Making Mental Health Part of Mainstream Costing

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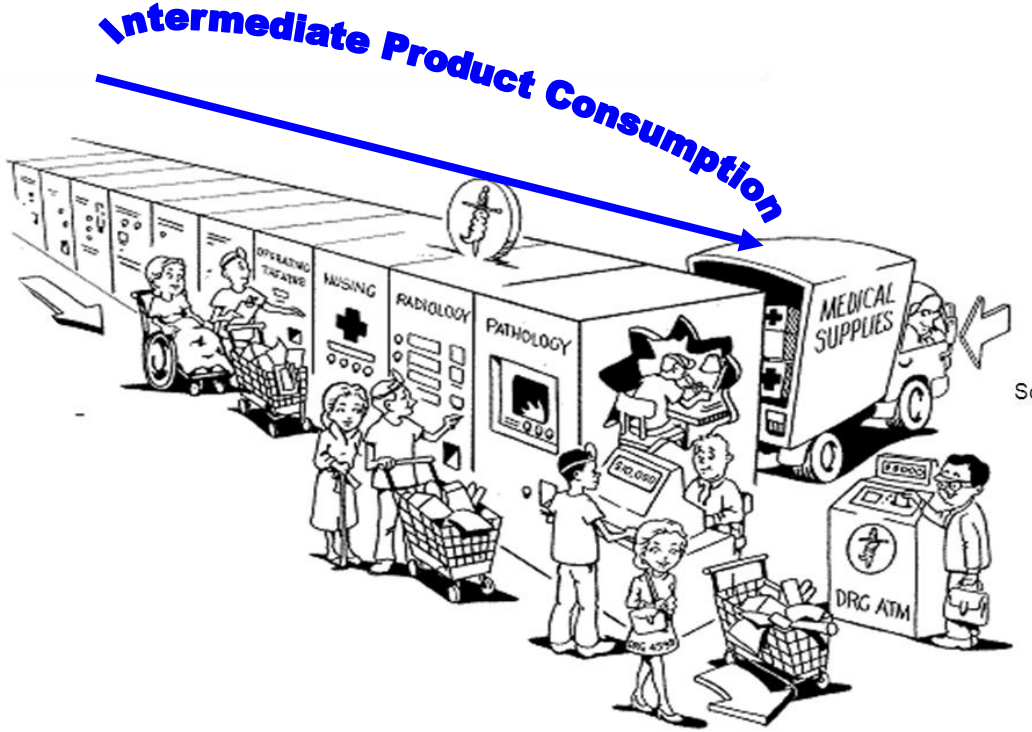
Patient Level Clinical Costing

Is the process of determining the resource costs of hospital (intermediate) products which are consumed by patients on their clinical journey and linking them back to patients to derive a total patient cost.



