Data – From Here to Integrity

Stephen Thomas
Operations Director, Ambulatory Services
Peter MacCallum Cancer Centre
Stephen.Thomas@petermac.org

Background

- Peter MacCallum Cancer Centre is Australia's largest specialist cancer centre
- Services are aligned around the Victorian Cancer Framework
- Contemporary Cancer treatment is predominantly Ambulatory
- Ambulatory Services account for over 200,000 patient attendances per annum
- PMCC identified substantial need to address funded activity overruns and better understand contributing factors
- Need to measure key improvements

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Background

- Victorian Context
  - Over the last 3 years Victoria has embarked on a program of Outpatient Reform
  - Major focus on Specialist Clinics
  - Planned phasing in of VINAH MDS
  - Planning phased implementation of MBS billing
  - Current ability to access *meaningful* data is minimal
  - Ability to benchmark and report meaningful activity data also minimal

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Opportunity

- The development of a comprehensive suite of performance measures would provided the opportunity to address both internal and external strategies:
  - internally it would enable Peter Mac to more readily measure its performance with respect to priority objectives such as activity overruns, resourcing pressures, patient flow, and MBS compliance,
  - externally it would demonstrate accountability to key stakeholders, and enable participation in industry benchmarking and the ability to report against the VINAH MDS

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Project Scope

- Specialist Clinics setting
- Focused on the pre clinic, clinic and post clinic phases of the patient attendance

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Project Objectives

- Develop a suite of performance measures for the Specialist Clinics that:
  - Align with organisational strategic directions
  - Align with the VQC Dimensions of Quality
  - Robust, clearly defined and *meaningful*

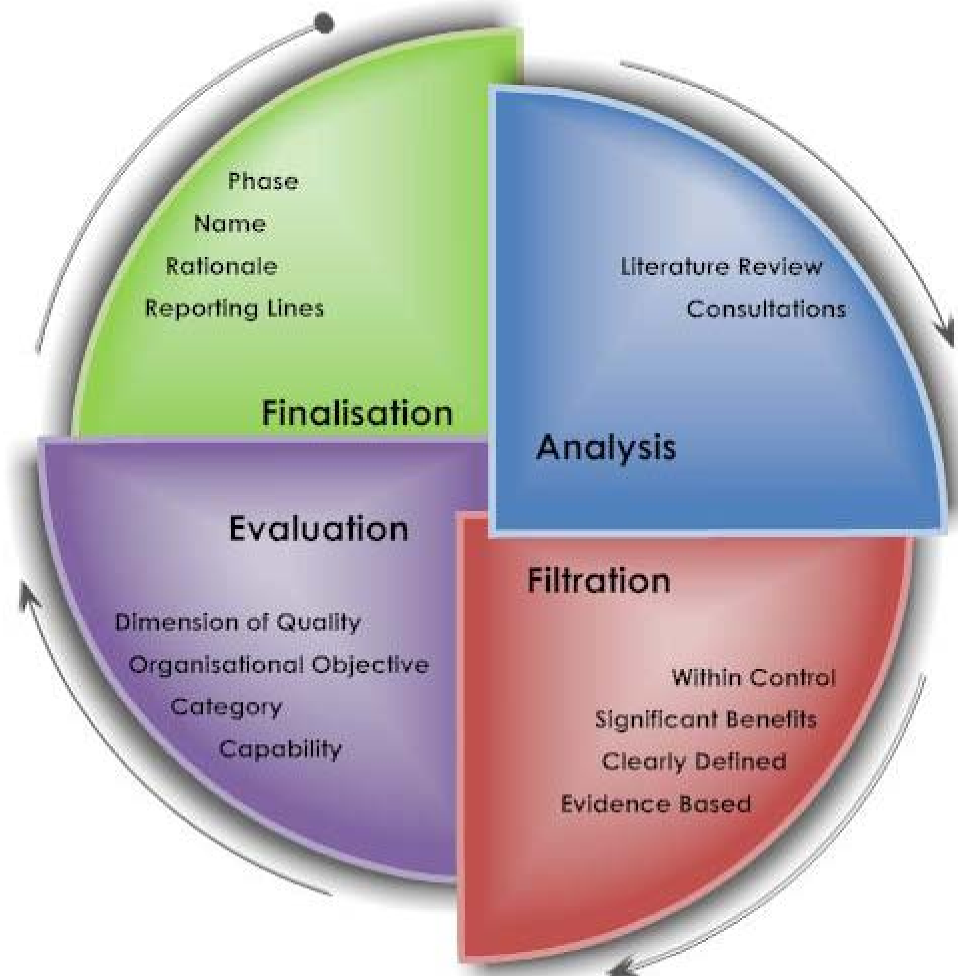
Peter Mac
EXCELLENCE INNOVATION COMPASSION

