Concurrent sessions outlines

Organisers
*Toni Ashton and Jackie Cumming*

As medical technology advances and pressures on health funding intensify, there has been increasing debate about how best to ration these scarce resources. New Zealand is one of a handful of countries which has generally accepted that rationing should be done explicitly, and should be based upon a careful assessment of the priority that should be accorded to each service. In 1998, the Health Funding Authority (HFA) proposed a method for setting priorities based upon five principles: effectiveness, cost, equity, Maori health and acceptability. They also proposed to use program budgeting and marginal analysis (PBMA) along with cost-utility analysis as a key component of the process. The purpose of this session is to consider these proposals.

Format

Description of the HFA’s proposed methodology
*Jackie Cumming*

Summary of strengths and weaknesses
*Toni Ashton*

Commentary
Guest commentators

PBMA: practising practical economics
*Marion Haas*

Discussion

Conclusions
*Nick Mays*

Australian Coordinated Care Trials I

Organiser
*Kathy Eagar*

The focus of these two sessions is the Australian Coordinated Care Trials. The session will give a brief overview of the historical policy context out of which the trials arose, and then proceed with speakers examining various issues that have arisen during the design and running of the trials. Issues to be covered include:

- whether it is possible to define under what circumstances case management improves the efficiency of resource allocation to clients with complex care needs;
- how well GPS respond to being the care coordinator, or whether other agents can fulfil this role better;
- whether there is evidence to support the premises that led to the trials, eg. that there was a mismatch between care needs and services delivered;
- whether funds pooling provides care-coordination services with an effective mechanism for purchasing care efficiently.

It is hoped that the National Evaluators will also provide some results from their mid-term evaluation. The Government has committed itself to a second phase of Coordinated Care Trials and the second session will conclude with a panel discussion that will aim to highlight relevant issues for the design of future trials.

**Format**

Australian Coordinated Care Trials: new species of health care services  
*David Perkins*

A perspective from the National Evaluators  
*Chris Silagy*

Care of the highly dependent elderly: a new organisational approach  
*Elizabeth Lew*

Reactions of participating in the Southern Healthcare Network’s coordinated care trial  
*David Dunt*

Improving the interface between primary care and mental health services  
*Jeremy Anderson*

**Measuring Clinical Performance**

Organizer  
*Brian Collopy*

The development of measures to determine the quality of clinical practice is a relatively recent concurrence in keeping with the global interest in evidence based practice and the requirement to demonstrate outcomes in health care.

The Australian Council on Healthcare Standards through its Care Evaluation Program, with the cooperation of the medical colleges and funding support from the Department of Health (Commonwealth), has introduced a large number of generic and discipline specific measures which are being monitored in more than half of the country’s acute hospitals. The program is unique in its provider involvement and the scope of the measures.

The session will cover the background and complexity of indicator selection and development and issues of validity. It will also demonstrate their effectiveness through information reported centrally and presentations on experience in the field, ie. in health care organisations.

**Format**

History of clinical performance measurement and the ACHS Care Evaluation Program  
*Brian Collopy*
Reforming general practice

Organiser
Jenny Lewis

General practice has been the subject of extensive policy reforms in Australia and elsewhere over the last decade. Primary health care provides a gateway to other health services and so is a crucial component of health care systems. An analysis of reforms introduced in this area provides an opportunity to reflect on what different policies have achieved and also to consider what methods are appropriate in undertaking a policy analysis of this area. This session includes four papers.

The first paper will present a comparative policy analysis of general practice reform in Australia with primary care reform in the UK. This analysis investigates policy making at the macro level within the very different health policy systems of these two countries.

The second paper will investigate the developments associated with budget holding by IPAs in New Zealand, and look at some of its achievements.

The next two papers deal with the impacts of reform on specific populations. The third paper will examine GP Division funding of work with a significant indigenous focus, and suggests a framework for building collaborative relationships between Aboriginal specific and mainstream primary health care services. The final paper will investigate the extent to which third sector primary health care organisations provide accessible care to low income populations.

Format

Markets and Partnerships: A Comparative Analysis of General Practice Reform
Jennifer Lewis

Evaluation of Budget Holding in New Zealand’s Independent Practitioner Associations
Laurence Malcom

Divisions of General Practice and indigenous health: what might the future hold
Ian Anderson
Australian Coordinated Care Trials II

Organiser
Kathy Eagar

The focus of these two sessions is the Australian Coordinated Care Trials. The session will give a brief overview of the historical policy context out of which the trials arose, and then proceed with speakers examining various issues that have arisen during the design and running of the trials. Issues to be covered include:

- whether it is possible to define what circumstances case management improves the efficiency of resource allocation to clients with complex care needs;
- how well GPS respond to being the care coordinator, or whether other agents can fulfil this role better
- whether there is evidence to support the premises that led to the trials, eg. that there was a mismatch between care needs and services delivered;
- whether funds pooling provides care-coordination services with an effective mechanism for purchasing care efficiently.

It is hoped that the National Evaluators will also provide some results from their mid-term evaluation. The Government has committed itself to a second phase of Coordinated Care Trials and the second session will conclude with a panel discussion that will aim to highlight relevant issues for the design of future trials.

Format

Coordinated Care: between the rhetoric and the reality
Leonie Segal

Case management for older persons: experience from a coordinated care trial
Karen Fisher

Funds pooling in the coordinated care trials: benefits and risks
David Cromwell

Where do we go to now? Lessons for Phase 2 trials

Panel debate

Innovations in health care I

Organisers
Marion Haas, Marian Shanahan, Robyn Smith

In these sessions, our aim is to use the presentations, each of which canvasses changes to the organisation and/or delivery of health care, as a springboard to stimulate discussion and debate about issues such as:
- the need for pilot projects/trials of substitutes for current care;
- the role of incentives;
- the funding implications of moving beyond pilot projects;
- changing organisational arrangements;
- workforce and training implications, and
- the effect of changes in the organisation and delivery of care on the recipients of care, their carers and the public more generally

Each group of presentations will be followed by a facilitated discussion or debate around specific issues raised by the presentations.

**Format**

A systematic review of the changing focus of health care delivery literature  
*Billie Bonevski*

Home or hospital for stroke rehabilitation? Results of a randomised controlled trial  
*Craig Anderson*

Discussion

Telehealth service planning in NSW  
*Kees van Gool*

HITH: What is the evidence and how do you know?  
*Marian Shanahan*

Summary – What are the policy implications of innovation in health care?

**Improving health and equity by focusing on specific geographic areas**

Organisers  
*Ken Judge, Peter Sainsbury, Liz Harris, E. Comino, J. Hyde*

There is increasing interest in developing and coordinating the actions of government and non-government agencies within specific geographic areas to reduce inequities in health. This workshop will present some of the developments in UK and NSW and will provide participants with the opportunity to discuss such initiatives, particularly their evaluation.

**Format**

Introduction  
*Liz Harris*

Ken Judge will describe the newly created Health Action Zones (HAZ) in the UK. Ken, who has responsibility for evaluating the HAZs, will discuss their origins, what and where they are, what they do, who is involved, how they are organised, and how they will be evaluated.
Question time

Liz Harris will briefly discuss several HAZ-like initiatives in NSW, with particular emphasis on their evaluation.

Open discussion focussing on how health action areas can be evaluated: For instance: Can the effects on both people and places be evaluated? How can changes in equity be measured? At what level should evaluation occur? What tools and techniques are available?

The outcomes of the workshop will be greater understanding by the participants of the (a) the nature of geographically sited projects aimed at improving health and equity in UK and NSW, and (b) approaches to, and problems involved with, the evaluation of such projects.

Organisational change, the key to quality improvement

Organiser
Jennifer Alexander

Presenters
Fiona Moss and Pam Garside

This is an interactive session which will explore organisational and systematic approaches to improving clinical practice, and link the theory with experience from hospitals in the UK.

Fiona Moss is Editor of the BMJ journal “Quality in Health Care”, and a respiratory physician. Pam Garside is an independent consultant concentrating on the implementation of health systems reform and organisational change. Both Fiona and Pam are Senior Associates of Cambridge University’s Judge Institute of Management Studies, and Co-Editors of the QHC Supplement “Organisational Change – the Key to Quality Improvement”.

Format

Introduction/setting the scene
Fiona Moss

Discussion

Is there an evidence base for organisational change? A proposed model
Pam Garside

Case Study in small groups on practical application of change within a hospital setting

Discussion, identification of key points and issues

Examples of success in system change, lessons learned
Fiona Moss, Pam Garside
Information Technology, Telehealth and public health policy

Organiser
Ken Harvey

The application of information technology (IT) and telecommunications to health has produced a plethora of new names as various specialties seize upon the potential of IT to enhance the reach, impact and status of their own discipline. The names generated include Telemedicine, Telepsychiatry, Teleradiology, Telepathology, Telenursing, etc.

While there remains confusion regarding terminology, the application of information technology (IT) and telecommunications to health has already produced major change. This will increase in the future. The educational, organisational and social consequences will also be profound. The technology transcends and is disrespectful of conventional disciplinary, institutional and geographical borders. It redefines responsibilities and ignores traditional hierarchies. By democratizing knowledge, it allows new ways for consumers and health professionals to relate to each other. In short, it will produce revolutionary change. The health sector is not unique in having to cope with these changes, however, it is our area of interest. This session will review the potential and problems of Telehealth.

The session will be of particular interest to health policy makers concerned with information technology but it will also provide a good overview of the area for those who wish to get up-to-date with this rapidly changing area. One outcome from this session will be a set of recommendations directed to the recently established National Health Information Management Advisory Council (NHIMAC).

Format

Telestatus: the current issues of Telehealth
Dr. Bruce Swanson, Telelehealth Adviser
Department of Human Services, SA

Teledisaster: a case study of the recently abandoned Commonwealth Therapeutic Health Information Project
Dr. Ken Havey, La Trobe University

Telefuture; the National Health Information Management Advisory Council
Kate Moore, Consumer Representative
NHIMAC

Panel/audience discussion with the panel representing various perspectives: consumers, health professionals, medical software industry and government

Using burden of disease

Organiser
Gavin Andrews

This session will present an overview of the rationale and method of the Global Burden of Disease Project (GBD), with particular attention to the priority-setting applications of this approach. The
DALY is a new summary measure of population health combining mortality and morbidity that was developed to address the need for information and evidence for policy and priority setting at a global level. It was used to provide a comprehensive assessment of the global burden of disease and injury in 1990 for the 1993 World Development Report of the World Bank. Applications of this approach at a national and state level, and for a particular disorder group, will be discussed in this session. Speakers from the Australian Institute of Health and Welfare (Colin Mathers), the Victorian Department of Health and Human Services (Theo Vos), and the WHO Collaborating Centre for Mental Health and Substance Abuse at St. Vincent’s Hospital, Sydney (Gavin Andrews and Kristy Sanderson), will present an overview of their respective programs of work and results to date. This will include a summary of the burden of disease for Australia and Victoria, an analysis of methods for measuring the epidemiology of disability with a focus on mental disorders, and a discussion of techniques to combine this information with costing data. Of particular interest is the potential of this framework for setting health care and research priorities, and for understanding reasons why burden due to particular disorder persists.

Format

Using burden of disease to inform priority setting
Gavin Andrews

Descriptive epidemiology of disability from mental disorders
Kristy Sanderson

The burden of disease and injury in Australia 1996: national results
Colin Mathers

Innovations in health care II

Organisers
Marion Haas, Marian Shanahan, Robyn Smith

In these sessions, our aim is to use the presentations, each of which canvasses changes to the organisation and/or delivery of health care, as a springboard to stimulate discussion and debate about issues such as:

- the need for pilot projects/trials of substitutes for current care;
- the role of incentives;
- the funding implications of moving beyond pilot projects;
- changing organisational arrangements
- workforce and training implications; and
- the effect of changes in the organisation and delivery of care on the recipients of care, their carers and the public more generally.

Each group of presentations will be followed by a facilitated discussion or debate around specific issues raised by the presentations.

Format

Debate
The growth in the complexity of health care has led governments and other funders of health care services to support the developing field of technology assessment in health care. In Australia, the Commonwealth, with the support of the Health Ministers Advisory Committee, has sponsored technology assessment, first through the National Health Technology Assessment Panel (NHTAP, 1982-1991), then through the National Health and Medical Research Council’s Australian Health Technology Assessment Committee (AHTAC, 1992-1998), and most recently in the establishment of the Medicare Services Advisory Committee (MSAC, 1998- ). The last two of these have had formal representation from the New Zealand Ministry of Health.

The Round Table, chaired by Dr. Terri Jackson (a member of both AHTAC and MSAC), brings together members of the three HTA Committees to reflect on the evolution of Technology Assessment in Australia and New Zealand:
Dr. Davis Weedon, Chair MSAC
Dr. Brendon Kearney, Deputy Chair, MSAC; Chair, AHYAC; member, NHTAP
Dr Ian McDonald, member, NHTAP
Dr. Andrew Holmes, ex-officio member, AHTAC; medical advisor, NZ Core Health Services Committee

Key questions to be addressed by panel members include:

- How does/did the Committee’s mandate and membership affect which technologies are/were assessed
- How do/did these factors influence the Committee’s approach?
- How successful is/was the Committee in having its recommendations acted upon by government?
- What are/were the weaknesses of the Committee’s lines of reporting and accountability?
- What kinds of evidence are/were used by the Committee and how satisfactory are/were they in reaching policy recommendations

Following Panel and general discussion of these issues, a proffered paper on the assessment of positron emission tomography by Lowin, et al will be presented. A brief discussion following the paper will focus on the implications of the research for dissemination of PET scanning in Australia and New Zealand.
The format of the Round Table is designed to make best use of the Panel’s expertise in an interactive and relatively informal session.

**Rural and remote health**

Organiser  
*K*oger Strasser

This session will provide those interested in carrying out health services research in rural and remote Australia the opportunity to interact with those engaged in the field. The presenters will draw on their own research experiences, successes and frustrations, to assist those who hope to improve the effectiveness of their own research efforts. The session will conclude with Professor Roger Strasser from Monash University’s Centre for Rural Health presenting a seminar exploring the factors that impinge on the sustainability of health services in rural and remote areas from the community’s perspective. If you want your research to be more effective, come and listen to these presentations. Learn from their experiences – what to do and what not to do!

**Format**

Ambulance Service Delivery in Emerald: A Pilot Study  
*Peter O’Meara*

Remote Area Health Services Research Methodology  
*John Wakerman*

Establishing an After Hours Medical Service in Moe  
*Peter O’Meara*

Community participation in rural and remote health services - discussion

**Abstracts**

**Public Health Services and Federations**

*Presenter*  
Aguirre B  
Universidade de São Paulo, Brazil

*Author*  
Aguirre B

**Concurrent session C3**

The aim of this article is to unveil the institutional incentives that could be developed in a federation as to improve the macro and microeconomic efficiency and the equity in the delivery of health care services. When states and even local governments have autonomy of collection and expending of taxes problems in the delivery of public health services could be of a more complex nature. Probably the most serious problem that may arise is the inequality on the supply of the services between states. Using a comparative approach this study analyses the cases of USA, Canada, Germany, Australia and Spain, which are all big federations as Brazil. Some indicators of cost and quality of health care are related to the type of the public health system. Following there is a description of the systems of each of the countries selected. Then it is be pointed the factors
that could explain the differences in performance among countries. Finally it will be constructed a typology of the combination of factors that could favors the improvement in health care supply as well as which are the elements that could make possible their establishment.

**Home or Hospital for Stroke Rehabilitation? Results of a Randomised Controlled Trial**

**Presenter** Anderson C  
Clinical Trials Research Unit, University of Auckland, NZ

**Authors** Anderson C, Rubenach S, Ni Mhurchu C, Clark M, Spencer C

**Concurrent session C5**

Background: Early hospital discharge and hospital-at-home schemes are increasing in popularity but evidence of their cost-effectiveness is limited. We report results of a randomised controlled trial of accelerated hospital discharge and home-based stroke rehabilitation in Adelaide, South Australia.

Methods and results: Between 1997 and 1998, 86 hospitalised patients with acute stroke who required rehabilitation were randomised to receive either early hospital discharge and home-based rehabilitation (n = 42), or conventional in-hospital rehabilitation and community care (n = 44). Independent multi-dimensional outcome assessments of patients and carers were conducted six months after randomisation. Overall clinical patient outcomes did not differ significantly between the groups at six months but the total duration of hospital stay in the experimental group was significantly reduced (15 v 30 days, p < 0.0001). However, carers among the home-based rehabilitation group had significantly lower mental health SF-36 scores (mean difference, 12 points). The mean total cost per patient was lower for patients randomised to home-based rehabilitation ($8,040) compared with conventional care ($10,054), mainly due to the reduction in length of hospital stay. Sensitivity analyses indicated consistent cost savings of home-based rehabilitation over conventional care except when hospital costs were assumed to be 50% less than those used in the initial analysis. Multivariate regression analysis demonstrated that baseline disability (as measured by the Barthel index) was a significant predictor of cost in the home-based rehabilitation scheme.

This project was funded by the Commonwealth of Australia Ambulatory Care Reform Project and South Australian Health Commission.

**Divisions of General Practice and Indigenous Health: What Might the Future Hold?**

**Presenter** Anderson I  
University of Melbourne, Parkville

**Authors** Anderson I, Sibthorpe B

**Concurrent session B2**

Division of general practice are regional cooperative of general practitioners (GPs) that have received core funding from the Commonwealth since 1992 to deliver improved health outcomes for their catchment populations. There are currently 123 divisions throughout Australia. In 1998 the program moved from a model of infrastructure funding supplemented by competitive grant funding to block grand funding. Prior to 1998 there were a total of 24 projects with a significant
Indigenous focus recorded on the national project database. A recent study of these project divisions and an additional sample divisions with appreciable Indigenous populations showed that 88% of Aboriginal health initiatives involved collaboration with Aboriginal Medical Services and/or other Aboriginal organisations or communities. Further it demonstrated a 40% decline in the number of divisions with Aboriginal initiatives with the introduction of block grant funding, and that relatively few initiatives attempted to incorporate Indigenous populations into divisions’ mainstream programs.

These findings have significant implications for how the role of divisions might be developed, particularly given the current emphasis in national Aboriginal health policy on developing Indigenous primary health care capacity. These policy implications will be explored in the context of a proposed model for primary health care development in urban Aboriginal communities, that seeks to articulate Aboriginal community controlled primary health care structures with mainstream primary health care, using divisions as a critical nexus. The proposed approach provides a framework for the implementation of strategies for building collaborative relationships between Aboriginal specific and mainstream primary health care services and capacity developments in both sectors. This discussion will draw upon program development and evaluation work currently being developed in collaboration with urban divisions in Melbourne.

**Improving the Interface Between Primary Care and Mental Health Services**

*Presenter*  
Anderson J  
Monash Medical Centre, Clayton

*Authors*  
Anderson J, Green L, Buick M, Morgan T

*Concurrent session A5*

The interface between primary care services, particularly general practitioners, and mental health services is a growth industry. It is a major focus of the National Mental Health Strategy. Specific mental health services research projects in New South Wales (Tobin and Norris, 1998) have supplemented major policy documents produced by the relevant Royal Colleges (Joint Consultative Committee, 1997). Different groups in Australia have trialed service models designed to enhance clinical contact between primary care practitioners and mental health services (Meadows, 1998). This paper describes a project that adopts a different strategy, operating from a systems perspective rather than a clinical one. The Southern Healthcare Network Coordinated Care Trial is one of nine coordinated care trials operating throughout Australia. The common objective of the trials is to coordinate care across existing health system boundaries for people with chronic and complex health care needs. Local general practitioners provide the care coordination role, assisted by a network of various service providers for higher risk subjects. Early data showed that people with mental health problems comprised 278 of the 1670 subjects enrolled in the experimental arm of the Trial. We convened a multi-disciplinary panel to recommend appropriate care improvement interventions for this group. Existing research undertaken by the local Division of General Practice and a needs assessment survey completed by the Trial identified that communication issues were the major perceived obstacle to better integration of care. Accordingly the Trial employed a Primary Care Liaison Officer to establish better links between local GPs and the mental health service. Thirty five GPs involved with the Trial (35 % of those eligible) volunteered to participate. The Liaison Officer provides monthly practice outreach visits, serves as a contact point within the mental health service for the participant GPs, and coordinates mental
health educational activities. Evaluation of the intervention included pre-post surveys of the participant GPs regrading their communication with the service, and a wide range of systems outcomes derived from databases held by the Southern Healthcare Network, Health Insurance Commission and community health agencies. This paper will report preliminary data after six months of the liaison intervention.


Using Burden of Disease to Inform Priority Setting

Presenter Andrews G
UNSW, St Vincent's Hospital, Sydney

Author Andrews G

Concurrent session D3

Medicine is big business in Australia, consuming 8.5% of the GDP. The problem is that medicine has grown to be too clever, we could spend more than any country could afford on efficacious investigations and treatments. The World Bank/WHO collaborative project, the Global Burden of Disease, provides a framework for integrating the epidemiology of fatal and non-fatal disorders with data on cost-effectiveness of current and optimal treatment. Such an approach can assist our understanding of why burden due to particular disorders persist, and the extent to which current treatment knowledge is able to address this burden within existing budgetary constraints. The situation of mental health services in Australia will be discussed as a case study of how these methods can be applied in practice.

Particular focus will be given to the importance of the recent National Survey of Mental Health and Wellbeing, Australia's first representative household survey of mental disorders, in this endeavour. A pilot analysis of providing cost-effective, optimal care for Panic Disorder and Agoraphobia will be presented.


Presenter Antioch K
The Alfred Hospital, Prahran

Authors Antioch K, Walsh M, Deadman S, Franzone A

Concurrent session D2
The paper will consider the adequacy of the current casemix funding model used in Victoria for HIV/AIDS and cystic fibrosis in a major Victorian teaching hospital. It will evaluate the hospital’s cost effectiveness in delivering these services, including international benchmarking analyses. It will analyse the cost-effectiveness of clinical protocols and pathways from an extensive review of the international literature, in order to develop models for health care and funding. The strengths and weaknesses of the funding models will be evaluated, with a balance of risk sharing between purchaser and provider. The inter-relationships between providers and the health care delivered by GPs, other community based care providers and the acute hospital setting will be analysed. The study will include a detailed examination of the utilization, costs and casemix complexity associated with the delivery of patient care for patients with cystic fibrosis and HIV/AIDS at The Alfred hospital. Broad applications of the new funding models for chronic diseases will be considered, providing important input into Commonwealth-State deliberations on developing classification systems, and models for health care and funding that extend beyond acute inpatient care.

Forecasting the Health Effects of Alternative Alcohol Control Policies

**Presenter**  Arnold-Reed DE  
Health Department of Western Australia, Perth

**Authors**  Arnold-Reed DE, Holman CDJ, English DR, Winter MG, McComb C, de Klerk N

**Concurrent session B3**

Present alcohol education programmes are based on the promotion of low alcohol intake as determined by the NHMRC\(^1\) criteria. The present study models the potential effects of alcohol related harm of different alcohol education policies by shifts and truncations to the present patterns of drinking behaviour in males, females and persons (males and females combined). Ischaemic heart diseases (IHD), aerodigestive cancers (oesophageal, laryngeal and oropharyngeal cancers combined), liver cirrhosis and stroke were chosen as markers for alcohol-caused harm (and benefits in the case of IHD). The four major strategies looked at are:

- **High risk strategy**- aimed at removing alcohol intake at hazardous and harmful levels as determined by NHMRC criteria.
- **Low risk strategy**- aimed at promoting teetotallers and very low level consumers to adopt alcohol consumption at levels which are deemed to give least total mortality.
- **Across the board exposure reductions** involving a population wide shift to the left in the distribution of alcohol intake of one drink per day less.
- **Across the board exposure increases** in alcohol intake at all pre-existing levels of one drink per day more.

The attributable proportions of alcohol-caused harm were based on the new concepts of continuous “excess risk function” and continuous “aetiological fraction function”, determined by modelling the prevalence of alcohol exposure and relative risk of major disease groups or total mortality associated with alcohol exposure using fractional polynomial regression. Details of the methodology of the development of the models and the health implications of adopting these policies will be discussed.

The Public/Private Mix in New Zealand

Presenter Ashton T
University of Auckland, NZ

Author Ashton T

Concurrent session C2

Over the past decade, New Zealand - like many other countries - has followed a programme of market-oriented health reform. The purchaser/provider split, introduced in 1993, was aimed at encouraging greater efficiency by making the provision of health services contestable. While tax-funding was retained, many critics saw the new model as the first step towards privatisation of the health system. This paper examines what shifts, if any, have occurred in the roles of the public and private sectors in the funding, purchasing and provision of health services. National statistics indicate that any shifts between the two sectors have been relatively minor to date. There are however, a number of new initiatives which have the potential to increase the role of the private sector quite significantly.

Can Surgeons Evaluate New Surgical Techniques?

Presenter Babidge WJ
ASERNIP-S, North Adelaide

Authors Babidge WJ, Maddern GJ

Concurrent session E7

Combined with the increasing number of new surgical techniques is the somewhat imperfect evidence base of current surgical practice. For many reasons the ‘gold standard’, randomized controlled trials have not been utilized in the surgical area. In an effort to improve evidence-based practice in surgery, the Commonwealth Government has funded a pilot project through the Royal Australasian College of Surgeons. The Australian Safety and Efficacy Register of New Interventional Procedures - Surgical (ASERNIP-S) was established in 1998.

The goal of the project is to establish a mechanism for collecting data on safety and efficacy of new surgical procedures. Data collection is guided by the outcome of a systematic literature review. Within the constraints of the pilot phase, nine procedures are being assessed and these cover a range of specialties and types of procedures.

