate for people with disability	
		Experience of discrimination for people with disability	
	Smoking behaviours (please also see Environmental Tobacco Smoking in children and youth only indicators)	Proportion of population who currently smoke tobacco by age and sex	Pitkänen et al. 2004 and Mathers et al. 2006; Venning et al., 2013.
		Frequency of use (daily vs non-daily, and units per day)	
		Type of product used	

Overall life satisfaction / Self-rated happiness	Life evaluation (life as a whole)	Personal Well-being in the UK QMI 2016; Kahneman and Krueger, 2006; Heliwell, 2008; Conceicao and Bandura, 2008; Diener et al., 2013; Diener and Chan, 2011; Helliwell, 2007; Cummins, 1995; Edwards and Klemmack, 1973; Yap et al., 2011.
	Affect (typically measured with reference to a particular point in time. Capture how people experience life rather than how they remember it. Positive affect captures emotions such as the experience of happiness, joy and contentment. Negative affect comprises the experience of unpleasant emotional states such as sadness, anger, fear and anxiety.	
	Eudaimonia (good psychological functioning, flourishing)	
Mental health	Mental health: been a nervous person, felt so down, been a happy person etc.	Alston and Dudley, 1973; Headey et al., 1993; Bhatia and Bhatia 2007; Laurel and Wolraich 2007; Patel et al. 2007; Lynch and Clarke 2006; Jorm et al., 2012; Adermann and Campbell, 2007; Lenz-Rashid, 2006; Unrau and Grinnell, 2005
	SF 36: mental health, vitality, emotional role functioning	
	Levels of psychological distress: measured by the Kessler 10 (K10) scale	
	Prevalence of mental disorders among young people aged 16–24 years	
	Health service (GP, hospitalisation, community health service) use for mental health problems	
	Diagnosed with serious illness - Depression or anxiety	
	Takes prescription medication for - Depression or anxiety	
	Depression / Anxiety	
Leisure activities (such as sports participation)	Participation in 30 mins of moderate intensity sport, once per week	Holder et al., 2009; Eccles and Barber, 1999; Fredericks and Eccles, 2005

Time devoted to leisure and personal care	Time use for recreation and leisure as time or % of total timetim	Lu and Hu, 2005; Iwasaki, 2007; Caldwell, 2005; Sacker and Cable, 2006; Agate et al.; Bruni and Stanca, 2008; Holder et al., 2009; Argyle, 2001; Csikszentmihalyi and Hunter, 2003; Shaw and Gant, 2002; Hills and Argyle, 1998.
Exposure to air pollution	Annual exposure to fine particulate matter (PM) air pollution	Rehdanz and Maddison, 2007; MacKerron and Mourato; Welsch, 2006; Goldberg et al., 2006
	Average air quality index for capital cities	
Climatic variability and climatic change	Total greenhouse gas emissions	Brereton, Clinch, and Ferreira, 2008; Smyth, Mishra, and Qian, 2008; Maddison and Rehdanz, 2011; Wilson et al., 2013;
Waste from households that is recycled	Waste from households that is recycled	Newman, 1999

Domain: Empowerment

Domain: Empowerment – All population (See appendix 1)

Domain	Outcome	Measure	Evidence
Empowerment	Voter turn-out	Number of votes casted over the voting-age population	Weitz-Shapiro and Winters (2011)
		Number of votes casted over the population registered to vote	
		Number of spoilt ballots	

Domain: Education and skills

Domain: Education and skills – All population (See appendix 1)

Domain	Outcome	Measure	Evidence
Education and skills	Educational attainment	Percentage of adults with at least upper secondary education	Desjardin, 2008; Bradshaw et al., 2007; Michalos, 2008; the OECD, 2011; 2013; Ovaska and Takashima, 2006; Hartog and Oosterbeek 1998; Hickson and Dockery 2008; Michalos 2008; Ross and Van Willigen 1997; Stevenson and Wolfers 2008; Witter et al. 1984; Frey and Stutzer, 2002a, 2002b; Helliwell, 2003; Blanchflower and Oswald 2004; Stutzer 2004; Fahey and Smyth 2004; Ferrer-i-Carbonell 2005; Dolan et al., 2008; Graham and Pettinato, 2001 in Dolan et al., 2008; Bukenya et al. 2003; Gerdtham and Johannesson 2001; Zhu and Chen, 2016; Card 2001; Griliches 1970 in Psacharopoulos 2010.
		Proportion of people aged 25-64 years with a vocational or higher education qualification	
		Mean Years of Schooling (UNDP uses this indicator as an HDI component)	
		The average number of completed years of education of a country's population, excluding years spent repeating individual grades for the population aged 25 years and older.	
		% of older people who completed Year 12	
		% of older people who completed Year 10	
		Percentage of adults with at least upper secondary education	
		Proportion of people aged 25-64 years with a vocational or higher education qualification	
		Mean Years of Schooling (UNDP uses this indicator as an HDI component)	
The average number of completed years of education of a country's population, excluding years spent repeating individual grades for the population aged 25 years and older.			