Project Aims

1. Establish a required and desired suite of KPIs to monitor access and performance across the outpatient specialist clinic service
2. Ensure the KPIs are robust; measures should be clearly defined, reliable and meaningful
3. Ensure the KPIs align with the Victorian Quality Council (VQC) Dimensions of Quality
4. Ensure the KPIs align with Peter Mac Specialist Clinic Strategic Directions
5. Identify all required data elements for the development of the KPIs and the VINAH MDS and categorise into those that are capable of being captured and those that are not
6. Illustrate the relationships between the organisational strategic directions, the Dimensions of Quality, individual data elements, the pathways of collection and the KPIs through the creation of an Outpatient Data Map
7. Refine the data elements and establish the KPIs that can be measured. Those KPIs that cannot be measured will be identified to be addressed in Phase Two of this project
8. Develop a staged implementation plan for the introduction of KPI reporting

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Methodology



4 Step Process

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Stakeholders

Table 1 - The impact on stakeholders	
Project Stakeholders	**Impact**
Clinical Chairs of Service	Low The impact is expected to increase in Phase Two with the implementation of the KPIs.
IT Clinical Information Analysts	Low The impact is expected to rise significantly in Phase Two as: - Technical information is required - Infrastructure modifications may be required - System training may be required – Ongoing reporting/auditing will be required
Outpatient Managers	Medium The impact was at a medium level as it required membership of the KPI working group. It is expected to remain at medium level throughout Phase Two and beyond.
Business Coordinator Ambulatory Services	Medium The impact was at a medium level as it required membership of the KPI working group. It is expected to rise throughout Phase Two and beyond with ongoing responsibility for collection, management, review and reporting of the KPIs.
Operations Director Ambulatory Services	Medium The impact was at a medium level as it required membership of the KPI working group. It is expected to remain at medium level throughout Phase Two and beyond with the overall accountability for outpatient specialist clinic performance.
Clinic clerical Staff	Low The impact is expected to increase in Phase Two with the implementation of the KPIs.
Peter Mac Committees – *Operations, Clinical Systems, Board Finance, Board Quality, Clinical Governance, Outpatients Improvement and Innovation Steering Committee*	Medium The input required from the Clinical Systems Committee and the Operations Committee was at a medium level. It is expected that the involvement of the Clinical Systems Committee will cease at the end of Phase Two. The ongoing impact for the Operations Committee, Board Finance, Board Quality, Clinical Governance and the Outpatient Improvement and Innovation Steering Committee will be at a medium level as they will regularly receive and review KPI performance reports.
Departmental Representatives *Pharmacy, Pathology, Radiotherapy, Diagnostic Imaging, Quality, Allied Health*	Medium The impact was at a medium level with input into the development of the KPIs required.
Department of Human Services	Low – Medium The involvement of the DHS in the collection of data through the VINAH MDS has been at a low to medium level throughout Phase One.

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Communication Methods

Based on two major objectives;

1. to engage staff/stakeholders in the development of the performance measures and to report the project progress to relevant stakeholders.
2. communicate project progress via regular meetings with the project sponsor and through presentations to the relevant hospital committees

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Project Governance

KPI Working Group established in April 2008.