The process begins with a systematic literature review undertaken by a review group. Recommendations are made which are presented to the ASERNIP-S Management Committee for ratification. Dissemination of the information follows endorsement by the Royal Australasian College of Surgeons. The procedure is classified as either (i) safe, (ii) use with continued audit, (iii) use only as part of a clinical trial or (iv) considered unsafe, should not be used.
Although the process has yielded reviews of high quality it has been slow and laborious. Engagement of Fellows of the College in the process is essential, however their time is limited. ASERNIP-S’s role in assessment of new surgical techniques is not an inhibitory one, but more so to facilitate and to enable assimilation of a large evidence-base. It is hoped that the process will be streamlined during the pilot phase and become an accepted method of assessment of new surgical technologies in the future.

**Defining Morbidity Profiles (Comorbidity) for Predicting Resource Utilisation**

**Presenter**  
Bailie RS  
Menzies School of Health Research, Casuarina

**Authors**  
Bailie RS, Sibthorpe BM,  
McGuiness C, Wang Z

**Concurrent session B6**

Individuals with complex chronic conditions tend to be high users of health resources. With the current economic imperatives and the promotion of a more holistic approach to care increased attention is being directed to describing the prevalence and impact of “comorbidity”. Methods of ascertaining and clearly defining morbidity profiles are necessary if morbidity profile is to be used as a means for determining resource allocation or eligibility for certain types of care arrangements. This presentation will provide an overview of methods of describing comorbidity, the methods of obtaining such data, and their limitations. Methods and data from a study of people with chronic and complex conditions in the ACT coordinated care trial will then be used to illustrate different approaches to defining morbidity profiles. These approaches include defining commonly occurring disease “clusters”; index conditions and patterns of commonly occurring comorbidities; and the sum of reported comorbidities. Preliminary analysis shows the most common conditions recorded in the ACT dataset, hypertension and arthritis, to be consistent with other studies of the morbidity profiles of older people. The combination of these two conditions is also the most commonly reported disease pair, followed by hypertension and ischaemic heart disease, and hypertension and diabetes. However, the most commonly reported main (index) diagnoses associated with the GP’s assessment of a requirement for increased coordination of care are diabetes and ischaemic heart disease, and associations of comorbidities with each of these index conditions will be defined. The association of these various measures of comorbidity with the GP’s assessment of severity of illness (using the Duke severity of illness scale) and the GPs’ prediction of resource need (using a new experimental scale) will be described. Further investigation of the extent to which such patterns of morbidity predict actual service utilisation and costs will be discussed.

**The Macquarie Panic Early Intervention Project**

**Presenter**  
Baillie AJ  
Macquarie University, Sydney

**Authors**  
Baillie AJ, Rapee RM

**Concurrent session C1**
The Macquarie Panic Early Intervention Project attempts to establish a model of early stepped care for people experiencing panic attacks that can be delivered to a community.

Panic attacks are common experiences which place people at risk of anxiety and mood disorders such as panic disorder, agoraphobia, and depression. These disorders are associated with substantial disability. Because panic attacks are memorable experiences that motivate people to seek help they may be a good cue for early intervention. The majority of sufferers seek help from general practitioners where their concerns are unrecognised, dismissed as "only stress", where considerable testing is performed to rule out physical causes, and/or medications are prescribed.

While many medications are effective their relative cost effectiveness compared with interventions based on Cognitive Behaviour Therapy has not lead to greater availability of CBT because of limited training. More economical forms of CBT involving self help manuals have been shown to be effective yet are not of benefit to all so the project provides a sequence of educational materials, self help and brief group therapy until people are free of panic.

Three aspects of the project will be discussed: the promotion of the project and early identification of people experiencing panic attacks; the stepped care package of intervention; and the evaluation of outcome and cost effectiveness. Some preliminary results form the project will be presented.

**Corporate Governance of Public Sector Health Services: An Assessment**

*Presenter* Barnett P  
Christchurch School of Medicine,  
NZ

*Authors* Barnett P, Powell M, Perkins R

*Concurrent session C2*

There is considerable international interest in alternative ways of organising the governance of public sector health services, with evidence that such choices influence the effectiveness of important aspects of organisational performance. Reform of public sector health services in New Zealand in 1993 included the corporatisation of public hospitals into government owned limited liability companies (Crown health enterprises, or CHEs), run by corporate boards. There has been considerable debate over the contribution of this corporate governance model to effective process and performance. Directors of boards and many chief executives were chosen for their commercial acumen and had little health sector experience. In terms of process there are concerns about accountability of boards and access to decision making by communities and health professionals. In terms of performance it has been suggested that the corporate model has focused unduly on financial rather than quality and service delivery issues. This paper reports on integrated research into the functioning of corporate boards in order to establish their strengths and weaknesses in relation to effective decision making and service performance. The research has employed a range of methods: a national postal survey of directors; in-depth interviews with chairs of boards; and interviews with a range of key informants including representatives of managers, clinicians, community leaders and the shareholder. An evaluation of results suggests that strengths of the corporate model include a clearer separation of governance and management functions compared with previous arrangements and higher expectations of management, particularly financial management, performance. Perceived weaknesses include the ‘democratic deficit’, failure to recognise the role of clinicians and health professionals and a lack of focus on service quality.
There are indications that capable, health oriented management can address these weaknesses within a corporate board context.

**The Annual Report: Source of Qualitative Data in Organisation Change**

*Presenter*  
Boldy D  
Curtin University of Technology,  
Perth

*Author*  
Boldy D

*Concurrent session E4*

All public hospitals are legally required to produce an annual report. The primary audience for this report is the state government it serves. While the annual report may meet this need there are significant other audiences that the report must increasingly consider: a range of customers including patients, employees, suppliers and communities.

Annual reports generally consist of quantitative and qualitative components. The quantitative component reports audited financial and other performance indicators. The qualitative components record the executive management’s impressions of the organisation’s activities and achievements. Epstein and Pava (1994) suggest that stakeholders trust the auditors, but do not trust management’s qualitative representation of activities.

Our research addressed the question of this mistrust. The aim was to compare the themes expressed in the qualitative components of annual reports and the perceptions expressed by the staff.

Textual data were obtained from five years of annual reports of a major metropolitan teaching hospital. From this, statements relating to organisational change and the impact on staff were identified. Focus groups were conducted to gain staff’s perception of these changes in the organisation for the same period.

Data analysis found marked differences between what was published in the annual report and what staff expressed. For example, patient care was an issue, particularly decreased length of stay. The annual report stated that patient throughput had increased and that staff had coped admirably with this change. Staff on the other hand, reported that greater patient turnover created pressure which took its toll on staff.

This research supports the position that the annual report is not a valid and reliable single source of data for qualitative research in organisational behaviour.

**The Impact of a General Practice Casualty on Overall Primary Medical Services.**

*Presenter*  
Bolton P  
University of Sydney, Sydney

*Authors*  
Bolton P, Mira M, Jones M

*Concurrent session E2*
The Balmain Hospital General Practice Casualty (GPC) is an innovative GP staffed casualty style service which meets the needs of the local community when their regular GP is not available. From a policy perspective one concern about such new services is that they may induce demand by addressing previously unmet need. It is possible to examine this hypothesis for the GPC using data collected by the Health Insurance Commission (HIC). The HIC collects data about almost all encounters provided in general practice.

Method: Aggregate data were provided by the HIC about the number of GP consultations provided in each of the GPC catchment, an adjacent area and a more removed area for each quarter commencing with September 1984 until September 1996. The generalised estimating equation (GEE) model was used to analyse the longitudinal GP consultation data available to gain some insight into the impact of the GPC opening on consultations in the three districts.

Results: The opening of the GPC was associated with a reduction in the quarterly rate of increase in the number of age-sex adjusted GP consultations per capita of 1.5% per capita in the GPC catchment, compared to other districts.

Discussion: The results presented support an association between the opening of the GPC and a reduction in the number of other primary medical services provided in the immediate area. The analysis suggest that the GPC does not induce demand. If it is generalisable then this finding has positive implications for the funding of similar services.


**An Evaluation of the Post-Acute Community Care (PACC) Program**

*Presenter* Bonevski B  
Newcastle Institute of Public Health, Newcastle

*Authors* Bonevski B, Lowe J, Aldrich R, Doran C

*Concurrent session D5*

“Hospital-at-home” is a generic term, referring to a package of home-based nursing and rehabilitation services. Schemes tend to be divided into two main groups: those that prevent admission into an acute hospital and those facilitating early discharge of patients from an acute hospital. Previous evaluations of early discharge, hospital-at-home schemes for orthopaedic patients in the UK have indicated that such schemes may reduce total length of hospital stay, although a recent evaluation found the opposite. The PACC program is a community service provided by the Hunter Area Health Service which aims to provide hospital type care in the home environment for patients with bone and joint disorders. Although there is a growing body of international literature related to hospital-at-home and early discharge programs, formal research within the Australian context has been somewhat limited. This study aims to evaluate the PACC program.

Specifically, it aims to:

1. assess costs associated with the program
2. measure patient and carer needs
3. measure patient functional status
4. assess provider acceptability

The results of the program cost analysis will be presented.

A Systematic Review of the Changing Focus of Health Care Delivery Literature

Presenter  Bonevski B
Newcastle Institute of Public Health, Newcastle

Authors  Bonevski B, Lowe J, Smith J, Tyter S

Concurrent session  C5

"Changing focus of health care delivery" relates to the transition of certain forms of health care out of the hospital. Post-acute care as well as pre-operative assessment procedures are moving away from the traditional hospital based services. In addition, there appears to be a change in the focus of health care delivery with a broader, multi-service community provider approach. These include general practice as a setting for the management of conditions previously treated exclusively in hospital and the increased implementation of nurse practitioners. The primary aim of the shift in health care delivery is to decrease hospital related costs without compromising the highest standard of patient care.

The aim of the current review is to critically examine aspects of the changing focus of health service delivery. More specifically, the review is assessing the quality of evidence in the existing literature, and the outcomes of 'community care' in comparison to traditional hospital based care. 'Community care' is any of the following five types of programs: the primary care of conditions previously managed in hospital; hospital in the home programs; subacute care programs transferring care from tertiary facilities to community hospital or polyclinic facility; specially trained health staff; pre-operative assessment clinics.

Measuring Incidence and Prevalence From Linked Hospital Data: Improved Methods

Presenter  Brameld KJ
University of Western Australia, Perth

Authors  Brameld KJ, Holman CDJ

Concurrent session  A4

Estimates of chronic disease incidence from Linked Data will usually be overestimates, particularly during the first few years of the data set. This results from the “prevalent pool effect” whereby prevalent cases have not been completely removed as their first admission occurred prior to the start of the data set. The current method of dealing with this problem is to define a “clearance period” after which it is assumed that most prevalent cases will have been removed from the data set. This method is not particularly satisfactory as its degree of accuracy is unknown and it results in a large reduction in the number of years of data available. To overcome this difficulty we have developed the “backcasting method”. This uses a survival model to estimate the
baseline risk of a patient having had no previous hospital admission for the specified disease. This
allows calculation of correction factors that can be applied to incidence estimates, depending on
the number of years data that the estimate is based on.

A further problem is the under-ascertainment of prevalence data that results when patients are
hospitalised infrequently. Prevalence estimates for the earlier years in the data set will be less
complete than those in later years, as the risk of hospitalisation increases with time. The problem
becomes increasingly acute with decreasing frequency of hospitalisation. A model has been
developed to allow estimation of the “completeness” of prevalence estimates from cancer registry
data and the same method can be applied to other chronic disease data. The model estimates
“completeness” of prevalence as a parametric function of incidence and relative survival.

The presentation will describe the ascertainment issues, the models that have been designed to
address them and demonstrate their practical application.

Medical Ethics in Paediatric Emergency Medicine - Triadic, Multiple-dyadic or Polyadic

**Presenter**  Bridges J
CHERE, Camperdown

**Authors**  Bridges J, Hanson R, Little M,
Choy Flannigan A and Fairley M

**Concurrent session**  D7

Most areas of health services research concentrate on a dyadic relationship between the doctor and
patient. In paediatric emergency medicine it may be necessary to focus on a more complicated
relationship - as the parents of the child play an important role in the delivery of medical services.
This paper consists of five authors discussing ethical principles in paediatric emergency medicine–
each from their own discipline of: health economics, clinical (paediatrics), medical ethics, legal and
clinical (psychiatric / psychology). The general consensus is that a more complicated relationship
is needed for the paediatric emergency setting such as triadic, multiple-dyadic or polyadic. Such
relations allow the inclusion of the parents and possibly the inclusion of other family members,
medical providers and community members. If such a framework is considered in the paediatric
setting it may be possible to provide a higher quality of care with a lower intensity of resources. If
the ethical relationship is extended, health care saving may come through the prevention of doctor
shopping and through centralised (electronic) medical records.

BEACH (Bettering the Evaluation and Care of Health) Continuous National Data Collection
in General Practice

**Presenter**  Britt H
AIHW, University of Sydney,
Westmead Hospital, Westmead

**Authors**  Britt H, Sayer GP, Miller GC,
Charles J, Scahill S, Horn F,
Bhasale A

**Concurrent session**  A2
Aims:
- provide a reliable and up-to-date database of GP/patient encounter information.
- access patient risk factors and health states and their relationship to health service activity.

Methods: Since 1/4/98, a random sample of 1,000 Recognised GPs (per year) each records details of 100 consecutive encounters on structured paper encounter forms, producing an annual database of 100,000 encounters. Data includes: GP characteristics; patient characteristics; encounter type, patient reasons for encounter, problems managed and treatments provided including referrals, tests and investigations ordered. A section on the bottom of each form investigates other aspects of patient health (eg risk factors) or health care delivery, and changes regularly.

Interim results: In the first 6 months GP response rates were 43.6%. Participants and non-participants did not differ in age, gender, years in practice, service activity level. Direct encounters represented 95.6% of the 47,600 described. The patients were: female (58.2%); new to the practice (9.5%); held a Health Care Card (47.5%); heal a Veterans’ Affairs Card (3.5%); were NESB (13.6%); stated they were A/TSI (1.4%). A quarter of encounters were with patients in each of: <25 years, 25-44, 45-64 and 65 years.

There were 69,991 patient reasons for encounter (147/100 encounters). Of the 68,845 problems managed 2.7% were thought work related. Medications were prescribed (85.8%), advised for purchase (OTCs) (7.7%), or supplied (6.3%), at a rate of 110.1 per 100 encounters and other treatments provided (at a rate of 42.1 per 100). Referrals were made at a rate of 10.6 per 100 encounters. At least one pathology test was ordered at 23.8% of and one (+) order for imaging was placed at 7.1% of encounters.

Discussion: This data base will provide a source of regularly up-dated data regarding the activities of general practice allowing measurement of changes over time and an indication of the effect of relevant National interventions. Funding for BEACH is provided by: DHAC, DVA, NOHSC, Astra, Roche, Rhone Poulenc Rorer.

**Purchasing and Funding Responsibilities in New Zealand: Implications of Integrated Care Developments**

**Presenter**  Brown P  
University of Auckland, NZ

**Author**  Brown P

**Concurrent session  E5**

As the purchaser of health services, New Zealand’s Health Funding Authority is responsible for using the money allocated by the crown to purchase services from providers to achieve the maximum health gain for the people of New Zealand within the available budget. The HFA’s integrated care demonstration projects have the potential to change the way the health services are delivered to the people of New Zealand. But the initiatives also have the potential for changing the way the services are purchased and to blur the distinction between funding and purchasing. Specifically, the initiatives may transfer to private purchasers such responsibilities as a) acting as
an informed agent for the public, b) acting as an informed agent for the public, c) negotiating a fair and equitable price for services, and d) prioritising between services.

This paper discusses the status of integrated care initiatives in New Zealand in terms of i) the purchasing responsibilities being transferred from the HFA to the integrated care demonstration projects and ii) the likely benefits and risks to the public health sector associated with the various types of initiatives. The characteristics of the initiatives raise a number of issues relevant to health policy and the health sector, including the implications of establishing organisations that compete with the HFA in contracting with providers, transferring service and prioritisation risk to third parties, and allowing private providers and organisations to determine the equitable distribution of health services.

A Research Inventory Linking Service Planning to Public Health Action

Presenter Cardona M
Queensland Health, Brisbane

Authors Norris M, Cardona M, Steele J

Concurrent session A2

While there have been many discrete collaborative efforts between Public Health Services and other organisations, no strategic or coordinated approach has existed to identify, prioritise and jointly address public health research priorities between institutions in Queensland.

A project team including representatives from Universities, funding agencies, policy makers, epidemiologists, health planners, and public health practitioners was established to identify research opportunities and priorities across key outcome areas (eg. injury, immunisation, environmental health, cancer). These were derived from the Public Health Services’ three-year plan for achievements, produced by content-specific teams across the state. Templates were designed to describe individual research topics, timeframes, objectives, options for completion, potential collaborators, available funding sources and contact details of a Public Health Services officer involved in identifying the topic. Initiatives in over 20 health service areas were prioritised and will provide a framework to assist service managers, established researchers, post-graduate students and other professionals in undertaking research and linking findings to practice.

The research priorities identified within this document reflect the commitment of Public Health Services to improving the quality and its relevance of public health research to public health practice, encouraging multi-disciplinary and cross agency team work, and integrating research into policy development and service delivery.

An annual review of research priorities and opportunities will be built into future planning cycles so that the identification of and response to research needs become an integral part of strategic planning and action.

This presentation will describe the process and outline the outcomes of the project as well as planned strategies to implement the research priorities.

Priority Setting In Public Health and Health Services Research
Priority setting in strategic public health and health services research is a topical issue. There have been a number of past attempts in this direction which have unfortunately suffered either from a lack of coherence or have omitted some key considerations. Our effort to improve on these previous approaches has resulted in the Seven ‘I’s model.

Seven ‘I’s (or “eyes”) summarise key perspectives or ways of looking at priority setting in strategic public health and health services research in Australia - innovation, identification, inequalities, incorporation, importance, influences, and interventions. We critically examine each component of the model and discuss the strengths and limitations of our approach compared to other priority setting models.

The process of allocating funds across research areas needs to be transparent and accountable on the one hand while also encouraging the link to population health gains on the other hand. The Seven ‘I’s model addresses these twin goals. We have progressed beyond simply compiling lists of priorities. What we propose is a methodology for priority setting which is flexible enough to adapt to a rapidly changing public health and health services environment.

The Seven ‘I’s model will aid the decision making process by testing the ‘relevance’ of the research, while the ‘excellence’ will be evaluated using published guidelines. We propose that the model be used by health decision makers to set research priorities primarily on the basis of expected health benefits, with adjustments made to allow for other non-health benefits as necessary.

The Seven ‘I’s model is applicable to commissioned research and to investigator-driven research. The model may be used to assess existing proposals for research into public health or health services issues, or alternatively may be used to generate suggestions for priority areas in future research.

Resource Utilisation in Mental Health: Determinants in Clinical Decision Making

The existing evidence has demonstrated that diagnosis makes only a small contribution to the prediction of resource utilisation in acute psychiatry (Rohrer & Vaughan, Stineman, et al). There is considerable concern from clinicians that there are inadequate numbers of acute psychiatry beds in NSW. This concern is supported by numerous anecdotes of registrars searching for beds throughout the metropolitan area for several hours on many occasions each week. In response, clinicians are working under pressure to maintain people out of hospital and promoting early
discharge almost all of the time. Within SESAHS, concerned clinicians believe that they are already providing the maximum possible community interventions aimed at preventing hospitalisation and they believe therefore that admission is inevitable.

The aim of the project is to investigate the reasons for high demand of acute beds, and to develop criteria for inpatient admission with a view to improving the effectiveness of demand-management for inpatient mental health services.

The project studied demand-side factors arising out of patient needs, and supply-side factors arising from the way that existing facilities are used. Factors influencing the clinical decision to admit/not admit in a psychiatric emergency is addressed.

This paper will present a statistical analysis of the clinical data derived from this project, using multi-variable analysis of factors including demographic, diagnostic, dangerousness of the current presentation, social support, family coping capacity, bed availability, availability of community mental health services, and seniority of decision making doctors. The implications of these statistical results for management strategies will be discussed.

**Using Geospatial Information Systems in Health Service Planning**

*Presenter*  
Chen Y  
North West Health Care Network, Victoria

*Author*  
Chen Y

*Concurrent session D4*

Efficient planning will reduce cost of health services, and make better use of the scarce health resources in a more equitable and accessible way. In order to achieve this, we need a powerful decision support system (DSS). The introduction of Geospatial Information Systems (GIS) into the health arena has helped to satisfy the above needs and reduce government expenditures in areas such as service location and service delivery.


The paper presents the role a GIS plays as a DSS in the current health service planning and methodologies of GIS in health. It concludes that GIS has potentials in improving public health
information to support decision making of health service planning. However more coordination and partnership is required to best utilise this technology as a DSS.

**History of Clinical Performance Measurement and the ACHS Care Evaluation Program**

*Presenter*  
Collopy BT  
ACHS Care Evaluation Program, Fitzroy

*Author*  
Collopy BT

*Concurrent session A7*

Clinical provider performance has historically been accepted, rather than measured, through recognition of qualifications, hospital appointments, publications and informal peer assessment. Self assessment examinations after graduation test knowledge rather than personal, cognitive and technical skills. The complexity and variability of biological (and psychological) systems introduce difficulties with clinical measurement, particularly in outcomes assessment.

The Australian Council on Healthcare Standards (ACHS) Care Evaluation Program (CEP) with the cooperation of the medical colleges and funding support from the Commonwealth, introduced 17 sets of performance measures (comprising over 200 clinical indicators) into its accreditation process, the Evaluation and Quality Improvement Program (EQuIP). Over 500 Australian acute hospitals forward data twice yearly to the CEP’s National Aggregate Indicator Database (NAID). The aggregate results are published annually. For some indicators the denominator (group at risk) reflects the care given to more than a million patients.

In addition to forwarding quantitative data, hospitals also provide qualitative information on actions taken as a result of comparison of results with peers. The capacity of the database to demonstrate trends in healthcare standards will shortly be evident.

Three factors in the acceptance of the indicator program by the medical colleges and the hospitals are a sense of co-ownership; the educational environment in which they are used (as part of a voluntary accreditation program) and their content validity through provider development.

**Effectiveness/Actions Following Indicator Monitoring**

*Presenter*  
Collopy BT  
ACHS Care Evaluation Program, Fitzroy

*Author*  
Collopy BT

*Concurrent session A7*

Not withstanding the imperfections in currently used clinical indicators, such that they are most often referred to as ‘flags’ and not exact standards, their value can be demonstrated by their responsiveness, that is their ability to induce action as a result of their monitoring. In 1997, more than 80% of 513 individual healthcare organisations reporting data to the Australian Council on Healthcare Standards (ACHS) Care Evaluation Program (CEP), National Aggregate Indicator
Database (NAID) reported taking some action to improve care on over six thousand occasions.

The types of action taken can be categorised as:
- further quality activities (QA) and improvements to databases
- policy and procedure changes
- educational programs
- new staff appointments
- changes in equipment/techniques

Monitoring of both process and outcomes indicators resulted in effecting change and the responsiveness of an indicator set appeared to increase each year in the accreditation process. Examples of actions taken in individual healthcare organisations will be demonstrated in relation to reduced complication rates and improved processes of patient care.

**An Area Health Service Taking Action to Achieve Health for All**

**Presenter**
Comino E
Liverpool Hospital, Liverpool

**Authors**
Comino E, Harris E

**Concurrent session D6**

During recent years, strong evidence, both in Australia and overseas, has accumulated to support the relationship between increasing disadvantage and poor health outcomes. Further there is general consensus that explanations for these differences include economic, social and lifestyle factors and access to services. What is not yet clear is ways to address these differences through the development of effective interventions. The aim of this paper is to examine a number of projects with an equity intent that are being conducted within and area health service to describe how they will address inequity.

Projects that were identified and included in the study ranged from hospital based service development issues to community based interventions. Projects (n=24) were presented at a recent forum hosted within the health service and 16 summaries were available. Projects were categorised according to three frameworks which are used in the literature:

1. The Ottawa Charter
2. Primary, secondary and tertiary prevention
3. Reactive/proactive action targeting individuals or populations

The results of these analyses demonstrate that the majority of projects were primarily concerned with service provision at an individual level. Even where projects ostensibly look at community development, the focus still seems to be on service delivery or provision of health related information to individuals. This reflects the general focus of health services on individual occasions of care and the limited resourcing of health services to explore alternative approaches.

**Substance Use Treatment Services: Standardised Client Profiles and Outcome Measurement**
There is general consensus concerning the need for reliable information about the activities and clients of alcohol and other drug treatment agencies. Preparations are well underway for the commencement of a national data collection for such agencies. This proposed National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS-AODTS) is an activity of the National Health Information Work Program. The NMDS-AODTS will provide ongoing information about the activities of treatment agencies and their clients. This type of information is urgently required to guide policy and service development on a regional and national basis, and will contribute to the evaluation component of the National Drug Strategy. During 1998, the National Drug and Alcohol Research Centre, in collaboration with the Australian Institute of Health and Welfare, developed standard data items to be used for the NMDS-AODTS. As a result of the lack of standardised data instruments within the sector, this work involved extensive consultation with agencies and health administrators. Following this initial consultation period, the data items were tested nationally in a pilot study of 19 agencies across the government and non-government sectors. The results of this pilot study and its influence on the recommended data items will be discussed. The next stage of this group of projects includes the development of a brief outcome module for use by treatment services.

