Health Outcomes: An Overview

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The Health Outcomes Jigsaw

Integrating the elements for health improvement

health outcomes, health gain, population health, evidence based medicine and health care,clinical practice improvement, practice guidelines, benchmarking, continuous quality improvement, quality of life, consumer focus, cost effectiveness...

Health Outcomes: 6 Reasons

- increasing expenditure/cost containment
- limited information on effects of treatments/services
- practice variations across regions / physicians
- whether new technologies improve patient well-being
- concerns re quality of care
- increasing empowerment of consumers

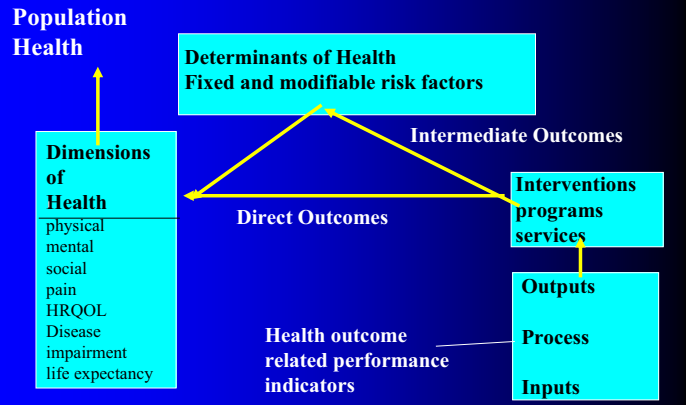
What is a health outcome?

A health outcomes is a change in the health of an individual, or a group of people or a population, which is wholly or partially attributable to an intervention or series of interventions. (AHMAC 1993, Modified NHIMG 1996)

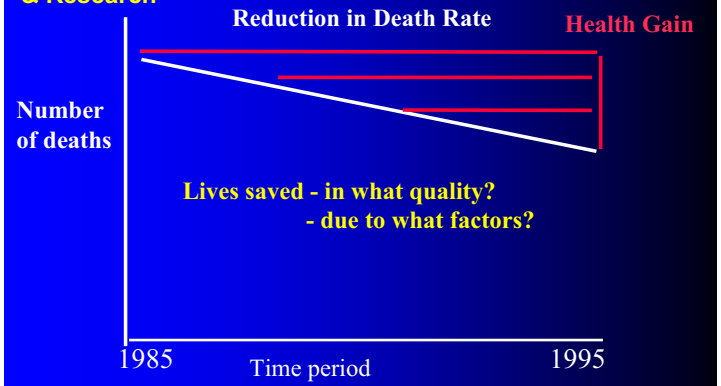
Health Outcomes Related Performance Indicators

An outcome-related performance indicator in the health and welfare field is a statistic or other unit of information which reflects, directly or indirectly, the performance of a health or welfare intervention, facility, service or system in maintaining or increasing the wellbeing of its target population (Armstrong, 1994)

Health Outcomes Framework



Health Status Monitoring vs. Health Outcomes Monitoring & Research



EFFICACY and EFFECTIVENESS

Converting inputs to outcomes

domain	measure	process
science	efficacy	RCT
practice	effectiveness	evaluation
process	quality of care	QA
personal	competence	audit

Research designs & levels of evidence

Pretest-Posttest Designs (before and after, with and without)

Randomized control trial

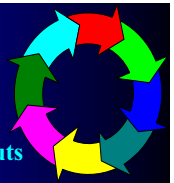
non equivalent comparison group designs -no random allocation (field experiments)

one group designs -no comparison/control

Other Designs

posttest only designs, time series designs, surveys, correlation and factor analytic studies, data mining, naturalistic observations and 1 shot case studies, qualitative research designs - including focus groups

The Service Evaluation Cycle



- Structure — context, organization/model, inputs
- Process — how service delivered, procedural endpoints, process outcomes
- Outputs — efficiency, throughputs -often tied to costs data
- Outcome — change in health status due to intervention
- Impact — effect on the broader health and economic context

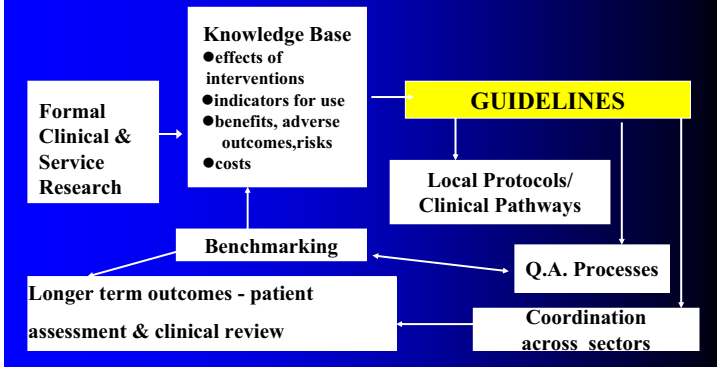
Q.A. & Health Outcomes Related Performance Indicators

- Structure/ Inputs - Organizational Structures, Standards, Resources
- Process/'Quality' Accreditation Indicators
- Patterns of Practice - Guidelines, Pathways, Standards & Variations, Adverse Events
- Throughput Issues & Waiting Lists - Efficiency & Effectiveness
- Consumer Information & Satisfaction
- Monitoring and Benchmarking Outcomes

