

## Priority Setting Techniques in Primary Health Care Research

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## Why Priority Setting?

- Consistency of process
  - Can ease understanding
  - Facilitate transparency
- Convey order and priority
  - In a systematic way
- Emphasise urgency
  - Minimise distracters

## How Can Priority Setting Research Be Used?

- To control the flow of medical traffic
  - In the consultation
  - Within the health care system
- To define clinically useful stopping rules
  - When to intervene
  - How long to “wait-and-see”
- To assist choice
  - Private health insurance
- To enhance the organisational quality of care
  - Broadening the range of information used in decision-making
  - Resulting in tangible benefits in recruitment, compliance and retention

## Components of Priority Setting

- Topics
  - Evidence based review
- Contextual Factors
  - Framework of Primary Health Care
- Modifying Factors
  - Priority-setting techniques

## Previously Used Priority Setting Techniques

- Delphi
- Nominal Group
- Conjoint Analysis

## Delphi Technique

- Two rounds
  - Panellists rate, discuss and re-rate
- Useful in distance mode
- Qualitative rating
  - Topics not ranked according to explicit criteria
- Priority setting process not systematised
- Topics, context and modifying factors not delineated
- A3GP process

## Nominal Group Technique

- Literature review
- Participants
  - Write down views
  - Contribute one priority
  - Privately rank ideas
- Ranking is tabulated
- Overall ranking discussed and re-ranked
  - Findings fed back to group
- Useful in small groups
- Topics and context identified
  - Ranking not systematised
- Modifying factors not systematically incorporated
- PHCRED Workshop 2003

## Modified Conjoint Analysis<sup>1</sup>

- Two step process
  - Topics prioritised
  - Modifying factors introduced
- Step One
  - Paired comparisons
  - Participants choose priority topics
  - Useful to narrow down range
- Step Two
  - Grid analysis
  - Participants rank topics by modifying factors
  - Useful to introduce outcome focus

<sup>1</sup>Ryan BMJ 2000

## Modified Conjoint Analysis


## Modified Conjoint Analysis

	After Hours (A)	Workforce (B)	Medicare (C)
After Hours (A)			
Workforce (B)			
Medicare (C)			

## Modified Conjoint Analysis

	After Hours (A)	Workforce (B)	Medicare (C)
After Hours (A)	X		
Workforce (B)	X	X	
Medicare (C)	X	X	X

## Modified Conjoint Analysis

	After Hours (A)	Workforce (B)	Medicare (C)
After Hours (A)	X	B	C
Workforce (B)	X	X	C
Medicare (C)	X	X	X

## Modified Conjoint Analysis

	After Hours (A)	Workforce (B)	Medicare (C)
After Hours (A)	X	B 1	C 3
Workforce (B)	X	X	C 1
Medicare (C)	X	X	X

C = 4 ( 80%)  
 B = 1 (20%)  
 A = 0

## Exercise: Modified Conjoint Analysis


## Reviews of Modifying Factors

- Two reviews
  - One local
  - One international
- Centre for Health Program Evaluation
  - Monash University
  - Review Primary Health Care specific
  - In depth, academic process
- Council on Health Research and Development
  - WHO, Geneva
  - Review specific to organisation
  - Pragmatic, consensus driven
- Both readily available on the Web

## Using Balanced Scorecard

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Peak Priority High demand High potential to improve outcome	

## Using Balanced Scorecard



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Peak Priority High demand High potential to improve outcome	High Priority Unexplored demand High potential to improve outcome



## Using Balanced Scorecard



Peak Priority High demand High potential to improve outcome	High Priority Unexplored demand High potential to improve outcome
High Priority High prevalence Low potential to improve	



## Using Balanced Scorecard



Peak Priority High demand High potential to improve outcome	High Priority Unexplored demand High potential to improve outcome
High Priority High prevalence Low potential to improve	Non-Peak Unrealistic demand Decreasing potential to improve outcome



## Centre for Health Program Evaluation Criteria

- Relevance
- Interface between producers and users
- Public accountability
- Scientific quality
- Feasibility and timeliness
- Multidisciplinary
- Final presentation of results





