Activity Based Management drives evidence-based decisions. It utilises patient level costing data to inform clinical, operational and strategic objectives. This contributes to maximising value for patient care.
Purpose

► to understand how Telehealth activity is counted, reported, costed and funded.
Overview

1. Introduction

1. Counting telehealth

2. Activity Reporting

4. Costing and Funding
NSW Health ABM Principals

► Keep the system safe and operating
► Transparency
► Explicit relationship between funds / activity / deliverables
► Incentives
► Reasonableness
ABF is....

A method to fund health facilities for **services they provide** (output funding instead of input)

A means of **transparently** identifying funding allocation

A tool to assist in **evaluating** models of care and current allocation of resources

Not an uncapped funding **source** for additional work
ABF Building Blocks...3 Cs (+P)
Counting

Electronic patient data is the invoice to the Ministry of Health

If activity data isn’t recorded in an organisational system, it can not be used in the funding formula

It will be as if the data didn’t exist at all!

The way you count and classify it is the way it will be costed and then priced
## Classifications

<table>
<thead>
<tr>
<th>Service Stream</th>
<th>Classification</th>
<th>Key Drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Admitted</td>
<td>AR-DRG v9</td>
<td>Diagnoses and procedure, comorbidity, complications, birth weight and disposition</td>
</tr>
<tr>
<td>Mental Health</td>
<td>Australian Mental Health Care Classification v1.0</td>
<td>Mental health phase of care, clinical outcomes assessment, legal status</td>
</tr>
<tr>
<td>Emergency Department</td>
<td>URGs v1.4 / UDGs v1.3</td>
<td>Type of visit, urgency of clinical condition (triage code), ED first diagnosis, and disposition</td>
</tr>
<tr>
<td>Subacute and Non Acute</td>
<td>AN-SNAP v4.0</td>
<td>Type of care (e.g. Rehab, Palliative, GEM, Psychogeriatric and Maintenance)</td>
</tr>
<tr>
<td>NSW Non Admitted Mental Health</td>
<td>NSW PSC</td>
<td>Principal Service Category</td>
</tr>
<tr>
<td>Non Admitted Patients</td>
<td>Tier 2 clinics v5</td>
<td>The predominant activity and usual provider of the clinic and number of ‘service events’ by type of clinic</td>
</tr>
</tbody>
</table>
Non-admitted classification and mapping

- **Service Unit**: Is assigned an Establishment Type in HERO
- **Which Maps to**: National Tier 2 Clinic Type
- **Which has a**: National Weight Activity Unit

**10 Series: Procedural**
- Provided by surgeon or medical specialist
- e.g. Renal Dialysis

**20 Series: Medical Consultations**
- Provided by a general physician or medical specialist
- e.g. Gastroenterology clinic

**30 Series: Stand Alone Diagnostic**
- Diagnostic services within a specific field of medicine
- e.g. MRI

**40 Series: Allied Health and/or CNS**
- e.g. Physio clinic
Non-admitted patient data collection

Service Unit

Provides

Non-admitted patient services

Which are recorded in source systems as

Appointments
Encounters
Service contacts

Which are converted to OOS in extracts and loaded as

Occasions of services in EDW

Which are converted by MOH using national business rules into

National Service Events

Same calendar day
## Non-admitted ABF Commonwealth Tier 2 Classification

### Example of Tier 2 Clinic Types

<table>
<thead>
<tr>
<th>Tier 2</th>
<th>Description</th>
<th>Price Weights 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.22</td>
<td>Cardiology</td>
<td>0.0581</td>
</tr>
<tr>
<td>40.06</td>
<td>Occupational Therapy</td>
<td>0.0420</td>
</tr>
<tr>
<td>40.09</td>
<td>Physiotherapy</td>
<td>0.0307</td>
</tr>
<tr>
<td>20.34</td>
<td>Endocrinology</td>
<td>0.0598</td>
</tr>
<tr>
<td>20.55</td>
<td>Telehealth –Patient Location</td>
<td>0.0201</td>
</tr>
<tr>
<td>40.61</td>
<td>Telehealth –Patient Location</td>
<td>0.0095</td>
</tr>
</tbody>
</table>
IHPA, Tier 2 and Telehealth

• Tier 2 is the National classification for Non-Admitted Care and reflects the clinical purpose of the team delivering care.

• IHPA guidelines exist for reporting patient end telehealth services

• This is reported Nationally as Service Type (Tier 2) – Telehealth (20.55 or 40.61).
In NSW the Telehealth Tier 2 is derived from the service contact type.

There are National Standards for reporting service contact type, Current NSW values are slightly more granular.

<table>
<thead>
<tr>
<th>NSW Values</th>
<th>Mapped to National Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone consultant end</td>
<td>Telephone</td>
</tr>
<tr>
<td>Telephone- Patient End</td>
<td>Telephone (reported as Telehealth Tier 2)</td>
</tr>
<tr>
<td>Videoconference Patient End</td>
<td>Videoconference (reported as Telehealth Tier 2)</td>
</tr>
<tr>
<td>Videoconference Consultant End</td>
<td>Videoconference</td>
</tr>
<tr>
<td>Email</td>
<td>Electronic Mail</td>
</tr>
<tr>
<td>Other Technology- NEC</td>
<td>Other</td>
</tr>
<tr>
<td>In Person</td>
<td>In Person</td>
</tr>
<tr>
<td>Postal/ Courier</td>
<td>Postal Courier</td>
</tr>
</tbody>
</table>
IHPA, Tier 2 and Telehealth