Purpose:

- Develop a comprehensive suite of KPIs for the Specialist Outpatient Clinics
- Evaluate the suite of KPIs using Peter MacCallum approved methodology
- Establish regular reporting lines for each of the KPIs

Functions:

- The functions of the KPI Working Group shall include, but not be limited to:
- Oversight of the KPI project and associated work threads
- Prepare reports for the PMCC Outpatient Improvement and Innovation Steering Committee for discussion
- Prepare reports for the Operations Committee and Clinical Systems Committee on activities at agreed timelines
- Liaise with key internal and external stakeholders of varying levels as required to meet the objectives of the KPI project

Membership:

- Operations Director, Ambulatory Services (Chair)
- Business Coordinator, Ambulatory Services
- Outpatients Manager, Ambulatory Services
- Nurse Unit Manager, Specialist Clinics
- Project Officer, Outpatients Department
- Quality Representative
- Medical Representative

Peter Mac

EXCELLENCE INNOVATION COMPASSION

Risk Management

- No major risks where identified at the commencement of the project
- However 'Scope Creep' became a risk during the project

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Step 1. Analysis

- Following a wide review of literature relating to both outpatient services and KPI development. Face to face consultations with the project stakeholders, a preliminary set of measures was established
- Total potential performance measures = 86
- Basic ‘Domains’ of activity where clustered into 3 Categories

Peter Mac

EXCELLENCE INNOVATION COMPASSION

KPI Categories

Key - Categories highlighted in bold are common categories of interest among stakeholders

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Step 2. Filtration

Filter Framework

Within Control?

Does Peter Mac have the ability to take action to impact performance on this measure?

Significant Benefit?

If actions are taken on this item will there be significant and tangible benefits to the services delivered by Peter Mac?

Clearly Defined?

Can the people who need to act on their own or behalf of others readily comprehend the indicators and what can be done to improve the related outcomes?

Evidenced Based?

Is there clear evidence available to support the measure and is it valid and reliable?

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Step 3. Evaluation

Peter Mac

EXCELLENCE INNOVATION COMPASSION

Step 3. Evaluation

VQC's (2005) Dimensions of Quality

Access	Efficiency	Appropriateness	Effectiveness	Acceptability	Safety
The ability of people to obtain health care at the right place and right time irrespective of income, physical location and cultural background.	Achieving the desired results with the most cost effective use of resources.	Using evidence to do the right thing to the right patient at the right time, avoiding overutilisation and underutilisation .	The extent to which the treatment, intervention or service achieves the desired outcomes.	The degree to which the service meets or exceeds the expectations of informed patients.	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.
Can I afford it? *How long do I wait?* *Can I get what I need?*	*Are resources used well?* *Is the journey streamlined?*	*Is it the right treatment?* *Will I get what I need?*	*Will the treatment work?* *Will I get better?*	*Am I consulted?* *Am I treated ok?*	*Will I get hurt?*

Step 3. Evaluation

AUDIT

A retrospective data collection to check compliance.

ACTIVITY MEASURE

Purely monitors activity via periodic reports to establish trends. There are no targets set.

PERFORMANCE INDICATOR

An activity measure with a target set.

KEY PERFORMANCE INDICATOR

An activity measure that has a target set and has a high level of importance for the organisation.

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Step 3. Evaluation

Key Specialist Clinic Strategic Priorities

- Improve the patient experience
- Maximise the patient visit
- Maximise performance through the collection and dissemination of meaningful, timely and accurate information
- Ensure financial viability and accountability
- Improve governance and accountability

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Step 3. Evaluation

Alignment assessment with VINAH MDS conducted

- Assessed more than just the ability to capture the data elements;
- Levels assessed whether:
  - L1 changes would be required to business processes, IT infrastructure or resourcing to enable collection and reporting:
  - L2 the data was readily available and currently reported internally;
  - L3 it was possible to collect but not currently reported;
  - L4 some development required; and
  - L5 significant development required.

