# Setting priorities in the south west of Western Australia: where are we now?

# Craig Mitton and Sarah Prout

#### **Abstract**

Due to resource scarcity, health care decision makers must make choices about what services to fund. In exploring the potential for developing a formal approach to priority setting in the South West Area Health Service (SWAHS) in Western Australia, we carried out a qualitative survey of senior decision makers. Respondents indicated that resources were primarily allocated on the basis of historical patterns. Suggested improvements for priority setting include development of a transparent approach to priority setting, better intra-organisational communication, public input in the form of identifying social determinants of health, and having an organisational 'credible commitment' in planning processes.

Aust Health Rev 2004: 28(3): 301-310

As health care resources are limited, decision makers must make choices about what services to fund and what not to fund (Auld et al. 2002). Internationally, various approaches for priority setting have been utilised at different levels in the health sector. This includes activity at national or state levels (Cumming 1994; Blumstein 1997), as well as at the level of individual hospitals (Martin et al. 2003), and more microoriented activity within programs of care or based on disease-condition groupings (Donald-

Craig Mitton, PhD, Assistant Professor.

Centre for Healthcare Innovation and Improvement, BC Research Institute for Women's and Children's Health, Vancouver, Canada.

**Sarah Prout**, BSc (Hons), PhD Candidate. Department of Human Geography, Macquarie University, Sydney.

Correspondence: Craig Mitton, Centre for Healthcare Innovation and Improvement, BC Research Institute for Women's and Children's Health, Vancouver, Canada. cmitton@cw.bc.ca

## What is known about the topic?

There is a growing need for explicit and transparent priority setting processes for health care resource allocation.

## What does this paper add?

Senior managers in WA suggested the need to develop an explicit, systematic process for priority setting for the health service.

### What are the implications for practitioners?

Consideration should be given to identification of appropriate mechanisms for effective priority setting. Australian decision makers can benefit from the priority setting experience of Canada and the United Kingdom.

son & Farrar 1993; Ruta, Donaldson & Gilray 1996; Carter et al. 2000; Astley & Wake-Dyster 2001; Mielke, Martin & Singer 2003).

However, limited research has been conducted to date to inform priority setting across programs at the level of geographically defined health regions (Menon et al. 2003). It has also been reported that decision makers within health regions have limited knowledge of explicit approaches for priority setting (Lomas, Veenstra & Woods 1997; Mitton & Donaldson 2002). As a result, one of the most common forms of priority setting in health care is simply to allocate resources on the basis of historical funding patterns with adjustments made in a given year for demographics or political influence (Miller et al. 1997; Segal & Richardson 1994).

In order to explore the potential for developing a formal approach to priority setting across major service areas and communities within the South West Area Health Service (SWAHS) in Western Australia, a survey of senior decision makers was undertaken. The aims of this survey were to obtain insight into current organisational practices with respect to priority setting, to identify from decision

makers both strengths and weaknesses of priority setting activity to date, to determine areas for improvement, to examine how incentives might factor into developing a process for setting priorities, and to outline, again from the perspective of the decision makers, how the public could be best used to support priority setting in this region.

The rationale for conducting this survey was twofold: first, previous research in Australia and Canada has identified the importance of the context or institutional setting in which priority setting activity is to occur (Jan, Dommers & Mooney 2003; Mitton and Donaldson 2003a), suggesting that priority setting is much more than the technical application of a specific framework; second, researchers in Britain have indicated that priority setting approaches must be able to fit with ongoing managerial processes to have merit in practice (Walshe & Rundall 2001). By examining the views of decision makers, priority setting processes can cater to the specific environment and stakeholders, thereby improving the likelihood of successful uptake of formal approaches in the long run. As well, the specific issues of incentives and public involvement in relation to priority setting have been shown in the literature to be relevant topics (Jan 2002; Litva et al. 2002), and thus are also explored here.

The primary purpose of this article is to report on key findings from the survey of decision makers in the SWAHS. These results should contribute to a growing body of literature that is focusing on insight gained from those charged with making actual funding decisions in health care (Rosen 2000; Farmer & Chesson 2001; Mitton & Donaldson 2002). While it is not the aim of qualitative research to produce generalisable results (in a statistical sense), it is likely that the qualitative findings reported here are transferable to other Australian health organisations.