• Cannot use Tier 2 to identify provider end telehealth activity

• Provider end telehealth is reported against the relevant Tier 2 of the service unit providing care

• Identifiable via the service contact type “modality”

• In NSW “information communication technology” is interpreted to mean services provided by telephone or videoconferencing
### 2017/18 Telehealth Activity - Non Admitted

Reported by “Modality” (incl. Telephone)

<table>
<thead>
<tr>
<th>Modality of Care</th>
<th>Final OOS</th>
<th>Non-Clinical Final OOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone – Individual – Clinician End</td>
<td>1,540,220</td>
<td>43,653</td>
</tr>
<tr>
<td>Email – Individual</td>
<td>85,397</td>
<td>1,839</td>
</tr>
<tr>
<td>Other technology – Individual</td>
<td>39,863</td>
<td>4,196</td>
</tr>
<tr>
<td>Videoconference – Individual – Clinician End</td>
<td>11,350</td>
<td>152</td>
</tr>
<tr>
<td>Videoconference – Individual – Client/Patient End</td>
<td>4,681</td>
<td>175</td>
</tr>
<tr>
<td>Telephone – Group – Consultant End</td>
<td>3,641</td>
<td>350</td>
</tr>
<tr>
<td>Videoconference – Group – Clinician End</td>
<td>1,130</td>
<td>25</td>
</tr>
<tr>
<td>Videoconference – Group – Client/Patient End</td>
<td>259</td>
<td>3</td>
</tr>
</tbody>
</table>
2017/18 Telehealth Activity - Non Admitted
Reported by “Modality” (incl. Telephone)

Clinical Final OOS

- Email – Individual: 3%
- Telephone – Group – Consultant End: 5%
- Telephone – Individual – Clinician End: 91%
- Other technology – Individual
- Videoconference – Group – Client/Patient End
- Videoconference – Group – Clinician End
- Videoconference – Individual – Client/Patient End
- Videoconference – Individual – Clinician End
2017/18 NAP Telehealth OOS by Tier 2 (incl. Telephone and email)
## 2017/18 Telehealth Reported by “Modality” (excl. telephone and email)

### Provider and Patient ends

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</tr>
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</table>
2017/18 Telehealth Activity - Non Admitted
Reported by “Modality” (excl. Telephone and Email)

Clinical Final OOS

- Other technology – Individual: 70%
- Videoconference – Group – Client/Patient End: 20%
- Videoconference – Group – Clinician End: 8%
- Videoconference – Individual – Client/Patient End: 2%
2017/18 NAP Telehealth OOS by Tier 2 (excl. Telephone and email)
Emergency Department Activity in 2017/18 by LHD/SHN

ED presentations with telehealth visit type
Full absorption costing

- **Corporate Costs**: (administration, finance etc)
- **Indirect Costs**: (linen, catering etc)
- **Direct Costs**: (surgeries, ward costs etc)

FULLY ABSORBED COSTS

State Price
Costing in Non-admitted Patient

► See costing process below

Patient 1

- OOS 1 – Med: $150
- OOS 2 – Nur: $100
- OOS 3 – AH: $100

Overheads
- e.g. Carer support, management, interpreters, admin, ICT… $50

Diagnostics, Pharmacy etc. $50

Total Cost of Service Event $450

(figures are for demonstration purposes only)
Costing in Non-admitted Patient

(figures are for demonstration purposes only)

Patient 2

OOS 1 – AH: $100

Overheads
  e.g. Management, case conference, Carer support, admin
  $50

Total Cost of Service Event
  $150
What is an NWAU?

The **NWAU (National Weighted Activity Unit)** is the ‘currency’ used to express the price weights for all services funded on an activity basis.

**Tier 2: 20.22**
Cardiology = 0.0520 NWAU

**Ave = 1 NWAU**

**DRG A10Z**
Insertion of Ventricular Assist Device (VAD) = 65.1977 NWAU

Relative cost of hospital services
ABF calculation

State Price \times Price Weight (NWAU) \times Volume
Commonwealth Funding

MoH provides activity estimates to the Commonwealth

$5,012/NWAU

45% is Commonwealth contribution to state price

State Funding

LHD/SHN’s report activity to MoH

$4,713/NWAU

LHD/SHN
Non-admitted patient funding data inputs

- Service Unit
  - Is assigned an Establishment Type in HERO, which maps to National Tier 2 Clinic Type, which has a National Weight Activity Unit.

- Non-admitted patient services
  - Provides
  - Establishments, encounters, service contacts, occasions of services in EDWARD
  - Appointments

- National Service Event Count
  - Which are recorded in source systems as appointments, encounters, service contacts
  - Which are converted to OOS in extracts and loaded as occasions of services

- National Service Events
  - Extracted at patient level with OOS Patient Level Record Service Type & Provider Type

- National Service Event Count
  - Which are converted by MOH using national business rules into

- National Service Event Count
  - Which are converted to OOS in extracts and loaded as

- National Service Event Count
  - National Service Event Count
  - National Service Event Count

- Service Unit’s ABF Payment Calculation
  - National Service Event Count x National Weight Activity Unit x State Price + Adjustments = Funding Allocation to LHD for Service Unit’s Activity

- State Price
  - Influences

- IHPA / ABF Branch Costing Studies
  - Financial data
Costing Directly Impacts Funding

- The NWAU is built on the average cost of all the service events in that class

Arrange to meet your costing officers to assist you in navigating the build up of your costs