**Third Sector Primary Health Care for Low Income Populations**

**Presenter** Crampton PR  
Victoria University of Wellington, NZ

**Author** Crampton PR

**Concurrent session B2**

Background and aims: New Zealand is developing a diverse range of primary care organisational arrangements. The emergence of third sector organisations over the past decade represents a departure from traditional private general practitioner-owned general practice. The term third sector describes organisations which are non-government and non-profit. This paper describes a study that aimed to determine the extent to which a group of third sector primary health care organisations was providing accessible primary care services to low income populations.

Methods: Data were collected in 1997 and 1998, from 14 third sector primary care organisations. Data were collected by face-to-face interviews of managers and other key informants using a semi-structured interview schedule, and by down-loading information from practice computer information systems.

Results: Approximately 80,000 patients were registered with the 14 primary care organisations. Overall the populations served were young, with only 4.0% of patients being aged 65 years or older, and the ethnicity profile of the registered practice populations was highly atypical for New Zealand, with 21.8% European, 36.0% Maori, 22.7% Pacific Island and 12.0% other. Benefit card holding rates were higher than that recorded in other general practice studies, and deprivation distributions were highly skewed, with far more people than average living in areas with
deprivation decile scores of 9 and 10. There were significant differences in management structures between the third sector practices and more traditional general practice; they employed salaried general practitioners and placed strong emphasis on community participation in governance. Utilisation rates were comparable to, or lower than rates reported in other studies of utilisation.

Conclusions: This study shows that third sector organisations are providing services for vulnerable populations. Considerable effort is now required to measure quality and effectiveness of services provided by other models of primary care delivery serving comparable populations.

Deprivation and Health Status in New Zealand: New Research Findings

Presenter  Crampton PR
Victoria University of Wellington, NZ

Authors  Crampton PR, Salmond CS

Concurrent session D6

Background and aims: Social and economic conditions are powerful determinants of the health status of individuals and populations. Indexes of deprivation have been used extensively for research and resource allocation in the United Kingdom and in New Zealand. This paper discusses a new area-based measure of deprivation, the NZDep index of deprivation, and describes the relationship between deprivation and: hospital admissions, mortality rates, smoking, lung cancer, asthma in adults, immunisation rates and meningitis.

Results: NZDep96 is an area-based measure of deprivation that combines nine variables from the 1996 census which reflect eight dimensions of deprivation. NZDep96 provides a deprivation score for each meshblock in New Zealand. Meshblocks are geographical units defined by Statistics New Zealand, containing a median of 90 people. The NZDep96 scale of deprivation from 1 to 10 divides areas in New Zealand into tenths. For example, a value of 10 indicates that the meshblock is in the most deprived 10 percent of areas in New Zealand. Recent studies of deprivation (using NZDep96 and its predecessor for the 1991 Census, NZDep91) have demonstrated strong and consistent associations between deprivation of area of residence and hospital admissions, mortality rates, smoking, and lung cancer registrations. There is a weak association between area deprivation and asthma in adults. Children not fully immunised at age two years are more likely to be living in deprived areas. For Pacific Island and European children the highest rates of meningococcal disease are seen in the most deprived areas.

Conclusions: There is increasing need for accurate socioeconomic characterisation of individuals and populations for the purposes of health needs assessment, resource allocation, health status monitoring, health service planning, capitation funding and research. The new NZDep96 index of deprivation for small areas is a tool suited to such applications. Deprivation measured by NZDep96 is strongly and consistently associated with a range of health outcomes.

Waiting List Statistics: the Good, the Bad and the Ugly

Presenter  Cromwell DA
University of Wollongong, Wollongong
In Australia and other countries, policies on waiting list management have encouraged the regular distribution of information on waiting times for elective surgery. By providing this information to surgeons, GPs and patients, the policies have aimed to ensure that a patient’s wait for treatment is kept to a minimum.

Surgeons play a pivotal role in ensuring that patients do not wait longer than necessary, but they face a difficult task. Waiting list behaviour is influenced by many factors, only a few of which can be easily controlled. Consequently, surgeons need as much warning as possible if they are to prevent excessive waiting times.

The focus of this paper will be a discussion of why common waiting list statistics do not function well as the basis of an "early warning system". These shortcomings suggest that a new indicator is needed: one such indicator will be presented.

**Funds Pooling in the Coordinated Care Trials: Benefits and Risks**

*Presenter*  
Cromwell DA  
University of Wollongong,  
Wollongong

*Authors*  
Cromwell DA, Owen A

Funds pooling has been a fundamental component of the coordinated care trials. Primarily, it has provided a budget so that care coordinators can purchase services but it has also offered a means of overcoming a number of flaws in current funding arrangements. For example, by pooling resources from various service providers, and hence from different funding sources, it removes the incentive to cost shift. It also creates a potentially powerful mechanism for service substitution, raising the possibility of distributing funds based on expected health gain rather than activity. However, funds pooling is not a simple panacea. Determining the budget is not straight forward, and poses a number of tricky methodological issues. But perhaps a greater potential problem is the variable nature of a community’s demand for health care. This variability has the potential to result in considerable financial risk for the budget holder (a trial) and service providers. This paper will examine the pros and cons of funds pooling, and will draw on the experience gained from creating the funding pool for the Illawarra Coordinated Care Trial.

**Managed Price Competition in the New Zealand Medicines Market**

*Presenter*  
Davis PB  
Christchurch School of Medicine, NZ

*Author*  
Davis PB

*Concurrent session A6*
Since the beginning of the 1990s New Zealand has undertaken a rapid and far-reaching series of institutional and systemic changes in the health sector. The effect of these changes on key policy outcomes remains generally uncertain. Furthermore, central aspects of the restructuring have been either modified or reversed as popular opposition – together with problems of implementation – blunted the government’s early determination to proceed with its initial agenda. The principal difficulties in evaluating such far-reaching restructuring have been: the absence of data, the frequently conflicting nature of multiple policy objectives, the controversial and contested nature of the changes, and their systemic character (thus making controlled evaluation virtually impossible). This paper will attempt to overcome some of these difficulties by concentrating on the assessment of a single, well-defined institutional innovation with reasonably clear-cut and unambiguous policy objectives. At the centre of the analysis is the introduction in 1993 of an explicit price-referencing system for the subsidisation of pharmaceuticals and the adoption of a self-conscious policy of enforcing price competition in the prescription medicines market in New Zealand. The project is in its early phases and interviews with key decision-makers are progressing. Nevertheless, a sufficient range of information has been collected to permit a reasonably definitive early conclusion about the efficacy and durability of these important institutional changes. Initial results suggest that, while the overall cost of subsidising pharmaceuticals has not been diminished, significant economies and efficiencies of operation have been extracted with the use of the monopsony power of the state subsidy agency. Nevertheless, the political cost of these hard-won gains has been great and there remain questions about the durability of the coalition of forces sustaining this stringent set of institutional arrangements.

**Shared Obstetric Care: Challenges for Hospitals and Care Providers**

*Presenter*  
Dawson W  
La Trobe University, Carlton

*Authors*  
Dawson W, Brown S, Gunn J, McNair R

*Concurrent session E2*

While shared obstetric care has expanded rapidly in Victoria, and other states in the last decade, a Victorian population based Survey of Recent Mothers indicated a low level of satisfaction with shared care arrangements. Factors which may explain dissatisfaction are being explored in a hospital survey, and interviews with providers.

**Method:** A survey of Victorian public hospitals with $\geq 300$ births ($n = 29$) and a purposive sample of hospitals with $<300$ births ($n = 14$) was conducted. Stage two consisted of thirty-two interviews with managers and care providers at four case study sites.

**Results:** The response rate to the survey from hospitals was 97% (42/43). The survey identified a diverse range of models of shared care and considerable variation in practice between Victorian hospitals. Few hospitals had written protocols for all models offered (14%); half had no written protocols. Only 14% had written information for women explaining options offered. A majority of hospitals were unable to access records identifying enrolments in shared care (62%), and therefore were unable to undertake any comparative evaluation between models of care. The case study interviews indicated that the current organisation of shared care promotes fragmentation, duplication and poor co-ordination rather than continuity. Participants had different views about who was responsible for particular aspects of care. Some participants suggested strategic management initiatives to improve organisational aspects of this model.
Conclusions: Rapid expansion of models of care without effective monitoring or evaluation should be avoided. The Review recommended further work on written guidelines and patient-held records in consultation with care providers; ongoing communication to develop an integrated approach based on a common philosophy of care; and improvements in information for women to enhance opportunities for an informed choice between models of care. Monitoring and evaluation, including economic evaluation is needed.

**Using Economics to Inform Policy in Population-Based Screening Programs**

**Presenter**  
De Abreu Lourenco R  
CHERE, Camperdown

**Authors**  
De Abreu Lourenco R, Gerard K,  
Kitcher D, Viney R

**Concurrent session B1**

Population health programs are delivered in a complex policy and health service delivery environment. The National Breast and Cervical Screening Programs are both notable for the complexity of their service delivery, funding, quality control, data management and access issues. Both of these programs are joint Commonwealth-State programs, creating additional policy constraints. Any assessment of the effectiveness, efficiency and equity of service delivery in these programs must be undertaken in the context of these factors. This means that the reality of evaluation may fall short of the economist’s Aideal@.

In this paper we use the example of a recent review of the NSW Breast and Cervical Screening Programs to demonstrate how it is possible to use economics principles to inform better decision making, although constrained by institutional factors.

We discuss the impact that the lack of good quality baseline measures and variability in the quality and consistency of financial and other reporting had on our capacity to assess the programs in cost-effectiveness terms. The broader organisational context for health services and historical service delivery arrangements also limits the options for change. As economics pragmatists we argue that despite the challenges these problems presented it was possible to use economics principles to develop proxy measures of efficiency and equity, and identify possible directions for change.

**The Challenge For Clinical Governance**

**Presenter**  
Degeling, P  
University of New South Wales,  
Kensington

**Authors**  
Degeling P, Hill M, Kennedy J

**Concurrent session E7**

In common sense terms the concept of clinical governance is both appealing and persuasive. These characteristics however will not guarantee its implementation. The challenges that are likely to arise from efforts to give substance and form to clinical governance in acute care settings are examined in the light of first the reported outcomes of past efforts at hospital reform and
secondly, findings derived from a recent comparative study of 850 staff located in four English and two Australian hospitals. The study canvassed the attitudes of medical, nursing and management staff to a range of matters which are central to current programs of hospital reform. The findings suggest that implementation of clinical governance will depend on the clarity with which the concept has been defined and on the willingness and capacity of clinician managers to bridge the very different perspectives of medical, nursing and managerial staff, particularly on the establishment of work process control structures and methods within clinical settings.

**Booking Systems for Surgery and Patient Quality of Life**

*Presenter*  
Derrett S  
University of Otago, NZ

*Author*  
Derrett S

*Concurrent session B7*

This paper discusses the results from the first phase of a longitudinal study of New Zealand’s recently introduced booking system for prioritising access of patients to non-urgent surgery. The overall aim of the study is to evaluate the physical, psychological, social and economic effects for patients of explicit prioritisation and booking systems. This study includes participants with a range of chronic conditions which are usually not fatal, and collects information on health-related quality of life, the process of care and the patients’ views about processes. This paper presents the reported experiences of 100 participants assessed and prioritised for cataract surgery and discusses some possible implications of these findings.

**New Zealand Health Sector Policy Evaluation: Where is it and Where is it Going?**

*Presenter*  
Dominick CH  
Ministry of Health, Wellington, NZ

*Author*  
Dominick CH

*Concurrent session C2*

Health sector policy evaluation in New Zealand is undertaken infrequently compared with other countries and in the views of health sector stakeholders. During the 1998/99 year, the Ministry of Health was charged with fostering independent evaluation of current and proposed health sector policy, its implementation and its impacts. This paper presents results from a review of health sector policy evaluation, actions proposed by the Ministry as a result of this review, and a developing framework for health sector policy evaluation.

The review formed the basis of an options paper for the Minister, in which actions for improvement were proposed; and a descriptive and exploratory case study.

Key questions for the review were
- What health sector policy evaluation is undertaken? (Where are the gaps?)
- How does it operate / occur? (What mechanisms and processes are used?)
- What is likely to enable timely, relevant high quality health sector policy evaluation being undertaken.
An embedded design was used for the case study. The methods included a literature review of policy evaluation frameworks, interviews with key stakeholders in the health sector, informal discussions with representatives from other government agencies, a document review, and participant observation.

The paper defines policy evaluation within a research framework, outlines the relationship of policy evaluation with other health research and evaluative activity, and describes the current levels and types of policy evaluation in the New Zealand health sector and the infrastructure that supports it. The strengths and weaknesses of the current situation and possible barriers to change are highlighted. A number of actions to foster health sector policy evaluation were derived from the analysis and these are described. It is anticipated that framework for health sector policy evaluation will be outlined, this is currently in development and is work in progress.

**Improving the Quality of Commissioned Research**

*Presenter*  
Douglas J  
Department of Health and Aged Care,  
Canberra

*Author*  
Douglas J

*Concurrent session A2*

This paper explores the factors that contribute to quality in commissioned research. It has been written from the perspective of how officers of the Department of Health and Aged Care can facilitate quality in the research. The recently published Discussion Paper of the *Health and Medical Research Strategic Review* suggested some health departments needed to improve their processes for priority-driven research. The paper explores some of the ways to achieve this.

The focus is on commissioned research, that is, particular pieces of research requested by the Department usually under contract arrangements. Research projects undertaken ‘in-house’, market research and investigator-driven research are not covered however there are many parallels. Following an introduction, quality issues are discussed in relation to inputs, processes, outputs and outcomes. The wide range of subject areas of commissioned research across the Department means that there would be variation in the emphasis placed on the components of commissioned research. Each section contains a summary of suggested indicators for quality in commissioning research.

The paper has been used for discussion purposes in the Department and further comment from the research community would be welcome.

**Do the Elderly Cost More?**

*Presenter*  
Duckett SJ  
La Trobe University, Bundoora

*Authors*  
Duckett SJ, Jackson TJ

*Concurrent session D2*
Victoria’s introduction of casemix funding for its public hospitals in 1993 was controversial, not least because significant budget cuts were implemented simultaneously. The decision was also criticised because it was felt that the elderly would be discriminated against under the new arrangements, because elderly patients cost more than younger patients, a cost difference not compensated through the casemix funding formula.

This paper evaluates within DRG cost variation associated with age. It uses a database of over 500,000 records extracted from patient costing systems in 15 major hospitals in Victoria. In only 92 DRGs (15% of the 617 DRGs in the database) was there a positive linear association between age and cost. Of those 92 DRGs, only 32 had an $r^2$ of more than .05, that is, in most cases age explained less than 5% of the variation in cost of the DRGs.

Given the conventional wisdom that costs of hospital care increase with age, it is useful to explore why this effect cannot be detected. Two DRGs were selected for closer examination: AN-DRG 177 (chronic obstructive airways disease) and AN-DRG 405 (hip replacement without comorbidity or complications). In AN-DRG 177, the average cost for persons over 65 was not significantly different for people under 65 even though persons over 65 had a longer length of stay than persons under 65. The longer length of stay was associated with increased costs for nursing in this DRG but resource consumption in other cost centres was quite different: patients under 65 incurring significantly greater costs in allied health, intensive care unit, imaging, and medical staff costs. For AN-DRG 405 the costs for patients under 65 was higher than the costs for patients over 65, principally caused by differences in the costs of the surgically implanted prostheses associated with this DRG.

Reactions of Participating GPs to the Southern Healthcare Network’s Coordinated Care Trial

**Presenter**  
Dunt DR  
Centre for Program Evaluation, West Heidelberg

**Authors**  
Dunt DR, Segal LS, Piterman H, Hawthorne G, Day N, Day S

**Concurrent session A5**

This coordinated Care Trial offers care on a population-wide basis to all residents with a recent history of high cost use of Acute Care Services in 30 economically and culturally diverse postcode areas in South-eastern Melbourne. It aims to determine whether care coordination by the patient’s GP supplemented by inputs from a service coordinator (for medium risk clients) and a case manager (for high risk clients) can make a difference to the health and wellbeing of participants within existing services and resources. A coordinated care plan by GP (with patient) and implementation of a Risk Assessment Tool (RAT) assigns clients into three levels of risk for future hospital use.

A supplementary GP impact study to access the impact of the CCT on GP’s role as care coordinators was initiated at Trial midpoint. A mail questionnaire was administered to 369 GPs with patients in the Trial. The results overall reveal a higher than expected, generally favourable responses to GPs with regard the impact of the Trial on both clinical practice and patient and
family care-giver outcomes as well as Coordinated Care as a possible health care reform in Australia.

**Priority Setting in Healthcare - The Relationship Between Clinical Decisions and Resource Allocation**

*Presenter*  
Feek CM  
Ministry of Health, Wellington, NZ

*Authors*  
Feek CM, Edgar W

_Conscurrent session E7_

Health Resources in New Zealand are, and have always been finite. New Zealand’s health reforms were introduced in 1993 and changed the framework for health service delivery; this framework clearly contemplates rationing. This means that judgements must be made about who will or will not receive publicly funded services within the available money. Those judgements are based on the benefit people will gain from services. Despite some public disquiet, increased by media coverage of the cases of individual patients, there is growing awareness in New Zealand of the reality that not everything can be afforded for all who might need health services. This applies to renal dialysis as to every other health service.

We describe the development of boundary guidelines (the Guidelines) for entry into endstage renal failure (ESRF) programs in the Northern Region of New Zealand, how they were used in the clinical decision making process and how they influenced public opinion. In particular, we describe two cases, Mr McKeown and Mr Williams, both involving the withholding of renal dialysis in the Northern Region, and in both, the decision to ration was examined under the public spotlight.

Rationing of healthcare is the relationship between clinical decision-making and resource allocation. Explicit rationing will only work when clinicians “own” the relationship. This was not so in the case of Mr McKeown. There was concern that the level of funding at the time would not meet the threshold at which clinicians were prepared to ration. The clinicians felt unsupported by government in making their rationing decisions. In contrast in the case of Mr Williams there was national clinical agreement on the Guidelines, the threshold for rationing, the level of funding and support from government. Under circumstances such as these, clinicians may be prepared to defend rationing decisions even when subjected to the spotlight of the media and the courts. The link between clinical decision-making and resource allocation needs to be accepted both by clinicians and politicians, if a sterile public debate about “a clinical” or “a resource allocation-decision” is to be avoided. Politicians and clinicians can only engage in public discussion if they are united over the issue of language and both must support the rationing process.

**Case Management for Older Persons: Experience from a Coordinated Care Trial**

*Presenter*  
Fisher KR  
UNSW, Sydney

*Authors*  
Fine MD, Fisher KR

_Conscurrent session B5_
In recent years case management appears to be popular with Australian health funders as a means of improving the efficiency of resource allocation to clients with complex care needs. This paper explores the proposition that case management can meet that goal, and specifically with older clients. It examines the relevant international literature on case management and draws upon the experience of the authors in the evaluation of the coordinated care trial in Hornsby Ku-ring-gai, Sydney.

Case management, like other services comes at a cost. This cost has been contained in existing case management mechanisms in the Australian context through restrictive eligibility criteria (e.g. Community Aged Care Packages); or through block funding to provide time-restricted case management or coordination (e.g. Aged Care Assessment Teams). Some case management is combined with funding initiatives such as individual packages or fund pooling in the hope of further improving efficiency gains.

One instance of case management is the coordinated care trial, Linked Care, in Hornsby Ku-ring-gai. It is one of nine trials funded nationally by the Department of Health and Aged Care, running until December 1999. Seven hundred clients with complex care needs, mainly older people and people with disabilities, were each allocated a trained care coordinator from their existing health and community service providers. To overcome the division of funding in the health and community sectors, the funds that would have been spent by providers for these 700 clients has been pooled together to be spent in a more planned manner according to individual care plans. The Social Policy Research Centre and Centre for General Practice Integration Studies, both of the University of New South Wales, are the local evaluators for the Trial.

Policy questions about whether and how to appropriately extend the application of case management to broader groups of health care clients are currently being asked. Exploring whether it is possible to define the circumstances when purchasing case management services returns efficiencies greater than its cost may provide a focus in that debate.

Implications of Population Ageing for the Burden of Cardiovascular Disease

*Presenter*  
Gajanayake I  
Australian Institute of Health and Welfare, Canberra

*Author*  
Gajanayake I

*Concurrent session B6*

Objectives: Despite falling death rates, cardiovascular disease remains the country’s greatest health problem. The incidence of cardiovascular disease (CVD) increases with age and, as the Australian population ages, is likely to place heavier demands on health services. The objective of this paper is to present the most likely future scenario for the national burden of cardiovascular disease and demand for hospital services in the first two decades of the new millenium, under prevailing conditions.

Methods: Cardiovascular disease incidence, prevalence, hospital utilisation and mortality were projected for the period 2000-2020 using the Australian Bureau of Statistics’ population projection series II. Baseline data for the projections of incidence, prevalence and mortality were largely from published sources, and for hospital utilisation, from the AIHW National Hospital Morbidity
Database. Current trends were estimated from data for the period 1986-1997 for mortality and 1993/94 to 1996/97 for incidence and hospital utilisation. Prevalence estimates were based on data from the 1995 National Health Survey. Separate projections of prevalence and hospital utilisation were made also for coronary heart disease and stroke. Projections of incidence were limited to coronary events.

Results: At current rates of change in CVD mortality and the projected population age structure, the crude death rate would decline at about 1.4% per annum. The number of deaths among people aged 45+ years would be nearly 49,000, a 9% drop between the years 2000 and 2020. However, the incidence of fatal and non-fatal coronary events between the ages 35 and 65 is expected to change little in the first decade and begin a decline thereafter. Coronary events are expected to fall by about 6% over the two decades, to nearly 18,000 in 2020. Substantial risk reduction in the population by 2005 could lower the incidence by as much as one-third by 2020. At the 1995 age specific rates, prevalence of heart disease, stroke and CVD would continue to grow and, by 2020, their respective prevalence rates would be about 39, 9 and 204 per 1,000 population. For the age group 45+, the rates would be higher, reaching 85, 20 and 400 per 1,000 population, respectively. Current trends in hospital separations indicate that, in the next 20 years, separations of persons aged 45+ years with a primary diagnosis of CVD would increase by about 4.5% annually, while separations for stroke and coronary heart disease would each grow at a rate of 3 per cent.

Conclusions: During the first two decades, 2000-2020, population ageing would increase the burden of cardiovascular disease in Australia. Although incidence would begin to decline, demand for cardiovascular health services would grow, particularly for hospital services. Under the prevailing conditions and current practice, the most likely scenario is one of rising burden of disease on the population and increasing pressures on the health services. In the light of recent research findings, improving the population risk profile could substantially lower the adverse impact of ageing on the burden of cardiovascular disease.

The Western Australian Linked Database Project

Presenter  Garfield CP  The University of WA, Nedlands

Authors  Garfield CP, Bass AJ

Concurrent session C4

The Western Australian Health Services Research Linked Database Project is a population based data linkage project established in WA in 1995. It is a collaborative venture between the Centre for Health Services Research, Department of Public Health, UWA and the Health Information Centre, Health Department of WA. The project is primarily responsible for linkage of unit records taken from the core HDWA data collections and other relevant data collections, and for the provision of linked data to support health planning, purchasing, evaluation and research.

The core data sets linked within the project are inpatient hospital morbidity data, birth and death registrations, midwives’ notifications, mental health services data, notifications to the cancer registry and electoral registration data. Linkages to other data collections such as ambulance, emergency department, home nursing and blood transfusion are undertaken as required. The first linkage to Health Insurance Commission data is planned for late 1999.

Demographic and clinical data files hold information used in generating the links which are the core of the project. These links are merely pointers indicating which records in the various source
 Recent and Pending Directions in New Zealand Health Policy

**Presenter** Gauld RDC
University of Otago, Dunedin, NZ

**Author** Gauld RDC

**Concurrent session C2**

New Zealand has been at the forefront of change in health policy, with many countries studying the restructurings that have taken place over the last decade. A great deal is known about the ‘health reforms’ installed in the early-1990s, which included the creation of an internal market for secondary care provision and splits between the funding, purchase and provision of services. Much less is known about subsequent and pending changes. Drawing upon information collected by the New Zealand Health Sector Transition Project, this paper takes a strategic view of the changes of the 1990s, in particular those that have taken place since the health reforms and which are currently in various stages of development and implementation. The changes discussed include: (1) formation of the centralised Health Funding Authority; (2) moves to de-institutionalise health care; (3) the trend of private delivery of public health care; (4) the development of service prioritisation and surgery access criteria; and (5) an emphasis on service integration and integrated care schemes. The paper highlights the gaps in, and demand for, research into the implications of the various changes.

The Development and Implementation of New Zealand’s Booking System

**Presenter** Gauld RDC
University of Otago, Dunedin, NZ

**Authors** Derrett S, Gauld RDC

**Concurrent session A6**

In mid-1998, a ‘booking system’ for non-urgent surgical and specialist treatments was introduced in all New Zealand public hospitals. The booking system is intended to replace hospital waiting lists, which have been criticised for their disorganisation, lack of transparency, and failure to provide certainty to patients about when they would receive treatment or to prioritise them in accordance with severity of symptoms. The booking system sees patients ‘scored’ against a set of clinical priority access criteria. If enough points are scored, the patient is then ‘booked’ for treatment. Those with higher scores are, thus, given priority access, while certainty is provided to patients in terms of when they can expect treatment. The booking system has been generally promoted as a positive and practicable policy initiative. Yet many problems which have surfaced with its introduction continue to hinder its performance. Given the widespread international interest in New Zealand’s booking system, it is important that its problems are openly discussed so that lessons can be extracted. This paper outlines the various problems plaguing the booking system. At a macro level, these include the context within which the booking system was developed, the haste with which it was introduced, and the failure to coordinate policy development or to pilot test the system. At a micro level, the problems include high access
thresholds, ongoing uncertainty about the provision of treatment, and a lack of research into the outcome of patients who meet the access threshold and go on to receive treatment and, more importantly, a lack of consideration of the outcomes for those who fail to meet the access threshold.

