

Using socioeconomic evidence in clinical practice guidelines

Rosemary Aldrich, Lynn Kemp, Jenny Stewart Williams, Elizabeth Harris, Sarah Simpson, Amanda Wilson, Katie McGill, Julie Byles, Julia Lowe and Terri Jackson

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The effects of socioeconomic position on health have been largely ignored in clinical guidelines. Australia's National Health and Medical Research Council has produced a framework to ensure that they are taken into account

The effects of socioeconomic position on health are well established12 but difficult to overcome. This is because the underlying causes are embedded in social and economic structures at all levels of society.3 Access to health services, the ability to act on health advice, and the capacity to modify health risk factors are all influenced by the circumstances in which people live and work.4 Studies have also shown that those most needing care are least likely to receive it,⁵ and that the quality of care received by people with lower socioeconomic positions is different from those with higher positions.⁷ Despite this evidence, guidelines for clinical practice do not take the effects of socioeconomic position into account, although some guideline groups acknowledge the need to consider the relevance and applicability of the evidence to the target group.8

Role of guidelines

Developers of guidelines for clinical practice attempt to identify, appraise, and collate the best evidence to ensure that the highest quality information is available for clinicians and patients. To date, clinical practice guidelines have been informed by clinical and, sometimes, economic evidence. The most robust evidence is considered to come from randomised controlled trials, but the results of such trials may not always be relevant and applicable to the needs of all groups in the population, particularly those who are socioeconomically disadvantaged.

Clinical practice guidelines have the potential to increase health inequalities by improving the health of the relatively health advantaged more readily than that of the relatively disadvantaged. Recognising this gap, Australia's National Health and Medical Research Council commissioned a handbook to inform developers of guidelines about ways to access, review, and collate evidence on the effect of socioeconomic position and apply that evidence when developing guidelines for clinical practice.¹¹

Developing the framework

Our process for developing the framework for using socioeconomic position and health evidence in clinical practice guidelines development is described fully in the handbook. Briefly, we used traditional search engine and listserv search and communication strategies to identify if and how evidence about socioeconomic position and health had been incorporated into guidelines. We located over 1700 published papers or guidelines or reports; 58 were considered relevant and critically reviewed. We also corresponded extensively with national and international experts in health equity and development of clinical guidelines.



Guidelines need to recognise the problems associated with low socioeconomic position

We found no guidelines, models, or handbooks for guideline developers that were specifically concerned with the use of evidence on socioeconomic position in developing broad clinical guidelines. We did, however, identify two specific guidelines (one for New Zealand Maori with heart failure¹² and the other for Australian Aboriginal patients with a spectrum of chronic diseases¹³) that included evidence about socioeconomic position and health. These guidelines included recommendations to be aware of access and cultural barriers to optimal care and evidence, where available, about strategies to overcome these barriers.

We recognised that in developing the framework it was crucial to attend to the following issues:

- Problems of translating evidence based guidelines into practice and use of clinical judgment¹⁴
- Non-representativeness of populations studied in randomised controlled trials¹⁵ 16
- Contribution of other types of evidence, including observational and qualitative studies¹⁷

Newcastle Institute of Public Health, PO Box 664J, Newcastle NSW 2300, Australia Rosemary Aldrich executive officer Jenny Stewart Williams research officer Amanda Wilson research officer Katie McGill research officer

Centre for Health Equity Training Research and Evaluation, School of Public Health and Community Medicine, University of New South Wales, Sydney NSW 2052, Australia

Lynn Kemp senior research associate Elizabeth Harris

director Sarah Simpson research officer

Centre for Clinical Epidemiology and Biostatistics, PO Box 664J, Newcastle NSW 2300, Australia Julie Byles

School of Public Health, LaTrobe University, Victoria 3086, Australia Terri Jackson senior research fellow

John Hunter Hospital, Hunter Area Health Service, Locked Bag No 1, Hunter Region Mail Centre, NSW 2310, Australia Julia Lowe director of general medicine

Correspondence to: R Aldrich raldrich@ mail.newcastle.edu.au

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- Appropriateness of, and difficulties in, conducting randomised controlled trials in all aspects of health (particularly modifying psychosocial conditions, health behaviours, and prevention)¹⁸
- Difficulty of developing and evaluating complex interventions in health services research within randomised trials.²⁰

Framework

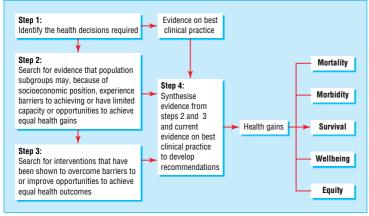
We developed a four step framework (figure) for developers of clinical practice guidelines by including an additional stage in Australia's established process for developing guidelines. The framework outlines the steps to be followed in accessing and applying evidence of socioeconomic position in the development of clinical practice guidelines. Box 1 gives an example of its use.