## **Methods**

## Context

The SWAHS, one of seven rural health regions in Western Australia, is responsible for delivering community and hospital-based services in the south-western corner of the state. On 1 January 2002, the previous South West Health Board was abolished, with the Minister for Health assuming this role. The Minister for Health delegated his powers and duties in that capacity to the Director General of Health, with day-to-day management of the health region provided by the Chief Executive Officer of the SWAHS. The CEO leads an Executive Management Group (EMG) of 10 Directors, and a broader group of senior officers, referred to as Health Service Managers (HSMs), who each oversee one of 16 communities within the region. The SWAHS has an annual operating budget of about A\$110 million and serves a population of about 130 000.

## Study design and sample

A qualitative, face-to-face interview consisting primarily of open-ended questions was used in this study. An initial letter describing the survey and requesting participation was sent to EMG members (n=10) and HSMs (n=16). Interview dates were then scheduled, and written informed consent was obtained at the start of each interview. Feedback on the survey was obtained from the first decision maker interviewed, and adjustments were made accordingly. Interviews were conducted by the authors during April 2003.

In order to adequately capture the heterogeneity in the sample for this qualitative study, an attempt was made to conduct interviews with all members of the senior management team (Maxwell 1996). In total, 22 of 27 decision makers agreed to participate (1 CEO, 8 out of 10 EMG members, and 13 out of 16 HSMs). Those who did not participate included two staff members on leave, two who stated they did not have time, and one who in the end was deemed not relevant for the purposes of this survey. Written notes were made during each interview, and interviews were audio-taped with permission.

## Questions and analysis

Based on the primary aims of the survey outlined above, the interview schedule (presented in Box 1) comprised nine questions. Responses were content analysed, with major themes (eg, 'com-

#### I Interview schedule

- 1 What is your role in terms of setting priorities and allocating resources in the Health Service?
- 2 What sources of information are currently used in determining short and long-term priorities in your region?
- 3a What types of information (or data or evidence) would you most want to use in setting priorities and allocating resources?
- 3b What is the value you see in these pieces of information / how would you use these pieces of information?
- 4 Once priorities are defined, how are decisions made to divide up the resources across the communities in your region (or various services within your community)?
- 5a In your opinion, does the current process of setting priorities and allocating resources work well?
- 5b What are the strengths and weaknesses of the current process?
- 6 In your opinion, how could the current process of setting priorities and allocating resources be improved?
- 7 How has the public been used in priority setting/resource allocation processes in the past?
- 8a Ideally, how would you want the public to be involved in the priority setting/resource allocation process?
- 8b What information is important to you to get from the public?
- 9a What barriers do you face in re-allocating resources from one service area to another?
- 9b What specific types of incentives, either at an organisational level or personal level, could be put in place that might aid in your participating in an explicit priority setting process which has at its core the notion of reallocation of resources?

munication') and sub-themes (eg, 'communication between managers and community members') developed as the findings were reviewed (Glaser & Strauss 1967). Once reduced into themes and sub-themes, the data were interpreted into meaningful concepts pertaining to current and desired priority setting practices in the SWAHS. Key quotes from the decision makers were recorded to support the concepts reported.

#### Results

The results are reported in terms of: roles and current practices, including information drawn upon in priority setting activities; strengths and weaknesses; areas for improvement; and barriers to and incentives for explicit priority setting practice.

## Roles and current practices

The first of two main processes for priority setting in the SWAHS is allocating resources across the 16 communities. This is mainly the responsibility of the EMG. The second process is the allocation of resources within each community across the various services and programs provided. A type of

'contract', called a service level agreement (SLA), is written between each HSM or EMG member and the CEO, which provides a service plan for activities within the given area of responsibility. In practice, the understanding of priority setting varied across individuals, as well as between HSM and EMG members. This variation leads in part to a discrepancy in relation to defining roles for priority setting.

Despite transitioning towards a more proactive approach to setting priorities, based in part on the SLAs, as a whole, resources are allocated primarily on the basis of historical patterns of spending. This notion of historical allocation is related to the concept of entrenchment of services, as illustrated with the following quote: "Even though a lot of what we do may be ineffectual, you dare not deny anyone who has historically had it." Before the relatively recent advent of SLAs, the process of allocating resources was basically an implicit one, with over half the respondents stating that they did not see any formal process for resource allocation in place.