**Resolution Access Block using an Acute Admissions Unit**

*Presenter* Geraghty C  
Newcastle Mater Misericordiae Hospital, Waratah

*Authors* Geraghty C, Foy A, Anderson D

*Concurrent session D7*

Access block refers to the inability to transfer patients from the Emergency Department to a ward destination within an appropriate time frame due to lack of available ward beds. In NSW it is measured against the benchmark time of transfer within 8 hours of the patient being seen by a doctor. The Newcastle Mater Misericordiae Hospital has consistently had the worst access block in NSW with less than 50% of applicable patients satisfying the benchmark. Access block results in severe congestion, lack of privacy, and an unsafe environment for both patients and staff in the Emergency Department.

The aim of the admissions unit strategy was to improve the processing of acute admissions to the hospital in a manner which allowed sufficient flexibility to cater for variation in activity without expanding the overall bed base of the hospital. A 12 bed open, nightingale-style ward was created, with sufficient flexibility to physically accommodate up to 23 patients at once to cope with peak activity times.

Whilst at times reaching maximum capacity (23 patients), average occupancy in the admissions unit was between 100-120% (12-14 patients). However access block in the emergency department improved dramatically to above 90% due entirely to reduced length of stay of admitted patients in the ED. Overcrowding in the ED was greatly reduced, and waiting times, “did not waits” and ambulance diversion all improved.

**Assessment of an Antenatal Day Unit: Considerations for an Economic Evaluation**

*Presenter* Gerard K  
CHERE, University of Sydney

*Authors* Gerard K, Shanahan M, Turnbull D, Wilkinson C, Stamp G, Kruzins G

*Concurrent session D5*

Studies have shown that about one-third of women have at least one inpatient antenatal admission for complications during their pregnancy. Day care is being introduced into Australia as a substitution to inpatient hospital care in some high-risk pregnancies. Previously there have been only a few small RCTs which examined the clinical effectiveness and the preferences of women for this type of care.
An NHMRC funded project of a randomised-controlled trial of a day care facility was set up in 1998 and is currently under way. This is the first study of its kind in Australia and is being conducted at Royal Women’s and Children’s Hospital in Adelaide. The hypotheses being tested are whether as an alternative to hospital admission the day assessment unit will have similar clinical outcomes; will reduce specified interventions and investigations; will be less costly and will lead to improved satisfaction and psychological well-being.

This paper will discuss the economic evaluation component of the study with consideration given to the challenges involved in undertaking an economic evaluation of a program offering substitute care. Some of the issues that will be discussed relate to generalisability of the results, the opportunity costs for the patient and her family and the possible impact of additional health care service use.

**Discrete Choice Modelling: Valuing Improvements to Breast Cancer Screening Services**

**Presenter** Gerard K  
CHERE, University of Sydney

**Authors** Gerard K, Shanahan M

**Concurrent session A1**

Since 1991 all women in Australia in the age group 50-69 years are targeted for free biennial mammography screening. This program is designed to reduce the death rate from breast cancer by 30% by the year 2000. Agreed National Accreditation Standards regarding compliance are for an overall compliance rate of 70% in the age group and a re-attendance rate for first re-screen of 90%. The subsequent re-screen level is required not to fall below 75%. However, currently available data suggests these rates vary across the country and would appear to be insufficient to achieved the program goal. Thus one problem currently facing service providers is how to enhance and sustain high long-term compliance rates.

Other research has shown that perceptions of their previous experience of with the program have influenced women’s decisions to re-attend. This includes factors such as: was it easy to make an appointment? Was the mammogram painful? Was there too much waiting around for the mammogram to be taken or the results to be made available? Were staff friendly and informative? For this reason it is important that service providers understand what it is about the screening process that is most valued by the screenee and whether or not these attributes are amenable to improvement. If there are some improvements that could be made then clearly for this group of screenees’ their satisfaction levels will be raised. In addition marginal non-re-attenders may change their minds. The technique of discrete choice modelling is arguably one way to help service providers identify and quantify key screening attributes and options for change.

We will present a recent pilot study of women’s preferences for screening options conducted in a BreastScreen NSW screening and assessment service in order to discuss how the principles of discrete choice modelling can be applied and be of use to these service providers and policy makers.

**Health Service Utilisation in the First Twelve Months of Life**

**Presenter** Goldfeld S  
Royal Childrens Hospital, Parkville
Introduction. There is limited data available about health service utilisation patterns in the first year of life and factors that influence choice of health care provider. This prospective cohort study provides Australian data that describe such patterns and examines parent and child related variables that influence decisions made by parents about sources of health care and information.

Methods. 173 infants and their families living in 2 middle socio-economic urban areas of Melbourne were enrolled when presenting for their initial maternal and child health nurse (MCHN) visit, and followed for 12 months. Parents completed standardised questionnaires at entry to the study, at 6 and at 12 months. In addition families kept a specific ‘health diary’ over the entire 12 months that recorded their daily use of any health service, and reasons for visits.

Results. The 12 months of diary data are described. 167 families contributed 1,811 months of diary data (87% completion rate). Mean number of visits to any health service including medical, hospital, MCHN, pharmacist, allied health and naturopath was 32.1 (95%CI 29.9-34.2) over 12 months. Of these 31% (mean 9.79) were general practitioner (GP) visits (50.8% because child unwell, 26% related to immunisation, 11% also had a question about the child’s health) and 41.5% (mean 12.85) were visits to the MCHN (5.2% related to immunisation, 71.2% routine visit, 12% also had a question about the child’s health). The rates of utilisation between the first and second six month period for MCHN’s was significantly different (p<0.001), but rates of GP use remained stable over the 12 month period.

Conclusion. This high rate of health service use equates to approximately one visit per fortnight. The high proportion of potential preventive and public health focused visits has implications for service delivery, health professional training and policy direction for this age group.

Community Participation in Health Decision Making

Presenter Goodwin A
Home Care Service of NSW, Parramatta

Author Goodwin A

Concurrent session E4

There is bi-partisan support in the NSW Parliament for community participation in areas of administrative decision-making. This policy extends to community participation in health policy, planning and service delivery decisions. Unless senior administrators are aware of government commitments to community participation, understand key concepts associated with the notion, and are committed to their implementation, the government commitments are paper commitments only.

This study sought to explore whether the views and practices of senior executive service officers employed within the NSW Health System in 1996 accord with state Government legislation and policy on community participation in health policy, planning and service delivery decisions. The study found that the majority of the 49 eligible study respondents appear to be committed to community participation at some level, with just over 80% indicating that they had involved the community in health decisions. These respondents involved the community in the full range of health decisions considered by the study: planning, policy and service delivery. Respondents were
also conversant with the reasons for and barriers to community participation advocated both in the literature and by government. Importantly the findings of the study appear to enhance the literature by suggesting at least one and possibly two hierarchies of reasons for involving the community in health decisions: a theoretical hierarchy; and a hierarchy which operates when community participation is put into practice. Disconcertingly, the study findings suggest that although committed to community participation many senior administrators are unaware of government policy.

**Family Expenditure and Utilisation of Primary Care for Families with Asthma in Golden Bay**

*Presenter*  
Green T  
University of Canterbury  
Christchurch, NZ

*Authors*  
Green T, Cumming J

*Concurrent session D2*

The Golden Bay study collected information on primary care utilisation for families with and without asthma, living in a rural community in New Zealand. This paper presents information on utilisation of general practitioner services and prescribed medicines for individuals with asthma and compares this with utilisation rates for those without asthma. Results are presented of analyses of primary care expenditure and utilisation by community services card status, gender and age. The policy implications are then discussed, particularly those relating to the way in which subsidies for primary care are organised in New Zealand.

**Assessing Overseas Cost-Effectiveness Evidence in Deciding National Colorectal Cancer Screening**

*Presenter*  
Green T  
University of Canterbury  
Christchurch, NZ

*Author*  
Green T

*Concurrent session B1*

Small countries like New Zealand are unlikely to conduct randomised controlled trials to determine either the effectiveness or cost-effectiveness of screening programmes. Yet they wish to base decisions on national screening programmes on the best evidence. They must therefore rely on overseas studies and endeavour to translate the results to their own country. This paper describes this process for the case of colorectal cancer screening, with particular emphasis on assessing cost-effectiveness, based on work undertaken for a working party of the National Health Committee. Published results on cost-effectiveness based on the randomised controlled trials are assessed on their ability to inform the decision on a national screening programme for colorectal cancer in New Zealand.

**Multidisciplinary Care: Promoting Organisational Change to Support Best Practice**
In 1995, the evidence-based NHMRC Clinical Practice Guidelines for the Management of Early Breast Cancer were disseminated by the National Breast Cancer Centre. The guidelines recommend that survival is better for women treated by specialists with a significant number of similar patients and with access to the full range of treatment options in a multi-disciplinary setting. National data, however, indicates that less than one-in-five women are treated in this way. This finding suggests that significant organisational change may be required in a range of HealthCare facilities to support the adoption of the guideline recommendation.

In 1999, the National Breast Cancer Centre was contracted by the Commonwealth Department of Health & Aged Care to undertake a joint demonstration project to consider the acceptability, feasibility, impact and cost of implementing an international model of multi-disciplinary care in Australia.

The paper will detail this new initiative aimed at assisting hospitals with organisational change to facilitate integrated care provision enabling best practice compliance and improving the quality of care for women with breast cancer. A report of findings to date will be provided.

**Qualitative Research Can Help Us Understand How People Make Decisions**

In the area of individual decision making, economics has long sought answers to questions like:

- How do people decide on a course of action?
- How, in the face of uncertainty and conflicting goals do people decide what to do next?

Economists, however, have largely assumed that people are rational decision makers. But there is little evidence that this is the case. While it is OK to begin with a simple model of decision making, if we are to have some influence over policy, then economists need to develop a deeper understanding of decision making processes and ask:

- Do people make decisions rationally?
- If not, what (psychological) processes do people use in making decisions?

One way of beginning to answer these questions is to ask people to think about a decision they have made and, from their descriptions of the processes they went through, disentangle various aspects of their approach to decision making.

A group of 20 people with chronic renal failure and 20 women with menstrual disorders are participating in a study where an unstructured interview format is being used to examine these questions.

The preliminary results of this research will be presented.
Program Budgeting and Marginal Analysis: Practising Practical Health Economics

**Presenter**  Haas M  
CHERE, Camperdown

**Authors**  Viney R, Haas M

**Concurrent session A3**

Program budgeting and marginal analysis (PBMA) is a method of planning and priority setting which is based on economics principles. It makes explicit the decisions about which services should be expanded and which should be contracted on the basis of what the effect of the altered patterns of service is likely to be on expected outcomes.

There are two stages in PBMA. The first stage is Program Budgeting. Program Budgets provide information about current resource use and the relationship between objectives, activities, resources and outputs. The second stage in PBMA is that of marginal analysis. The process of undertaking marginal analysis involves looking to the future and considering what could and/or should be changed in order to maximise the objectives of the service (e.g. efficiency and equity). In this stage, the potential benefits gained and lost through a shift in resource allocation are determined.

CHERE has been involved in a number of PBMA projects in NSW. This presentation will use our experiences and practical examples to highlight both the usefulness of PBMA and the difficulties participants have encountered.

The Ageing Australian Population And Future Health Costs

**Presenter**  Hagan P  
Department of Health and Aged Care, Canberra

**Authors**  Cooper C, Hagan P, Solon R, Braunstein P

**Concurrent session B6**

This study uses a health cost model developed within the Commonwealth Department of Health and Aged Care to project the likely recurrent costs of MBS, PBS and inpatient acute care in Australia due to population growth and ageing through to the year 2051. Each of these major components of Australia's health care system is characterised by a new 'health index' constructed for each gender and one-year age group from the proportion of people using each component, the number of times a person uses that component and the average cost for each use.

The analysis is developed in three stages. First, the health costs for a projected population, similar to that of the ABS Series 1 projection of the Australian population, are computed. This is called the Normal Population Projection. Next, a Constant Population Projection is costed. The Constant Population Projection is produced by fixing the population to its 1996 levels and varying the distribution of people according to age and sex for each year of the projection to mirror the Normal Population Projection. This projection effectively removes population growth as a factor driving estimated future health costs. The variation of costs are then due entirely to the changing ratios of the number of people in each one-year age group, yielding a clearer view of the likely
effect of ageing on health costs. Finally, a Differential Population Projection is costed. In this projection, the 1996 population is subtracted from the Constant Population Projection so that the age groups contributing to increased costs and the age groups resulting in decreased costs are revealed. The results show that the ageing population will present significant challenges for health care planners but the problem may not be as severe as some other commentators suggest.

**Quasi-Market Changes in the New Zealand Health System: A Systematic Review**

**Presenter**  
Hand K  
The Treasury, Wellington, NZ

**Authors**  
Mays N, Cumming J, Hand K, Fraser P and Davies P

**Concurrent session C2**

The introduction of a quasi-market into the publicly financed health system in New Zealand was accompanied by high expectations on the part of proponents and fierce criticism from opponents. Since 1993, the fate of the health services delivery system has been the subject of considerable debate and controversy.

This paper presents the findings from a systematic review (in progress) of the published and ‘grey’ literature which contains relevant empirical material on the consequences for the health system of the introduction of a quasi-market with separation between purchasing and providing roles. The 1993 changes are assessed in relation to their impact on efficiency, equity, quality, choice and responsiveness and accountability. The general approach to identifying, summarising and interpreting the literature is based on previous work by one of the authors on the National Health Service in the UK (Le Grand, Mays and Mulligan, 1998).

The review covers not only the performance of the post-1993 purchasers (Regional Health Authorities and latterly, the Health Funding Authority) and providers (Crown Health Enterprises, now known as Hospital and Health Services), but also the impact of Independent Practitioner Associations (IPAs) and other developments which relate to the quasi-market, but which were not explicit in the original plans for system-wide change.

The review further discusses the gaps in knowledge identified and makes recommendations for future research into the consequences of major policy changes.

**Reference:**  

**Willingness to Pay for Health: An Economic Exegesis**

**Presenter**  
Harris A  
University of Melbourne, West Heidelberg

**Authors**  
Harris A, Abel Olsen J, Smith RD
**Concurrent session A1**

Cost-effectiveness, and cost-utility, analyses have historically been the most widely used techniques of economic evaluation applied to the evaluation of health care programs. However, in recent years there has been renewed interest in the use of cost-benefit analysis, which requires the assessment of programme benefits in monetary terms.

This paper provides a brief review of the economic basis for willingness to pay, and monetary valuation more widely, used in the conduct of cost-benefit analysis. This theoretical background is placed within the framework of the evaluation of health care programs, and in particular the context of priority-setting and the concurrent use of cost-effectiveness and cost-utility analyses.

It is concluded that cost-benefit analysis does have a strong conceptual basis in welfare economics, whereas other techniques of economic evaluation do not. The advantage of this being that it provides cost-benefit analysis with a logical structure for guidance on issues such as what costs and benefits should be included, and how they should be measured. However, it is clear that when deciding whether to adopt CBA as a desirable technique on which to base resource allocation decisions, a number of considerations at the theoretical level are to be made, prior to consideration of methodological issues.

Fundamentally, this means considering whether the maximisation of ‘social welfare’ (as defined in welfare economics), rather than ‘health outcomes’, is the basis on which decisions should be made. That is, should health (care) services be responsive to individual stated preference for programs, or concerned with maximising the health status of the population? Furthermore, there are also considerations to be made to allow for the difference in ranking which will result from CBA, CEA and CUA, and decision-criteria developed to account for this in the decision-making process.

**The AMWAC Approach to Medical Workforce Planning**

*Presenter* Harris MG  
AMWAC, North Sydney

*Authors* Gavel PG, Harris MG

**Concurrent session B3**

All countries are faced with a need to plan their medical workforce so that scarce resources are not wasted and access to medical services is not compromised. In brief, the purpose of medical workforce planning is to ensure that the right number of doctors are in the right place, at the right time, with the right skills to competently and proficiently perform the tasks expected of them in accordance with world’s best practice. Too few doctors may mean there is underservicing, poor health outcomes, and overworked practitioners; significantly too many practitioners and there is the likelihood of overservicing, underemployment of practitioners, potentially poor health outcomes and unnecessary training costs. The Australian Medical Workforce Advisory Committee (AMWAC) was established in 1995 to advise the Australian Health Minister’s Advisory Council on medical workforce issues, with particular attention to improving access to specialties with known shortages and to addressing problems in geographic distribution. However, little accurate data were available at this time on which to base national level planning. During the last four years AMWAC (in cooperation with the Australian Institute of Health and Welfare, medical Colleges and other important stakeholders), has developed a systematic approach to data collection, which
enables a panel of ‘judges’ to evaluate the adequacy of a given medical workforce, to predict future requirements and to recommend changes designed to bring workforce supply and population requirements into balance. This paper describes and critically analyses AMWAC’s methods of data collection and workforce requirement prediction. Particular note is made of the link between policy development and research associated with workforce planning.

The Effect of Psychosis and Health-Related Quality of Life

Presenter      Hawthorne G  
                University of Melbourne, West Heidelberg

Author         Hawthorne G, Herman H

Concurrent session B4

Whilst there is widespread acceptance of self-reported health-related quality of life (HRQoL), there is uncertainty regarding the evaluations of those suffering psychosis. A major reason is the validity of subjective evaluations from people whose cognitive function may be disturbed.

We investigated this using the World Health Organisation Quality of Life Instrument (WHOQOL-Bref; a HRQoL profile Instrument).

Data were collected from 173 community cases with long-term psychosis using a battery of instruments, including the Beck Depression Inventory, Beck Hopelessness Scale, Life Satisfaction Scale, and the SF36. Case managers were asked, as proxies, to complete the WHOQoL-Bref and the AQoL to gauge the validity of obtained HRQoL scores. Most cases were able to self-complete without difficulty; there was little evidence of response bias.

Examination of correlations between cases and the case managers’ values showed poor convergence. For the WHOQoL-Bref these varied between 0.19 (social relationships) and 0.39 (physical health). For the AqoL they were between 0.12 (psychological wellbeing) and 0.46 (independent living). The correlation between the AqoL utility evaluations was 0.41. For the WHOQoL, mean case managers’ scores were 9% lower than mean case scores; whereas for the AqoL case managers’ scores were an average of 4% lower. The biggest differences were in relation to ‘social relationships’ were case managers’ scores were 17% and 16% lower respectively. Possible reasons for these findings include adaptation.

The implications of these findings for the validity of the WHOQoL-Bref and AQoL will be discussed, and advice offered for those needing to use them.

Use of Health Information Systems in an Economic Framework

Presenter      Haywood P  
                Department of Health, North Sydney

Author         Haywood P

Concurrent session C3
New and more developed computer systems have the potential to revolutionise the administration of medical care. The manner in which to value or evaluate these technologies is problematic, the costs and especially the marginal costs are difficult to correctly interpret.

A natural starting position may be to develop the natural monopoly theory and apply it to the development of information technologies. This paper is an attempt to analyse the potential benefits and costs of the revolution in a natural monopoly setting with lumpy capital inputs.

Vasectomy and Vasectomy Reversal: Utilisation and Outcomes Using Record Linkage

**Presenter**  Holman CDJ  
University of WA, Nedlands

**Authors**  Holman CDJ, Wisniewski ZS, Semmens JB, Bass AJ

**Concurrent session C4**

The paper is the first report of work in progress to evaluate the utilisation and outcomes of vasectomy and vasectomy reversal, using linked hospital morbidity, cancer, death, birth and State electoral registration records. The study subjects are the 31,470 men who underwent vasectomy at a hospital during 1980 to 1996 in Western Australia, and the 2,164 men who underwent vasectomy reversal during the same period. The aims of the study are (1) to examine the rates of hospital-based vasectomy and vasectomy reversal, the trends over time and distribution across different socio-demographic groups; (2) to examine the occurrence of post-operative complications causing extended length of stay and re-admission; (3) to compare the risks of cardiovascular disease and cancer in men undergoing vasectomy with the general male population; (4) to estimate the ‘risk’ of undergoing a reversal operation at different time intervals post-vasectomy and to identify factors predictive of a higher risk of vasectomy reversal; (7) to examine the occurrence of post-operative complications and re-admission post-reversal; and (8) to estimate the ‘success’ of vasectomy reversal, using linked birth registrations, and to identify factors predictive of a higher likelihood of success. The paper will provide an illustration of the use of linked administrative data in the evaluation of health system performance, using a common surgical procedure and one that is significant to men’s and women’s reproductive health.

The Use of Geographic Information Systems in Health Service Planning

**Presenter**  Hyndman JCG  
Health Department of WA, Perth

**Authors**  Hyndman JCG, Holman CDJ

**Concurrent session A2**
The spatial location of health services has often been made on the basis of administrative boundaries, political pressures or local resources. GIS can be used to advantage to plan and assess the location of health service facilities globally, in order to improve spatial access for target groups.

The main tool that is used in this field is the location/allocation model. The fundamental statistic is distance, which can be defined as straight line or road, travel times or travel distances. Differences in these measures are illustrated using access to child health clinics.

Social disadvantage can be measured at the individual or spatial level. When the latter is used the size of the spatial definition is significant. Two definitions are defined and the numbers of the population categorised in each quartile of social disadvantage is compared.

The benefits of GIS are illustrated by:

(i) planning and placement of locations for mammography screening clinics; for AAA screening clinics and for renal dialysis units,
(ii) analysis of equity of access to child health clinics and to mammography screening clinics,
(iii) planning travel routes to collect data for an interview survey,
(iv) analysis of the spatial availability of general practice services in metropolitan Perth, demonstrating a relative over-provision of service in socially disadvantaged areas.

There are many public health benefits from incorporating GIS analysis into decisions concerning the planning and evaluation of the spatial location of health services.
States of Play in Outpatient Activity Measurement: VACS, QHACS and DACS

Presenter  Jackson TJ
Monash University, West Heidelberg

Author  Jackson TJ

Concurrent session D4

Hospital outpatient care is an area of rapid change in the Australian health care system, with increasing focus on continuity of care and unresolved issues of Commonwealth and State/Territory responsibilities for funding. A number of policy initiatives from the Commonwealth, including the National Ambulatory Casemix Project, the National Institution Based Ambulatory Modelling project (NIBAM), and the $20 M Ambulatory Care Reform Program, have had the aim of creating a knowledge base on which future policy could be developed. None has provided a satisfactory basis for outpatient activity measurement, an increasingly important function in States that have adopted casemix approaches to funding of hospital services. In the absence of a national consensus on a system for classifying outpatient activity, States have created and tested their own systems. This paper reviews the key characteristics of eight Commonwealth or State-sponsored classifications for hospital outpatient care: the Victorian Ambulatory Classification System (VACS), the Queensland Health Ambulatory Classification (QHAC), the South Australian Health Commission Clinic Classification, and Commonwealth initiatives including the Developmental Ambulatory Classification System (DACS), the Australian Ambulatory and Paediatric Ambulatory Classifications, and the current ‘Occasions of Service’ and Medical Benefits Schedule descriptors. It compares areas of strength and weakness of each system as the basis for payment, and argues for a ‘core’ system (inferred from those common characteristics of the State systems identified in the review) as the basis of incremental national development.

Population Ageing and Health Funding in New Zealand

Presenter  Johnston GA
Ministry of Health, Wellington, NZ

Authors  Johnston GA, Teasdale AJ

Concurrent session B6

New Zealand has an ageing population: over the next 50 years the proportion of the population who are aged 65 or over is projected to double. Since elderly people receive more health care than younger people, there will be a resulting pressure on public health funding to rise. We estimate that health funding would need to grow by an average of 0.8% each year over the next 50 years just to maintain the overall level of health services. Ageing also affects economic growth, as the proportion of people who are of working age is set to decline.

Assuming annual funding increases to meet ageing pressures, 1.0% real per capita funding growth on top of this, and average annual real GDP growth of 1.5%, we project public health funding as a percentage of GDP to rise from its current level of 5.8% to 7.5% in 2051. This increase is equivalent in size to the current government expenditure on defence.
Ageing pressures are unavoidable. Changes in relative per capita costs, or in future fertility and mortality trends, make little difference to the effects of the baby boom cohort on health funding. The magnitude of any increases in public health funding as a percentage of GDP, however, will depend on the economic growth that New Zealand experiences and on the size of other health funding increases, above and beyond those related to ageing.

**Paradigm Barriers to Health Services Management Research**

*Presenter* Johnstone PL  
Charles Sturt University, Bathurst

*Author* Johnstone PL

*Concurrent session E4*

This paper presents some of the author's experiences associated with her doctoral research in progress, in seeking support to conduct health services management research in five Australian hospitals using a retrospective multiple case study design. It presents the case study approach as a legitimate method for investigating organisational issues generally, and more specifically in health service organisations, and also as a valid theory-building technique. Support to conduct research at four sites/hospitals was largely unproblematic, but numerous obstacles were encountered over a period of eleven months in gaining support from the only tertiary teaching hospital in the study.

The author proposes that committees empowered to approve the conduct of research within health care institutions are possibly ill-equipped to evaluate the scientific merit and human ethical implications of non-positivist, non-experimental research proposals, and whilst numerous explanations could be proffered to explain this situation, the long-standing paradigm debate concerning experimental versus naturalistic research is presented as being a barrier to access to these organisations for the purposes of conducting health services management research. This "paradigm problem" is discussed in connection with concerns about both the interpretation and application of the National Health and Medical Research Council Guidelines by individuals and/or institutional committees, and the capacity of these guidelines, which deal predominantly with biomedical research, to provide an appropriate framework for committees to evaluate naturalistic research proposals.