Step 1: Identify the health decision

The first step is to identify clearly the health decision that the guideline will concern and clarify the desired outcomes. These should include wellbeing and equity as well as mortality, morbidity, and survival. The decision may vary from individual management to treatment of whole communities and can refer to any part of care (prevention, diagnosis, primary care, secondary care, tertiary care) as well as psychosocial factors and health behaviours that may be affected by socioeconomic position.

Step 2: Search for evidence that socioeconomic position affects outcome

Once the health decision has been identified, a literature search is needed to identify the effect of socioeconomic position on the outcomes. As well as socioeconomic effects, the search should include the multiple factors (personal, behavioural, physiological, social, and environmental) that affect the capacity of individuals and population subgroups to comply with best practice. ^{21 22} All studies with sufficient power to control for the effect of socioeconomic position should be reviewed. Evidence of an association between the markers of socioeconomic position and the health decisions may include factors at the physical, economic, or social environment levels (such as health service provision, transport, and housing infrastructure) and health determinants (such as education,



Framework for including effects of socioeconomic position in guidelines

Box 1: Example of application of framework to New South Wales policy standards for cardiac rehabilitation

Step 1: Identify the health decision

Overweight and obese patients should be advised to optimise their body weight and increase physical activity

Step 2: Search for evidence of effect of socioeconomic position

Evidence from cross sectional studies shows that socioeconomic factors influence capacity to optimise weight and increase physical activity

Step 3: Search for interventions that reduce the effects of socioeconomic position

Social support and lifestyle advice have been shown to be more effective than lifestyle advice alone. Interventions should be low cost, scheduled at appropriate times, include assistance with transportation and childcare, and seek to promote general knowledge about health.

Step 4: Synthesise evidence to develop recommendations

Recommendation: Counselling for weight loss and increased physical activity should be conducted within a programme of social support and interventions to overcome the geographical, financial, social, or educational barriers that may affect the patient's capacity to gain maximum benefit

employment, occupation, income, housing, and area of residence).^{2 23}

Step 3: Search for studies of interventions that reduce effect of socioeconomic inequity

Literature describing interventions that attempt to overcome barriers to achieving equal health outcomes is often scarce. When this is the case, the guidelines should apply the general principles of equitable service—that is, "everyone should have a fair opportunity to attain their full potential and ... no-one should be disadvantaged from achieving this potential, if it can be avoided."²⁴ Approaches include targeting interventions that take into account the structural, material, economic, and environmental constraints experienced by population subgroups.²

Step 4: Use the evidence to produce guidelines

Once the evidence is gathered, the literature is analysed and synthesised to inform a set of recommendations or treatment options. Box 2 gives strategies that can be used if no evidence is available. When synthesising the evidence, developers of guidelines need to consider the representativeness of populations identified in the evidence and the interactions (including confounders and effect modifiers) between individual markers of socioeconomic position and health outcomes.

The future

The framework requires groups developing guidelines on clinical practice to analyse and synthesise a broader range of evidence than has been done in the past. Developers may have to learn how to identify and critically review evidence on socioeconomic position from peer reviewed and grey literature, including observa-

Box 2: What to do when there is no evidence

- · Broaden the search terms
- · Repeat the search strategy with a similar disease
- Repeat the search for different aspects of care of the same disease
- Review different types of evidence—for example, non-intervention, observational, and qualitative studies
- Review different sources of evidence—for example, grey literature
- If no relevant information is found, base recommendations on generic principles that promote health equity

Summary points

Socioeconomic position is known to affect health outcomes and delivery of health care

Guidelines for clinical practice have not routinely incorporated evidence on the effect of socioeconomic position

A framework is described for using socioeconomic evidence in development of clinical practice guidelines

Routine use of the framework should contribute to more equitable health care

tional and qualitative studies. However, incorporation of such evidence into guidelines will ensure that decision making in health care becomes an informed process leading to more equal health outcomes.²²

The authors of this paper were contracted by the National Health and Medical Research Council to draft the handbook *Using socioeconomic evidence in clinical practice guidelines*, published and launched in 2003. The framework for using socioeconomic evidence in clinical practice guidelines is reported here with the permission of the NHMRC. We thank the NHMRC for the opportunity to develop the framework and the many experts who contributed to the process

Contributors and sources: The authors have qualifications and experience in public health medicine, biostatistics, health economics, social science, journalism, nursing, psychology, epidemiology, and clinical medicine.

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- Acheson D. Independent inquiry into inequalities in health. London: Stationery Office, 1998.
- 2 Turrell G, Oldenburg B, McGuffog I, Dent R. Socioeconomic determinants of health: towards a national research program and a policy and intervention agenda. Canberra: Queensland University of Technology, School of Public Health, Ausinfo, 1999.
- 3 Harris E, Sainsbury P, Nuttbeam D. Perspectives on health inequity. Sydney: Australian Centre for Health Promotion, Department of Public Health and Community Medicine, University of Sydney, 1999.
- 4 Wilkinson R, Marmot M, ed. Social determinants of health. The solid facts. Copenhagen: WHO, 1998;308.
- Copenhagen: WHO, 1998:308.