## Using Balanced Scorecard







Peak Priority High demand High potential to improve outcome	High Priority Unexplored demand High potential to improve outcome
Interface between producers and users	
High Priority High prevalence Low potential to improve	Non-Peak Unrealistic demand Decreasing potential to improve outcome







### Using Balanced Scorecard

 <p>Peak Priority High demand High potential to improve outcome</p> <p><b>Interface between producers and users</b></p>	<p>High Priority Unexplored demand High potential to improve outcome</p> <p><b>Relevance</b></p>	
 <p>High Priority High prevalence Low potential to improve</p> <p><b>Scientific quality</b></p>	<p>Non-Peak Unrealistic demand Decreasing potential to improve outcome</p>	





### Using Balanced Scorecard

 <p>Peak Priority High demand High potential to improve outcome</p> <p><b>Interface between producers and users</b></p>	<p>High Priority Unexplored demand High potential to improve outcome</p> <p><b>Relevance</b></p>	
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### Using Balanced Scorecard

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 <p>High Priority High prevalence Low potential to improve</p> <p><b>Scientific quality</b></p>	<p>Non-Peak Unrealistic demand Decreasing potential to improve outcome</p> <p><b>Public accountability</b></p>	





### Exercise: Using Balanced Scorecard

 <p>Peak Priority High demand High potential to improve outcome</p>	<p>High Priority Unexplored demand High potential to improve outcome</p>	
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### Council on Health Research for Development (COHRED) Strategy

- Appropriateness
  - No duplication
- Right fit
  - For COHRED
- Success
  - Achievable outcomes
- Impact
  - Beneficial to stakeholders

### Using Balanced Scorecard

 <p>Peak Priority High demand High potential to improve outcome</p> <p><b>Right fit</b></p>	<p>High Priority Unexplored demand High potential to improve outcome</p> <p><b>Impact</b></p>	
 <p>High Priority High prevalence Low potential to improve</p> <p><b>Achievable outcomes</b></p>	<p>Non-Peak Unrealistic demand Decreasing potential to improve outcome</p> <p><b>Success</b></p>	

## Exercise: Using Balanced Scorecard

	<p><b>Peak Priority</b> High demand High potential to improve outcome</p>	<p><b>High Priority</b> Unexplored demand High potential to improve outcome</p>	
	<p><b>High Priority</b> High prevalence Low potential to improve</p>	<p><b>Non-Peak</b> Unrealistic demand Decreasing potential to improve outcome</p>	

## Priority Setting In Consultation-Based Research

## Prioritising Symptoms

- More than half all primary health care visits<sup>1</sup>
- High base rate
- Can relate to a number of morbidities
- Potential to create traffic jams

<sup>1</sup> Kivimäki K. Studying Symptoms: Sampling and Measurement Issues. *Annals of Internal Medicine* 2001; 135: 844-853

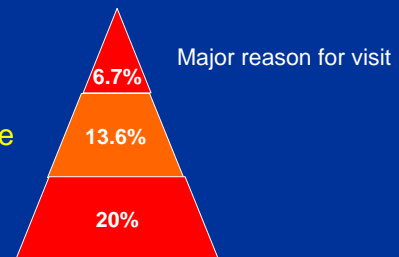
## Symptoms: Not always the reason for visit

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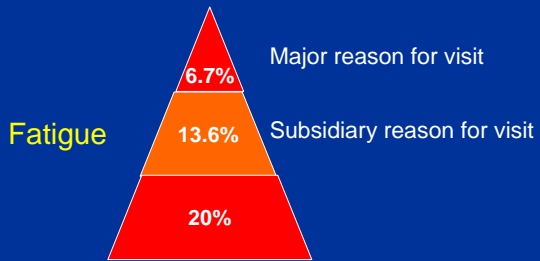
Fatigue