**Cross-Cultural Research: Requirements for Working With People From Different Cultural Backgrounds.**

*Presenter* Kanitsaki O  
La Trobe University, Bundoora

*Authors* McGartland M, Kanitsaki O, Blacker V

*Concurrent session E4*

The size of Australia’s non-English speaking background (NESB) population presents many challenges for the health system. It is widely known that the health system does not cater optimally for people from NESB with, for example, relatively poor use being made of interpreters and
bilingual workers. This study responded to the dearth of formal studies and aimed to assess and analysis the experiences of women accessing healthcare services.

The study recruited a representative sample of Vietnamese born women over 18 and a matched group of women from Anglo-Saxon/Celtic backgrounds living in the Greater Dandenong local government area in Victoria. This area has one of the highest concentrations of Vietnamese speaking people in Australia. The women were interviewed and kept diaries of their interactions with healthcare providers for a year. Healthcare providers for this project included any person a woman visited with regard to her health, including traditional western medical practitioners such as medical practitioners, nurses or physiotherapists and ethnic health workers such as acupuncturists or herbalists.

This study investigated the total healthcare experiences of 140 women over one year. It focused on access to services, perceptions of service quality, cultural and language barriers encountered and levels of satisfaction. A sample of healthcare providers consulted by the participants were also interviewed.

Working with matched control groups provided an opportunity to compare and contrast the research requirements needed to deal effectively with an English speaking and a NESB group. This paper focuses on the differences that emerged in working with the two groups in regard to: recruitment of participants, staff selection, resource requirement, maintaining the involvement of the participants, balancing research team workloads, dealing with participants requests and ethical considerations of the project.

A brief discussion of the implication of these differences for the conduct of research and policy development will be provided.

**Qualitative Methods in Quality of Life Research**

**Presenter**  
Kenny P  
CHERE, Camperdown

**Author**  
Kenny P

**Concurrent session B4**

Since the 1980s, there has been a dramatic increase in the number of studies which include health related quality of life (QoL) as an outcome measure. Measurement of QoL has generally relied on psychometric methods, with the consequent development of many standardised questionnaires. This paper discusses some of the limitations of this approach and considers the use of more qualitative approaches. While the analysis of the scores generated from standardised questionnaires provide some insights into the outcome of an intervention from the patient’s perspective, they are by necessity limited. The additional detail provided by qualitative methods can enable a more useful interpretation of standardised questionnaire data. In the case of early stage breast cancer, the results of QoL studies may be usefully employed in the clinical situation, to inform patients choosing between treatment options which have similar survival rates. Qualitative and quantitative data from a study of QoL after treatment for early stage breast cancer are used to illustrate that the use of dual methodologies can produce an enhanced understanding of the treatment experience, but also encourage caution in the use of results based on average scores to inform individual patients.
The Propertisation of the Mentally Unwell Subject

Presenter          Kilkeary S
                    SSAT, Melbourne

Author             Kilkeary S

Concurrent session B7

There is growing concern around the world about legislative and policy measures designed to enforce treatment for mentally unwell subjects. This concern is founded on two key points:

1) the right of the individual to bodily autonomy; and

2) the dubious efficacy of the treatment enforced.

Under ordinary circumstances, intrusion into the body of another without their informed consent constitutes trespass. This is the case even if that other's life is in imminent danger. The rationale behind this is that to retain control over one's own body is a fundamental human right. Why then is this fundamental human right so often obviated when the subject becomes mentally unwell?

In my paper I will discuss the process by which the mentally unwell subject has been propertised, the rationale behind this propertisation, and the implications it has for human rights in general, and for human rights in mental health in particular. I will argue that it is the process of propertisation which has underwritten the forced treatment of the mentally unwell subject, even when that treatment makes them sick.

Improving the Precision of Estimates of Responsiveness to Change

Presenter          King MT
                    CHERE, Camperdown

Authors            King MT, Dobson AJ

Concurrent session A4

Background: The responsiveness of an instrument is a measure of its ability to detect a substantively important change over time. Empirical studies of responsiveness suggest that there is considerable sampling variability in estimates of responsiveness. In studies involving repeated measures, there are two ways to improve precision: increase the number of subjects or increase the number of repeated measurements per subject. This second option has not previously been considered for responsiveness as all indexes to date have been based on two observations per subject. In this paper, a commonly used index of responsiveness (the effect size for paired differences = mean difference/standard deviation of the difference), is generalised to more than two repeated observations per subject.

Methods: A statistic derived from repeated observations per subject was shown to be algebraically equivalent to the effect size for paired differences. The sampling distribution of the generalised effect size was simulated across a plausible range of values of the relevant parameters and variables. Confidence intervals were constructed by various methods, and their coverage properties were investigated by simulation.

Results: The statistic, $R_t$, is a function of the average rate of change in health score, the within-person standard deviation of health score, the number of subjects ($n$) and the number of
observations per subject (t). Confidence intervals constructed using a Normal approximation with jackknife estimates of bias and standard error have good coverage properties, even for small samples (n=20, t=2). Quality of life (QOL) data are used to illustrate the improvement in precision provided by multiple repeated observations per subject when comparing the responsiveness of two cancer-specific QOL measures in a small sample.

Conclusions: The precision of estimates of responsiveness can be improved by increasing either the number of subjects or the number of repeated measurements per subject or both. The relative gain in precision is greater for extra subjects than for extra observations per subject.

Multilevel Models are Useful for Health Services Research

Presenter        King MT
                  CHERE, Camperdown

Author            King MT

Concurrent session A4

The evaluation of health services often requires the measurement of change in health outcomes. The simplest way to measure change is to assess the health of individuals before and after an intervention. More complicated data arise if health is measured sequentially, e.g. across six cycles of chemotherapy, or four sessions of counselling. In health services research, it is not unusual for participants to be measured a different number of times or at different time intervals. Until recently, the analysis of unbalanced, correlated data was difficult. Recent developments in computer hardware and software have made a family of statistical models, called multilevel models, quite accessible. Multilevel models treat repeated measures as clustered within individuals. The modelling of clusters generalises, e.g. individuals clustered within homes, local areas, or hospitals. Thus multilevel models accommodate the complex sampling designs which often arise in health services research. Such models are useful for a number of reasons: (1) Complex variance structures can be modelled, providing insights into sources of variability in health outcomes e.g. variability in longitudinal quality of life measures is due to differences between patients and within-patient fluctuations over time. (2) The amount of correlation within clusters can be estimated e.g. temporal correlation in repeated measures data. (3) Individual change can be modelled, e.g. patients who improve can be differentiated from patients who deteriorate. (4) Insights can be gained into which subgroups benefit from interventions by including covariates (be they clinical, socio-demographic or personal) to explain individual differences in response to treatment. Such information can then be used to target interventions more effectively. (5) Estimates of treatment effect are adjusted for baseline differences between intervention groups which arise in the course of routine service provision. In summary, multilevel models are ideal for unravelling the complex data that often arises in health services research.

Variations Over Time in Quality of Life in Cancer

Presenter        King MT
                  CHERE, Camperdown

Author            King MT

Concurrent session B4
Background: Experience to date with quality of life measures suggests that, even within groups of patients in similar states of health, there is a lot of variability between patients in self-reported quality of life (QOL). Regardless of which QOL measure is used and which patient population is sampled, the full range of possible scores on the QOL scale is often observed. However, little is known about how QOL varies over time. The purpose of this research was to see whether the large between-patient differences in QOL observed cross-sectionally persist over time, and to estimate the size of short-term fluctuations in QOL relative to group-average change over time in four groups of cancer patients over a course of chemotherapy.

Methods: The Functional Living Index - Cancer (FLIC) was used to assess QOL on repeated occasions during chemotherapy for 99 patients: 21 adjuvant breast (BADJ), 18 metastatic breast (BMET), 44 adjuvant colon (CADJ), 16 metastatic colon (CMET). The total FLIC score was converted to 0-100 scale of QOL units (high score=good QOL).

Results: The majority of the total variability in QOL was accounted for by the variation between patients, with intra-class correlations of 0.80 (BADJ), 0.83 (BMET), 0.68 (CADJ) and 0.75 (CMET). On average, the early stage breast cancer patients experienced an improvement in QOL equivalent to 5.6 QOL units over the 18 week course of adjuvant IV-CMF chemotherapy. However, there was no change in QOL on average among any of the three remaining groups. The average size (QOL units) of short-term fluctuations over time was: 4.3 (BADJ), 4.6 (BMET), 4.6 (CADJ), 4.2 (CMET).

Conclusions: Large between-patient differences in QOL are relatively stable over time, and short-term within-patient fluctuations in QOL are large relative to group-average change over time.

Interpreting Quality of Life Measures: Clinical Versus Statistical Significance

Presenter	King MT
CHERE, Camperdown

Author	King MT

Concurrent session B4

While quality of life (QOL) assessment is becoming more common, interpreting the results remains problematic. Recent reports of empirical studies of QOL indicate that, in the absence of guidelines for interpreting the clinical meaning of QOL outcomes, statistical significance is often used as the sole criterion. The p value is quoted, without reference to the size of the observed effect. The real issue is whether the observed effect is larger than the “smallest clinically important effect”. Because QOL assessment is relatively new, its units of measurement are unfamiliar, and it is not intuitively obvious how to interpret the size of observed effects, or how to determine the smallest important effect. As QOL assessment becomes more common in clinical settings, intuitive familiarity will develop both through individual and collective experience, as has occurred for more established measures of disease activity and severity. In the meantime, we must derive meaning more explicitly. A number of approaches are being used, and can be categorised as distribution-based and anchor-based. Distribution-based methods include population norms (i.e. using the QOL instrument in community samples (i.e generally well people) and in groups of patients with particular health problems, e.g. heart disease, renal failure, diabetes) and standardised effect-size (mean/standard deviation). Anchor-based methods include individual-based global ratings (i.e. individuals are asked to rate the change in their own health as important or trivial, and interpretation is transferred to the change in health as measured prospectively with the QOL measure) and Aknown-group@ comparisons (e.g. QOL results are grouped according to various clinical indicators of disease or treatment, thereby providing clinically-based benchmarks by
which to interpret the QOL results). This paper will summarise current approaches to interpreting QOL results, with examples from the SF-36 (a generic QOL instrument) and the QLQ-C30 (a cancer-specific QOL instrument). The strengths and weaknesses of the various approaches will be discussed.

**Hospital Co-locations - Implications for the Public Sector**

*Presenter*  
Koff E  
South Eastern Sydney Area Health Service, Sydney

*Authors*  
Koff E, Lee L, Crawford C, Xie M

*Concurrent session A6*

Co-location of private hospitals with public health facilities is not a new phenomenon in health care, with most States in Australia having a variety of co-location models in place. Purported benefits to the public sector of these relationships have been said to relate to financial advantage, management advantages, work force issues and patient care issues. Post establishment evaluation of co-locations has been largely absent.

St George Hospital is a 540 bed teaching hospital in South Eastern Sydney Area Health Service (SESAHS) In 1995 St George Private Hospital commenced operation on the site. The two facilities are not physically connected, operate independently and offer a similar range of clinical services. The effect of the co-location on some of the key clinical services provided at St George Public Hospital are examined. Specifically explored are the trends in separation rates and the casemix profile for some of high volume DRGs.

The implications of these trends are considered in the context of the clinical capacity of the hospital, infrastructure issues and revenue generation. These issues are also considered in the wider context of State and National Policies relating to private sector participation in the public health system. This may then serve to inform future negotiations on the development of public private co-locations and position the public sector to ensure that benefits from co-locations are maximised.

**Continuity of Care: The Birthing Services Transition Project**

*Presenter*  
Lane K  
Deakin University, Geelong

*Authors*  
Lane K, Burdess N

*Concurrent session A6*

The Health Services Act aims to achieve the following objectives – high quality care, including a “seamless integrated continuum of care”, consumer choice based on informed decisions; appropriate service regardless of funding arrangements and ability to respond to changing technologies. Overall, the Act aims to achieve a system which is fair, efficient and protects the vulnerable (Health Services Policy Review 1993:3-4)
This paper concentrates on one of the goals of the health service – to ensure “a seamless integrated continuum of care”. It draws upon primary data gleaned from an evaluation of six alternative birthing services funded in Victoria by the Commonwealth. Although this data suggests that all women from a range of socio-economic groups benefit from continuity of care and continuity of carer, only a minority of women now enjoy and will enjoy these conditions. Proposed changes to achieve the objectives of the Health Services Act, including continuity of care, do not recognise the special case of birthing women and will not change the existing fragmented arrangements which exploit, rather than protect women’s vulnerability during childbirth.

The Measurement of Reliability in Medicine: Follies and Fallacies

**Presenter**  
Lassere M  
Westmead Hospital, Westmead

**Author**  
Lassere M

**Concurrent session A4**

Clinical, health services and biomedical researchers usually use inappropriate study designs and statistical procedures to evaluate the reliability of new or existing measures. Using different statistical procedures this paper (1) re-analyses the data of reliability studies published since 1960 on functional (e.g. SF-36), clinical (e.g. clinical joint examination) and radiographic indices, (2) develops a critical appraisal worksheet to evaluate studies on reliability and (3) uses the model of the musculoskeletal diseases to compare intra-observer, inter-observer and test-retest reliability of functional, clinical and radiographic measures of patient status disease, activity and damage.

Appropriate measures include kappa coefficient, fixed or random effects intra-class correlation coefficients and the 95% limits of agreement methods. Inappropriate measures that are all too often seen in medical and health services research publications include product-moment or rank correlation, paired t – test, coefficient of variation and percentage variance of patients and observers.

Using the same data, different renderings of agreement and reliability can be produced. Inappropriate statistical designs and methods usually suggest better agreement. Mechanisms to falsely increase estimates of reliability are illustrated. The implications of the performance characteristics of these and other measures for the interpretation of responsiveness criteria in clinical trials, monitoring of patient management in routine clinical care and health services research is discussed.

System Drivers that Predict Weekly Patterns of Emergency Admissions Length of Stay

**Presenter**  
Lassere M  
Westmead Hospital, Westmead

**Authors**  
Lassere M, Tridgell P

**Concurrent session D4**

The aim of this study was (i) to examine the system drivers that contribute to the weekly pattern of overnight beds occupied by patients admitted through the Emergency Department of Westmead,
Mount Druitt, Blacktown and Auburn Hospitals and (ii) to use this information to develop models of efficient use of hospital resources.

All consecutive admissions through the Accident and Emergency Department of four hospitals of Western Sydney Area Health Service from 1 December 1997 to 30 June 1998 were analyzed to determine the relationship between demographic (e.g. age, sex, ethnicity, insurance status) and clinical variables (major condition, comorbid conditions) with health services utilization (e.g. weekly patterns of length of stay, number of and type of procedures).

Preliminary results show that peek admissions through the Emergency Department occur on Monday (18%) and fewest on Saturday (8%). However, average length of stay is greatest for patients admitted on Tuesdays (7.9 days) and Fridays (7.7 days). Patients admitted on Tuesday were older and sicker (increased number of comorbid conditions) than patients admitted any other weekday, including Friday. This suggests that the increased length of stay for patients admitted on Friday is due to lack of diagnostic or treatment service being offered over the weekend. About 8% of patients in beds over the weekend could have been discharged given no difference in diagnostic/treatment access. Subgroup analysis by hospital, major diagnosis, comorbid diagnoses and procedure type, and an economic analysis of different models of hospital health services utilization will be presented.

**Quantile Reference Curves of Health Status: A New Interpretation of the SF-36**

*Presenter*  
Lassere M  
Westmead Hospital, Westmead

*Author*  
Lassere M

*Concurrent session B4*

Reference standards have been used to interpret predominantly laboratory based measures in normal people and in people with various medical conditions. In clinical medicine we need similar disease-specific and population-based standards for the various clinical measures, physical function and psychosocial health status and we need a way to appropriately interpret and to apply these reference standards, within the context of the individual clinician-patient contact, to facilitate the clinician’s task to describe, to note change, to make predictions to choose and evaluate interventions and (of course) to effectively improve outcome. Similarly from a broader, public health perspective, reference curves of health status are a valuable tool for the evaluation of chronic disease and the ageing population. They provide a benchmark against which to test programs, define targets and improve accountability in the use of resources, all of which are essential for the evaluation of health services and outcomes.

Quantile scores describe the position of an individual relative to some reference population and facilitate the interpretation of a score particularly when many measures need to be evaluated and when there are no absolute standards. By introducing a covariate such as time, a series of smoothed curves show how the quantile scores of a measure change over time. Depending on the specific methodology used quantile curves provide a reference framework to ascertain status, to judge change over time and provide an arbitrary but rational basis for the development of treatment targets.

This paper describes the construction and application of disease duration dependent quantile
reference curves and age-dependent quantile reference curves in two groups of subjects: patients with arthritis and patients from the 1995 General Health Survey. The curves were constructed using a new method statistical method: fractional polynomial quantile regression and using various dimensions of the SF-36.

**Physical Illness in Psychiatric Patients in Western Australia**

*Presenter*  Lawrence D  
University of WA, Nedlands  
*Authors*  Lawrence D, Holman CDJ,  
Jablensky AV  

*Concurrent session C4*

Around 8% of the population of Western Australia (WA) is included on the Mental Health Information System (MHIS), as having contact with mental health services in WA. These people are responsible for 20% of admissions to acute hospitals in WA. A record linkage analysis was undertaken to measure the extent to which people with mental disorders suffer from higher rates of physical illnesses compared to the general population.

The Western Australian Health Services Research Linked Database was established in 1996. It links the MHIS with records of all private and public hospital admissions in WA, the WA Cancer Register, and births, deaths and midwives registers. The database covers the period 1980-95, and includes 176,000 patients of mental health services in WA. From these data we have measured the occurrence of a range of serious physical health problems among people with mental illness.

Mortality rates, cancer incidence rates and hospital admission rates have been calculated for the population of people with contact with mental health services. Excess mortality was found for all causes of death, including both natural and unnatural causes. There are particularly high rates of hospital admission for a number of infectious diseases, including hepatitis, HIV, tuberculosis and STDs. No excess of cancer incidence was found, but there is an excess of cancer mortality which may be attributed to a higher case fatality rate in people with mental illness.

The results of this analysis show that psychiatric patients do have higher mortality and morbidity rates than the general population for many illnesses. This presentation will present a summary of results highlighting areas of particular concern. The information from this study will be used to develop targeted health promotion strategies and specific interventions for patients with mental illness.

**An Evaluation of the RACGP Hepatitis C Training Program**

*Presenter*  Lennings CJ  
University of Sydney, Lidcombe  
*Authors*  Lennings CJ, Mackdacy L  

*Concurrent session D7*

The General Practitioner Hepatitis C Education Program conducted by the Royal Australian College of General Practitioners (RACGP) was funded by the Commonwealth Government from
January 1997 to January 1999. Many of the outcomes of the program appear to have been achieved although further impact studies would be required in order to conclusively test them. A major strategy to assist the program was the development and utilisation of a network of projects which provided input into many of the objectives and tasks. Findings from the Project Evaluation include noting that a majority of respondents (up to 86%) were of the view that national standards were required to be established in diagnosis and treatment protocols, supporting medical information, educational resources, generic training programs, communication tools (web sites, special interest journals and newsletters) and GP competencies (which received the least but still a majority endorsement by respondents).

The evaluation report found that GP education in Hepatitis C needs to continue, preferably under the auspices of the RACGP, and offers a range of recommendations for future improvement. These include the formalisation of working relationships and program objectives between key stakeholders - particularly the RACGP, the AGI, Divisions of General Practice and ANCARD. It is proposed that a future program prioritise the development and implementation of a core national training curriculum including resource packages, a train the trainer program in addition to the review and updating of the National Management Guide for Hepatitis C. Impact evaluations which are based upon research undertaken by the evaluators is necessary to determine the effectiveness of the education strategy. (For instance the Evaluators found that a gap still exists between patients evaluation of GPs response to their general health needs as opposed to GP responses to HCV specific health care needs).

**Care of the Highly Dependent Elderly: A New Organisational Approach**

*Presenter*  
Lew E  
Bundoora Extended Care Centre,  
Bundoora

*Author*  
Lew E

*Concurrent session A5*

In 1995 the Council of Australian Governments (COAG) stated “…that the current health care system is often unfriendly and complex for those who use it and inefficient for governments to fund”.

COAG identified the need for reform of the organisation and funding of health and community services to “…ensure both improved health gain and cost effectiveness for all governments”. (Duckett 1996)

The Australian Commonwealth Government committed to research health service delivery to high users and established nine Co-ordinated Care Trials in Australia.

The primary hypothesis being tested is “that coordination of care for people with multiple complex needs where care is accessed through individual care plans, and funds are pooled from existing commonwealth, state and joint programs, will result in improved individual client health and well being within existing resources”. (Commonwealth Dept. of Health & Family Services, 1996: 29)

The North East Co-ordinated Care Trial operates in four north eastern council areas of Melbourne and is managing the care of some 500 elderly people with high service needs who live in their own
homes sometimes with a carer and many on their own.

The Trial has entered into a partnership arrangement with 9 independently funded health and community services agencies which allows for centralised management of budget and policy.

The Trial offers one point of entry to:
- Care planning and service coordination, post hospitalisation review, crisis management, patient medication review and pulmonary rehabilitation
- Care planning review
- Preventative health care

A similar cohort of elderly people has been identified as a control group for evaluation. The Trial is being conducted over two years to finish in December 1999. This paper will outline the philosophy, the methods and operation of the Trial within the Australian health system and present the evaluation to date.

Markets and Partnerships: a Comparative Analysis of General Practice Reform

*Presenter* Lewis JM  
University of Melbourne, Parkville

*Author* Lewis JM

*Concurrent session B2*

Governments and health care organisations around the world are reforming health care by attempting to contain costs, increase efficiency and improve service standards. General practice has been the subject of extensive policy reforms in Australia and the UK over the last decade, with reform activity increasing the range of financial incentives, administrative rules and normative pressures on GPs. In Australia the various programs and activities associated with the General Practice Strategy have focussed on quality, workforce, integration and financing problems. In the UK the internal market reforms changed organisational arrangements and budgetary incentives, as the more recently announced primary care group reforms will also do.

Many of the reforms applied in Australia and elsewhere were introduced with an expectation that shifts in how GPs work would result. It has been argued that professional autonomy is being curbed through increased scrutiny and intervention from governments and health care organisations which are external to the profession of medicine. Medical professionals have generally viewed reforms which increase accountability with alarm, seeing greater management control and increased competition with colleagues as having severe negative impacts. Yet scant research has been undertaken to determine how reforms have changed general practice in different countries.

This paper compares the reforms introduced in Australia and the UK in relation to general practice. It analyses policy documents and other published material, and uses interviews to highlight change. While the reform tools used in both countries share the concerns of cost containment and service improvement, the strategies employed and the policy resultants differ. Cross country variations in institutions, health care systems, professions, workforces and service delivery, lead to divergent results from reforming general practice. This comparative approach makes a substantial contribution to a policy analysis of general practice reform.
Establishing an Integrated Aged and Disability Service in a Rural Area

Presenter Lindeman MA
National Ageing Research Institute, Parkville

Author Lindeman MA

Concurrent session B6

This paper will discuss the process and outcomes of applying an action research approach in the aged and disability services sector for the purpose of service system development in a rural area. A Steering Committee of South West Home and Community Care (HACC) Providers, with funding from the Victorian Department of Human Services, engaged the National Ageing Research Institute (NARI) in February 1998 to undertake the Project: “Best Practice in an Integrated Service Delivery System, South West Sub-Region.” The Project was undertaken over a period of nine months, and used an action research model whereby project participants came together in a series of workshops to identify issues, develop actions, and reflect on practice. The project established networks of HACC and disability service providers throughout the South West of Victoria by focusing on the key aspects of assessment and targeting which are the points of entry to the service system.

A key outcome was a set of protocols for assessment, access and coordination in aged and disability services applicable across the South West. These protocols cover roles and responsibilities during assessment including use of a common information record, protocols for assessment of health status and nutritional risk, reviews and reassessment. The protocols rely on a lead agency / key worker model. A model for ongoing communication and coordination was also a key component of the protocols. This is based on a three tiered structure which includes regular forums for case coordination discussions, networking and planning. The project has laid the foundation for further work in integrated service system development including electronic networking for client data sharing.

Evaluating the Role of Positron Emission Tomography for Lung Cancer Patients

Presenter Lowin A
CHERE, Camperdown


Concurrent session E1

Positron Emission Tomography (PET) is a functional imaging tool, able to quantify physiological and biochemical processes within tissues. A major application of PET has developed in staging disease for oncology patients. The independent contribution of imaging studies to outcomes of care is best assessed through a randomised controlled trial (RCT). No RCT has yet been conducted on PET and existing evaluations of PET worldwide have fallen short of addressing issues of patient outcomes and resource use.

Non-small cell lung cancer (NSCLC) accounts for 80% of lung cancer, and 25% of patients present with disease which can be treated surgically. Preliminary data suggest PET may have an
important role in staging NSCLC prior to surgery to identify patients with previously undetected distant metastases. The trauma and resource use of unnecessary surgery can then be avoided for these patients. In 1998 members of CHERE and clinicians at the Royal Prince Alfred Hospital obtained a 3-year NHMRC grant to conduct a RCT and economic evaluation of the use of PET as a staging tool in the surgical management of apparently respectable (AR) NSCLC. Recruitment began on the 9th of April this year.