Decision makers were also asked about the sources of information used in priority setting and resource allocation processes. About half the

## 2 Perceived weaknesses in priority setting in the South West Area Health Service

Structural Lack of a formal process for priority setting and thus no explicit mechanism with which to shift resources

> Communication barriers within the organisation (lack of understanding of priority setting processes by HSMs, confusion over use of SLAs)

Lack of transparency and accountability for priority setting

Perceived limited role of HSMs in the process (decisions made by the EMG, desire for HSMs to have greater input as they feel they know the communities best)

Inappropriate data or lacking sources to support priority setting activity

Lack of management training for HSMs

Attitudinal Reactive nature of health care (crisis mode reigns)

Resistance to change (turf wars, disempowerment with centralisation of decision making at the regional level)

Perceived lack of 'credible commitment' to decisions made with longer-term gain in mind

Challenges of group dynamics (including trust in such a diversely represented management group and role clarification)

Lack of buy-in to regional model (ie, some communities are happy to get more resources but would be unwilling to give up resources even if benefit to the region would likely be improved)

#### External

Political influence

Community views (expectation of historical services continuing to be funded and a lack of trust in more centralised decision making)

Budgetary constraints and short-term planning cycle

HSMs = Health Service Managers; SLAs = Service Level Agreements; EMG = Executive Management Group.

sample stated that epidemiological information and public opinion were drawn upon in their processes, although for the latter this was reported much more by HSMs (77%) than members of the EMG (43%). A number of means are currently used to access public opinion, as discussed below. Epidemiological information is usually obtained from the local population health unit as well as from the WA Department of Health.

Other inputs included: information on social determinants of health such as child care, housing and employment issues, and socioeconomic factors; state or federal policy; regional or state reports; medical opinion; and needs assessments. There did not appear to be explicit assessment of whether available resources are used to maximise

health gain, although it is unlikely that such aims would be met within a historical funding model.

## Strengths and weaknesses

Only one respondent unequivocally stated that priority setting in the SWAHS worked well. Still, a number of strengths were mentioned by the respondents, such as the decision makers being quite knowledgeable about the services provided and having a strong leader (CEO) with a clear vision for the health region. Favorable views were also given on use of a 'Health Care Framework' as well as the plan to develop more formal links with various community agencies. It was also held that consistency and transparency of priority setting was improving with the use of SLAs.

\*The Health Care Framework is a model based on health conditions which provides a means of depicting what services are provided based on a stratification scheme which is relevant for local decision makers. The framework is to be used within the SWAHS as a mapping tool (ie, the 'as is' model of activity and expenditure), a planning tool (ie, what does the evidence say about efficient allocation in the matrix?), and an investment tool (ie, once resources are tracked, how can they be moved around?).

## 3 Mechanisms for involving the public

**Health councils** Formal bodies set up at the community level to provide input on governance and

operational issues; equal number of respondents were for and against these councils

Those in favor suggested that the council should include training and the focus should be

at a non-operational level (ie, focus on strategic planning)

Those against were primarily individuals already entrenched in their communities and had

strong feedback systems in place, so for them councils would be an additional

bureaucratic layer

Forums Community meeting where members of the public could voice their opinions and an

interaction between staff and the community could take place

A large majority of respondents viewed this as a flawed platform for community input due to the difficulty of getting a representative cross-section of the population, missing key health consumers, and the ease with which forums can be hijacked by special interest

groups

Informal interaction Includes being on volunteer boards, being visible in the community, interacting with the

'constituents'

Informal interaction was seen as a powerful mechanism for involving the public and

eliciting input

Three broad categories of weaknesses became apparent with respect to the current processes of setting priorities and allocating resources: structural, attitudinal, and external. These are highlighted in Box 2. In relation to external factors, one respondent remarked: "[Politicians] can't, in their own minds, develop a sufficient foresight to provide for the better improvement of health. It's political imperatives which are the immediacy of resolution to illness."

## Areas for improvement

The most commonly recognised area for improvement related to the need to develop and implement an explicit approach for priority setting and resource allocation. This would include articulating a clear plan and disseminating that plan throughout the levels of the organisation. The use of SLAs and the Health Care Framework was seen to be integral to any plan. Decision makers were also quick to advocate less political influence in priority setting and were keen to take a longer-term view of the budgeting cycle.