Guideline Issues

- Stakeholder Involvement in Development?
- Credibility - Commercial /Colleges
- Evidence or Consensus Based?
- Outcomes Monitoring?
- Recency of Evidence
- Local Adaptation and Organizational Implementation
- Dissemination and Compliance

Guidelines Development, Implementation and Evaluation



GUIDELINES

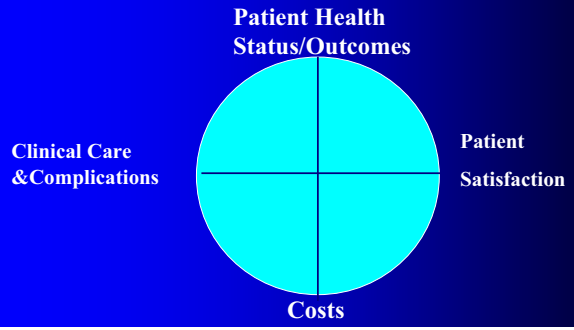
Useful for guiding practice

BUT NEED TO

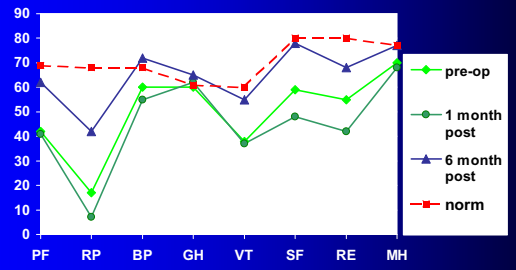
- continually update these guidelines based on evidence
- assess whether clinicians are using the guidelines
- assess whether the use of guidelines is leading to better patient outcomes

note National Guideline Clearinghouse (USA) can be found at www.guidelines.gov

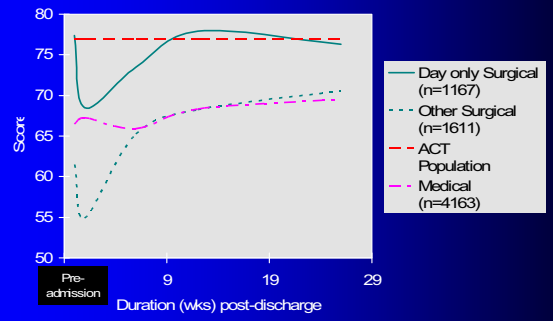
QA and Health Outcomes Monitoring Throughout the Clinical Pathway



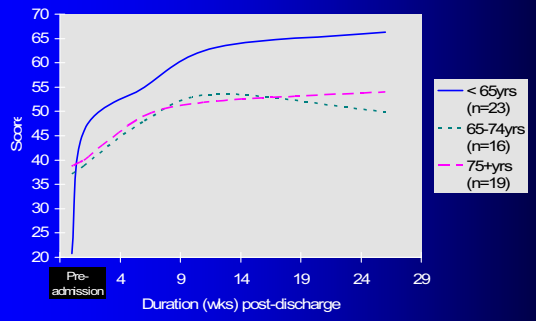
HEART VALVE REPLACEMENT

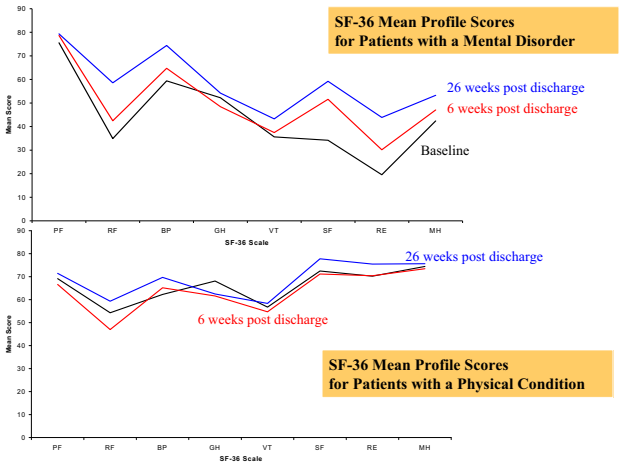


Mean Pain Scores (SF-36) for Surgical and Medical Patients

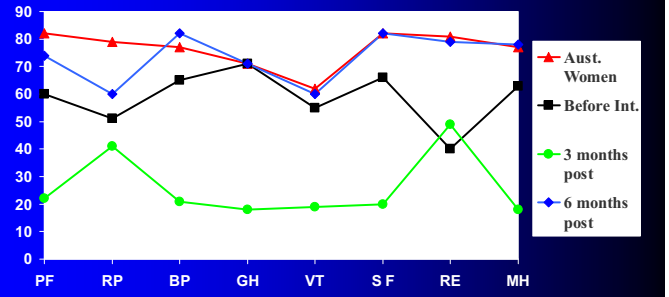


Mean Pain Scores (SF-36) for Hip Replacement Patients by Age Group





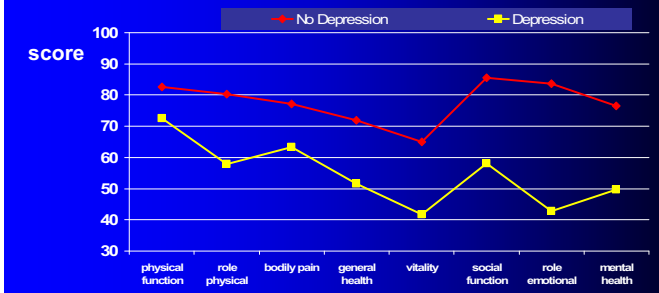
SF-36 Scores : Gynecological Cancer Surgery