## Symptoms: Not always the reason for visit

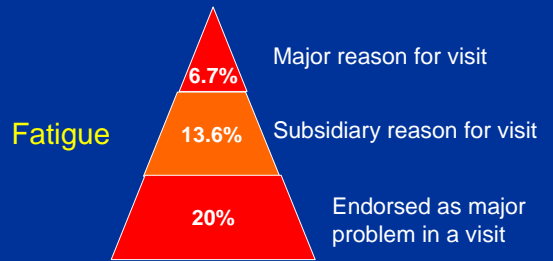
Fatigue



### Symptoms: Not always the reason for visit



### Symptoms: Not always the reason for visit



### Symptoms: Can change over time

### Symptoms: Can change over time

Dizziness

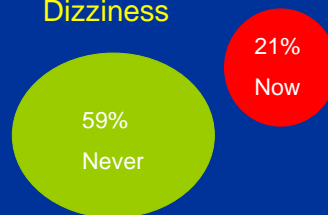
### Symptoms: Can change over time

Dizziness



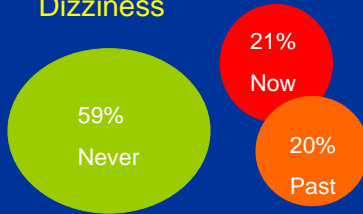
### Symptoms: Can change over time

Dizziness



## Symptoms: Can change over time

### Dizziness



## Symptoms: Can relate to a number of co-morbidities

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- Consider a 25 year old woman who presents with fatigue...

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- Consider a 25 year old woman who presents with fatigue...
- You are thinking, could this be...

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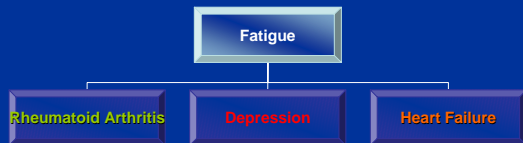
## Symptoms: Can relate to a number of co-morbidities

- As a child she had an episode of bacterial endocarditis...



## Symptoms: Can relate to a number of co-morbidities

- As a child she had an episode of bacterial endocarditis...
- She has just given birth to her fourth child...

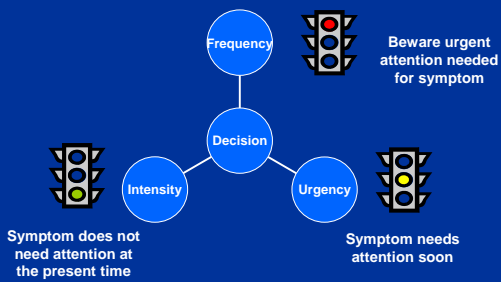


## Symptoms: Can relate to a number of co-morbidities

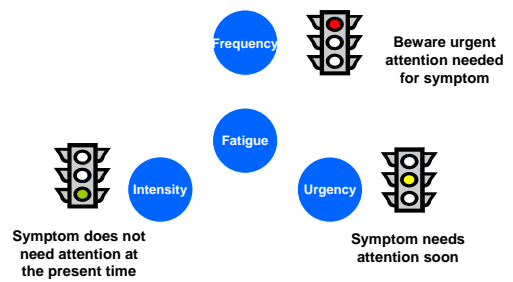
- As a child she had an episode of bacterial endocarditis...
- She has just given birth to her fourth child...
- She works at home making clothes and has sore joints all her working life....



## Using Prioritisation In Symptom Recording

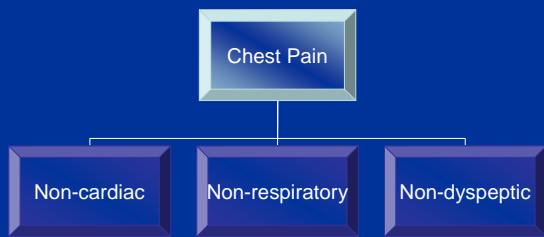


## Exercise: What Factors Would You Use To Prioritise?



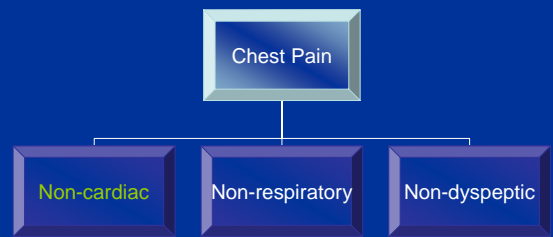
## Symptoms: Exclusion Can Be Time Consuming

- A 45 year old presents to your clinic with chest pain...