Peter Mac
EXCELLENCE INNOVATION COMPASSION

Step 4. Finalisation

- Aim 6 Illustrate these relationships through the creation of an 'Outpatient Data Map'.
- Aim 7 allocate Phase 1 and 2 activities and determine for Phase 1 measures a name, rationale, and reporting lines

EXCELLENCE INNOVATION COMPASSION

Name	Numerator / Denominator (Data Elements Required)	Unit of Measurement	Filter				Dimension of Quality						Type of Measure				Strategic Objective					Capability				Journey		
			Within Control	Significant Benefit	Clearly Defined	Evidence Based	Access	Safety	Effectiveness	Appropriateness	Acceptability	Efficiency	Audit	Activity Measure	Performance Indicator	Key Performance Indicator	Improve Patient Experience	Maximise Patient Visit	Maximise Performance	Financial Viability	Governance & Accountability	Currently Reported	Available, not reported	Some development required	Significant development required	Pre Clinic	During Clinic	Post Clinic
MBS Invalid Referral Rate	No. of patients attended who elected Private/MBS status without an MBS valid referral / Total no. of patients who elected to be Private/MBS status	%	●	●	●							●				●				●	●			●		●	●	
VACS encounters by patients who elected Private/MBS status	No. of patients seen by a Dr that has no Right of Private Practice / Total no. of patients that elect to be MBS/Private Status	%	●	●	●							●		●						●	●			●		●	●	
Patient Election Rate	No. of patients electing for Private/MBS status / Total no. of patients	%	●	●	●							●		●						●	●		●				●	
MBS Billing Rate	No of patients billed to MBS / Total no. of patients elected Private/MBS Status	%	●	●	●							●		●						●	●				●			●
MBS Revenue	Amount of MBS revenue	$	●	●	●							●		●						●	●		●					●
Year To Date VACS Summary	VACS variance to target	%	●	●	●							●				●			●	●	●	●						●
New Patient DNA Rate	No. of new DNA / No. of new patients booked	%	●	●	●							●		●				●	●		●		●			●	●	
Cancelled Clinics Report	No. of clinics cancelled within 14 days / Total no. of clinics cancelled	%	●	●	●							●			●		●	●	●		●	●				●		
Outpatient Specialist Clinic Complaints	Outpatient Complaints	No.	●	●	●	●					●			●			●	●	●		●		●				●	
Time: Referral to First Appointment	Date Referral Received at PMCC to Date of first clinic appointment, regardless of attendance	%	●	●	●	●	●							●			●	●			●	●				●		
Slot Utilisation	No. of slots utilised / No. of available booking slots	%	●	●	●	●						●			●		●	●	●	●	●	●				●		
New Patient Ratio	No. of new patients attended / Total no. of patients attended	%	●	●	●		●							●				●	●		●		●			●		
Attendance by Slot Type Report	No. of review patients attended / Total no. of attendances	%	●	●	●					●				●			●	●	●		●	●				●		
Time: Arrival to Departure Specialist Clinics	Total visit duration - time of arrival at registration or front desk to time of departure from clinic area	Min	●	●	●	●						●		●			●	●			●		●				●	

Name	Numerator / Denominator (Data Elements Required)	Unit of Measurement	Filter				Dimension of Quality						Type of Measure				Strategic Objective					Capability				Journey		
			Within Control	Significant Benefit	Clearly Defined	Evidence Based	Access	Safety	Effectiveness	Appropriateness	Acceptability	Efficiency	Audit	Activity Measure	Performance Indicator	Key Performance Indicator	Improve Patient Experience	Maximise Patient Visit	Maximise Performance	Financial Viability	Governance & Accountability	Currently Reported	Available, not reported	Some development required	Significant development required	Pre Clinic	During Clinic	Post Clinic
Clinically Invalid Referral Rate	No. of patients booked without clinically valid referral / Total no. of patients booked	%	●	●	●			●								●			●	●	●				●	●		
	No. of leave requests lodged less than 14 days prior to leave / Total no. of leave applications	%	●	●	●							●	●					●	●		●		N/A			●		
	No. of referrals accepted / Total no. of referrals received	%	●	●	●					●								●			●				●	●		
	Time at presentation at front desk to actual time seen by Dr 1	Min	●	●	●	●						●		●			●	●			●				●		●	
	Start time with Dr 1 to end time with final Dr	Min	●	●	●					●		●		●			●	●	●						●		●	
	No. of DNA not followed up / Total no. of DNA	%	●	●	●			●				●	●												●			
	Patient Status following clinic attendance	%	●	●	●							●		●				●	●		●			●			●	
	No. of referrals where hospital staff are required to seek additional information from referring practitioner / Total no. of referrals received	%	●	●	●					●		●		●			●	●	●		●				●	●		
	No. of Peter Mac initiated clinic appointment postponements / Total no. of appointments booked	No.	●	●	●	●						●		●			●	●	●		●				●	●		
	No. of occasions consultant late per month / Total no. of consulting occasions	%	●	●	●							●	●				●	●			●		N/A				●	
	No. of patients where communication is provided to patient's GP / Total no. of patient attendances	%	●	●	●	●		●				●	●					●	●		●		N/A					●
	No. of patients seen within clinically appropriate timeframe by triage category / Total no. of patients attended	%	●	●	●	●				●						●		●			●				●	●		
	Date referral written to Date referral received at Peter Mac	%	●	●	●							●		●				●	●		●			●		●		

