Targeting health expectancy gaps in South Australia

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REVES 21, Copenhagen, Denmark, 27-29 May 2009

> Outline history & small area work

 Describe comparisons

> Discuss applications



> This work represents the authors' views and not necessarily those of the South Australian Government or SA Health



Background

- > Australian Burden of Disease and Injury 1999
- > Expert training
- > Incoming government
 - Generational Health Review
- > Summary measures of population health
 - Disability Adjusted Life Years DALYs
 - Health adjusted life expectancy HALE

Background



HEALTHY LIFE EXPECTANCY

South Australians have a good life expectancy. However, it is the quality of that life which is the focus of this group of largets. Langevity must be accompanied by an active and healthy lifestyle which enables people to participate in their community. The difference in life expectancy between Aboriginal and non-Aboriginal populations is very concerning. The median age of mortality among South Australia's Aboriginal population has been 25–30 years less than far non-Aboriginal South Australians. This cannot be fixed quickly, but it is a crucial intergenerational challenge. A new target in the updated plan looks of the years of life last through avoidable disease as a means to highlight the problem and tackle it head-on.

Chronic disease management is the subject of a new target and reflects the reality that, as we live longer, we need to learn how to cope better with long-term illnesses.

The health-adjusted life expectancy (HALE) target is a carryover from the original plan and measures life expectancy as equivalent years of full health.

T2.4 TARGET - Healthy South Australians (existing modified): increase the healthy life expectancy of South Australians by 5% for males and 3% for females by 2014.

KEY MEASURE:

healthy adjusted life expectancy (HALE) (baseline: 1999-01).

DATA SOURCE:

Department of Health, South Australian Burden of Disease Study www.health.sa.gov.au/burdenatdisease/ DesktopDefault.aspx

Background

- > Australian Burden of Disease and Injury 2003 Study
 - Small area outcomes based on sex, age, area disadvantage, remoteness
 - Internally consistent synthetic estimates
- > HALE decomposition
- > Two sets of estimates:
 - Expected (synthetic estimates)
 - Observed

Aim

- Outline aspects of small area work in summary population health measures in South Australia
- > Health expectancy gaps across SES
 - Describe comparisons
 - Discuss application areas

Methods

- State level estimates for 2003 Australian Study
- > Relative movement back and forward in time
- > Results and projections for 1999-2015
- > Estimates are 3-yearly-averages
- > Statistical Local Areas (SLAs)

Methods

> Aggregate SLAs

- 100,000 population (min) for:
 - South Australian Government Regions
 - Health Regions
 - Health districts/sub-regions
 - Geographic Remoteness
 - Index of Relative Socio-economic Disadvantage (IRSD) quintiles





Healthy life expectancy at birth (South Australia)



Results

Healthy life expectancy at birth by area disadvantage (South Australia)



Results

Healthy life expectancy at birth by area disadvantage (South Australia)





Decomposition of differences in healthy life expectancy at birth by area disadvantage (South Australia 2004-2006)



Expected



Decomposition of differences in healthy life expectancy at birth by area disadvantage (South Australia 2004-2006)



2006 IRSD Quintile

Discussion

- > Decomposition analysis helps us understand what makes up the gap
- Expected and Observed outcomes within and across areas show variations in health and potential scope for change



Discussion

- > Identify issues for further investigation
 - Check for consistency and trends in observed results over time
 - Consider age specific rates
 - Examine expectancy for particular sex and ages (e.g. age 50)
- > Absence of confidence intervals limits formal testing
- > Confounders



Applications

1. Account for population health using health expectancy

Describe health 'gaps' by: Sex, age, socioeconomic status (SES)

5. Refine targets & priorities

Monitor indicators to gauge progress by SES

4. Apply knowledge to decision making & implementation

Integrate feasibility, impact and efficiency into decision-making - targeting by SES

2. Assess intervention effectiveness in the community

Adjust efficacy for acceptability, access/coverage, feasibility, provider/patient adherence, and SES

3. Conduct economic evaluation

Relate costs and effects of intervention options by SES

Framework adapted from: Tugwell P, de Savigny D, Hawker G, & Robinson V. Applying clinical epidemiological methods to health equity: the equity effectiveness loop BMJ Feb 2006; 332: 358 - 361

Equity-effectiveness framework

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Conclusion

Developments for producing health expectancy measures enabled another perspective in health planning and evaluation activities

SA well placed for further exploration