Patients referred to participating surgeons with a diagnosis of AR-NSCLC are eligible. Consenting patients are randomised either to undergo a PET scan or not prior to the final decision about surgery being made. All patients in the study will be followed up for up to three years. The primary outcome measure will be the proportion of patients for whom unnecessary surgery is avoided. Other outcomes will include morbidity, post-surgical mortality, local and distant recurrence, survival and quality of life. Resource use will be compared between the study group and the control group to determine the net impact of PET.

**Whether and How to Introduce Chickenpox Vaccination into Australia**

*Presenter*  
Lowan A  
CHERE, Camperdown

*Authors*  

*Concurrent session B1*

There are an estimated 240,000 cases of chickenpox, an infectious disease caused by the varicella-zoster virus, annually in Australia. In addition there are on average 1,200 hospitalisations and 4 fatalities annually. A routine varicella vaccination program targeted at healthy children could largely prevent the morbidity and mortality associated with this disease.

In 1998, CHERE examined the cost-effectiveness of adding the varicella vaccine to the existing childhood immunisation schedule. The analysis modelled the costs (valued in monetary terms) and consequences (valued in health outcomes) of a vaccination program which included the varicella vaccine compared to the costs and consequences of not adding the varicella vaccine. On baseline assumptions we estimated the varicella vaccination program would cost $64.33 per case of chickenpox averted.

The results of the cost-effectiveness analysis (CEA) imply that varicella vaccination may be a worthwhile public health investment. However for such a program to be a success a high coverage rate would be needed. To date there is little knowledge on what factors may influence a parent’s decision to vaccinate their child, such as location of vaccination, information or reassurance. We assessed the suitability of Discrete Choice Modelling (DCM) methods for answering the question ‘what would affect parents decision to vaccinate their children against varicella’. We set up a DCM experiment where parents were presented with 16 hypothetical vaccination scenarios and asked to state ‘yes’ or ‘no’ to whether given that situation they would take their child to be vaccinated. The specification of our model, the methods we used in our pilot study and the results from our first 13 respondents are described.
Operational Requirements on Integrated Care Organisations with Respect to Risk

Presenter  Lynn RD  
New Zealand Ministry of Health, NZ

Authors  Lynn RD, Galapitage C

Concurrent session E5

The purpose of this paper is on identifying and describing the risks, both financial and others, around a system incorporating integrated care organisations (ICOs), and the methods available to minimise those risks. The sources of those risks are defined as well as providing an examination into the range of risks facing both the funder and an ICO in an integrated care environment.

Two analytical studies are carried out to illustrate some of those risks. The first study analyses the impact of random variation in inpatient hospital costs when related to ICO population size. A simulation model was used to assess the financial risk, in terms of random variability of health care expenditure, for ICOs of various enrolled population sizes.

A second analysis compares how accurately a model using only socio-demographic variables predicted individuals health costs, against a model which used both socio-demographic and patient-level variables in the analysis.

Service risk denotes changes in the way an ICO operates and the resultant impact on patient outcomes. Service risk may be the direct result of the variations in the health care expenditure of the ICO, or due to inefficient/inappropriate patient and administrative management.

There are a number of ways that financial and service risks to both a funder and ICO could be minimised. These methods for ameliorating risk are summarised in this paper.

Models of Hospital Drug Costs

Presenter  MacIntyre R  
Westmead Hospital, Sydney

Authors  MacIntyre CR, Sindhusake D

Concurrent session C3

The rising cost of drugs in hospital are a major concern in acute health care. Attempts to contain drug costs must be evidence-based and data driven. Efforts are often expended restricting the use of high cost, low-volume drugs such as S-100 drugs, while high-volume, low cost drugs are ignored. In practice, there may be less room for altering prescribing of s-100 drugs than of commonly used drugs such as antibiotics and anticoagulants.

We analysed drug utilisation data for a large teaching hospital and modelled the impact of variations in utilisation at different points. S-100 drugs were used in 0.2% of all hospital separations, and comprised 3.7% of total cost.
Antibiotics were used in 13.8% of separations and comprised 14% of total cost. We present a series of models showing the impact of different strategies for containing drug costs.

**Estimating Staff Requirements in Home Nursing: The Royal District Nursing Model**

**Presenter** Maddox J  
Royal District Nursing Service,  
St Kilda

**Author** Maddox J

**Concurrent session B3**

Staffing levels are a major determinant of home nursing costs and quality of service delivery. Staffing can vary according to numbers, types, grades, qualifications and clinical experience. Past methods of calculating home nursing requirements, such as staff / population ratios, are no longer acceptable; as a major provider agency, Royal District Nursing Service (Vic) was confronted with the need to adjust its staffing profile, and devised a new model to determine future staff mix.

The model takes into account the aggregate volume of care to be provided, and the grades and skill levels of staff required to produce that care, allowing for the types of client (casemix) to be served. Client classification is an integral part of the model, which is thus built on previous classification analysis. The model can then adjust for individual productivity levels – for example, can take into account a lift in productivity targets. It can also be extended to respond to population forecasts and changes in demand; these and other testable assumptions can be altered to examine different scenarios.

This model has proved robust, and is in the process of implementation. The steps in the model will be illustrated from agency experience, and the underlying assumptions laid out.

**Towards Integrated Primary Care in New Zealand: Contrasts with Australia**

**Presenter** Malcolm L  
Aotearoa Health, Lyttleton, NZ

**Authors** Malcolm L, Barnett P, Wright L

**Concurrent session E5**

A significant outcome of New Zealand's somewhat discredited health reforms of the early 1990s has been a GP driven restructuring of primary health care, achieved through the formation of independent practitioner associations (IPAs). Similar in some respects to the Australian divisions of general practice, IPAs were initially formed to provide a stronger contracting base to negotiate with government purchasing agencies. This paper reports on a national survey of IPAs in 1998 which showed that 70% of all GPs were now IPA members, over half in groups of 150 or more and most of the rest in groups of 50-90 doctors. IPAs have expanded to take on a wide range of functions including primary care budget holding and the provision of new services. The survey showed that IPAs' most important stated goals were "achieving better health outcomes for patients" and "making better use of primary care resources". A majority supported moves towards integrated and capitated primary care budgets. The most important achievements
identified by IPAs include the establishment of an infrastructure, collaboration between members, developing information systems and primary care resource management, none of which had been possible under earlier government initiatives. IPAs have funded many health services research projects and, in contrast with Australian divisions, have the following features: choice of organisation to join, resource management goals, almost total computerisation of practice registers and integrated information systems. IPAs, which formed on the initiative of practitioners and without government mandate or sponsorship, are reshaping the face of primary care. Of particular interest is the extent to which they have undertaken new roles to co-ordinate services, developing relationships with communities, other primary, and secondary care services. These developments can be seen as moving rapidly towards a model of clinical governance in primary care.

**Does Good Quality Primary Care Reduce Demand on Hospital Services?**

*Presenter*  
Malcolm L  
Aotearoa Health, Lyttleton, NZ

*Author*  
Malcolm L

**Concurrent session C1**

This study analysed overall relationships between primary and secondary care utilisation and expenditure for the 12 000 patients registered with the Christchurch South Health Centre for 1996 and 1997. The Centre is recognised as a model of progressive primary care development. Denominator data on the population from the Centre were linked with numerator data on all sources of primary and secondary services by a unique number, the national health index (NHI). Hospital utilisation rates were standardised by adjusting the Centre’s figures to national percentages for age, gender and income. Primary care expenditure, including pharmaceuticals, was significantly below national guidelines. Total discharge and bed day rates were 85% and 76% respectively of national rates. For those over 65 years the respective figures were 78% and 70% and decreased with older ages. The 8.6% of patients who were classified as high users of GP services generated 31.5% of discharges and 42.4% of bed days. Total expenditure on Centre patients was well below national levels. The study showed that good quality primary care may be associated with low hospital utilisation especially for older patients. Follow up research is being planned to determine the reasons for such low utilisation in the elderly.

**Evaluation of Budget Holding in New Zealand’s Independent Practitioner Associations**

*Presenter*  
Malcolm L  
Aotearoa Health, Lyttleton, NZ

*Author*  
Malcolm L

**Concurrent session B2**

Independent practitioner associations (IPAs) have been a key factor in primary care development in New Zealand’s health system in recent years. IPAs and related groups now serve nearly 80% of the population and, through budget holding manage some 70% of pharmaceutical and laboratory services expenditure under contract to the Health Funding Authority. Budgets are currently historically based but are moving to a needs adjusted, population-based formula. Evaluation of budget holding in 9 IPAs, serving in total over 1 million population has shown the following
findings. IPAs have implemented a comprehensive and classical pharmaceutical and in some cases laboratory management strategy. This includes active personalised feedback, information sharing, peer review groups, internalised guideline and information system development, all within an incentive framework of retained savings for new services. Despite this investment, savings have been relatively modest between 5-10% of total budgets but these savings are well in excess of the costs of the management strategy. Despite extensive feedback wide variation between practices in prescribing and laboratory costs remains. The main achievements have been the development of a substantial infrastructure, peer review processes, new internal and external relationships and accountability for the management of both quality and cost in what may be styled clinical governance. However the key challenge to implementing population-based funding will be finding a strategy that works in reducing the high residual expenditure variation both between and especially within IPAs.

Is Public Health Our Best Investment Yet?

Presenter
Mateo C
Australian Institute of Health and Welfare, Canberra

Authors
Mateo C, Goss J

Concurrent session B1

Introduction
The contribution of public (preventive) health interventions has long been associated with significant improvements in the health and welfare status of populations. Only recently though are meaningful measures of public health investment being derived. Public (preventive) health makes up a small proportion of total expenditure on health services, yet contributes greatly to the wellbeing of our population.

The major players in public health in Australia have traditionally been within the government sector, namely, Commonwealth, State, and Local governments. This year, for the first time, the Commonwealth Grants Commission has produced detailed estimates of public health investment by State Governments in Australia, for the period 1993-94 to 1997-98. These estimates, along with information from other sources, enable a number of meaningful questions to be partially answered: How much investment in public health actually takes place in Australia? How does this level of investment compare with the past?

Who funds most of the public health effort? The Commonwealth, the States or Local Government?

How does the level of public health investment differ from investment in other health sector activities?

What proportion of health expenditure is directed towards prevention measures as opposed to the treatment of illness or injury?

Are we getting value for money from our public health effort? How cost-effective are our public health approaches?

Scope
Preventive health measures involve many aspects of our environment and daily routines. These measures are not only confined to the health sector, but span across other sectors such as transport, infrastructure, employment and education. This analysis is confined to the health sector in Australia, but proposals to measure public health activity outside the health sector are discussed.
Concurrent session D3

This paper presents an overview of results of the Australian Burden of Disease study. This study was a comprehensive analysis of the national disease burden for 175 diseases and injuries (including around 500 sequelae) as well as a number of important risk factors. It used the methods of the Global Burden of Disease Study developed by Harvard University, World Bank and WHO but adapted them to best suit the Australian context and the need for greater detail in measuring the size of health problems that are prevalent in Australia.

The DALY is a new summary measure of population health combining mortality and morbidity that was developed to address the need for information and evidence for policy and priority setting at a global level. It was used to provide a comprehensive assessment of the global burden of disease and injury in 1990 for the 1993 World Development Report of the World Bank. In order to assist in addressing questions of priority setting and value for money in health, the DALY was designed to:
- provide a common metric for fatal and non-fatal health outcomes
- provide a common metric for estimating population health impact and assessment of cost-effectiveness
- allow estimates of health impact to be mapped to causes (disease, impairment, risk factors, broader social determinants).
- use common values and health standards for all regions of the world.

Some of the methodological issues relating to the use of DALYs as an outcome measure for cost-effectiveness analyses will also be discussed.

Concurrent session D7

Quality assurance methods have been applied to diagnostic imaging since the 1980s, with the introduction of quality control testing of diagnostic x-ray units on a hospital level, through to national imaging modality programs as currently seen in mammography. The basis of initiatives has been the desire to increase diagnostic image quality, reduce patient radiation dose and optimise managerial efficiency. The initial emphasis was on the establishment of quality assurance protocols and the identification of methods of introducing such programs in a health system largely ignorant of the benefits of quality programs. Educational initiatives, starting in the mid-1980s, have been well received by the radiographic, physics and engineering professions and have
more recently been re-enforced by external accreditation requirements from professional, independent and regulatory bodies.

Mammography has been identified as a diagnostic imaging modality critically dependant on good image quality, with a need, particularly in the screening setting, to have minimal patient dose. Quality is best assured in mammography with a national program, which can apply uniform and externally monitored indicators of quality. Such a program is that of the Royal Australasian College of Radiologists. This program gathers survey information on personnel credentials and technical data and uses expert panels to assess clinical films, a phantom film and an exposed radiation dosimeter submitted by the clinical centres. Equipment reports with QC and processing logs are required on an annual basis. A strong feature of the program has been its educational role. This has been achieved primarily through a comprehensive QA manual from feedback to the centres from the assessment panels.

This model of quality assurance demonstrates how education and quality assurance can work together to improve care in diagnostic services. Other areas for future initiatives could well be in digital and paediatric imaging.

**Developing a Model of Effective HealthCare Teams**

*Presenter*  
Micron SM  
University of Queensland, Brisbane

*Authors*  
Micron SM, Roger S

*Concurrent session E4*

Healthcare teams have historically delivered coordinated client care services. With expanding technology and information infrastructures, there has been an increase in the complexity and specialisation of health care. Clinical and management information is widely available to more healthcare professionals and there has been a flattening effect on traditional hierarchical organisational structures. Therefore, management systems have had to develop ways of coordinating and integrating a wide range of services for clients who are increasingly demanding wholistic, accountable and efficient services. As a result, healthcare teams are being required to translate high quality clinical care into value for money. This change in the focus and expectations of teamwork has emphasised the importance of effective teamwork without necessarily clarifying the unique pre-requisite conditions. While there is ample research and anecdotal literature on effective teams in business environments, there is comparatively little in the unique organisational context of healthcare environments.

This presentation will summarise the exploratory stage of an ongoing research project, which aims to investigate, describe and justify crucial elements of effective teamwork, within healthcare environments, in the language of healthcare managers. In order to move beyond existing theoretical frameworks, the theoretical paradigm of personal construct theory was adopted to inductively explore and differentiate between managers’ experiences of effective and ineffective teams. Practically, 39 structured interviews using repertory grids were conducted, and over 420 bipolar personal constructs were generated. Using both qualitative and quantitative analyses, an hierarchical model of effective teamwork is being generated. A preliminary version of this model will be presented. It is anticipated that after rigorous testing, this model will serve as a basis for educating health professionals to enhance their collaborative practice in healthcare teams and to
maximise quality and coordinated client care.

**MORUCOS: A Model to Inform Policy and Resource Implications for Stroke**

**Presenter**  
Mihalopoulos C  
Centre for Health Program Evaluation, West Heidelberg

**Authors**  
Mihalopoulos C, Carter R, Dewey H

**Concurrent session B3**

Australian and international studies estimate that the incidence of first ever stroke is expected to significantly increase over the next 20 years (NH&MRC, 1996; Malmgen & Bamford, 1989). This prediction has important implications for future resource allocation and expenditure with respect to stroke. The national peak body for stroke in Australia, the National Stroke Foundation, has recognised the importance of accurate information for future resource allocation and planning and has supported the development of a model which will be useful in helping inform the future planning of stroke care.

The ‘Model of Resource Utilisation, Costs and Outcomes for Stroke’ (MORUCOS) has been developed utilising an economic framework which is able to describe and project the incidence and costs of stroke, as well as facilitate evaluation of new interventions in the areas of prevention, cure and care. The model has been developed on EXCEL spreadsheets utilising a user friendly approach and has the potential to inform many important decisions with respect to stroke.

The presentation will detail the development of the model and present some preliminary results demonstrating the model’s potential usefulness. The role and limitations of such ‘needs based’ planning models will also be discussed.

**Best Buys in Acute Myocardial Infarction: Thrombolysis Versus Cardiac Rehabilitation**

**Presenter**  
Muscatello DJ  
Central Sydney Area Health Service, Newtown

**Authors**  
Muscatello DJ, Corben P

**Concurrent session B1**

The NSW Mid North Coast Area Health Service’s Cardiovascular Disease Expert Advisory Group is considering alternative strategies, within fixed budgets, for the treatment of acute myocardial infarction (AMI) and delivery of cardiac rehabilitation services. The current pattern of use of the thrombolytic drug tissue plasminogen activator (tPA) adds an estimated $160,000 annually to the Area's cardiovascular disease budget compared to the alternative drug, streptokinase. The benefits of thrombolysis are strongly time dependent and pre-hospital thrombolytic treatment has been a topic of recent research. Based on a literature review, outcomes and cost-effectiveness of 1) thrombolysis using tPA rather than streptokinase, 2) pre-hospital thrombolysis, and 3) cardiac rehabilitation were compared. The short term mortality benefit of tPA versus streptokinase (10-19 lives saved per 1,000 patients), is comparable to that obtained through pre-hospital thrombolysis
(16/1000). In the medium term (1-2 years), the benefit of tPA is maintained, while studies of pre-hospital thrombolysis have shown mixed results ranging from no significant benefit to 220 lives saved/1,000. Cardiac rehabilitation provides a medium term mortality benefit of 26 to 32/1,000. In the long term (5-10 years), no information on tPA is available. Five-year mortality benefits of 110 to 280/1,000 have been reported for pre-hospital thrombolysis. For cardiac rehabilitation the benefit at 10 years has shown mixed results, from no significant benefit to a positive benefit of 160 lives/1,000. Evidence on cost-effectiveness is difficult to interpret, but all three interventions appear to be cost-effective by conventional standards. Complex questions of ethics and equity are raised when considering policy directions based on this evidence.

Evidence-Based Health Policy and Practice: A Case-Study from the Rehabilitation Sector

Presenter Nagel P
Inner & Eastern Health Care Network, East Melbourne

Authors Nagel P, Leggat S

Concurrent session E7

There is common agreement that per diem funding of inpatient rehabilitation services does not promote service efficiency. Hence, it is hardly surprising that a major challenge for purchasers of rehabilitation services has been the introduction of funding reforms which include incentives towards technical efficiency.

From the provider perspective, there is also a reluctance to continue with bed-based funding in its current form. However, for providers, the issue is less to do with technical efficiency than with allocative efficiency. That is, one of the unfortunate legacies of the funding system’s bias towards bed-day funding is the relative under-development of non-inpatient services. Specialists from the rehabilitation sector have consistently argued the merits of an expanded provision of rehabilitation services across a range of non-inpatient settings such as outpatients, community rehabilitation centres, and rehabilitation at home services.

This paper explores the potential for convergence of policy positions between purchasers and providers. The case study reviewed here is the proposed introduction of a casemix funding system by the Department of Human Services for rehabilitation services.

The move towards casemix funding is laudable to the extent that such funding reforms can achieve objectives of efficiency and equity. This paper reviews the extent to which systematic differences between rehabilitation agencies may limit the achievement of these objectives.

More broadly, the paper examines how in the wider context of system reform, service substitution of inpatient services can be addressed to meet reform objectives of both purchasers and providers. Recent developments in the structure and funding of rehabilitation services in the North America context are reviewed as a backdrop to mooted reforms in the Australian context.

An Outcomes Framework for Community Health Care

Presenter Nancarrow SA
Academic Unit of General Practice, Jamison
Increasingly, funding bodies and consumers are calling for evidence to demonstrate the effectiveness of health services. The shift to a purchaser – provider model of community health service delivery and the move towards output and outcome based funding has emphasised this requirement. ACT Community Care has developed, and is in the process of piloting a framework for the routine collection of outcomes data by community health services. This framework was developed to incorporate the principles of clinical governance and quality assurance within the health care setting and thus incorporates process, quality and outcome indicators. Specifically, the framework looks at the inter-relationship between the following variables; intervention specific health outcomes, adverse events, variation in the number of interventions, client satisfaction, cost, provider satisfaction, appropriateness of care and quality of life outcomes. By using of a number of indicators it is anticipated that triangulation of data will be possible to help validate each measure. A series of case studies are being used to pilot the framework to determine the effectiveness of the model, and where possible simplify data collection, perhaps through the use of proxy measures.

“The Footpath”: A Model of Care for the Prevention of Amputation

Presenter  
Nancarrow SA  
Academic Unit of General Practice, Jamison

Authors  
Nancarrow SA, Glasgow N

Foot problems account for the highest proportion of costs and longest duration of stay in hospital for any complication associated with diabetes. The increasing incidence of diabetes and its complications means that the burden of diabetic foot disease is likely to represent an increasing proportion of health expenditure. Several studies have demonstrated that between 50-70% of diabetes related foot problems can be prevented if a multi-disciplinary team provides an appropriate intervention. Current models of diabetic foot care, in the few places they exist in Australia, rely primarily on a co-located team of specialists residing in tertiary institutions. Extensive consultation was undertaken in the ACT to determine the best way to deliver care to prevent lower limb complications, resulting in an integrated, primary care model, dubbed ‘The Footpath’. The Footpath model has the General Practitioner as the coordinator of care and involves a series of clinical pathways and referral documents which are utilised by the GP, podiatrists and diabetes educators across the ACT. A randomised controlled trial (n=400) is currently being undertaken in the ACT to determine the effectiveness of the Footpath at improving intermediate lower limb risk factors (such as minor foot pathology, knowledge of lower limb care, self reported foot care and foot health status) and improving communication between health service providers. This paper will discuss issues surrounding the development and implementation of the primary care, integrated model which forms the Footpath.
During the 1990s, overall prescribing of anti-depressants has increased dramatically, both in terms of expenditure and volumes dispensed. Government expenditure rose six fold between 1992-1997 and four times as many days of anti-depressant medication were supplied in 1997 as in 1992. The growth is mostly due to the introduction of newer, more expensive drugs onto the market.

A previous New Zealand study (Norris et al, 1998) found substantial regional variation in the prescribing of the most popular newer drug, fluoxetine (Prozac) during a six month period in 1993-1994. This earlier research led to the suggestion that regional variation in the use of new anti-depressants might be due to doctors in some regions choosing to prescribe newer drugs rather than older ones. In this paper we use data on all anti-depressant prescribing from 1992-1997 to investigate this.

We found that throughout the period newer anti-depressants have become increasingly important in every region in New Zealand. There has been a steady convergence between regions in the prescribing of newer anti-depressants as a proportion of all anti-depressants. However, there are large differences in the rate of anti-depressant prescribing per-capita, which have not narrowed between 1992 and 1997. Areas with more anti-depressant prescribing also tend to have more expensive anti-depressants prescribed, increasing the variation in expenditure per-capita.

In July 1997, patient part-charges for GP visits and drugs were abolished for New Zealand children under six. A large-scale evaluation was carried out after the first year of operation of the new policy (the Free Child Healthcare Scheme – FCHCS). This paper reports some results of that evaluation, including analyses from household sample surveys.

The focus of the paper is on who benefited from the policy change, rather than on the health gains and the financial cost - both of which proved surprisingly difficult to ascertain. There was some indication of possible health gain, although the evidence was inconclusive, partly because the
scheme had been running only one year, and partly because of the poor quality of much of the data. The overall cost was approximately NZ$50 million per year. On the usual benefit/cost criteria it is difficult to justify the policy.

The ‘equity’ case for the scheme is stronger. It is certainly stronger than thought by many at the scheme’s inception, although more in terms of ‘distributional equity’ than ‘health equity’, whether in terms of access or of outcomes. This is demonstrated by results presented on the distribution of the financial benefits from the policy among households of differing size, and at different income levels.

**Ambulance Service Delivery in Emerald: A Pilot Study**

*Presenter*  
O’Meara P  
Monash University, Traralgon

*Authors*  
O’Meara P, Somers G

*Concurrent session E6*

Introduction: The objective of the study was to gain an understanding of the ambulance service delivery model in the Emerald area on the metropolitan fringe of Melbourne. It aimed to determine the appropriateness of this model through the eyes of two principal stakeholders – ambulance officers and general practitioners.

Methods: Preliminary research was carried out to determine the availability of information on the ambulance services offered and the population served. A face-to-face meeting was held with potential informants, outlining the background to the study.

Participants were requested to complete questionnaires relating to their local ambulance service. The Officer in Charge of the ambulance station filled in a questionnaire profiling the branch in terms of staffing and relationships to other health and emergency service providers.

Results: The Emerald ambulance, with five staff, services a catchment population of 18,815 that shares many of the characteristics of small rural centres in proximity of larger provincial centres.

The only other significant health service providers are general practitioners. Other emergency services are well represented in Emerald. Both ambulance officers and general practitioners expressed satisfaction with the services offered; they valued promptness, professional competence and the ability to work with other members of the health and emergency response teams.

Discussion: The satisfaction expressed regarding ambulance services and the ability to respond to medical emergencies reflects the dependence that rests on the local ambulance service and general practitioners in communities without easily accessible hospital services. Apart from the cry for more resources, the respondents had few major suggestions for improvement at a local level. The local availability of paramedic back-up possibly influenced the satisfaction with the level of service offered. Other communities of similar size and demographic profile in rural Victoria, rarely have this additional layer of service provision available.
Establishing an After-Hours Medical Service in Moe

Presenter: O’Meara P
Monash University, Traralgon

Authors: O’Meara P, Hall RH, Strasser R

Concurrent session E6

Background: The objective of the study was to determine the feasibility of establishing an after-hours medical service in Moe, Victoria after the closure of the Moe Campus of the Latrobe Regional Hospital.

Methods: A prospective study was undertaken to estimate the potential after-hours patient throughput using Accident and Emergency Department data. The potential number and nature of the population likely to utilise the service was inferred, while the projected income from the Commonwealth Medical Benefits Scheme was estimated.