 5 Hart JT. The inverse care law. *Lancet* 1971;i:405-12.
- Furler JS, Harris E, Chondros P, Powell Davies PG, Harris MF, Young DYL. The inverse care law revisited: impact of disadvantaged location on accessing longer GP consultation times. Med J Aust 2002;177:80-3.
 Harris MF, Priddin D, Ruscoe W, Infante FA, O'Toole BI. Quality of care
- 7 Harris MF, Priddin D, Ruscoe W, Infante FA, O'Toole BI. Quality of care provided by general practitioners using or not using division-based diabetes registers. Med J Aust 2002;177:250-2.
- 8 Harbour R, Miller J. A new system for grading recommendations in evidence based guidelines. BMJ 2001;323:334-6.
- 9 National Health and Medical Research Council. A guide to the development, implementation and evaluation of clinical practice guidelines. Canberra: NHMRC, 1998. www.nhmrc.gov.au/publications/synopses/cp65syn.htm (accessed 8 Oct 2003).
- National Health and Medical Research Council. How to compare the cost and benefits: evaluation of the economic evidence. Canberra: NHMRC, 2000. www.nhmrc.gov.au/publications/synopses/cp65syn.htm (accessed 8 Oct 2003).
- 11 National Health and Medical Research Council. Using socioeconomic evidence in clinical practice guidelines. Canberra: NHMRC, 2003:95. www.nhmrc.gov.au/publications/synopses/cp65syn.htm (accessed 8 Oct 2003).
- New Zealand Guidelines Group. Best practice evidence based guideline. Cardiac rehabilitation. Wellington: New Zealand Guidelines Group, 2002:163.
 Couzos S, Metcalf S, Murray RB. Systematic review of existing evidence and
- 13 Couzos S, Metcalf S, Murray RB. Systematic review of existing evidence and primary care guidelines on the management of otitis media in Aboriginal and Torres Strait Islander populations. Canberra: Commonwealth Department of Health and Aged Care, 2001. www.health.gov.au/oatsih/pubs/ index.htm#G (accessed 15 July 2003).
- 14 Greenhalgh T. Narrative based medicine in an evidence based world. BMJ 1999;318:323-5.
- 15 Britton A, Thorogood M, Coombes Y, Lewando-Hundt G. Search for evidence of effective health promotion. BMJ 1998;316:703.
- 16 Mason S, Hussain-Gambles M, Leese B, Atkin K, Brown J. Representation of South Asian people in randomised clinical trials: analysis of trials' data. BMJ 2003;326:1244-5.
- 17 Barton S. Which clinical studies provide the best evidence? *BMJ* 2000;321:255-6.
- 18 Speller V, Learmonth A, Harrison D. The search for evidence of effective health promotion. $BM\!J$ 1997;315:361-3.
- 19 Campbell M, Fitzpatrick R, Haines A, Kinmonth A, Sandercock P, Spiegelhalter D, et al. Framework for design and evaluation of complex interventions to improve health. *BMJ* 2000;321:694-6.
- 20 Bradley F, Wiles R, Kinmonth A-L, Mant D, Gantley M. Development and evaluation of complex interventions in health services research: case study of the Southampton heart integrated care project (SHIP). BMJ 1909-318-711-4
- 1999;318:711-4.
 21 Kidd KE, Altman DG. Adherence in social context. Control Clin Trials 2000;21(suppl 1):S184-7.
- 22 Brancati F, Kao W, Folsom A, Watson R, Szklo M. Incident type 2 diabetes mellitus in African American and white adults: the atherosclerosis risk in communities study. JAMA 2000;283:2253-9.
- 23 Shaw M, Dorling D, Mitchell R. Health, place and society. Harlow: Pearson Education, 2002.
- 24 Whitehead M. The concepts and principles of equity and health. Copenhagen: WHO Regional Office for Europe, 1990.

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My holistic bakery

In Exeter we are lucky in that some of our old-fashioned corner shops have survived the onslaught of the supermarkets. My bakery is such a remnant from the past. What is more, it is more holistic than an alternative health centre.

The first thing that strikes you when you enter is the irresistible smell. Customers' wellbeing hits the ceiling, and the local aromatherapists are out of business. There is often a queue, and the intense stimulation of my olfactory system relaxes my mind and lulls me into an autohypnotic state as I wait to be served. "You are looking well today," says the baker's wife. Her diagnosis is spot on; her holistic therapy has already cured all my ills. Her

whole-wheat cheese scones are unbeatable so I order three—one for the road and two for tea at home. Prices have gone up a bit, but, as with all holistic therapies, the more you pay the more it's worth. "Here you are," she says, handing me my scones. As I pay, our hands touch and I briefly experience the intense energy transfer characteristic of all touch therapies. "Take care now, and God bless."

As I walk home, I contemplate these well said words—expert counselling and holistic from the physical to the spiritual level.

Edzard Ernst director, Complementary Medicine, Peninsula Medical School, Universities of Exeter and Plymouth