	% of older people who completed Year 12	
	% of older people who completed Year 10	
Student's cognitive skills	Programme for International Student Assessment (PISA) mean score for reading, mathematics and science	Suldo et al., 2008; Kirkcaldy et al., 2004; Gilman and Huebner 2003; Verkuyten and Thijs 2002; Quinn and Duckworth, 2007; Ansari and Stock 2010; Stoeber and Rambow 2007; Huebner, 1991; Freeman et al., 2011; Bird and Akerman, 2005; Bradshaw et al. 2007; Perry and McConney, 2013; Chakraborty and Blackburn, 2013; Kirkcaldy et al., 2004.
	NAPLAN– Literacy and Numeracy	
	International Mathematics and Science Study (TIMMS) and Progress in International Reading Literacy Study (PIRLS)	
	Australian Early Development Index (AEDI) and Australian Early Development Census (AEDC) – Language and Cognitive Skills component	
Those not in education, employment or training (NEET)	The percentage of the population of a given age group and gender who is not employed and not involved in further education or training.	Feather and O'Brien 1986; Patton and Noller, 1984; Proctor et al. 2009; Children of the Recession 2014 – UNICEF report card

Domain: Social and community

Domain: Social and community – All population (See appendix 1)

Domain	Outcome	Measure	Evidence
Social and community	Trust in Government	% of population in certain age group who report trust in government (local/federal?)/the parliament/politicians/the judicial system	Hudson, 2006; Helliwell and Putnam, 2004; Helliwell, Layard, and Sachs, 2015; Jovanovic, 2016.
	Perceived social network support	Percentage of people who have relatives or friends they can count on	Siedlecki et al., 2014; Newsom and Schulz 1996; Pinquart and Soerenen 2000; Thomas 2010; Lakey et al. 2010; Lee et al. 1995; Lepore et al. 2008; Wan et al., 1996; Ferguson 2006; Stone and Hughes 2000; Zwi and Henry 2005; Kafetsios and Sideridis, 2006; Fiori et al., 2006; Oberle et al., 2011; Suldo and Huebner, 2006; Chu et al., 2010.
		Percentage of people who report having to lean on in times of trouble / someone to confide in	
	Relationship with partner	% of population who report satisfied with their partner	Kim and McKenry, 2002; Hawkins and Booth, 2005.
	Feelings of loneliness	% of population who report often feeling lonely	Measuring National Well-Being – What Matters, 2013; Chu, 2010.
	Volunteering (more than once in the last 12 months)	% of population who volunteer	Hao, 2008; Fengler, 1984; Greenfield and Marks, 2004; Hunter and Linn, 1981; Jirovec and Hyduk, 1999; Burr et al., 2005; Morrow-Howell et al., 2003; Wilson, 2000; Miranti and Yu, 2015
	Feeling of a sense of belonging to their neighbourhood	% of population who feel belong to their community/neighbourhood	Young et al., 2004; O'Brien and Ayidiya, 1991; Oktay et al., 2009; Farrell et al., 2004
	Engagement with / participation in arts or cultural activities	% people attending events such as fetes, shows, festivals or other community events	Nimrod, 2005; Cohen et al., 2006; Lowis et al., 2011.