Benchmarking For Costs and Quality

- Regional and Inter-hospital Practice Variations
- Interim Standards or Excellence?
- Anonymity or in the Public Domain
- Statistical/ Data Issues - indicators, aggregation, casemix adjustments, time frames, analysis
- Meaningless Benchmarking
- Clinical Audit of Outcomes Data -AROC, AMHOCCN, Orthopedics

SF-36 Subscale Scores by Depression (NHS)



Clinical Monitoring: Mental Health

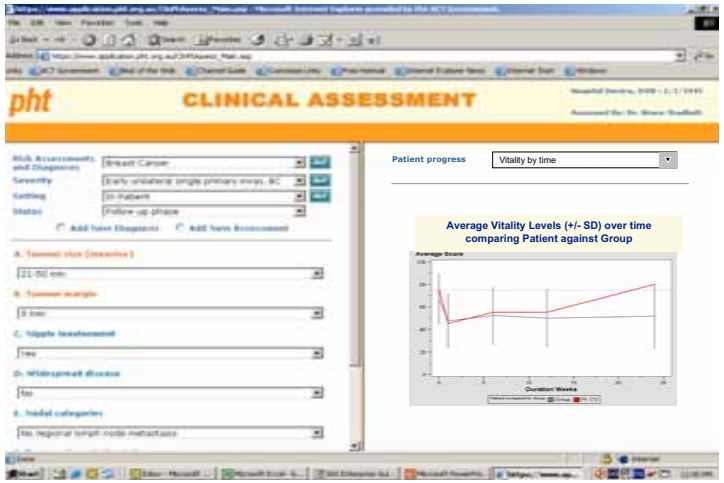
- Review of consumer outcome measures – Andrews et al., 1994
- Small trial of potential consumer measures (BASIS, MHI, SF-36) and provider measures (HoNOS, LSP, RFS)
- Development of MH Classification and Service Costs Project MH-CASC (HoNOS, LSP, RUGS-ADL).
- Routine Implementation – HoNOS, LSP for all inpatients plus chosen consumer measure (K-10, BASIS, MHI) - latter also used for outpatients

Clinical Monitoring & Benchmarking

- Beginnings of service comparisons – outcomes results adjusted for patient mix - Casemix Adjusted Relative Mean Improvement (CARMI)
- HoNOS - assumed predictor of cost also good predictor of outcome
- But is a severity assessment measure a good measure for monitoring patient outcomes over time?
- Australian Rehabilitation Outcomes Centre (AROC) - Similar benchmarking initiatives in rehabilitation (using FIM)
- Issues of real time feedback are critical for clinical use, static databases are not the answer

IT and Disease Management Systems

- An example is Protocol Hypothesis Testing (PHT). This is a web enabled intelligent knowledge management system for outcomes management - providing real time feedback to clinicians
- Allows recruitment to RCTs and HSR studies while providing support for patient care
- Integrates EBM knowledge bases, guidelines, in developing decision support algorithms
- includes HRQOL data with settings which can be linked to instrument review repositories and provide feedback to these



Types of Outcome Indicators

Direct Indicators — mortality, period of survival, morbidity as measured by generic, disease specific and clinical indicators over time

Predictors — accident/risk factors and injury, Glasgow Coma Scale score, co-morbidity, severity

Indicators of Process — adverse events, compliance with guidelines, time in critical care, time to receive treatment, readmissions, complications, level of patient functioning

Types of Outcomes Indicators

Well-being Indicators — accommodation, employment, transport, wellbeing (e.g. outcomes of mental health patients- SCAP)

Relative Costs — ALOS, costs of treatments and services, economic impact on the individual - days of work, compensation and pension costs

Consumer Issues & Health Outcomes

- Access to Care (and affordable medicine!)
- User Satisfaction with, and Participation in, Care Processes and Services
- Informed Consent and Informed Choice
- Accountability and Quality of Care
- Costs and Value for Money Issues

WHOSE OUTCOMES?

Road Trauma: Antonia's Desired Outcomes (post injury)

- to survive
- regain the capacity to communicate
- regain as much functioning as impairments/disabilities may permit
- come to terms with loss and future disability
- manage disability and minimize handicap
- to remain healthy albeit with a chronic disability
- to become less of a burden to carers
- to regain confidence and a sense of self control/direction
- to obtain employment or income support
- regain and maintain independent living skills
- to live independently in the community

WHOSE OUTCOMES?