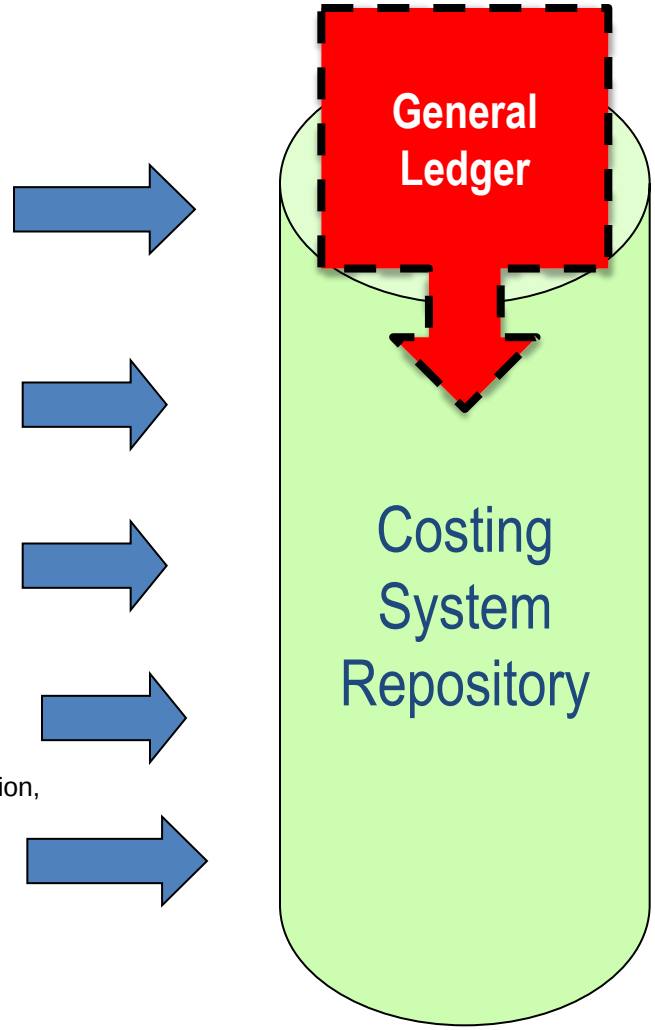
Source Bill Kricker

- The patient consumes a number of intermediate products over their LOS

Loading into the Costing System – Feeders and the GL

Feeder data:

Inpatient PMI,
Outpatient,
Emergency,
Cath lab,
ICD Diagnosis Codes,
ICD Procedure Codes,
Imaging,
Nuclear Medicine,
Orthotics & Prosthetics,
Pathology,
Pharmacy,
Theatre,
Anaesthetics,
Prosthetics,
Transfers,
Allied Health,
Ward Patient Classification,
Interpreters
Others ….



These systems are known as feeders & contain various data items to link records & help apportion costs including:

- Patient information (UR number, admit & sep dates, date & time of service)
- Demographics (age, sex)
- Volume data (quantity, duration, actual charges).

Used to link services to episodes to inpatients, outpatients & creating unlinked services

The capture of this activity data across the hospital & the linking of the activity each patient receives makes the clinical costing system the most comprehensive & only database in hospitals that captures the services offered to patients during their stay.