Consultation took place with local general practitioners to determine the type of medical services they felt were appropriate.

Results: After-hours demand at the Moe Hospital Accident & Emergency Department was 9,669 patients per year. Of these patients, 80 percent or 7,735 were after-hours ambulatory patient encounters.

Local GPs gave their support to the establishment of an after-hours service on the basis of the State Government establishing the necessary infrastructure and assisting with its long-term development. These conditions were met through the development of a business plan and the transfer of management responsibility to the Latrobe Community Health Service.

Discussion: Demand for the proposed after-hours medical service in Moe will come from a mixture of the after-hours overflow from local GPs surgeries and a high percentage of those ambulatory patients who previously attended the Moe Accident and Emergency Department. A business plan was prepared to deliver a suitable service delivery model and to work toward the development of a financially viable service through the development of additional income streams utilising the service’s infrastructure during business hours. An interim service has been established close to the previous hospital campus while new premises are constructed at the Latrobe Community Health Service site in Moe.

Regulating for Quality: Patients’ Rights in the US and New Zealand

Presenter: Paterson RJ
New Zealand Ministry of Health, NZ

Author: Paterson RJ

Concurrent session B7

Regulators in the United States and New Zealand have looked to statutory codes of rights as a
mechanism to protect consumers enrolling in health plans and patients receiving health care. Strengthening the hand of patients, by ensuring access to accurate, relevant, and understandable information about quality, has been identified as a key strategy for improving the quality of health care.

This paper will focus on regulatory initiatives in four states - Missouri, New Jersey, Texas, and Vermont - which have enacted comprehensive managed care consumer protections. The early lessons from implementation of the new laws will be discussed. The use of report cards/consumer guides as a tool to promote quality improvement will be examined.

The role of an independent Health Care Ombudsman and publicly funded advocacy services will be discussed, comparing Vermont’s 1999 program with New Zealand’s experience, since 1996, of a statutory Commissioner overseeing a legally enforceable Code of Consumers’ Rights.

There is as yet little evidence that legislating for patients’ rights is improving the quality of health care. However, regulatory initiatives in the US and New Zealand suggest creative ways in which quality measures can be used to inform purchasers and consumers of health care, who may in turn drive improvements in quality.

Pragmatism and Priority Setting - Towards Guidelines for Program Budgeting and Marginal Analysis

Presenter Peacock SJ
Monash University, West Heidelberg

Author Peacock SJ

Concurrent session C3

Program Budgeting and Marginal Analysis (PBMA) is enjoying increasing popularity as a priority setting tool in Australia and overseas. PBMA represents a practical application of the economic principles of opportunity cost, cost-effectiveness and marginal analysis in priority setting. Drawing on experiences in Australia and overseas, this paper seeks to develop guidelines for PBMA study design that focus on both pragmatic and methodological considerations. In the best tradition of health economics guidelines, ten key issues in study design are outlined.

The success of a PBMA study is most frequently measured by its impact on decision making in the allocation of health service resources. Whether a PBMA study will be successful in influencing resource allocation will depend largely on pragmatic rather than methodological considerations in study design. Pragmatic considerations include:

What are the organisation’s objectives?
What is the organisational context and study setting?
Who are the key stakeholders in setting service priorities?
How should results be implemented?

Methodological considerations in study design are more important in determining the validity and robustness of information to be used in the decision making process, and include:

What is the question to be addressed?
What program(s) should be examined?  
How (if at all) should the program budget be constructed?  
What services should be chosen for evaluation?  
How should those services be evaluated?  
How robust are study results?  

The paper concludes with a brief discussion of the possible of criteria under which the success of a PBMA study may be judged, including changes in the allocation of resources, changes in decision making culture, and the generation of research agendas.

**Australian Coordinated Care Trials: New Species of Health Care Services**

**Presenter**  Perkins D  
**Authors**  Perkins D, Eagar K  

**Concurrent session A5**

The Coordinated Care Trials are a significant development in 1990s Australian health care policy. While they employ some conventional approaches such as case management, funds pooling, client advocacy and individual assessment, they address a series of problems endemic in the Australian health and social care system. These include the separation of responsibilities between Commonwealth and State Governments, and multiple agencies with overlapping remits. A notable feature of the nine trials that have been operating is their considerable diversity. The trials have differed in their interpretation of case management, their choice of target group, the sponsoring organisations, and just about everything else. This paper examines these differences within the framework of common hypotheses, common outcome measures and financial arrangements established by the Commonwealth.

**Suicide Attempts in Psychiatric Care: A Clinical Indicator**

**Presenter**  Pirkis J  
Centre for Health Program Evaluation, West Heidelberg  
**Authors**  Pirkis J, Burgess P, Jolley D  

**Concurrent session A7**

Introduction: The Royal Australian and New Zealand College of Psychiatrists and the Australian Council on Healthcare Standards have developed a set of clinical indicators for psychiatry. Included among these indicators are major critical incidents to inpatients, one of which is attempted suicide. This study examined rates of, and risk factors associated with, suicide attempts by psychiatric patients under active care, considering both inpatient care (acute inpatient and long-stay inpatient) and community-based care.

Method: 12,229 patients in 13,632 episodes of care were rated on the Health of the Nation Outcome Scales (HoNOS) Item 2 which assesses suicidality. A score of 4 at any point in a given episode was deemed to indicate a suicide attempt.
Results: An attempt was made in 8.3% of acute inpatient episodes (95% CI = 7.3-9.3), at a rate of 5.4 attempts per 1000 episode days (95% CI = 4.8-6.1). For those in long-stay inpatient care, an attempt was made in 5.3% of episodes (95% CI = 4.0-7.0), which amounted to 0.6 attempts per 1000 episode days (95% CI = 0.5-0.8). For those in community care, an attempt was made in 3.3% of episodes (95% CI = 2.9-3.7), at a rate of 0.5 attempts per 1000 episode days (95% CI = 0.5-0.6). Predictors of attempts varied by treatment setting, although risk was elevated for those with personality disorders in all settings, even after adjustment for demographics.

Conclusion: As a clinical indicator, suicide attempts in care can act as a flag to possible problems and opportunities for improvement in patient care. This study demonstrates that suicide attempts among psychiatric patients under care occur at a rate which should be of concern to contemporary mental health care systems. It also demonstrates that risk factors vary across treatment settings.

**Health Undertaking for Tuberculosis: How Migrants Respond to the Service**

**Presenter**

Prasopa-Plaizier N
Department of Human Services,
Melbourne

**Authors**

Prasopa-Plaizier N, Carnie J,
Randall M

**Concurrent session B7**

Background: In Victoria, the screening service for health undertaking for tuberculosis (TBU) has been contracted out to two external providers since October 1996. This is the first study undertaken to assess the responses from migrants to the service since the outsourcing.

Methods: A telephone survey using structured questionnaire conducted during February-June 1998. Migrants residing in Victoria who were registered on TBU and referred to external service providers from October 1996 to June 1997 (N=2,099) were eligible for participation. One hundred and eighty subjects were randomly chosen from the TBU database.

Results: Sixty of 79 contactable migrants were interviewed. Respondents came from 24 countries and spoke 26 languages. Four in five respondents came with a migration visa. Since arriving in Victoria, 40% of respondents engaged in interstate or overseas travels and 52% changed contact addresses. Eighty per cent of respondents agreed that migrants should be placed on TBU although about two-thirds did not know why they were placed on the program. TBU completion rate was low. Overall, only half of respondents (52%, n=31) completed the TBU assessment and informed the results. Non completion of TBU assessment was largely attributable to the lack of communication between migrants and their service providers.

Conclusion: Clear communication is essential with any health undertaking, especially when dealing with newly arrived migrant groups. Clear reasons need to be given to the individuals as to why they are being placed on the TBU, and why notifying change of address details is important, if we are to maximise the number of people who complete the TBU process.

**Applied Research with Older People Informing Policy**

**Presenter**

Quine S
Faculty of Health Sciences, University of Sydney, Sydney

**Authors**

Kendig H, Quine S
Concurrent session B6

This paper examines ways in which applied research has brought older people’s views to the massive development of aged care and health promotion policies over the last 15 years. At each of the major stages of program development governments have commissioned or drawn from research which has been used to argue the case for new directions and to improve implementation. Research has been used as part of a broader process of bringing the direction of services and programs from a provider dominance to more government direction and arguably more of a consumer emphasis.

Drawing on case studies the paper will analyse factors which influence how well applied research has been able to empower older people and contribute to advocacy on their behalf. The cases will include studies conducted by the authors: major needs surveys, qualitative studies of service use, and program evaluations. Attention will be directed to studies involving older people who are at risk as a result of frailty, cultural differences, or low income. The capacity of applied research to represent the views of vulnerable older people will be shown to be influenced by both the methodology (especially qualitative and quantitative distinctions) and relationships between funders and researchers (notably consultancies and grants).

On the Market: Managing Health Professionals in the Contract State

Presenter
Reiger KM
La Trobe University, Bundoora

Authors
Reiger KM, Keleher HM

Concurrent session C2

Since the mid-1990s, the Victorian Government has embarked on a radical reshaping of many human services under the guise of contracting out or privatisation. The public policy shifts have involved a contraction of the state’s role through the separation of purchaser and provider functions, and organisational restructuring associated with compulsory competitive tendering (CCT). This paper examines the dilemmas facing Maternal and Child Health professionals in view of the new public sector management strategies. Based on both qualitative and quantitative research with Victorian nurses, coordinators and line managers, it identifies both the tensions and opportunities which have emerged as a formerly universal service for mothers and children has been put on the ‘market’. Tensions between maintaining professional identity and collegial relationships and the pressures of commercial competition place nurses in contradictory situations in terms of sharing information. Further, is their commitment primarily to clients, or to ‘customers’ of a business unit in which their jobs are reliant on successful retendering? Rapid change at local government level, where most MCH services are still located, has presented new challenges but also opportunities. Professional autonomy and responsibility have been enhanced by teamwork rather than isolated practice, by clarifying objectives and monitoring achievements. Increased skills in computer usage, program development, and generating new service initiatives have extended the professional identity of at least some nurses. In particular, those coordinators who have successfully adapted to a management role have increased the visibility and professionalism of the service. Our argument however, is that fundamental contradictions remain between the demands of the market and of professional health service delivery.
Should Utility Maximisation be the Objective of Economic Evaluation of Health Programs?

Presenter: Richardson J  
Centre for Health Program Evaluation, West Heidleberg

Authors: Richardson J, Olsen JA

Concurrent session A1

Orthodox economic theory assumes that the objective of economic evaluation should be the maximisation of utility subject to a distributional or equity constraint. For this reason the willingness to pay technique is often assumed to be the gold standard for the measurement of benefits as it reflects the strength of an individual’s preferences, that is, utility. This orthodox “welfarism” is challenged by the “extra welfarist” view that objectives other than utility may characterise the social welfare function.

In this paper we present empirical results from an Australian survey which was designed to determine the criterion of value that responders believe should be used in project evaluation and whether or not respondents believe that decision makers should “override” individual preferences in the fulfilment of this criterion. The survey explores the importance of two extra welfarist objectives that are related to equity and social justice.

Quantification of the Utility of Health States Using the Australian ‘Assessment of Quality of Life’ (AQoL) Instrument: Methodological Innovations and Problems

Presenter: Richardson J  
Centre for Health Program Evaluation, West Heidleberg

Authors: Richardson J, Hawthorne G et al

Concurrent session B4

The Assessment of Quality of Life (AQOL) Instrument was designed to overcome a number of the methodological shortcomings in the design of multi attribute utility instruments elsewhere. The paper outlines these problems and discusses the AQOL experience to date with overcoming them. The paper compliments the analysis reported in Hawthorne et al also presented at the Conference.

The Effect of Ageing on the Cost of Health Services in Australia: Wrong Methods give Wrong Answers

Presenter: Richardson J  
Centre for Health Program Evaluation, West Heidleberg

Authors: Richardson J, Robertson I

Concurrent session D2
In this paper we describe and apply the conventional methodology for determining the impact of ageing upon the likely cost of health services in Australia. By contract with earlier studies we do not find that this impact is significant. The paper then analyses the more fundamental question of whether or not the methodology used in the conventional calculation is acceptable. We conclude that it is not and that ageing may have little or even no impact upon future costs.

The Effectiveness of Care Management for Elderly Medical Patients

Presenter  Ryan K
Royal Hobart Hospital, Tas

Authors  Ryan K, Ford K, Deverson C, Grimmer K, Daniels B

Concurrent session C1

Care Management has been trialed on three medical wards at the Royal Hobart Hospital. Care Management is a model of care that involved the allocation of Care Managers to patients with complex care needs. The key role of the Care Manager was to facilitate patient specific discharge planning. A modified risk-screening tool (Thomas and Associates, 1998) was used to identify at-risk patients who should receive Care Management.

This paper outlines the effect of Care Management on a number of different indicators. Length of stay and readmission rates were used to evaluate the effect on cost of care. Responses to validated questionnaires (Grimmer et al, 1999) were used to evaluate the effect on process and outcome of care as rated by patients, carers and community providers. Finally a staff questionnaire was developed and administered to determine hospital staff perception of the Care Management model. Data was collected over a ten-month period from patients 65 years and older, who stayed in hospital for three or more days and were discharged from the target medical wards. Data was split into pre and post intervention (Care Management introduction) time periods, allowing for comparison of trends over time.

Within each time period, data was stratified by model of care (care managed or non-care managed) and change over time was assessed using ANOVAs and chi-square analyses. Comparisons were also made between strata within each time interval using t tests and chi-square analyses.

The modified risk-screening tool (Thomas and Associates, 1998) was successful in identifying an appropriate group of patients for Care Management. Care managed patients were older, stayed in hospital longer and used more community services than non-care managed patients. Following the introduction of Care Management, the process of care (as rated by patients, carers, hospital staff and community providers) improved. Improvements were greatest in the care managed group but were also evident in the non-care managed group. These improvements were achieved without increasing the cost of care. Despite some initial resistance to change, over 80% of hospital staff surveyed thought that Care Management should continue.

References

Descriptive Epidemiology of Disability from Mental Disorders

Presenter Sanderson K
UNSW, St Vincent's Hospital,
Sydney

Authors Sanderson K, Andrews G

Concurrent session D3

The Global Burden of Disease project was of particular interest to the mental health community due to its inclusion of non-fatal health conditions. However a number of important methodological issues remain unresolved:

1. The techniques for measuring the prevalence of disability are not as advanced as those used to measure mortality
The utility of self-report for measuring the prevalence of disability in the affective, anxiety, substance and personality disorders will be examined with data from the National survey of Mental Health and Wellbeing, using the Medical Outcomes Study Short-Form 12 item (SF-12) and disability days. The 1-month prevalence of people with each disorder can be weighted by the proportion in each disorder who fall into one of four severity classes (none, mild, moderate, severe), to provide a simple form of severity-weighted point prevalence.

2. Comorbidity was largely unaccounted for in the GBD
Comorbidity is of particular relevance to the mental disorders as co-occurrence of symptom clusters among mental disorders is common (35% of one month DSM-IV cases of mental disorder meet criteria for at least one other disorder). This disorder overlap poses an important challenge for measuring the size of burden due to mental disorders, and also for exploring cost-effective treatment strategies: the person should only be counted once (just as each death is only counted once), but we need to know the absolute number of people with each disorder for health planning. The prevalence of disability among comorbid individuals will be presented. Using data from the National Survey, statistical strategies for addressing this problem will be examined, by presenting prevalence and disability for pure cases of disorder, for disorder as the person's principle complaint, and by using regression to control for the presence of co-occurring disorders.

Legislation and Access to Dental Services

Presenter Satur J
Deakin University, Somerville

Author Satur J

Concurrent session A6

Dental disease is the most prevalent and costly diet related disease in Australia. At a national level we spent over $1.8 Billion in 1995-96 on services, around 85% of which were delivered by the private sector. Despite this level of expenditure, around 75% of preschoolers and 50% of adults do not receive regular care, resulting in dental decay levels affecting, on average 19 teeth per person by middle age. Additionally, the patterns of our aging population will ensure increasing levels of
demand for care in the future as more people retain their teeth into old age. Socio-economic circumstances have a clear relationship to risk status for dental disease and many people have less access to care because the distribution system for dental care is based on an ability to pay for care. The challenges to the community lie in finding better ways to use existing resources to increase access and improve the dental health status of the whole community. Dental practice Acts Australia-wide regulate the delivery of services by dentists, dental specialists, auxiliaries and technicians. Many states are in the process of reviewing their regulatory arrangements around dental care delivery in response to the National Competition Policy demands. The NCP reviews of legislation provide an opportunity for State Governments to attempt to improve market delivery systems, and increase access to care. Victoria was the first state to complete its review of dental practice legislation and has presented this legislation to the Autumn session of parliament.

This paper will describe the outcomes of the Victorian review of the Dentists Act in the context of indicators for increased access to care as identified in the literature.

**Health Outcomes and Health Reform: Some Reflections**

**Presenter**
Scott CD
Victoria University of Wellington, NZ

**Author**
Scott CD

**Concurrent session E3**

This paper reflects on the relationship between the policy goal of ‘better health outcomes’ and recent reforms to health care systems in New Zealand and the UK. Both countries have implemented a purchaser-provider split and now appear to be moving toward reforms involving managed care. A number of managed care pilots are currently being conducted in the New Zealand context. In the UK, the new Labour government has signalled further structural changes which place responsibility for health care services with Primary Care Groups(PCGs) led by GPs. Reform proposals in both countries appear to have the potential to position health care services within a wider social policy context.

In recent years the governments of both UK and New Zealand have made major changes to institutional arrangements surrounding the roles of funding, purchasing and provision of health care. The paper will assess the capacity of the reforms to deliver improved performance in terms of health care outcomes. The paper notes the trend toward greater involvement by private institutions (alongside or in competition with public institutions) and considers the implications of this for improvements in health care outcomes. Some issues surrounding public accountability for outputs and outcomes are addressed which extend discussion presented in J. Cumming & C. Scott, ‘The Role of Outputs and Outcomes in Purchaser Accountability: Reflecting on New Zealand Experience’ Health Policy, December, 1998.

**Evaluating Process and Outcomes of Care for Acute Myocardial Infarction**

**Presenter**
Scott IA
Princess Alexandria Hospital, Brisbane

**Authors**
Scott IA, Eyeson-Annon ML, Huxley SL, West MJ
**Utilisation of New Zealand General Practitioner Services: Met and Unmet Need**

*Presenter*  
Scott KM  
Ministry of Health, Wellington, NZ

*Author*  
Scott KM

**Concurrent session D6**

Results are presented from the 1996/97 New Zealand Health Survey on utilisation of, levels of satisfaction with, and unmet need for general practitioner (GP) services among New Zealanders. The 1996/97 Health Survey is the second nationally representative survey of the health status and health service utilisation of New Zealanders, with an adult sample of around 8000.

Around 80% of the population reported going to a GP in the previous 12 months. Rates of GP utilisation were fairly similar across the major ethnic groups; but in the context of other data from the survey showing ethnic differences in health status there may be some discrepancy between GP utilisation and health needs in some ethnic subgroups. Those in lower socioeconomic groups were more likely to be frequent users of GP services.

Levels of satisfaction with GP services (and overall health care) were generally high, with only minor differences across ethnic group. The levels of satisfaction found in this survey were very similar to those found in the earlier 1992/93 Health Survey.

The level of reported unmet need was higher in some ethnic groups than others. A range of reasons were cited for not going to the GP despite reported need, some of which suggest that some unmet need is for relatively minor or transient complaints. Cost was cited as the reason for unmet need by just under half, with differences in the likelihood of citing cost occurring across sex, age, socioeconomic status and ethnic groups.

**Improving Aged Care: Transitional Care**

*Presenter*  
Scott M  
Hunter Area Health Service, New Lambton

*Authors*  
Mehan T, Fardy S, Scott M

**Concurrent session D7**

This paper will outline the development of a transitional care service model by the Hunter Area Health Service.

The transitional care project pilot is part of the Hunter Area Health Service initiatives to better manage bed access, particularly in winter and to better coordinate care offered to older people.
Emergence of transitional care arose from a series of issues relating to aged care services in the Hunter Area Health Service, such as fragmentation of elderly patients in acute hospitals awaiting placement, and increased clinical recognition of the particular need to achieve improved outcomes for these patients. A 16 bed transitional care unit was developed at the Royal Newcastle Hospital. This had a structured placement preparation program that acknowledged the patient’s capacity for self care and the stresses often involved in such a life change. The outcomes resulted in a submission to the NSW Health Department and the Commonwealth Department of Health with agreement to a two year pilot. The pilot is a joint venture between Hunter Area Health Service, Baptist Community Services, State and Commonwealth Governments. It is proposed to rigorously evaluate the pilot with a view to publishing the results of the evaluation.

**Coordinated Care: A Gap Between the Rhetoric and The Reality**

*Presenter*  
Segal L  
Monash University, West Heidelberg

*Author*  
Segal L

**Concurrent session  B5**

In the establishment of the National Coordinated Care Trials a number of premises can be identified that underpin the structure of the Trials. The validity of these assumptions can now be revisited, informed by the Trials, and in turn, informing the future health system reform processes. Central premises to be reviewed will be drawn from the following; i) the nomination of the general practitioner as the Care Coordinator. Is there a contradiction between the rhetoric of the general practitioner as the natural care coordinator and the requirements of the role; ii) the presumption of service duplication and a mismatch between services and clients, for which coordination of care is the solution; iii) that for patients with complex chronic care needs, there is a reasonable expectation of health gain within current resourcing and within a short time frame; iv) that the Funds Pool provides an effective mechanism for maintaining cost neutrality. In relation to the latter key issues are whether a Funds Pool be developed which is a true reflection of expected health service costs and whether, Funds Pool status be generated in `real time’ and applied to the adjustment of purchasing decisions?

Issues will be reviewed from first principles, the health system reform literature and with limited reference to experience of the National Coordinated Care Trials.

**Priority Setting Revisited**

*Presenter*  
Segal L  
Monash University, West Heidelberg

*Author*  
Segal L

**Concurrent session A2**

Priority setting is of increasing importance as health sectors move towards the purchaser provider model, yielding greater opportunity for area level purchasing. A number of priority setting models
are reported in the literature, based broadly on economic principles. This paper reports on research
to develop criteria for reviewing the performance of alternative priority setting models. The key
criteria adopted are: i) the existence of mechanisms for defining and incorporating equity and
access objectives – or more broadly a mechanism for reaching agreement about program
objectives, ii) a capacity to define the scope of the research question in a way that is meaningful,
iii) a focus on interventions, iv) a mechanism for the selection of interventions to minimise the risk
of sub-optimisation, v) the adoption of a marginal rather than average cost perspective, vi) a focus
on community level, real resource costs and vii) a commitment to the use of objective evidence on
program impacts. Three priority setting models that claim to be based on economic principles are
briefly reviewed against these criteria. These are: PBMA, Qaly league tables, and a Disease Based
Framework.

Treatment Modalities for Abdominal Aortic Aneurysm Repair: an Australasian Perspective

Presenter  Semmens JB
            University of Western Australia, Perth

Authors  Semmens JB, Lawrence-Brown
            MMD, Norman PE, Holman CDJ

Concurrent session E3

Background: The aim of intervention for abdominal aortic aneurysm (AAA) is to prevent death
from rupture, because 80% (men 75%, women 90%) of all cases with ruptured AAA will die.
While the cornerstone of preventive management has been elective open resection, the
introduction of endoluminal graft repair (ELG) in the 1990s provides an alternative treatment
modality.

Objective: To compare the surgical outcomes for endoluminal repair for AAA, in a multicentre
study, against the benchmark standards established for open repair in Western Australia.

Methods: The Western Australian Linked Database was used to link morbidity and mortality
records of all patients electively treated with open resection for AAA in Western Australia during
1985 to 1994. A specialised ELG database, containing clinical, radiological and device data was
established from chart review for patients treated with Cook Zenith bifurcated ELGs in Australia
and New Zealand from 1994 to 1998. Survival was assessed using crude and relative survival.

Results: Outcomes were assessed for 935 elective patients treated by open resection and 276
patients treated by endoluminal repair. Endoluminal grafts are less stressful and invasive than
open resection and this is reflected in the lower 30-day crude mortality rate (1.8% cf 4.7% 
respectively). The two-year relative survival (93.2%; CI 83.2-103.3%) of ELG patients was similar
to those who had elective open resection (96.2%; CI 93.9-98.5%) despite their more complex
comorbidity. Some of these high risk ELG patients were not suitable for open repair surgery.

Conclusion: ELG, as an alternative to open resection for AAA, has changed the face of aneurysm
intervention. While the technology for ELG is still evolving, short-term survival is superior to
open resection. The success of ELG is based on patient selection, with the primary determinant
being the morphology of the proximal neck, and the ongoing durability of the device. The long-
term results are dependant upon the durability of the device.
HITH: What is the Evidence and How Do You Know?

**Presenter**  Shanahan M  
**Authors**  Shanahan M, Haas M, Viney R, Cameron I

*Concurrent session C5*

There is a shift to require evidence-based and cost-effective health care with published guidelines available on how to determine whether a treatment or program is clinically effective or cost-effective. Although this is a worthwhile objective it is rarely straightforward. Local contextual factors are often essential in determining whether a new method of service delivery will be trialed, the extent to which it is accepted by clients and providers, and what the overall impact is on resource use.

This paper uses the example of Hospital in the Home (HITH), a substitute for acute hospital care, to illustrate the challenges in attempting to determine whether such programs should be widely promoted in the Australian health care system. There is now a range of HITH programs in Australia, although it is still not a standard alternative to hospital care. These programs vary greatly in terms of objectives, organisational and funding arrangements and models of care provision.