Respondents also stated a need for greater intra-organisational coordination, including improved communication between the different levels of management, greater clarity about roles within the organisation, and improved consist-

ency in processes across the region. In addition, EMG members in particular commented that some evidence of a credible commitment by the organisation to proposed changes, specifically around innovative ideas and longer-term planning, would be welcomed. In order to move towards an explicit approach for priority setting, a large number of respondents stated that staff training, including education on health economics, was required.

Two further areas for improvement were discussed by the respondents: information needed to support decision making and public involvement. Both HSMs and EMG members wanted a greater reliance on epidemiological information and population health data for setting priorities, and there was a general consensus that training in using and interpreting the data would be valuable. A general theme which also arose was the need for a practical tool to operationalise the inputs and move towards applying the information in an explicit and systematic manner for setting priorities.

Although already used, HSMs in particular wanted better quality public input and improvement in structures for obtaining this information. Three main mechanisms for involving the public were put forward by the respondents, as per Box

3. Of these, the one seen to have the greatest impact was informal interaction. Support for public input into priority setting was not universal, however: about 25% of respondents stated that obtaining public views was not insightful or logistically possible. It was also widely held that if the public were to be involved, education on the reality of resource constraints and the structure of health care would be a necessary prerequisite.

#### **Barriers** and incentives

Although the concept of resource reallocation seemed to be supported in principle, and implementation of an explicit, systematic approach to priority setting was desired, decision makers in the SWAHS were also quite realistic about the barriers involved in such activity. The main issue, and one particularly relevant for rural health regions, is the notion that in a small town the hospital is often the main employer, and thus closing the hospital or embarking on other major service redesign could have serious social and economic impact on the community. Reallocation of staff broadly across communities may not be possible in many cases as employees are often tied to the specific community due to family businesses, such as farming.

Other key barriers cited by respondents included political interference, from both local and state governments, the short-sighted budget planning and election cycles, organisational dynamics (eg, trust among decision makers) and the perceived 'crisis' mentality that arises in rural areas every time 'change' is discussed. This latter point was emphasised by one decision maker who stated: "People feel a lot of ownership towards services, in smaller communities in particular, because they've either been on boards historically, they've fundraised to get services and/ or equipment or to build buildings . . . the staff and the service are the community."

Despite these barriers, most respondents were willing to accept an explicit process that focused on reallocation. In fact, the majority either stated directly or alluded to the fact that if resource shifts could be shown to improve the health of the region then support would be given for

proposed redesigns. Seeing a clear vision, having a plan for achieving the vision, and an understanding of how individual managers fit into the vision were seen as important incentives for buying into a change process. Community support and engagement and education both for the community and for decision makers were also put forward as important incentives for change.

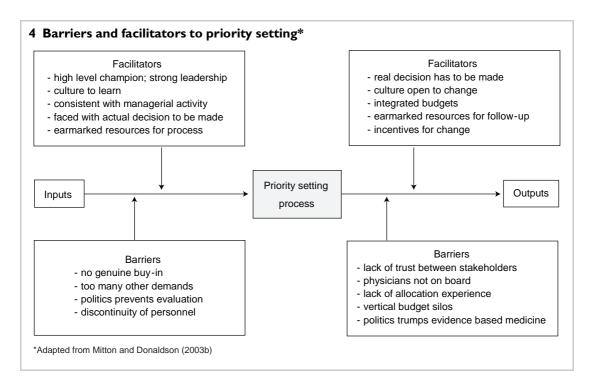
## Discussion

#### General comments

To our knowledge, this article is the first to provide perspectives from decision makers on priority setting and resource allocation processes for an Australian health organisation, and can be set alongside previous work in Australia pertaining to the use of economic evaluations in practice (Ross 1995). In addition, related survey work outside of Australia has not specifically examined managerial insight into barriers to undertaking explicit priority setting and incentives for moving forward.

At the outset of this research a decision was made by the SWAHS to examine the potential of moving towards a more formal process for priority setting at a broad level across all programs and communities. As a precursor to this, the survey of decision makers elicited views on how the current priority setting processes could be improved, and also identified potential organisational barriers and facilitators to using a process which could involve shifting resources across broad service areas.