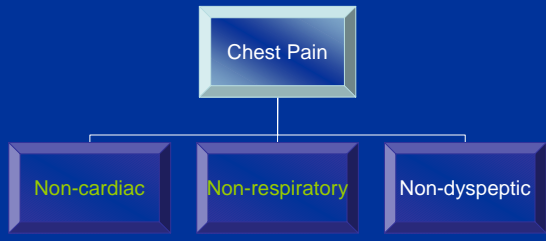
## Symptoms: Exclusion can be time consuming

- He has no cardiac risk factors...



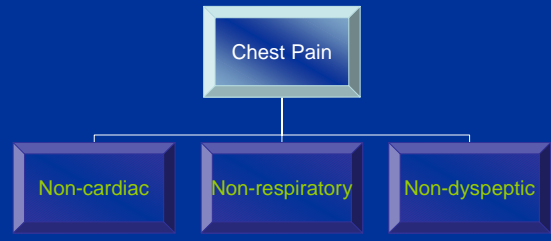
## Symptoms: Exclusion can be time consuming

- He has no cardiac risk factors
- He has no respiratory history...

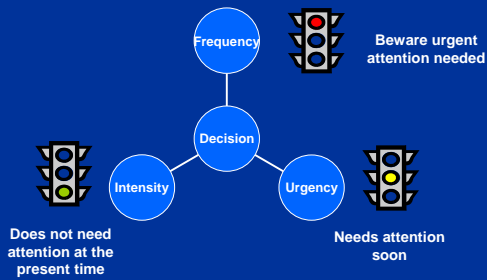


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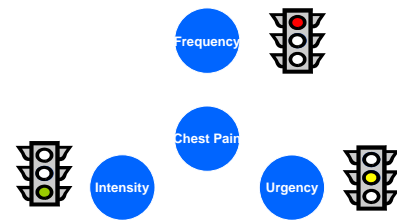
- He has no cardiac risk factors
- He has no respiratory history
- He has no GI history



## Prioritising Management



## Exercise: How Would You Prioritise Your Management?



## Using Prioritisation To Control The Flow Of Traffic In The Consultation

Co-morbidities

## When there is more than one problem what should we do?

- 40% of patients presenting to general practitioners have more than one health problem that is dealt with in that consultation
- Over 10% have more than two problems managed
- Over 25% of consultations involve more than one management strategy: prescription, lifestyle, investigations, referral, procedure!

## What are the conditions we need to prioritise?

- Australian GP Top Ten<sup>2</sup>
  - Patient: Check-up, Prescription, Cough, Immunisation, Test results
  - Doctor: Hypertension, Upper respiratory tract infection, Depression, Lipid disorder, Asthma

<sup>1</sup> BEACH Australian Institute of Health and Welfare 2001

## Exercise 3: Co-morbidity In Practice

Patient: Check-up, Prescription, Cough, Immunisation, Test results

Doctor: Hypertension, Upper respiratory tract infection, Depression, Lipid disorder, Asthma

What features would assist you in prioritisation?

- Cause for Intervention (STOP)
- Watching Brief (BEWARE)
- Improvement (GO)

## Prioritising In The Health Care System

Paying For The Doctor

Use this chart to compare your Medicare options



Green light! The plan may meet your needs

Yellow light! Look carefully and ask questions

Red light! The plan may not meet your needs

What health care coverage do you need?	Medicare Only	Medicare + Supplemental Coverage	Medicare HMO (Health Maintenance Organization)	Medicare PPO (Preferred Provider Organization)	Medicare PFFS (Private Fee-For-Service Plan)
1. Choice of doctor	Green	Green	Red	Yellow	Yellow
2. Specialist access	Red	Green	Yellow	Yellow	Yellow
3. Affordable on a fixed budget	Red	Yellow	Yellow	Yellow	Yellow
4. Coverage away from home	Green	Green	Red	Yellow	Yellow
5. Prescription drug coverage	Red	Yellow	Yellow	Yellow	Yellow
6. Works with Medicaid	Green	Yellow	Yellow	Yellow	Yellow