	Accessing natural environment	Accessing natural environment at least once a week in the last 12 months	Thompson Coon et al., 2011; Björk et al., 2008; Sugiyama and Thompson, 2005; Korpela, 2014.
	Energy consumption from renewable sources	Solar energy as % of total energy production	Mazur, 2011
Geothermal energy as % of total energy production			
Wind energy as % of total energy production			
Hydropower energy as % of total energy production			

Domain: Safety

Domain: Safety – All population (See appendix 1)

Domain	Outcome	Measure	Evidence
Safety	Self-reported victimization	The percentage of people who declare that they have been victim of an assault crime in the last 12 months. The data presented here are drawn from the Gallup World Poll.	Sundaram et al.,2008; Hanslmaier, 2013; Michalos and Zumbo, 2000; Turner et al., 2006; Greenfield, 2010; Maniglio, 2009
		Physical assault victimisation rate	
		Malicious property damage victimisation	
	Crimes against people	Crimes against the person (per 1,000 adults)	Cohen, 2008; Michalos and Zumbo, 2000; Hanson et al., 1995; Breslau, Davis, Andreski, and Peterson, 1991; Kilpatrick et al., 1989; Resnick, Kilpatrick, Dansky, Saunders, and Best, 1993; Anand and Santos, 2007; AIHW 2007
		The number of police-recorded intentional homicides reported each year, per 100,000 people	
		Death due to assaults	
	Feeling fairly/very safe	% of population (demographic?) who report feeling safe walking alone after dark	Young et al., 2004; Lavrakas 1982; Lewis and Salem 1986; Ross 1993; Skogan and Maxfield 1981; Moore and Trojanowicz, 1988; Quine and Morrel, 2008; Green et al., 2002; Lorenc et al., 2012

Domain: Health – Children

Domain: Health – Children (See appendix 2)

Domain	Outcome	Measure	Evidence
Health	Smoking in pregnancy	Decreased rate of women smoking during pregnancy	Aliyu et al. 2007; Chan and Sullivan 2008; Hoff et al. 2007; Jauniaux and Burton 2007; Julvez et al. 2007; Key et al. 2007; Salihu and Wilson 2007; Triche and Hossain 2007; Wigle et al. 2008; Lassen and Oei 1998; Vic: Laws, Grayson and Sullivan, 2006.
	Birthweight	Proportion of live born infants of low birthweight	AIHW: Ford et al. 2003; AIHW: Laws et al. 2004; AIHW: Laws et al. 2007; Chomitz et al. 1995; Bellingham-Young et al. 2013; Laws et al., 2006; Leeds et al, 2007; Laws et al, 2007
		Low birth weight	
	Breastfeeding	Proportion of infants exclusively breastfed at 4 months of age	Horta et al. 2007, Dyson et al., 2005; Chung et al. 2008.
		Increased rate of breastfeeding	
	Alcohol and drug use in pregnancy	Proportion of pregnant women with self-reported substance use during pregnancy	Rangmar et al. 2015; Niccols 2007; Elliott et al. 2007; Burns et al. 2013; Schneider et al., 2011; Mullally et al., 2011; Källénet al. 2013; Schempf and Strobino 2008; van Gelder et al. 2010; Skagerström, et al. 2011; Elliott et al. 2007; Fitzpatrick et al. 2012.
		Proportion of women with a positive toxicology screen during pregnancy	
	Immunisation	Increased rates of immunisation	England et al. 2001; WHO 2005, 2007a; Immunisation Myths and Realities, Department of Health and Aging, 2013; Menzies et al. 2008
	Parental substance use (alcohol and illicit drugs)	% of parents engaging in risky and high risk drinking patterns	Dawe et al. 2006; Gruenert et al. 2004; Johnson and Leff 1999, NSW DoCS 2006; Patton 2003; Barnard and McKeganey 2004; Drapela and Mosher 2007; McDermott 1984
		% of parents with self-reported substance use	
Injuries	Age-specific death rates from all injuries for children aged 0-4, 5-9 and 10-14 years	Berry et al. 2010; Cripps and Steel 2006; Garzon 2005; Howard 2006; Schnitzer 2006; WHO 2006; Vic, AIHW 2005	
	Decreased rate of unintentional injury		

	Wearing protective gear such as bicycle helmets, seatbelts	
Environmental tobacco smoke	Decreased rate of children exposed to tobacco smoke in the home	CDC 2007; Commonwealth of Australia 2002; WHO 2007b; Larsson et al. 2001; Golding 1997; Lassen and Oei, 1998; Laws et al. 2006
Dental health	Cleaning teeth at least twice a day	Berg & Coniglio 2006; Petersen 2003; Watt 2005; Dental Health Service Victoria 2003; Gussy et al., 2008; Oral health and dental care in Australia 2015; Sheiham, 2006; Pine et al. 2000; AIHW 2003
	Ratio of dentists: Statistical proportion based on number of dentists divided by total population (000 s)	
Overweight and obesity	Proportion of children who are overweight and obese for their age and gender	Griffiths et al. 2006, GUO et al. 2002, Hayden-Wade et al. 2005; Must and Strauss 1999; AMA Obesity 2016; Gill et al., 2005; De, Small, & Baur, 2008; Patradoon-Ho, Scheinberg, & Baur, 2005; NSW Government submission, 2008
Nutrition	Food security: Proportion of families who are food insecure	AIHW 2009a; NHMRC 2003; HSBC 2013/2014; Hampden-Thompson et al. 2008; SIGNAL, 2001; CEH, 2008
	Eating 5 portions of fresh fruit and vegetables a day	
Adequate sleep hours/night	Physical health, development & safety	Smaldone et al., 2007; Hamilton et al., 2007; Birchler-Pedross et al., 2009