Conclusions

- Methodology was found to provide a rigorous process
- Building on proven methodology and tailoring to the Health Service assisted to ensure the measures are clearly defined, reliable and meaningful
- Resulted in a balanced score card approach

Peter Mac
EXCELLENCE INNOVATION COMPASSION

References

- Cancer Services Framework (2003), *A report from a consortium led by*
- *The Collaboration for Cancer Outcomes Research and Evaluation (CORE)* [online]. Available: http://www.health.vic.gov.au/metrohealthstrategy/cancerhilights.pdf
- Funding Policy Section, *Victorian Ambulatory Classification and Funding System (VACS),* Department of Human Services Victoria, Australia [online]. Available: http://www.health.vic.gov.au/vacs/index.htm
- National Health Performance Committee (NHPC) (2001), *National Health Performance Framework Report,* 2001, Queensland Health, Brisbane.
- National Health Performance Committee (NHPC) (2001), *Fourth National Report on Health Sector Performance Indicators – A report to the Australian Health Ministers Conference,* New South Wales Health Department, Sydney.
- Peter MacCallum Cancer Centre (2007), *Annual General Report 2007* [online]. Available: www.petermac.org
- Peter MacCallum Cancer Centre (2008), *Strategic Plan 2006-2010* [online]. Available: www.petermac.org
- Peter MacCallum Cancer Centre (2008), *Business Intelligence Reports,* Melbourne.
- Peter MacCallum Cancer Centre (2006), *Clinical Audit at Peter Mac Discussion Paper,* Melbourne.
- Specialist Outpatient Review Committee, Queensland Health (2007), *A Report on Access to Specialist Outpatient Services in Queensland Public Hospitals*, Brisbane.
- State Government Victoria Department of Human Services, *Connecting Cancer Care* [online]. Available: http://www.health.vic.gov.au/cancer/
- State Government of Victoria, Australia, Department of Human Services (2008), *Victorian Integrated Non-Admitted Health Minimum Data Set* [online]. Available: http://www.health.vic.gov.au/hdss/vinah/index.htm
- State Government of Victoria, Australia, Department of Human Services (2008), *Victorian Government Health Cancer Initiatives* [online]. Available: http://www.health.vic.gov.au/cancer/
- State Government of Victoria, Australia, Department of Human Services (2007), 2007-08 *Statement of Priorities: Agreement between Minister for Health and Peter MacCallum Cancer Centre,* Melbourne.
- State Government of Victoria, Australia, Department of Human Services (2008), *Private Specialist Ambulatory Care Services in Public Hospitals: Interim Resource Kit*, Melbourne.
- State Government of Victoria, Australia, Department of Human Services (2007), *Development of a Comprehensive Comparative Data Set for Victorian Public Health Services – Industry Consultation Workshop - Metro*, Melbourne.
- Thomas, S (2008), *Overview of Peter Mac Ambulatory Services Projects 2007 - 2009* Peter MacCallum Cancer Centre, Melbourne.
- Victorian Quality Council Safety and Quality in Health (2005), *Better Quality, Better Health Care: A Safety and Quality Improvement Framework for Victorian Health Services* [online]. Available: http://www.health.vic.gov.au/qualitycouncil/downloads/framework.pdf
- Victorian Auditor General's Office (Australia) (2006), *Access to Specialist Medical Outpatient Care* [online]. Available: http://www.audit.vic.gov.au/reports_par/agp113fd.html

Peter Mac

EXCELLENCE INNOVATION COMPASSION