It is the patient resource pathway

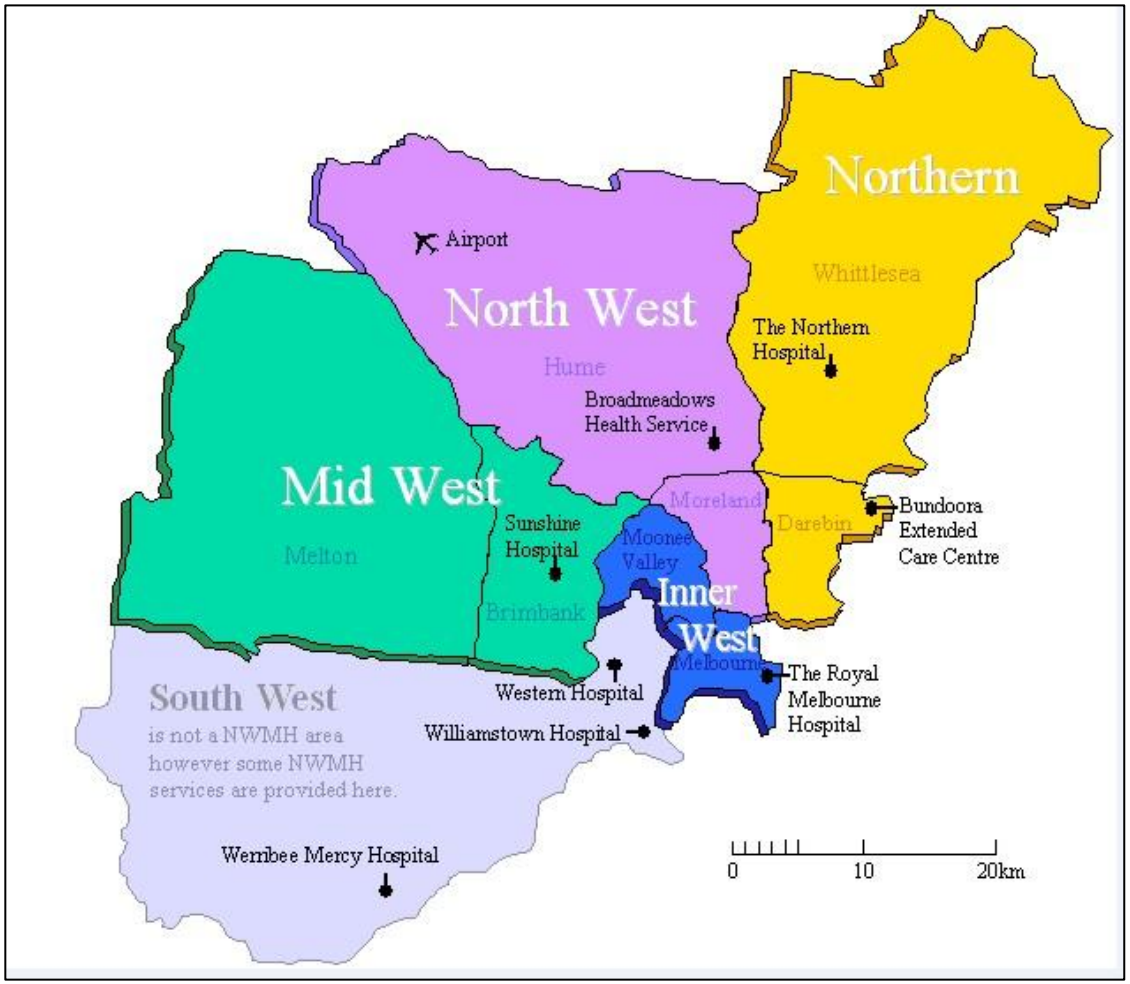
History of Mental Costing

- Seed funding to Austin Health & Melbourne Health in 2012 to pilot mental health costing
- Both Health Services engaged EFT, one recruited EFT directly into the costing team
- Approach was to cost and not classify
- Led to the development of the Mental Health Costing Working Group
  - Industry Based with Costing and Health Information representatives with collaboration from DHHS
- 18 Health Services submitting cost data across Victoria's Program A and M in the VCDC

Northwestern Mental Health

- NWMH is run by Melbourne Health with subcentres at other sites.
- Services 1.2 million people.
- Patient profile includes youth, adult and aged services.
- Provides acute, residential and community treatment.
- Costed services in 13/14 included:
  - 5 372 admissions
  - 444 972 non admitted contacts

NWMH Catchment



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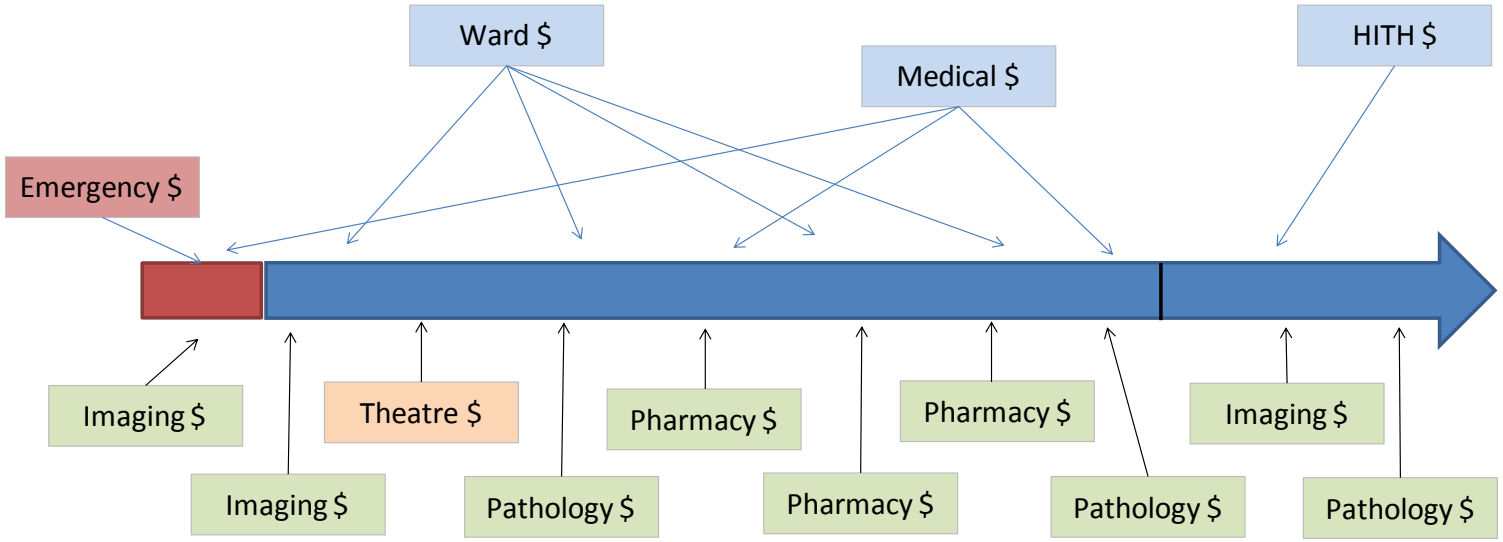
Untangling Shared Service Arrangements

- Matching Victorian mental health Client Management Interface data (CMI) with Melbourne Health's Patient Admission System.
- Liaising with DHHS and catchment hospitals for data sharing with approvals required at CEO level.
- Ongoing support from the DHHS through the Victorian Clinical Costing User Group (VCCUG) and the Mental Health Branch.