Several interesting issues arose in examining priority setting with decision makers in the SWAHS. For example, is the structure and size of the management group appropriate for a population of 130 000, and is funding for the region, which comes in at less than \$1000 per head, adequate? Further, in determining how best to move forward with priority setting in the southwest, funding of seriously resource-intensive treatments would have to be considered among competing claims for the limited budget available. Finally, decision makers in Australia and elsewhere



must consider why health organisations so often continue to fund services that, even by their own admission, have limited relative value.

## **Examination of key results**

Similar to Canadian and United Kingdom (UK) health authorities (Miller & Vale 2001: Mitton & Donaldson 2002), the SWAHS does not have a formal process of priority setting, instead relying largely on historical patterns to allocate resources. This is of concern not only from an economic perspective, but, as well, bioethicists have clearly indicated the need for transparent and explicit approaches for health care priority setting (Gibson, Martin & Singer 2002). Views from decision makers in the SWAHS were in line with this, articulating a desire for an explicit approach for priority setting, as well as the need for improved communication and clarity of roles, particularly between different levels in the organisation, and a desire for less political influence in decision making.

Managers in the SWAHS indicated that the best way to involve members of the public in priority setting is through informal interaction. This finding suggests careful consideration is required before spending resources on developing 'community councils' or other more bureaucratic mechanisms for deriving public input. Further research is required in assessing less formal interaction for eliciting public input against the use of more formal approaches found in the literature (Mullen 1999; Menon et al. 2003). In the SWAHS, managers were looking for practical information to assist in planning, such as information related to social determinants of health.

Barriers to reallocating resources can be compared with research from Canada which suggests that explicit priority setting is impacted by organisational barriers and facilitators both before the implementation of an explicit priority setting process and before follow-through on resource allocation recommendations (Mitton & Donaldson 2003a) (Box 4). A further barrier identified for the SWAHS was the 'economics of small towns'. As is well known, hospitals are a key economic driver in rural areas and in some ways stand in the face of shifting from an acute focus to

genuine community-based service delivery. That said, just because there is a hospital does not mean that the focus of care has to be on acute services. Thus, what is likely to be required is a paradigm shift in which stakeholders recognise the changing models to support wellness as opposed to a focus on curing illness.

In favour of making change happen, the notion of an organisational 'credible commitment' has been argued to be a key aspect of instituting explicit priority setting processes in health care (Jan 2002). If it was reasonably expected that change would result in improvements to the health of the region as a whole, managers in the SWAHS would buy-in to the notion of shifting resources across program areas and communities. Development of incentives to support health care priority setting is an area requiring further study. In addition, training for both members of the public and decision makers would appear to be an important aspect of this, and is supported by other work from Australia (Peacock 1998).

## Where to from here?

The desire for an explicit, systematic process for priority setting in the SWAHS is clear. While a detailed road map is beyond the scope of the current paper, the next step for the SWAHS would be to examine the insight from the decision makers and decide whether to adopt an explicit framework for priority setting. Various economic and non-economic approaches can be used to aid in priority setting, such as needs assessment, core services, and Quality Adjusted Life Year (QALY) league tables. Each of these have been criticised, however, and, for the purposes of priority setting, have had limited success in practice (Maynard & Bloor 1998, Mitton & Donaldson 2003b). One approach which has been used in other Australian health organisations with some success is a framework known as program budgeting and marginal analysis (PBMA) (Viney, Haas & Mooney 1995; Ashton, Cumming & Devlin 2000; Astley & Wake-Dyster 2001).

In the end, adoption of a formal approach for priority setting would result in greater transparency for, and standardisation of, such activity in the SWAHS. There would also be less likelihood of political interference due to the explicitness of the process and an opportunity for public involvement both in generating criteria or principles as well as in providing information on broader determinants. Using SLAs to put forward options for redesign, and an overarching focus on resource reallocation across the 16 communities has the potential to lead to improving population benefit for resources available. Development of a longer-term planning cycle for this activity would also fit well with the desires of decision makers in the region.

What remains to be seen is how the SWAHS will indeed move forward. Having detailed insight through the current survey will enable a process to be developed that works for those who ultimately will be making the difficult investment and disinvestment decisions in this region.