Domain: Safety – Children

Domain: Safety – Children (See appendix 2)

Domain	Outcome	Measure	Evidence
Safety	Child abuse and neglect	Rate of children who were the subject of child protection substantiation in a given year	Glaser 2000; Green et al. 2010; Hildyard and Wofe 2002; Layton 2003; Ronan et al. 2009. Tennant et al. 2003; Vic DHS 2002
		Child protection: Decreased rate of re-notifications to child protection	
	Safe schools	safe from bullying, discrimination, crime	Gladstone et al., 2006.
		% of children having been bullied	

Domain: Economic – Children

Domain: Economic – Children (See appendix 2)

Domain	Outcome	Measure	Evidence
Economic	Parental education	Highest level of education attained by the parent/s or carers	Miranti et al. 2015; Acevedo-Garcia et al. 2007; Arntzen et al. 2008; du Prel et al. 2006; House of Representatives 2007; Kalil et al. 2009; Luo et al. 2006; WHO 2007c; Yu 2008
	Parental employment	Steady parental employment and adequate income/benefits	AIHW 2009b; Miranti et al. 2015
		Working age parents/guardians employed/unemployed/inactivity	
Proportion of dependent children aged 0-15 in family where no parent is working			

Domain: Education and skills – Children

Domain: Education and skills – Children (See appendix 2)

Domain	Outcome	Measure	Evidence
Education and skills	Cognitive/developmental resources (books, phone, internet, magazines, newspapers)	Proportion of dependent children aged 0–15 living in household with no internet access	Abello et al. 2012; Gross et al., 2002; Subrahmanyam and Lin, 2007; Sarriera et al., 2015.

Domain: Social and community – Children

Domain: Social and community – Children (See appendix 2)

Domain	Outcome	Measure	Evidence
Social and community	Organised child/youth/recreational activities	% of school-aged children participating in school clubs and extracurricular activities in school	Steptoe and Butler 1996; Loughry et al. 2006; Fredricks and Eccles 2010; Park, 2004; Mahoney 2000; Mahoney and Cairns 1997; Mahoney and Stattin 2000; 2002; Mahoney, Stattin, and Magnusson 2001.
		% of school-aged children participating in organized recreation activities and activities at community organisations/institutions	
	Relationships at school	% of children who self-report a sense of belonging at school and peer acceptance	Uusitalo-Malmivaara 2012; O'Rourke and Cooper 2010

Domain: Health – Youth

Domain: Health – Youth (See appendix 3)

Domain	Outcome	Measure	Evidence
Health	Injury and poisoning	Injury and poisoning death rate for young people aged 12–24 years	NPHP 2004; Allgaier et al., 2012.
		Road transport accident death rate for young people aged 12–24 years	
		Assault death rate for young people aged 12–24 years	
		Suicide rate for young people aged 15–24 years	
		Accidental poisoning death rate for young people aged 12–24 years	
		Injury and poisoning hospitalisation rate for young people aged 12–24 years	
Chronic conditions		Prevalence of long-term conditions among young people aged 12–24 years	GINA 2005; Varni et al. 2007; Edward, 2013
		Proportion of young people aged 12–24 years with asthma as a long-term condition	
		Incidence of diabetes among young people aged 15–24 years	
		Incidence of cancer per 100,000 young people aged 12–24 years	
Communicable diseases		Incidence of vaccine-preventable diseases among young people aged 12–24 years	Miller et al., 2012; Hutton et al., 2013