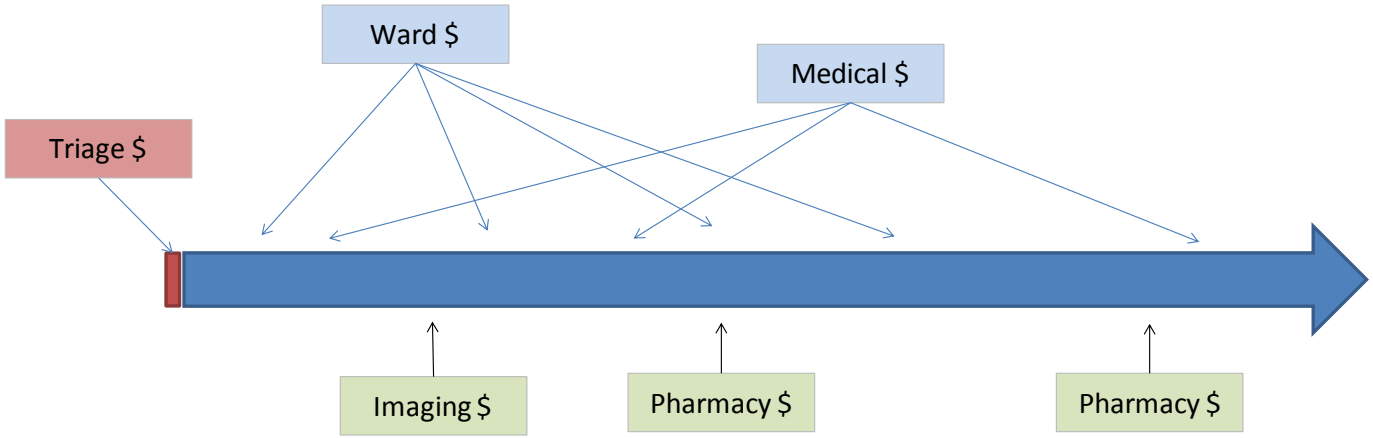
Costing Acute Services

- Non mental health episode costs are driven by the accumulation of services.



Costing Mental Health

- Mental health episode costs are driven far more by length of stay.



Methodology Template

VCCUG Mental Health Costing Methodology Template

Process	*Method*	*Melbourne*	*St Vincent's*	*Hospital 3*	*Hospital 4*	*Hospital 5*
Data Sources	Admitted episodes from PAS (where available)					
	Admitted episodes from CMI directly (PAS duplicates removed)					
	Admitted episodes from CMI data in warehouse					
	MeH presentations from ED system					
	Non admitted registered contacts from CMI					
	Non admitted unregistered contacts from CMI					
	Feeders providing services to MeH patients					
Linking	CMI Admissions matched to PAS admissions are excluded.					
	Seclusions linked to admission					
	Mechanical Restraint linked to admission					
	Admission events from CMI integrated with PAS ward transfers					
	Leave from CMI integrated with PAS ward transfers					
	CMI Contacts linked to ED episodes first, using UR & date/time					
	CMI Contacts linked to Admitted episodes second, using UR & date/time					
	All unlinked CMI Contacts become occasions of service episodes					
	ITO records generated and linked to all episodes.					
	CTO records generated and linked to all episodes.					
	Apply standard linking rules for all feeders to link to CMI episodes					

Using Results to Drive Improved Data Capture and Quality

- A patient's legal status was recognised as an indicator of increased utilisation of resources and staff time.
- Patients covered by an Assessment Order were therefore weighted to increase their cost allocation.
- Some resources could not be measured or tracked to a patient, e.g. mental health tribunal preparation.
- As new legal status codes have been introduced, these weights will need to be reviewed.
- Newly admitted patients require more attention and staff time until they settle.
- Transferred patients similarly require time to settle.