Desired outcomes Indicators

- Patient
- Parent/Family
- A&E Director
- Director of Rehabilitation
- Commonwealth Health Administrator
- State Health Administrator
- Public Health Officer/ Epidemiologist
- General Practitioner

Maximal and Optimal Outcomes

Optimal health outcomes are the best that can be achieved under the prevailing, practical circumstances of the health system

Maximal health outcomes cannot be achieved because of the practical 'conflict' at the system level, between the two immediate objectives of the health system

- Optimization of equity in the delivery of health interventions
- Optimization of the cost effectiveness of health interventions delivered

INDICATORS: ROAD TRAUMA

Primary Prevention

might include indicators around intersectoral activities such as legislation concerning seat belts, licensing, car and road design, effectiveness of education campaigns -alcohol

Screening

drivers license testing including eye sight and epilepsy screening

INDICATORS: ROAD TRAUMA

Early Diagnosis or Intervention

'golden hour' - time to road trauma treatment centre, period of survival, appropriateness of care accuracy of diagnosis

Treatment

adverse events, complications, compliance with treatment guidelines, injury type and severity in relation to period of survival, hrqol ….

INDICATORS: ROAD TRAUMA

Rehabilitation

Time to rehabilitation, wellbeing, health related quality of life during rehabilitation, proportion of patients with persisting disability who have received appropriate rehabilitation

Outpatient Rehabilitation /Ambulatory Care

proportion of patients returning to and retaining independent community residence, return to work or gaining of employment or training

INDICATORS:PALLIATION

Proportion of patients dying in their preferred surroundings

Proportion of patients dying free of pain and physical discomfort

Proportion of patients dying at peace with themselves

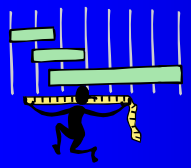
Prevalence of healthy grieving in close family and friends

Patterns of practice, e.g. drug use, unnecessary surgical procedures

Desired Outcomes: Care Co-ordination

- Improved patient health and wellbeing outcomes
- Improved patient management and monitoring
- Reduction in lifestyle risk behaviours of client group
- Prevention of the onset of associated diseases and complications
- Reduction in acute episodes and unplanned hospital admissions
- Patient satisfaction with care management
- Patient compliance with medications and treatment plans, increased patient knowledge
- Reduction in the proportion of patients requiring medication for condition management, appropriateness of prescribing patterns

Indicators Exercise



Indicators Exercise

Read the case study

Choose a player –e.g Mother, Emily, Sameena, Health Administrator etc

Consider the desired outcomes of your chosen player

Discuss your ideas with your group

Report back.

Emily: Asthma

- Patient
- Parent/Family
- A&E Director
- Government Health Administrator
- Public Health Officer/ Epidemiologist
- General Practitioner
- Community Services

Desired outcome

minimize effect lifestyle & sport

Areas for Indicators or Measures

Asthma symptoms, HRQol, pulmonary function, effective self-management

Some Questions to Ask

What is the intervention being evaluated?

What are the goals of the intervention?

What is the hypothesis?

Are we examining group or individual outcomes?

How do you define the intervention?

What are the desired outcomes of this intervention - if this treatment or service works what would you expect to happen?

What information does the organization collect routinely -does any of this reflect on outcome?

Is there any baseline information?

Allied Health Example : The Footpath Project (refer paper P.19)

Outcome Type	*Foot Health Indicators*	*Effectiveness Goal*	*Quality Action Point*	*Data Source*	*Frequency of Review*
Disease Specific Outcome					
General Health Outcome					
Patient Performance Outcome					
Patient Satisfaction Outcome					

Allied Health Example (Cont.)

- The ***indicator*** is based on what the intervention is trying to achieve within the scope of the service. A number of indicators may be identified, and these should be prioritized into those aspects of care which are most important for the service.
- The ***effectiveness goal*** is the level to which the organization is going to aim to achieve the chosen indicator. The ***effectiveness goals*** and ***quality action points*** are arbitrary and ideally, should be based on the evidence of the effectiveness of interventions as shown by research.
- The ***quality action point*** is a predetermined threshold that is used to flag the need to introduce quality improvement activity to improve performance on the indicators.
- The ***data source*** requires careful consideration to provide the level of information required in the most effective way. Consideration must be given to the availability of the data, the method of data collection, how much data is required to provide meaningful results and, the value of the data in terms of providing useful information.

Allied Health Example (Cont.)

- The outcome type may be 'General Health Outcome'
- The foot health indicator could be Foot Health Status Questionnaire (FHSQ)
- The effectiveness goal might be: 90% of patients report that their foot status is excellent or very good
- The quality action point may be 70%
- The data source may be giving the FHSQ to 33% of patients who receive foot health care
- The frequency of review might be 6 monthly

….Population Group Approaches

INDICATORS FOR POPULATION GROUPS: WOMEN'S HEALTH

Primary Prevention

might include indicators concerning modifiable risk factors for women's health and effectiveness of primary prevention/education campaigns e.g smoking prevalence and incidence, targeting of screening campaigns, nutrition/obesity, domestic violence etc.