	Hepatitis A, B, and C notification rates for young people aged 12–24 years	
	HIV infection notification rate for young people aged 12–24 years	
	Incidence of notifiable sexually transmissible infections among young people aged 12–24 years	
Oral health	Proportion of young people aged 12 and 15 years decay-free	AIHW 2005; Petersen 2003; Watt 2005; Pahel et al., 2007; Kruger et al. 2005; Roberts-Thomson et al. 2008
	Mean number of decayed, missing or filled teeth (DMFT) at 12 and 15 years	
	A statistical proportion based on the number of dentists, divided by the total population (000s)	
Overweight and obesity	Proportion of young people who are overweight or obese	Lobstien et al., 2004; Reilly, 2005; Royal College of Physicians of London, 2004; Stewart-Knox et al., 2012; Tiffin et al., 2011
Nutrition	Proportion of young people aged 12–24 years meeting Australian Dietary Guidelines	McNaughton et al., 2012; Brimblecombe and O'Dea, 2009.
Sun protection	Proportion of young people aged 12–24 years using sun protection	AIHW 2007b; Grant, N., Wardle, J., & Steptoe, A., 2009; Dobbins et al. 2008.
Substance use	Reported rate for substance use disorders for young people aged 16–24 years	Bruner & Fishman 1998; Moran et al. 2006; Slade et al 2009; AIHW 2010b, 2011c
	Proportion of young people aged 12–24 years who are daily smokers	
	Proportion of young people aged 12–24 years who drink at risky or high-risk levels in the short or long term	
	Proportion of young people aged 12–24 years who had used an illicit drug within the last 12 months	

Sexual and reproductive health	Proportion of young people in Year 10 and Year 12 who have had sexual intercourse	WHO 2005; Johns et al., 2013; McMahon et al., 2011; Kang et al. 2007; Pursche 2007.
	Age-specific birth rate for 15–19 year old women	
	Teenage pregnancies: Proportion of females aged 15–19 with at least one child ever born	
Parental health and disability	Proportion of parents rating their health as 'fair' or 'poor'	Kowalenko et al. 2000; Lancaster 1999; Steck et al. 2005; AIHW 2010b.
	Proportion of young people aged 15–24 years living with a parent with disability	
	Proportion of youth aged 15–19 living in households where someone needs assistance with core activities	
Environmental tobacco smoke	Proportion of households with a young person aged 12–17 years where a household member smoked inside the home	CDC 2007; WHO 2007b; Chen et al., 2103; AIHW 2010b; Paul et al. 2010.
Potentially preventable hospitalisations	Potentially preventable hospitalisation rate for young people aged 12–24 years	Bodenheimer & Fernandez 2005; Mohanty et al., 2016.
Survival for melanoma of the skin	Five-year relative survival rate for melanoma of the skin for young people aged 12–24 years	Hamama-Raz et al., 2007.
Cervical cancer	Cervical screening rates among women aged 20–24 years	Vistad et al, 2006; Australian Indigenous Health Info Net, 2003.
	Cervical cancer vaccination rates among women aged 12–24 years	
Appropriate use of antibiotics	Proportion of upper respiratory tract infections managed for which oral antibiotics were prescribed	NHPC, 2004; Wutzke et al., 2007.

Delivery by caesarean section	Caesarean sections as a proportion of all deliveries for young women aged 15–24 years who gave birth.	Getahun et al. 2006; Taylor et al. 2006; AIHW 2010b; ABS 2006e; Rowlands and Redshaw, 2012.
General practice consultations	Rate of general practice encounters for young people aged 12–24 years	Hetlevik et al. 2010; Potiradis et al., 2008; Huang et al., 2006.
	Ration of GPs: A statistical proportion based on the number of General Practitioners (GPs), divided by the total population (000s)	
	Ratio of Dentists: A statistical proportion based on the number of dentists, divided by the total population (000s)	
Emergency department waiting times	Proportion of patients aged 12–24 years who are treated within national benchmarks for waiting times across triage categories in public hospital emergency departments	NPHP 2004; Muntlin et al., 2006.
Adverse events treated in hospital	Proportion of hospitalisations for young people aged 12–24 years where an adverse event was treated and/or occurred	Runciman et al. 2000; Brennan et al., 2004.