Weighting Episodes in CMI

- Seclusions
- Mechanical Restraint
  - Two separate extracts are created and logic applied to double the duration, the duration captured is in minutes and we then convert this to hours (which is how we cost our bed-day product). These extracts link directly to the inpatient stay.

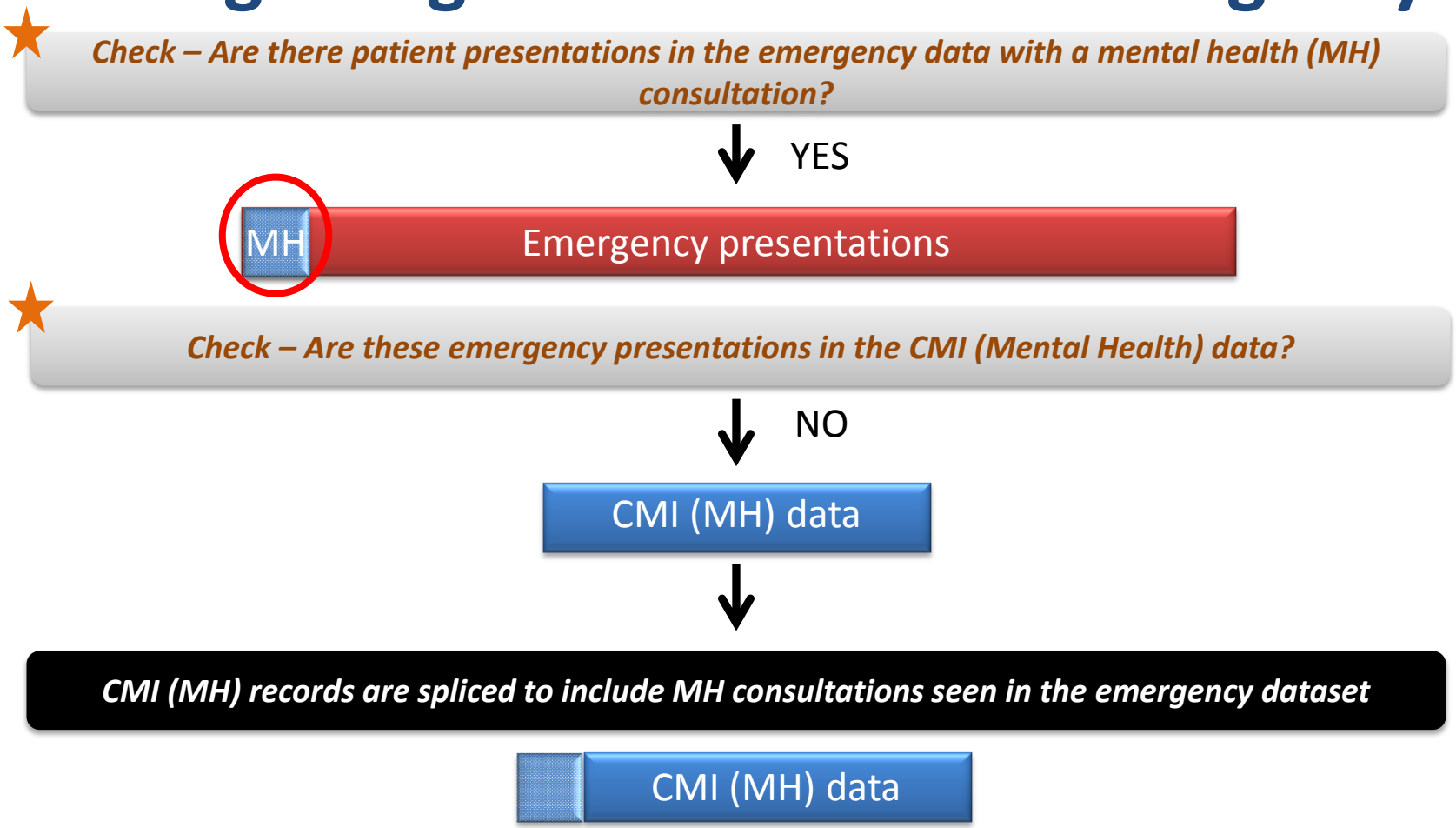
Better Understanding of Electro Convulsive Therapy Costs

- An ‘ECT’ Area is created within the costing system.