Screening and Ambulatory Care

breast and cervical cancer screening; proportion of women at risk receiving routine monitoring for hypertension, cholesterol, bmi, depression and appropriate referral to health promoting activities, presence of care plans, care satisfaction

INDICATORS: WOMEN'S HEALTH

Early Diagnosis or Intervention

Gender differentials concerning timeliness of diagnosis and treatment, stage of condition at diagnosis, appropriateness of care, accuracy of diagnosis, prescribing patterns

Treatment

adverse events, complications, compliance with treatment guidelines, patient compliance with treatment protocols, practice variations in relation to gender, prescribing patterns, severity of condition in relation to survival, hrqol

INDICATORS: WOMEN'S HEALTH

Rehabilitation

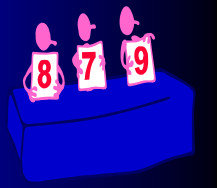
Time to receive rehabilitation, wellbeing, health related quality of life during rehabilitation, proportion of women with persisting disability who have received appropriate rehabilitation

Outpatient Rehabilitation

proportion of women returning to and retaining independent community residence, return to work/care roles or gaining/returning to employment or training

Indicator Issues - Women's Health

Indicator - high Cesarean section/hysterectomy rate compared with other states (and therefore higher costs)



How do we know whether the rates are reflecting avoidable /inappropriate surgical intervention or conservative practice?

Why is this occurring and are there regional/hospital variations that beg questions concerning appropriate practice?

Is the average for Australia the appropriate benchmark? What might best practice guidelines and available evidence indicate the rate should be?

Indicator Issues in Strategic Plans

Objective: Increase support for women with disabilities affected by violence and reduce their isolation

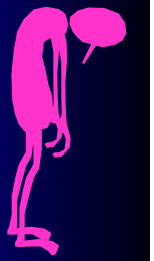
Initiative: Establish peer support groups for women……..

Performance Indicator: 4 peer support groups to be established by xxxx

Outcome Issue: Did the presence of peer support groups improve these women's hrqol, self esteem, or reduce their isolation? Did the participants judge these groups and this strategy to be of value?

Indicator Issues: Strategic Plans

Objective: Lower incidence of ongoing depression in older women in residential care settings...



Initiative: Develop guidelines for appropriate assessment services on identification, and provide support for older women when moving into residential care

Performance Indicator: Develop guidelines for assessment services by XXXX

Outcome Issue: Are the guidelines being used, what support are the women receiving following identification, and to what extent are these activities contributing to better patient outcomes. (Note with better identification strategies your incidence might increase!)

Population Approaches: National Health Priority Areas

…..NG&Ts, Better Health Outcomes for all Australians…and now NHPAs

Leading causes of death and disability, the burden of illness for the community

areas of increasing prevalence, or high rates of prevalence

areas of concern for our indigenous peoples (diabetes)

Areas where it is thought gains can be made (ebhc)

high social and financial cost……but

Disease based -priority populations? Differentials and equity issues?

political knee jerks?

Health Status and Outcomes

How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?

Health Conditions	Human Function	Life Expectancy & Wellbeing	Deaths
Prevalence of disease, disorder, injury or trauma or other health related states	Alterations to body, structure or function (impairment) activities (activity limitation) and participation (restrictions in participation)	Broad measures of physical,mental and social wellbeing of individuals (QOL/ HRQOL) and derived indicators such as Disability Adjusted Life Expectancy (DALE)	Age and/or condition specific mortality rates

National Health Performance Framework

Determinants of Health

Are the factors determining good health changing for the better? Is it the same for everyone? Where and for whom are these factors changing.

Environmental Factors	Socio-economic	Community Capacity	Health Behaviours	Person - related Factors
Physical, chemical & biological factors e.g air, water & food quality resulting from chemical pollution & waste disposal	Factors Factors such as education, employment, per capita expenditure on health, & average weekly earnings	Factors such as population density, age distribution, health literacy, housing, community support services & transport	Attitudes, beliefs, knowledge & behaviours e.g patterns of eating, physical activity, alcohol consumption, and smoking	Genetic related susceptibility to disease & other factors such as blood pressure, cholesterol levels & body weight

National Health Performance Framework

Health System Performance

How well is the health system performing in delivering quality health actions to improve the health of all Australians? Is is the same for everyone.

Effective

Care, intervention or action achieves outcome

Responsive

Service provides respect for persons and is client oriented

Continuous

Ability to provide uninterrupted, co-ordinated care or integrated service across settings & time

Appropriate

Care/intervention/action is relevant to client needs and based on established standards

Accessible

people can obtain health care at the right place and irrespective of income, geography & cultural background

Capable

Individual/service's capacity tp provide a health service based on skills and knowledge