## Transferability

This survey was based in a rural health region in Western Australia from which in-depth reflections of priority setting were obtained from a single group of senior decision makers. Some issues reported are clearly more rural-oriented than others, or will at least be manifested differently in urban settings. That said, noting findings of related survey work in Canada and the UK, a number of issues raised by decision makers in the SWAHS do accurately depict practice elsewhere, such as the reliance on historical patterns for allocating resources and a desire for greater explicitness in the priority setting process. As such, it may be that the insight gained through this survey will be relevant to other health organisations interested in developing an explicit, systematic process for setting priorities.

## Conclusion

Priority setting is a necessity due to the reality of resource scarcity. To date, limited work has been done in the development and implementation of explicit approaches to priority setting across major service areas or localities within health regions. Before development of such a process,

the literature indicates the importance of examining the perspective of decision makers. Not only did the current survey provide a set of information based on decision maker insight which can now be used by the SWAHS for moving forward, it is also likely that awareness of the need to make explicit choices increased.

Recognition of existing business planning processes such as the Health Care Framework and SLAs, identification of issues to be considered at the outset of implementing a formal approach to priority setting, such as communication and the desire for transparency, and detailed insight into public involvement and potential barriers to explicit priority setting all support the merit of this survey. As the SWAHS moves forward, monitoring and evaluation will be required to assess the short and longer-term impact with respect to resource allocation decisions and, ultimately, improvement in health outcomes.

## **Acknowledgements**

We would like to thank the decision makers in the South West Area Health Service who participated in this survey, and in particular acknowledge the assistance of Gail Good. We are also grateful for the input of Professor Cam Donaldson, University of Newcastle, UK, and for the comments of two anonymous referees. This work was funded in part by the Canadian Health Services Research Foundation; travel funds were provided by the South West Area Health Service.

## **Competing interests**

None identified.

### References

Ashton T, Cumming J, Devlin N 2000, Priority-setting in New Zealand: translating principles into practice, *Journal of Health Services Research and Policy*, vol. 5, pp. 170-5.

Astley J, Wake-Dyster W 2001, Evidence-based priority setting, *Australian Health Review*, vol. 24(2), pp. 32-9, viewed 18 October 2004, <a href="http://www.aushealthreview.com.au/documents/publications/30/issues/198/articles/389/24.2-7.pdf">http://www.aushealthreview.com.au/documents/publications/30/issues/198/articles/389/24.2-7.pdf</a>.

Auld P, Donaldson C, Mitton C, Shackley P 2002, Economic evaluation, in Detels R, McEwan J, Beagle-

hole R, Tanaka H (eds), Oxford Textbook of Public Health (4th Edition), Oxford University Press, Oxford.

Blumstein J 1997, The Oregon experiment, *Social Science and Medicine*, vol. 45, pp. 545-54.

Carter R, Stone C, Vos T, Hocking J, Mihalopuolous C, Peacock S, Crowley S 2000, *Trial of program budgeting and marginal analysis (PBMA) to assist cancer control planning in Australia*, Centre for Health Program Evaluation, Melbourne.

Cumming J 1994, Core services and priority setting: the New Zealand experience, *Health Policy*, vol. 29, pp. 41-60.

Donaldson C, Farrar S 1993, Needs assessment: developing an economic approach, *Health Policy*, vol. 25, pp. 95-108.

Farmer J, Chesson R 2001, Health care management: models for evidence-based practice, *Journal of Management in Medicine*, vol. 15, pp. 266-82.

Gibson JL, Martin DK, Singer PA 2002, Priority setting for new technologies in medicine: a transdisciplinary study, *BMC Health Services Research*, vol. 2, p. 14.

Glaser BG, Strauss AL 1967, The discovery of grounded theory: strategies for qualitative research, Aldine, Chicago.

Jan S 2002, A perspective on the analysis of credible commitment and myopia in health sector decision making, *Health Policy*, vol. 53, pp. 269-78.

Jan S, Dommers E, Mooney G 2003, A politico-economic analysis of decision making in funding health service organizations, *Social Science and Medicine*, vol. 57, pp. 427-35.

Litva A, Coast J, Donovan J, Eyles J, Shepherd M, Tacchi J, Abelson J, Morgan K 2002, 'The public is too subjective': public involvement at different levels of health-care decision making, *Social Science and Medicine*, vol. 54, pp. 1825-37.