ECT Treatment - 1Hr and 15 Mins 3 x per week	ECT Area
ECT Nurse	3hrs and 45 mins (38 hr week)
AIS Consultant	3hrs and 45 mins (40 hr week)
Director or Clinical Services	3hrs and 45 mins (40 hr week)
Registrar	3 hrs and 45 mins (43 hr week)
Fee - Day Procedure Unit	Per treatment
Fee - Anaesthetic Department	Monthly $ for attending

- Taking all of this into account there are over 13 rows of codes isolating costs specifically for ECT treatments.

Recognising Hidden Costs of Emergency



Commence Costing

On average, costs have doubled with incorporation of hidden emergency costs

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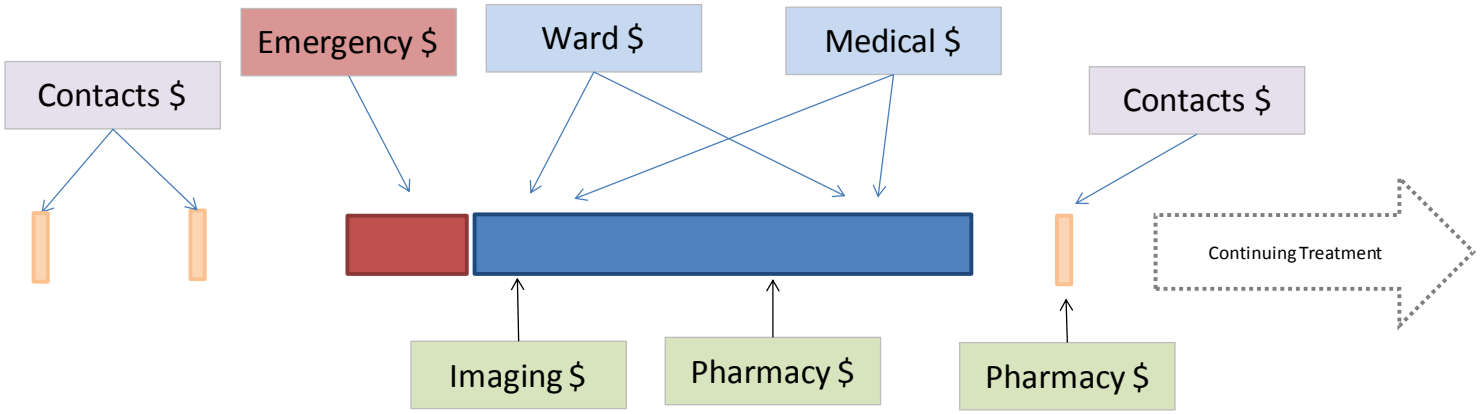
Adding Value to Existing Clinical Costing Processing

- Full financial picture matched with hospital activity.
- Full reporting of activity.
- View of patient journey extended:



Engaging with Mental Health Staff

- Regular feedback to mental health area.
- Plans to engage other health services to refine our allocation of shared services.
- Our methodology was favourably received when we initially presented it to the NWMH Executive.
- There are now ongoing arrangements for refining methods, data remediation and exception reporting.
- Also educating audiences about clinical costing.

Ongoing Challenges

- Mental health costing is not fundamentally different from other areas
  - E.g. Interpreter expenses sitting in the home cost centre – if not identified then the costs are spread to all patients.
  - Data quality; high duration, clinicians in attendance, group contacts, missing data.
- Work in progress problems are magnified.
- There are different views on travel time for community work.
  - St Vincent's for example have not included travel time in their logic due to their location –staff may very well spend most of their time stuck on Victoria Parade (and staff were not confident on how the post code was being entered into CMI).

Ongoing Challenges

- EBA and Industrial Action may affect data entry/quality.
- Lack of historical/peer data for comparison (13/14 is the first year we have had data for comparison).
- Most importantly, more measures and fewer weighted events are needed to get beyond a flat bedday cost.

The Positives

- VCCUG Mental Health Sub Group has been formed.
- Tools have been developed for capturing a standardised methodology.
- Code developed for CMI extracts has been shared.
- Benchmarking our results within the Sub Group.
- We are engaging with clinicians in a very sensitive area and getting positive feedback.
- Costing mental health activity is becoming entrenched.
- Results to date allow us to learn from our experience and will provide the foundation for development in the future.

Questions