Efficient

Achieving desired results with most cost effective use of resources

Safe

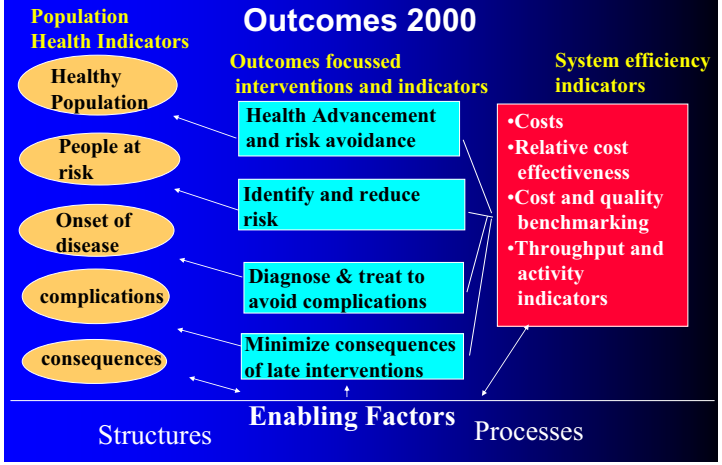
The avoidance or reduction to acceptable limits of actual or potential harm from health care management or the environment in which health care is delivered

Sustainable

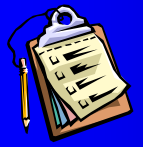
capacity to provide necessary infrastructure and respond to emerging needs

National Health Performance Framework

Outcomes 2000



Part 2: Instruments & Measures



Instruments and Measures

1. Rank order the 5 most important things to you in your life at present (refer next slide)
2. Please fill in SF-36 V1 survey provided
3. Compare this to Version 2 provided

SEIQOL

What are the things that you would rate as being the most important areas of your life?

1

2

3

4

5

On a scale of 1-10 (1 being worst possible, and 10 being best possible) how do you think you are doing in each of these life areas

Discussion

What are the most important dimensions?

Where did health rate?

Is there a difference between QOL and HRQOL?

Might the importance of 'health' vary depending on age/stage of life, gender, lifestyle and cultural factors?

CONSTRUCT OF HEALTH

Absence of disease, illness, injury?

or

'A state of complete physical, mental and social well-being, and not merely the absence of disease or injury.' (WHO, 1981).

The World Health Organization has recommended the development of measures of positive health..is this too broad?

Health and Well-being

Dimensions of Well-being

- health
- life satisfaction
- social well-being
- economic well-being
- environmental well-being
- spiritual or existential well-being
- other characteristics valued by humans

Dimensions of Health

- morbidity (disease or impairment)
- limitations to functional abilities (disability)
- role limitations because of health problems (handicap)
- bodily pain
- mental health (psychological distress & psychological well-being)
- vitality (energy/fatigue)
- general perception of health

QOL/ HRQOL

- **These terms are often used interchangeably but refer to quite different types of instruments**
- **Examine SF-36 V2**
- **Is this measuring quality of life, or is it measuring health related quality of life?**

Discussion

- **Do you think the dimensions in the construct of health outlined here are the same for all groups?**
- **Can you provide examples where the dimensions within the construct of health may differ across groups?**

Difference in the meaning of health by social class - d'Houtaud and Field (1984)

Lower classes	Upper classes
Health as utility	Health as enjoyment
Health necessary to work	Health a value in itself
Fatalism	Control
Not being sick	Physical fitness, equilibrium and psychological well being
Focus on maintaining social relationships	Focus on the individual

TYPOLOGY OF OUTCOME MEASURES

- **QUANTITY of LIFE**
  - Mortality, survival, avoidable premature mortality
- **PROCESS**
  - Practice Variations, ORPIs- readmission, complications etc
- **QUALITY of LIFE**
  - Generic and specific measures
- **SATISFACTION**
  - Client surveys, focus groups

Health Related Quality of Life

Physical	Impairment	Disease/ Symptom	Single
Mental	Disability	Condition	Multiple Measures
Social	Handicap/ Capacitation	Generic Measures	Profiles/ Indexes

Types of Measures

Disease/ Symptom Specific –these usually are checklists of symptoms of a particular disease e.g cancer. These may include symptom severity and impact items. Sometimes there will also be a single symptom measure such as sexual or cognitive functioning included in a battery (refer Rotterdam Checklist).

Condition Specific – Instead of a measure of depression you may have a broader measure that assesses mental health in general e.g Beck vs. HoNOS. Functional status measures for the elderly are often applied this way.

Blends - where a quality of life or hrqol measure is combined with a disease specific or condition specific measure (e.g Asthma QOL, FIQL). Some issues with these measures.

Types of Measures

- **Generic HRQOL/ Health Status Measures** – SF-36, NHP
- **Generic QOL/ Well-Being Measures** – COMQOL, WHOQOL
- **Generic Functional Status** – FIM, Barthel
- **Health Utility Indexes** – for economic evaluation particularly cost utility analysis - AQOL, EQ5D, HUI
- **Patient Satisfaction Measures** – CQ 8, CQ18, Picker Commonwealth, GUTTS
- **Outcome Measurement Suites** – Stanford Q for CDM, COMS, DOMS
- **Individual Measures (Seiqol, Patient Generated Index…)**

Some Example Questionnaires

- **Please fill in SF-36 V1 and SF-36 V2**
- **What changes have been made and why do you think that is?**
- **Were there any questions you found puzzling or difficult to answer**

Criteria for Selecting Measures

- **Reliability** - consistency of measurement; internal consistency, inter-rater and test-retest reliability
- **Validity** - does the instrument measure what it claims to measure? (concurrent, content, construct, convergent, criterion, & discriminant validity)