We have undertaken a review of HITH programs, documenting existing and potential models of HITH in Australia in order to determine which features contribute most to its capacity to provide an acceptable cost-effective and accessible alternative to traditional models of care. Others may encounter many of the challenges faced by this team when attempting to evaluate programs that have sprung up in the health care system for a multitude of reasons. These reasons may be to alleviate bed shortages, funding difficulties or because individual (or groups of) practitioners feel that a given service would be beneficial to their particular group of patients.

We will be presenting an overview these challenges and a discussion of how we attempted to deal with them.

Monitoring Service Reforms Under the National Mental Health Strategy

**Presenter**  Shaw J  
**Authors**  Shaw J, Grant B

*Concurrent session C3*

A major policy initiative under the National Mental Health Strategy, now in its second stage, has introduced a reform process in service delivery to people affected by a mental disorder. A key objective under the Strategy has directed a reduction in the size and activity of public psychiatric hospitals, and an increase in the volume of services delivered in acute care hospitals and community-based centres.
This paper presents data reported since the establishment of the Strategy in 1992, and compares the extent of changes in service delivery between different sub-specialty programs designated for the care of people with serious mental illness. The data were collected through the annual National Survey of Mental Health Services (NSMHS) covering the period from 1993 to 1997. The services captured by the NSMHS are those that provide specialised treatment, rehabilitation or community support for people affected by a mental illness or psychiatric disability. Specialised geriatric and child and adolescent programs are reported to the survey, including hospital and community-based mental health services.

Aggregate data for adult psychiatry show a national trend that are in line with the policy, however for geriatric and child and adolescent programs, the data show a less consistent pattern. The shift in bed numbers from psychiatric hospitals to acute care facilities has not occurred nationally for sub-specialty programs in the same proportion as that for adult services. In the community, the number of service agencies providing child and adolescent programs has increased, but this has not been matched by an increase in overall activity. Some of the apparent decreases associated with care delivered in geriatric psychiatry programs may be attributable to a shift toward service provision in aged care facilities.

Skin Lesion Removal: An Examination of Medicare Data

**Presenter** Smith DP  
NSW Cancer Council,  
Woolloomooloo

**Authors** Smith DP, Armstrong BK

**Concurrent session D2**

The costs of skin lesion removal to the Australian health system are large. In any one year an estimated four percent of Australians have a skin lesion removed. Yet it has been estimated that the ratio of benign pigmented lesions to invasive melanomas is 30 to 1. Strategies to increase general practitioners' skills in detecting early skin cancers and reduce unnecessary lesion removal offer significant benefits. One such strategy involved restructuring the Medicare Benefit Schedule for reimbursement of procedures for their removal.

We obtained national data for all skin lesions removed and reimbursed under Medicare between 1984 and 1997 with the intention of describing the patterns and trends in skin lesion management in Australia. Data showed that in 1996 more than 1.6 million procedures for the removal of skin lesions were undertaken at a cost of over $87 million. Removal rates increased between 1994 and 1997 and were highest in the northern most states. Most (60%) of procedures were undertaken by general practitioners, while the remainder were undertaken equally by plastic surgeons and dermatologists. The majority (70%) of procedures were for the removal of tumours, cysts, ulcers or scars.

Changes to the Medicare Benefit Schedule in 1996 through higher reimbursement for pathologically proven skin cancers were designed to decrease the inappropriate removal of skin lesions and save $4 million annually. However, this measure had the opposite effect, for while the overall number of procedures increased by just 2%, the cost in benefits paid increased by 23% as a shift from non-excisional procedures to excisions was evident. Subsequent changes were made to the schedule in 1997 to rectify this effect.
Health Services Research – Handicapped by Current Outcome Measures

**Presenter**  
Smith RA  
National Ageing Institute, Parkville

**Authors**  
Smith RA, Darzins PJ

**Concurrent session E3**

**Objectives:**
1. To discuss some limitations of the approach used at present to assess people’s health care needs and their outcome of health care
2. To clarify the place of personal-care handicap measurement in the planning, delivery and evaluation of health services.

**Thesis:**
Assessment strategies that can reveal people’s health related predicaments at the disease, impairment, disability and handicap levels (as per the WHO -ICIDH) are important for the targeting of health services. Use of outcome measures to reflect the changes that have occurred as a result of health services also is important. The use of disease, impairment or disability-based measures is widespread, however, the utility of such tools to measure outcome in some settings is seriously limited because they do not measure change in handicap. Handicap - the impact of illness on people’s everyday life is particularly relevant for people with chronic, incurable disease. For people with these conditions the main aim of intervention is to reduce handicap. Despite the obvious need to gather information about personal-care handicaps (clothing, hygiene, nutrition, mobility, safety, residence and available supports) these are rarely formally assessed in clinical settings. Indeed, although it is widely recognised by clinicians that measurement of handicap is important to direct intervention and to judge its success, most outcome measures ignore handicap and concentrate on impairment and disability. Particularly in sub-acute and chronic care there is a mismatch between clinical interventions, resources expended and the outcomes measured.

**Conclusions:**
All health care professionals, health care administrators and health services researchers need to revisit the concept of handicap to ensure that they do not overlook this important and useful construct.

Unemployment: Why Not Give Someone a Job?

**Presenter**  
Stuart S  
Centre for Health Equity Training Research and Evaluation, Liverpool

**Authors**  
Harris L, Stuart S

**Concurrent session D6**

Health services in Australia are major employers. However, when thinking about the action that the health care system can take to reduce the impact of unemployment on health, finding people who are unemployed, work in the health care system is often overlooked as an effective strategy.
Phase 1 – Department of Employment Education Training and Youth Affairs (DEETYA)
For two years funds were received from DEETYA to establish a) a referral network between the Commonwealth Employment Service (CES) and the Area Health Service, b) provide training and work experience opportunities for people who were long term unemployed. Over the time project operated over 180 people were employed and 90% of all trainees had positive outcomes.

Phase 2 – Coping with Changing Times

The dismantling of the CES and creating of the Employment Network has caused a radical shift in the range of opportunities for providing employment opportunities within the health system. Work for the Dole, trainee-ships with limited subsidies and a user pays structured work experience program are options. The last of an integrated system for large organisations (such as AHS) to deal with means the opportunities for employing people who are unemployed has dramatically reduced.

The impact of the changes on employment outcomes and organisational support for these types of projects are discussed.

**Discrete Choice Modelling to Measure Consumer Preference for Drug Treatments**

*Presenter*  
Taylor SJ  
University of Sydney

*Authors*  
Taylor SJ, Armour CL

*Concurrent session A1*

This study was designed to assess whether patients could make an informed choice of treatment and to measure patient preference for one of two treatments used to induce labour. The treatments compared were artificial rupture of the membranes (ARM) plus oxytocin and prostaglandin E\(_2\) vaginal gel.

Discrete choice modelling was used. A description of the two methods in terms of six attributes was formulated. Levels were assigned to the attributes and a fractional factorial, main effects design generated. 18 different scenarios, which included all six attributes at varying levels, were presented to 400 pregnant women attending a public hospital antenatal clinic. Respondents were asked to choose between the two treatments in each scenario. A random effects probit regression analysis was conducted. Respondents’ marginal willingness to pay (WTP) for each attribute and their WTP for particular scenarios were calculated.

88% of questionnaires were returned and 309/400 (77%) of responses were considered to be valid. All attributes were found to significantly influence women’s choice of treatment. The marginal WTP was:- $11 for a 1% reduction in the chance of needing oxytocin as well as gel, $20 for a 1% chance of needing an epidural anaesthetic, $55 for each hour reduction in the length of time from induction to delivery, $90 for a 1% reduction in the chance of needing a Caesarean section and approximately $300 to have the treatment in the ante-natal ward or a single room rather than the labour ward. In the average case scenario the WTP was $80.

The patients studied were able to make a choice of treatment based on the information provided. The figures obtained could be used, together with information on costs, to aid health care decision
Consumer Participation in Health Care Services: Measuring Achievements and Effectiveness

Presenter       Tobin M  
SESAHS, Kogarah

Authors         Tobin M, Chen L, Chan S

Concurrent session B7

Over the last couple of years health services have increasingly focused on consumer participation. It is no longer acceptable that all the decision making power lies in the hands of service providers. Consumer participation seeks to involve consumers in all aspects of health.

This paper will examine the level, extent and quality of mental health consumer participation within the South Eastern Sydney Area Health Service. Three levels of consumer participation have been identified as being:

- participation in the consumer’s own treatment and recovery plan,
- participation in the delivery and planning of health services,
- participation in consumer led activities.

In different parts of the Area, various levels of resources have been committed to improving consumer participation and various models trialed. The project employed a qualitative research method and relied on consumers to obtain the information. These consumers went through training for conducting interviews and taking notes. They were employed by the Area Mental Health Program for a period of 4 to 6 weeks. Interviews with consumers were conducted to assess their understanding of and involvement in the three levels of consumer participation. Correlation between consumers’ views of the effectiveness of participation and resources committed were noted.

Results on the level, extent and quality of mental health consumer participation will be presented and discussed, and the value of consumer interviewing fellow consumers will be reviewed.

Beyond Development of Clinical Practice Guidelines: The Challenges of Implementation

Presenter       Tobin M  
SESAHS, Kogarah

Authors         Tobin M, Chen L

Concurrent session E7

Clinical practice guidelines (CPGs) have been developed for many years. They are part of a quality improvement strategy which aims to standardise clinical practice. Much effort has been put into the development of CPGs, but there is considerable evidence of low rates of clinician uptake.

This paper will present 4 years of experience by an Area Mental Health Service operationalising
and implementing CPGs, using academic/management/clinician partnership model. It will focus on the dissemination and implementation strategies which were used. These include involvement of clinician leaders during operationalisation to foster the culture of a learning organisation; achieving balance between requirements of standard and a sufficient user-friendliness to promote incremental change; restructuring the service to maximise compliance with implementation; and building a process of continued quality improvement which ensures constant monitoring and feedback.

Results on clinician compliance, changes in clinical practice and improvement with services will be discussed from clinical data and clinician/manager, consumer interview. Our experience with CPG implementation in the four mental health priority areas will be described. These are (1) Recent Onset Psychosis; (2) Deliberate Self-Harm; (3) Co-morbidity with Drug and Alcohol Problems and (4) Late Onset Depression. The management challenges inherent in application of national policy directions will be discussed.

Evaluating A Clinical Support Systems Project - Where to Begin?

**Presenter**

Toulkidis V  
Australian College of Physicians,  
Sydney

**Authors**

Patterson CG, Toulkidis V

**Concurrent session E2**

The Clinical Support Systems Project (CSSP) seeks to integrate the two main parallel movements that aim to improve the quality of care in Australian hospitals namely:

Clinical Practice Improvement (CPI), which uses the management of clinical practice, including tools such as clinical pathways, outcome and performance indicators, clinical measurement and review and consumer pathways in a continuous improvement cycle supported by appropriate information systems.

Evidence-Based Medicine (EBM), which involves incorporating best available evidence, based on scientific research, into the clinical decision making process using tools such as clinical practice guidelines, peer reviewed clinical research and direct clinical measurement.

CSSP promotes multi-disciplinary leadership and supports the clinical practice, cultural change, organisational development, technical capacity, and consumer involvement required to affect systemic changes to patient care.

The CSSP will examine and evaluate how CPI can reduce the opportunity for error and enable clinicians to use available evidence to analyse variations in treatment and outcome, that reflect either the uniqueness of the patient or may indicate a weakness in the care process. The use of CPI systems supports the implementation of EBM through its direct application in clinical practice. By monitoring the outcomes of care and analysing critical performance, outcome and resource measures, it will enable comparison with previous measures, those achieved by other clinicians and that available in the medical literature.

The CSSP involves the development, implementation and evaluation of a series of pilot studies...
which will be discussed, including the complexity of developing appropriate health outcomes measurement instruments and appropriate evaluation tools for a coordinated system of care. The progress of the pilot studies will be outlined.

**Complications of Cholecystectomy: A Validated, Population Study Using Record Linkage**

*Presenter*  
Valinsky LJ  
University of Western Australia, Nedlands

*Authors*  
Valinsky LJ, Hobbs MST, Fletcher DR, Knuiman MW

*Concurrent session C4*

**Background:** Since its introduction to Australia in 1990 laparoscopic cholecystectomy has become the method of choice for removal of the gall bladder. There have been, however, some concerns about the safety of this procedure, particularly in relation to bile duct injuries.

**Methods:** We conducted a population-based study of the outcomes of cholecystectomy for the years 1988-1994, using the Western Australian Health Services Research Linked Database. As there was no ICD9-CM code for Bile Duct Injury it was essential to use linked re-admissions and a combination of condition and procedure codes to identify suspected cases of intra-operative injury following cholecystectomy. We reviewed hospital records to ascertain the prevalence of injuries in this population, and to validate the database. Using logistic regression methods we determined the factors associated with these injuries.

**Results:** The proportion of laparoscopic cholecystectomies increased from 25% in 1991 to 80% in 1994. All complications increased from 0.56% during 1988-90, to 1.09% during 1993-94. We identified a significant increased risk of intra-operative injuries associated with the laparoscopic method (adjusted OR 2.5, 95%CI 1.53-4.22). We also demonstrated, for the first time, that intra-operative cholangiography has a significant protective effect for these complications (adjusted OR 0.50, 95%CI 0.35-0.70).

Having found an association between visualisation of the bile duct and outcomes of surgery, we have used the database to describe trends in the different methods used to visualise the biliary tree, and identify demographic and clinical factors associated with each method.

The recent expansion of the linked database to 1980-1997, will enable us to continue to monitor trends in complications of surgery and clinical practice. We will also be able to investigate long-term outcomes of gall bladder disease, and its associated costs and management.

**Evaluation of Health System Reform – A Case Study**

*Presenter*  
van Eyk HC  
Flinders University, Adelaide

*Authors*  
vvan Eyk HC, Baum FE, Blandford JM

*Concurrent session E2*
This paper identifies a significant gap in relation to the evaluation of health system reform both internationally and within Australia. It then describes work in progress on an evaluation being undertaken of a case study of health system reform in the southern metropolitan area of Adelaide, South Australia. This reform process involves a group of hospitals and community health services working towards the development of regionally focused population based health care delivery through increased collaboration and planning between the agencies. The reforms being evaluated have emerged from strategies developed by the agencies themselves in attempts to respond to budgetary pressures and to the desire to improve service provision to the community. This paper considers some preliminary findings from the initial data collection for this evaluation project. It discusses what these preliminary findings may suggest about health system reform and considers the implications for the design of evaluation of health system reform in a continually changing context.

**Telehealth Service Planning in NSW**

*Presenter*  
van Gool K  
NSW Health Performance Management, North Sydney

*Authors*  
Oong D, van Gool K, Viney R, Haas M

*Concurrent session C5*

Telehealth in Australia aims to provide access to health services to under-served populations in rural and remote parts of the country. Since 1996 the NSW Department of Health has established 14 Telehealth projects, each undergoing rigorous evaluation and testing of the technology. The next phase for telehealth in NSW will be the integration of telehealth services into the day to day service delivery of the health system. The desired economists' aim for the policy maker would be to create an environment where, from a society's point of view, telehealth is provided up to the point where marginal costs equal marginal benefits. This would result in efficient use of resources devoted to telehealth. To achieve this, however, a number of impediments such as cost shifting, incentives and service impacts will need to be overcome before such a milieu is established. Based on the experiences of the NSW Telehealth Initiative, this paper will examine how best this economic goal can be achieved. It will also address some of the key policy issues facing the federal system of Government and outline the service planning initiatives taken by NSW Health. The paper concludes that telehealth crosses many of the existing boundaries in the health care system and therefore requires clear policy directions at all levels of government.
Risk and Uncertainty In Health Care: Issues for Economic Evaluation

Presenter Viney R
CHERE, Camperdown

Author Viney R

Concurrent session A1

Economic evaluation is concerned with capturing the value of health care interventions to society. Health care involves risk and uncertainty. Thus, the value of health care interventions to individuals will incorporate the value of the outcomes and the value of the risk. If individuals value risk, then this is relevant to the value that society places on health care, and on different health care interventions. This paper argues that none of the conventional methods of economic evaluation have adequately considered the impact of the value of risk associated with health care. The conventional approaches have not distinguished between aggregating the value of the expected outcomes of the intervention to the individual and valuing the aggregated outcomes of the intervention to the population.

This paper explores issues which arise from recognising the need to include the value of risk and uncertainty associated with health care in economic evaluation. It describes the nature of risk and uncertainty in health care. It identifies explicit and implicit assumptions about the value of risk and uncertainty which have been incorporated in conventional economic evaluation methods, including cost-effectiveness analysis and the different utility estimation methods used in cost-utility analysis. An assessment is made of the circumstances under which these assumptions are likely to be reasonable. The implications for social decision rules are discussed.

Remote Area Health Services Research Methodology

Presenter Wakeman J
Centre for Remote Health,
Alice Springs

Author Wakeman J, Warchivker I,
Bennett M, Healy V

Concurrent session E6

Health services research in remote areas presents some unique challenges and opportunities. Working in a cross-cultural context, in a distinct historical and political setting and across large distances have implications for the methodology to be used. This paper describes the qualitative and quantitative methodology developed in a regional remote health service review. The qualitative methodology includes the development of explanatory tools, extensive community consultation and ongoing communication and negotiation with multiple stakeholders. The quantitative methodology includes population estimation, detailed expenditure analysis, the development of a resource allocation algorithm and model costing. The authors then discuss issues related to appropriateness of the research team, the benefits and constraints of a participatory approach, project planning, particularly risk management, researcher fatigue and multiple contemporaneous projects.
Distributional Impact of Higher Patient Contributions to Australia’s Pharmaceutical Benefits Scheme

Presenter    Walker AE
University of Canberra

Author       Walker AE

Concurrent session A6

In Australia, as in most other developed countries, there has been growing concern about sharply rising health expenditures. One of the areas of strongest growth has been the Pharmaceutical Benefits Scheme (PBS).

This paper uses NATSEM’s Pharmaceutical Benefits Model to analyse the effects of a hypothetical 25 per cent rise in patient contributions to medicines prescribed under the PBS. The model, based on microsimulation techniques, simulates the impact of changes in policy settings and provides a much broader range of outcomes information, at a much greater level of detail, than has previously been available.

The paper considers the impact of higher contributions by individuals on the government-to-patient split in total PBS prescription costs, as well as the distribution of such costs across age groups, family incomes, family types and by 36 prescribed medicine types. The paper also reports on changes in the shares of family incomes spent on prescribed drugs arising from the hypothetical 25 per cent rise in patient contributions.

Changing Use of Time in the Provision of Clinical Care

Presenter    Walker R
La Trobe University, Bundoora

Author       Walker R, Adam J

Concurrent session D7

In 1996, in the midst of major hospital reforms in Victoria, time was the resource hospital staff most frequently spoke of as problematic.

In a qualitative study of two separate clinical units, changes to the use of time were explored. The two units offered very different services and approached changes to their use of time in quite different ways. One unit approached time in quite orthodox ways and sought to delete chunks of it wherever possible. There were significant changes of work organisation but not, apparently, in the conceptualisation of time and its associated social arrangements. The second unit approached time in a very different way. Care was individualised, staff work relationships in the unit were redesigned and substantial changes to the processes of care were achieved.

It is not possible to generalise to other sites on the basis of two case studies. However, it is possible to conceptualise the ways time was managed, and some consequences that followed. The lessons learned from this study will be relevant to any manager seeking to utilise time more efficiently while at the same time seeking to maintain, or improve, quality of services.
Potential Returns on Investment in Aboriginal Health

Presenter  Warchivker I  
Menzies School of Health,  
Alice Springs

Authors  Warchivker I, Wakeman J

Concurrent session C3

This paper examines the results from hospitalisation analysis and it identifies the costs of alternative prevention options for four Aboriginal communities in Central Australia. We have found that, despite different funding arrangements and different management structures, the hospitalisation pattern in the four communities was similar. The Aboriginal Community Controlled Health Services exhibited lower hospitalisation rates than the other health services examined. The pattern of hospitalisation for all types of health services was dominated by unacceptable rates of hospitalisation amongst children under 5 years of age and especially, children under 2 years of age. The hospitalisation rates of the adults over 50 years of age were lower than expected.

The perspective taken here is that scarce health resources should be used to provide the best value for money. Our starting point was to examine suitable methods, costs and possible benefit to the serviced population. This was intended to be incorporated into policy. In this paper we present a detailed analysis of alternative prevention option for selected causes of hospitalisation related to inadequate nutrition of children under 3 years of age. It is expected that a nutrition program in the community for the under 3 years of age would prevent an estimated 20-30 hospitalisation per year from the four communities examined or 40-60 percent of hospitalisation related to inadequate nutrition. This would account for a potential cost savings of $98,000 - $160,000 a year in health care costs. It would also help focus the activities of the health service to improve early detection of nutritional problems of kids therefore, assisting to reduce the levels of hospitalisation. The program has positive flow on effects on the health of other children in the community. Finally the paper address the implications of this study to Central Australia.

Converting Research into Workable Policy: Bilingual Staff in Mainstream Project

Presenter  Whelan A  
SWSAHS, Liverpool

Author  Whelan A, Noble C, Matthews C, Johnson M

Concurrent session D6

Australia has a highly culturally diverse population, and this is reflected in people who are admitted to hospital. While New South Wales has a well-developed Health Care Interpreter Service, it is generally limited to office hours. The Telephone Interpreter Service is often difficult for health professionals and sick patients to use. Research from South-West Sydney Area Health Service has shown that 31% of staff are bilingual or multilingual. How can these staff be utilised so that patients receive improved care, staff are not exploited, managers are aware of appropriate use of bilingual staff, and the Area Health Service is legally covered? NSW Department of Health has invested in continuing research which will develop policy applicable across all Area Health
Services in the state. This means that an appropriate language assessment tool is developed; bilingual staff are identified; language needs of patients are identified and various models of utilising staff are trialed. The qualitative research currently being conducted is to inform the draft policy. Stakeholders have been involved in the concurrent research and policy process, and the outcomes will hopefully be a policy based in sound research that is understandable to decision-makers in the health service. This project provides an informative case study of research explicitly linked to policy formation.

**Clinical Indicator Development**

*Presenter*  
Williams J

*Author*  
Williams J

**Concurrent session A7**

Over the last decade in particular there has been increasing interest in measuring health outcomes throughout the world. This interest is widespread, coming from consumers, providers and those responsible for funding health programs. Although their primary motivation may vary, all the stakeholders would like to be able to determine the performance of health services and this has lead to a surge in the development of quality programs with associated performance measures. The many programs have been developed using different models and much has been written about the various attributes and criteria that measurement tools should have if they are to be useful. This presentation will compare the development models and the attributes of performance measures considered important by the national programs throughout the world. The validity of the data collected will be examined when discussing the interpretation of results and application of the various programs.

**Helping or Humbugging? Community Consultation in Remote NT Communities**

*Presenter*  
Williams RL  
NT University, Darwin

*Author*  
Williams RL

**Concurrent session B7**

The author has been involved in several health and education projects in remote communities over the last twenty years, most recently with a Top End regional planning study. The study involved developing a health services planning document detailing population data and health services resource and utilisation data. Gaps in services were identified by comparing what health services people actually have access to, with an agreed level of services to which people should have access to.

The community consultation process highlighted and reiterated several issues relating to health services for people in remote indigenous communities. Some of these issues included: concerns as to whose agenda(s) was being met and who the process would actually benefit; perceptions of yet another ‘visiting expert’ and ‘their’ project adding to the burden of overstretched staff; and ongoing requests for provision of relevant services and training.
Consultation has been only one of the problematic aspects of service delivery for rural and remote communities. There are varying and (often) conflicting demands and expectations of key stakeholders, especially in relation to pressure placed on service deliverers to provide a ‘magic formula’. These services have been expected to predict and demonstrate health and economic related benefits in the short term. These demands mitigated against an emphasis on developing sustainability or community capacity, forcing a focus on quick results.

The paper also examines some of the aspects of cultural safety in relation to health service delivery in remote indigenous communities.

**Is Mental Health Case Management Effective?**

*Presenter*  
Ziguras S  
St Vincent’s Hospital, Fitzroy

*Authors*  
Ziguras S, Stuart GW, McKenzie D

*Concurrent session A4*

Case management has been widely introduced in community mental health services over the last twenty years, and there are more than fifty studies into its effectiveness. Most qualitative reviews of these studies have concluded that case management is effective. However, a recent meta-analytic review by Marshall and colleagues as part of the Cochrane collaboration concluded that case management (excluding assertive community treatment): ‘approximately doubles the number of hospital admissions with little evidence of causing an improvement in mental state, social functioning or quality of life’. These findings have been widely discussed, and appear to have been influential in some areas of psychiatry.

We also conducted a meta-analysis of studies of the effectiveness of case management in mental health. Our methods were similar to those used by Marshall, but with less restrictive inclusion criteria so that more data could be analysed. Our findings match Marshall’s as far as hospital admissions and drop-out rates from services are concerned but we also found that case management decreases total days in hospital, improves level of social functioning, client satisfaction and symptomatology, and decreases family burden of care. Overall our conclusions about the effectiveness of case management are positive and starkly different to those of Marshall.

This paper will briefly present the results of our meta-analysis, and explore some methodological issues in meta-analytic research, which forms the basis of most approaches to ‘evidence based medicine’. In particular we will discuss the effect of different inclusion criteria (such as study quality, or including only previously published measures) to the overall findings of meta-analytic studies. Finally, this paper raises some questions about the nature of ‘evidence’ and judgement used by researchers and policy-makers.