Medicare Rights Center

Use this chart to compare options



Green light! The plan may meet your needs

Yellow light! Look carefully and ask questions

Red light! The plan may not meet your needs

What health care coverage do you need?	Medicare Only	Medicare + Supplemental Coverage	Medicare HMO (Health Maintenance Organization)	Medicare PPO (Preferred Provider Organization)	Medicare PFFS (Private Fee-For-Service Plan)
1. Choice of doctor	Green	Green	Red	Yellow	Yellow
2. Other	Red	Green	Yellow	Yellow	Yellow
3. Affordable on a fixed budget	Red	Yellow	Yellow	Yellow	Yellow
4. Coverage overseas	Green	Green	Red	Yellow	Yellow
5. Prescription drug coverage	Red	Yellow	Yellow	Yellow	Yellow
6. Works with Medicaid	Green	Yellow	Yellow	Yellow	Yellow

## Prioritising In Health Care Institutions

Balanced Scorecard

Example: Corporate level balanced scorecard in health<sup>1</sup>

Financial			Customer			Operational			People			Technical			
Indicator	Target	FY99 Final	Indicator	Target	Status	Indicator	Target	Status	Indicator	Target	Status	Indicator	Target	Status	
Adjusted Discharges	23,900	23,940	Patient Satisfaction	Choose key focus areas for improvement	C	Arranging Care	Determine required phone models, conduct pilots	C	Cultural Development	Complete employee survey	C	Quality Improvement	Implement system-wide provider structure	C	
Encounters	912,183	912,210	Employee Satisfaction	Complete survey development & implementation in CY 1999	CY	Arranging Care	Determine required model for registration & scheduling	C	Complete physician survey	C	Complete external quality report in CY 1999	CY	Complete external quality survey	CY	
Cost per Adjusted Discharge	6,964	7,035	HEDIS Indicators	Select indicators for development	M	Providing Care	Determine model for patient delivery system for clinical divisions	C	Complete employee survey	C	Meet or exceed standards for SMOG accreditation	C	Meet or exceed standards for SMOG accreditation	C	
Cost per Encounter	215	224	Community Awareness	Complete reporting process and inventory	C	Providing Care	Complete system strategy for ambulatory surgery	C	Complete plan to assist Catholic	C	Information Technology	Complete IT strategy plan in CY 1999	CY	Complete IT strategy plan in CY 1999	CY
Operating Margin	2.0	1.3	Community Awareness	Complete survey in CY 1999	CY	Decision Making and Tracking	Complete plan for discounted codes and charge entry	C	Employee Relations Strategy	Accomplish 75% equity	C	Medical Education & Research	Complete report of funded grants and publications	C	
Excess Margin	3.8	3.5	Market Share	Complete baseline	C	Decision Making and Tracking	Complete feasibility study for a women's health center	C	Structure employee benefits	C	Medical Education & Research	Complete report of funded grants and publications	C		
Days Cash on Hand	103.8	106.6				Decision Making and Tracking	Complete plan for a genetics program	C			Facilities Planning	Complete Patient & Web plan	M		
Days in Accounts Receivable	77.7	77.7													
Return on Investment	3.4	3.5													

C = task completed, CY = Calendar, M = modified

1 Balanced Scorecard Co-operative bscol.com

Exercise: Reprioritise With PHC Focus

Financial			Customer			Operational			People			Technical			
Indicator	Target	FY99 Final	Indicator	Target	Status	Indicator	Target	Status	Indicator	Target	Status	Indicator	Target	Status	
Adjusted Discharges	23,900	23,940	Patient Satisfaction	Choose key focus areas for improvement	C	Arranging Care	Determine required phone models, conduct pilots	C	Cultural Development	Complete employee survey	C	Quality Improvement	Implement system-wide provider structure	C	
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## In summary

The concept can be used

- In the consultation to
  - control the management of symptoms
  - prioritise co-morbidities
- In communities to
  - prioritise health problems
  - facilitate consumer choice in health insurance
- In health care organisations to
  - provide a balanced scorecard

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