  Discriminant - does the health status measure differentiate between the healthy public and the terminally ill?
- **Responsiveness** - can the instrument detect change over time - if it is not sensitive to changes in a person's condition over time it is not much use as an outcome measure

Criteria for Selection

- **Normative Data/Clinical Data:** – is information available for comparison purposes/benchmarks
- **Type of Instrument**: well-being measure, generic health status measure, health utility index, disease specific measure, symptom index, condition specific measure
- **Style of Instrument** - self report inventory, clinical rating scale, goal attainment scale - issue of proxy reports

Criteria for Selection

- **Practical Utility** -respondent burden, costs, training
- **Freedom from Confounding Factors** -social desirability, inappropriate questions, literacy levels
- **Relevance and Suitability of Application** -does the instrument cover the dimensions of interest
- **Mode of Administration** -client fills in survey, structured interview, computer assisted telephone interview (norms can vary by method)
- **Culture, Gender, Age Appropriateness** -note there are a number of instruments specifically designed for children and adolescents. Some instruments need language modifications for Australia.

Some Instrument Issues

After examining the instruments provided consider the following:

Rating scales vs. self report –what might be some of the issues?

Is SF-36 V2 an improvement on V1 and if so why?

Response options and ceiling and floor effects.

Weighting and double counting issues.

Standardised instruments vs. DIY.

How might age, gender and cultural issues affect our design/selection of instruments?

What instruments and items may be more prone to missing data?

When selecting instruments for an Outcomes Measurement Suite –how might we weight the criteria for selection?

Health Indexes

Possible Outcomes in Economic Evaluation

1. **The outcomes of treatment A and B are the same for all outcome measures including HRQOL (no difference)**
2. **All outcomes are superior in treatment A compared to treatment B (clearly A preferred)**

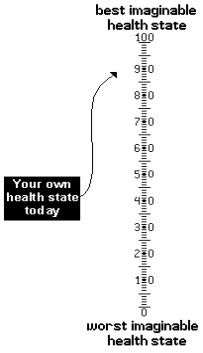
But what do we do if

3A. For Treatment A the HRQOL outcomes are better, but other outcomes such as survival are worse

or

3B. Outcomes differ by health dimension on the HRQOL measure between treatments A and B – one may improve physical functioning, the other mental – how do we weigh these up?

EuroQol EQ-5D



- **MOBILITY**
  - I have no problems in walking about
  - I have some problems in walking about
  - I am confined to bed
- **SELF-CARE**
  - I have no problems with self-care
  - I have some problems washing or dressing myself
  - I am unable to wash or dress myself
- **USUAL ACTIVITIES (e.g. work, study, housework, family or leisure activities)**
  - I have no problems with performing my usual activities
  - I have some problems with performing my usual activities
  - I am unable to perform my usual activities
- **PAIN/ DISCOMFORT**
  - I have no pain or discomfort
  - I have moderate pain or discomfort
  - I have extreme pain or discomfort
- **ANXIETY/ DEPRESSION**
  - I am not anxious or depressed
  - I am moderately anxious or depressed
  - I am extremely anxious or depressed

Example EQ-5D

Has 5 dimensions: mobility, self-care, usual activities, pain/ discomfort, anxiety/ depression (please fill in your copy)

3 levels of response are available for each dimension 1 = no problems, 2 = some problems, 3 = extreme problems

Thus a person with extreme anxiety may respond 1,1,1,1,3 across these dimensions = a person's health state

Community values/ 'utilities' have been ascertained for a range of these health states based on a scale 1 = best imaginable health state to 0 = worst imaginable health state (usually death).

Various methods may have been used to do this (Standard Gamble, Time Trade Off, Visual Analog Scale etc)

Life
1.0
0.0
Death

Valuations

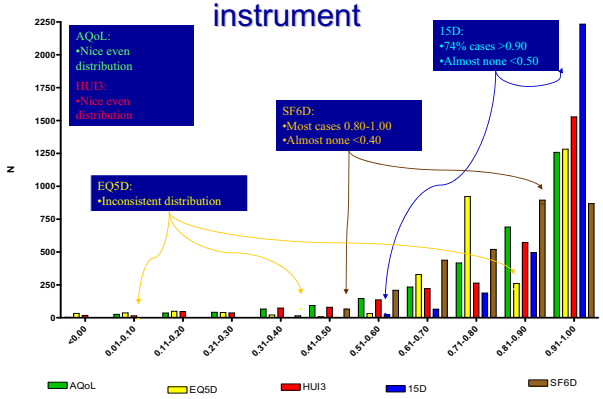
The result for this health state = 0.414 whereas from another condition e.g 11222 the valuation/ preference could be .689

By this method we have derived one total health score and thus can compare the valuations for different health conditions (burden) and of the effect of different treatments on a condition