Lomas J, Veenstra G, Woods J 1997, Devolving authority for health care in Canada's provinces: 2. Backgrounds, resources and activities of board members, *Canadian Medical Association Journal*, vol. 156, pp. 513-20.

Martin D, Shulman K, Santiago-Sorrell P, Singer P 2003, Priority-setting and hospital strategic planning: a qualitative case study, *Journal of Health Services Research Policy*, vol. 8, pp. 197-201.

Maxwell J 1996, *Qualitative Research Design*, Sage Publications, Thousand Oaks.

Maynard A, Bloor K 1998, *Our certain fate: rationing in health care*, Office of Health Economics, London.

Menon D, Stafinski T, Martin D, Windwick B, Singer P, Caulfield T 2003, *Incorporating public values and technical information in to health care resource allocation decision-making*, Alberta Heritage Foundation for Medical Research, Edmonton.

Mielke J, Martin DK, Singer PA 2003, Priority setting in a hospital critical care unit: qualitative case study, *Critical Care Medicine*, vol. 31, pp. 2764-8.

Miller P, Parkin D, Craig N, Lewis D, Gerard K 1997, Less fog on the Tyne? Programme budgeting in Newcastle and North Tyneside, *Health Policy*, vol. 40, pp. 217-29.

Miller P, Vale L 2001, Programme approach to managing informed commissioning, *Health Services Management Research*, vol. 14, pp. 159-64.

Mitton C, Donaldson C 2002, Setting priorities in Canadian regional health authorities: a survey of key decision makers, *Health Policy*, vol. 60, pp. 39-58.

Mitton C, Donaldson C 2003a, Setting priorities and allocating resources in health regions: lessons from a project evaluating program budgeting and marginal analysis (PBMA), *Health Policy*, vol. 64, pp. 335-48.

Mitton C, Donaldson C 2003b, Tools of the trade: a comparative analysis of approaches to priority setting in health care, *Health Services Management Research*, vol. 16, pp. 96-105.

Mullen P 1999, Public involvement in health care priority setting: an overview of methods for eliciting values, *Health Expectations*, vol. 2, pp. 222-34.

Peacock S 1998, An evaluation of program budgeting and marginal analysis applied in South Australian hospitals, Center for Health Program Evaluation, Monash University, Melbourne.

Rosen R 2000, Applying research to health care policy and practice: medical and managerial views on effectiveness and the role of research, *Journal of Health Services Research and Policy*, vol. 5, pp. 103-8.

Ross J 1995, The use of economic evaluation in health care: Australian decision makers' perceptions, *Health Policy*, vol. 31, pp. 103-10.

Ruta D, Donaldson C, Gilray I 1996, Economics, public health and health care purchasing: the Tayside experience of programme budgeting and marginal analysis, *Journal of Health Service Research and Policy*, vol. 1, pp. 185-93.

Segal L, Richardson J 1994, Efficiency in resource allocation, National Centre for Health Program Evaluation, Fairfield, Victoria.

Viney R, Haas M, Mooney G 1995, Program budgeting and marginal analysis: a guide to resource allocation, *New South Wales Public Health Bulletin*, vol. 6, pp. 29-32.

Walshe K, Rundall TG 2001, Evidence-based management: from theory to practice in health care, *Milbank Quarterly*, vol. 79, pp. 429-57.

(Received 29 Jan 2004, accepted 28 Sep 2004)



Australia's only directory of consultants and specialised service providers to the healthcare industry **justhealth consultants** connects consultants and specialised service providers with healthcare organisations in a simple, accessible directory.

If you are working as a consultant in the health industry, the best way to advertise is through the AHA's justhealth consultants directory. Healthcare organisations frequently require consultants or specialised service providers in legal services, project management, service planning, capital works. AHA's justhealth consultants makes sourcing such external expertise very easy.

A printed edition is published annually and distributed free of charge to over 3000 healthcare organisations. The online version at www.justhealthconsultants.com.au can be updated at any time and can hold additional information (eg, capability statement) about registered consultants.

Plus, registered consultants are notified by email when new postings have been added to justhealth tenders <www.justhealthtenders.com.au>, among Australia's biggest national, online listings of health industry tenders, expressions of interest and requests for proposal.

To register for the justhealth consultants, contact Australian Healthcare Association on +61 2 6162 0780 or admin@aha.asn.au, or register online at www.aushealthcare.com.au and follow the prompts.