Domain: Social and community – Youth

Domain: Social and community – Youth (See appendix 3)

Domain	Outcome	Measure	Evidence
Social and Community	Family functioning	Not clear	Geggie et al. 2000; Shek 2002; Fleming et al. 2010; Ghazarian & Buehler 2010; Henderson et al. 2006; Li-Nang 1999; Strazdins et al., 2006

Domain: Safety – Youth

Domain: Safety – Youth (See appendix 3)

Domain	Outcome	Measure	Evidence
Safety	School relationships and bullying - Note about this, usability medium but the data is not available	Not clear	Lodge 2008; Skues et al. 2005; Spector & Kelly 2006; Wolke and Skew, 2012
	Child protection	Rate of young people aged 12–17 years who were the subject of a substantiation of a child protection notification received in a given year	McCain & Mustard 2002; Stanley et al. 2003; Chartier et al. 2007; Gupta 2008; Zolotor et al. 1999; Higgins and Katz, 2008.
		Rate of young people aged 12–17 years who are the subject of care and protection orders	

Domain: Education and skills – Youth

Domain: Education and skills – Youth (See appendix 3)

Domain	Outcome	Measure	Evidence
Education and Skills or Economic	Socioeconomic status of parents	Proportion of young people aged 12–24 years whose parents did not complete secondary school (Year 10 or above)	AIHW 2009c; Conger et al., 2010.
		Proportion of young people aged 12–24 years living in jobless families	
		Proportion of youth aged 15–19 in families where no parent is working	

Domain: Economic – Older adults

Domain: Economic – Older adults (See appendix 4)

Domain	Outcome	Measure	Evidence
Economic	Underemployment	% of older people working fewer hours than desired	Koeber and Wright 2001; Chan and Steven 2004; Gong and McNamara, 2011; Spoehr et al., 2009; Slack and Jensen, 2008; 2011; Wilkins, 2006; Friedland and Price, 2003; Wooden et al., 2009

Domain: Social and community – Older adults

Domain: Social and community – Older adults (See appendix 4)

Domain	Outcome	Measure	Evidence	
Social and Community	Caring duties	% of older people who provided care to children who were not their grandchildren	ABS, 2011; Sands et al., 2005; Thiele and Whelan, 2008; Hagedoorn et al., 2001; Holmen et al., 2000; Ekwall et al., 2004; McConaghy et al., 2005; Zarit et al., 1980; . Brodaty et al., 1994; George and Gwyther, 1986; Milne et al., 1993; Bell et al., 2001.	
		% of older people who provided care to children who were their grandchildren		
		% of older people who provided care to their children and/or grandchildren (daily and several days a week).		
		% of older people providing care to others		
	Access to transportation	% of older people who had no access to car		Fobker and Grotz, 2006; Liddle et al., 2011; Hilleras et al., 1999; Musselwhite and Haddad, 2010.
		% of older people who access public transport (bus, ferry, rail or taxi)		
	Connectivity	% of older people who have no Internet in the household		Shapira et al., 2006; Sum et al., 2009; Cody et al., 1999; Straka and Clark, 2000; Dickinson and Gregor, 2006.

Domain: Education and skills – Older adults

Domain: Education and skills – Older adults (See appendix 4)

Domain	Outcome	Measure	Evidence
Education and Skills	Language skills	% of older people who cannot speak English well or not at all	N/A

Domain: Home – Older adults

Domain: Home – Older adults (See appendix 4)

Domain	Outcome	Measure	Evidence
Home	Home tenure	% of older people who are still paying mortgages	Gong et al., 2012; 2015; Faulkner et al., 2002.
		% of older people who are private renters	
		% of older people living in public housing	
	Rent assistance	% of older people receiving rent assistance	Faulkner et al., 2002.

Domain: Health – Older adults

Domain: Health – Older adults (See appendix 4)

Domain	Outcome	Measure	Evidence
Health	Assistance needs	% of older people who need assistance with core activities	Weick, 2015; Skinner et al., 1999.
		% of older people who need assistance for 1 to 4 activities of daily living	
		% of older people who need assistance for 5 or more activities % of older people who have an unmet need for assistance for 1 to 4 activities	
		% of older people who have an unmet need for assistance for 5 or more activities	
	Using aged care services	% of older people who use aged care services	Noelker and Harel, 1978; Street et al., 2006
	Home and community care	% of older people who are Home and Community Care clients	Noelker and Harel, 1978; Street et al., 2006
	Community care hours	Hours of assistance for Home and Community Care per older person	Kane et al., 2004; Donald et al., 2013; Kadowaki et al., 2015; Subasi and Hayran, 2005
	Community packaged care	% of older people with low level community packaged care	Kane et al., 2004; Donald et al., 2013; Kadowaki et al., 2015; Subasi and Hayran, 2005
% of older people with high level community packaged care			
% of older people in the community with packaged care			
	Dementia	Prevalence of Dementia	John and Montgomery, 2010; de Boer et al., 2007; Smith et al., 2008; Boughtwood et al. 2011.