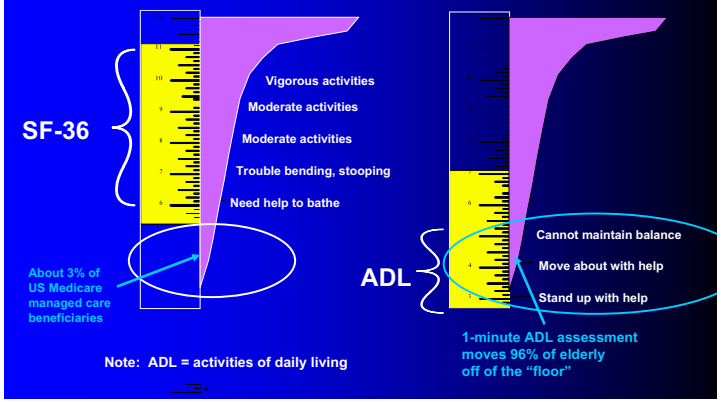
Utility for urinary incontinence could be .6. If treatment improves this to .7 over 10 years then the value of treatment =.10 * 10 = 1 Qaly. If we add the costs of treatments to this then the treatment providing the lowest cost per Qaly gained is preferred

As there is a common metric theoretically we can also compare different treatments for different conditions : Qaly league tables

Distribution of HRQoL utility scores by instrument



Combining and Refining Measures (Ware)



Note: ADL = activities of daily living

Some Useful References

For instruments and measures

Bowling, A. (2001) Measuring Disease, 2nd edit, Open University Press

Bowling, A. (2005) Measuring Health, 3rd edit, Open University Press

McDowell, I. & Newell,C. (1996) Measuring Health, 2nd edit, Oxford University Press

McDowell, I. (2006) Measuring Health, 3rd edit. Oxford University Press

Dittmar, S.S. & Gresham G.E (1997) Functional Assessment and Outcome Measures for the Rehabilitation Professional. Aspen Publications

Streiner, D.L. & Norman, G.R. (2003) Health Measurement Scales, 3rd edit, Oxford University Press

and refer to the health outcomes reading list provided.

Australian Health Outcomes Collaboration

Centre for Health Service Development, University of Wollongong

but located at The Canberra Hospital (02 62050869)

WEB SITE

currently www.chsd.uow.edu.au

- General Information
- Research Activities Proforma (RAID)
- Current and Forthcoming Educational Activities
- Health Outcomes Education and Research Personnel
- Instrument Order Forms (and reviews)
- Related Sites
- Contact Details

Some Australian Organizations

- Australian Bureau of Statistics
- Australasian Cochrane Collaboration
- Australian Council for Healthcare Standards
- Australian Institute of Health and Welfare
- Centre for Health Program Evaluation
- Centre for Health Economics and Research Evaluation
- Centre for Health Service Development
- Department of Health and Ageing -useful web site!
- State and Territory Health Departments - web sites
- OZQOL, ANZHAM Network….and many others

For more information contact the **AHOC**

Some International Agencies

- Agency for Healthcare Research and Quality (USA)
- Qmetric, USA
- National Centre for Health Outcomes Development (UK)
- Irish Clearing House
- FACTT, USA
- Sheffield Centre for Health and Related Research
- MAPI Group (France)…QOLID database (www.qolid.org)
- WHO and OECD and there are many others.

See our web links and refer to the health outcomes reading and resources list provided

Indicators Exercise

Emily: Asthma

	Desired outcome	Areas for Indicators or Measures
Patient	minimize disruption HRQOL, reduction acute episodes, self management	Asthma symptoms, HRQOL, pulmonary function, effective self-management-reduction acute episodes &admits
Parent/Family	Manage condition Avoid acute episodes	presence of management plan, parent knowledge, reduced admits
A&E Director	Minimize avoidable admissions	effective discharge planning, avoidable presentations/ readmissions to ED

Emily: Asthma

	Desired outcome	Areas for Indicators or Measures
Government Health Administrator	Reduce $ associated with condition through better management by providers - ensure $ spent leading to better management	compliance with guidelines, costs data, PBS data, performance indicators concerning effectiveness $ spent
PHO/Epidemiologist	Identify risk, incidence & distribution factors to assist in planning	Pop & regional data concerning spread & incidence, asthma surveys
General Practitioner	Early detection and better patient management	Screening for risk, presence of management plan, routine monitoring systems
Community Services	Provide appropriate community education programs, appropriate management and co-ord across services	Parents and teachers in education programs, identification/screening practices, appropriate referral practices, compliance with guidelines

Sameena: Depression

	Desired outcome	Areas for Indicators or Measures
Patient	Relieve symptoms & cope HRQOL, manage baby, reduce isolation	Reduction in symptoms – Qol/ Mental Health scale over time…….
Husband	Understand condition Better family relationships	Accessing counseling, relationship advice, DV reports?
Baby	Minimize avoidable admissions	Achieve normal developmental milestones

Sameena: Depression

	Desired outcome	Areas for Indicators or Measures
■GPs	Reduction in symptoms, appropriate med. Management, referrals…..	Care plan & monitoring, referrals to appropriate services, appropriate med.
■Community Health	Appropriate management plan & co-ord. of services	Presence of care plan, use of support services, baby achieving developmental milestones
■Turkish Support Group	Provide effective support	Time from referral to follow up, attendance at support group (proxy)
■A&E Director	Avoid emergency admits	Number of ED admissions
■Govt. Health Administrator	Avoid hospitalization or institutionalization	Compliance with care plans/guidelines for people from CALD backgrounds