Implementation of a national casemix classification and funding model into palliative care in Australia

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Capturing complexity and implementing funding models in palliative care: emerging evidence,
Governor’s Hall, St Thomas’s Hospital London 30 October 2014
But first, a brief introduction to where I come from
Area size comparison of Australia and Europe

Australia’s area = 7,706,168 sq km
Europe’s area as shown = 3,483,066 sq km
The Australian health care system

Background context
The starting point for the Australian western health care system

New South Wales became a (penal) colony in 1788, followed progressively by the other Australian States. Australia didn’t become a country until 1901
A federation

- Commonwealth (national) government
- 6 State (previously colony) and 2 Territory governments
- Constitution (1901) - health is the responsibility of the States
  - Except quarantine matters
- Amended in 1946
  - Commonwealth can provide health benefits for returned soldiers
  - More broadly - “but not so as to authorise any form of civil conscription”
- Commonwealth didn’t have a formal role in health care until 1972 (Medibank)
  - Except for war veterans
- States and territories own all public health facilities and infrastructure
Public hospital funding

- Commonwealth agreed in 1972 to contribute 50% of public hospital funding (with inception of Medibank)

- 5 year Commonwealth-State agreements from 1983
  - Last agreement was 2008-2013
  - Ended 30 June 2013

- 2011 National Health Reform Agreement
  - Signed by all governments 31 July 2011
Key elements of 2011 hospital reform

- Hospitals remain a State responsibility
- Commonwealth funding contribution to States now Activity Based Funding (ABF)
- Establishment of an Independent Hospital Pricing Authority (IHPA)
- Establishment of a National Health Performance Authority (NHPA)
Commonwealth role from 2012

◆ Pay a ‘National Efficient Price’ for every public hospital “activity”
  – Funding at historic levels (around 38%) until 2014
  – 2014-2017 - fund 45% of efficient growth in public hospitals
  – 2017 on - fund 50% of efficient growth in public hospitals

◆ Fund States a contribution for:
  – teaching, training and research
  – block funding for small hospitals

◆ Agreement has detailed arrangements for defining a ‘hospital’ service for Commonwealth funding purposes
Activity Based Funding (ABF)

Also known as ‘casemix’ funding and Payment by Results (PbR)
IHPA role

- Define activity units and set the price that the Commonwealth will pay for a unit of activity (National Weighted Activity Unit - NWAU)
- IHPA determines the price paid to States
- IHPA does not determine the price paid by a State or Territory to a hospital network or hospital
  - Although States and Territories are free to adopt the IHPA price if they want
- IHPA does not determine the funding for individual palliative care services
“National Efficient Price”

◆ Five different classifications for different streams of activity:
  – acute admitted
  – subacute (including palliative care)
  – outpatient services
  – emergency department
  – mental health

◆ One ‘national efficient price’ for a ‘national weighted activity unit’ (cost weight)

◆ Cost weights equalised across classifications
National ABF activity classifications

- Acute - AR-DRG
- Subacute and non-acute - AN-SNAP
- Outpatients and community care - Tier 2 outpatient clinic list of Service Events
- ED - Urgency Related Groups - URGs or Urgency Disposition Groups - UDGs
- Mental health – new classification to be developed
- Teaching and research – block funded for now
### AN-SNAP v2 & v3

**palliative care inpatient classes**

<table>
<thead>
<tr>
<th>ClassNo</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-101</td>
<td>Assessment only</td>
</tr>
<tr>
<td>S2-102</td>
<td>Stable, RUG-ADL 4</td>
</tr>
<tr>
<td>S2-103</td>
<td>Stable, RUG-ADL 5-17</td>
</tr>
<tr>
<td>S2-104</td>
<td>Stable, RUG-ADL 18</td>
</tr>
<tr>
<td>S2-105</td>
<td>Unstable, RUG-ADL 4-17</td>
</tr>
<tr>
<td>S2-106</td>
<td>Unstable, RUG-ADL 18</td>
</tr>
<tr>
<td>S2-107</td>
<td>Deteriorating, RUG-ADL 4-14</td>
</tr>
<tr>
<td>S2-108</td>
<td>Deteriorating, RUG-ADL 15-18, age &lt;=52</td>
</tr>
<tr>
<td>S2-109</td>
<td>Deteriorating, RUG-ADL 15-18, age &gt;=53</td>
</tr>
<tr>
<td>S2-110</td>
<td>Terminal, RUG-ADL 4-16</td>
</tr>
<tr>
<td>S2-111</td>
<td>Terminal, RUG-ADL 17-18</td>
</tr>
<tr>
<td>S2-112</td>
<td>Bereavement</td>
</tr>
</tbody>
</table>
Calculation of National Efficient Price

- Based on the “cost of the efficient delivery of public hospital services”
- Adjusted for ‘legitimate and unavoidable variations in wage costs and other inputs which affect the costs of service delivery, including:
  - hospital type and size
  - hospital location, including regional and remote status
  - patient complexity, including Indigenous status’
2014 Commonwealth budget included big changes

Bye bye IHPA, NHPA etc.
Hello (maybe) National Productivity and Performance Authority
A few 2014 budget headlines

◆ White paper on the future of the federation:
   – Hospitals and schools are a state, not a federal, responsibility
◆ National Health Reform Agreement in place till 2017, won’t be renewed. From July 2017:
   – Commonwealth revert to block payments and
   – abandons commitment to 50% of growth funding
   – Commonwealth growth funding reduces from 9% pa to 6.5%.
◆ States and territories have agreed to continue with ABF funding at the state level regardless
ABF is here to stay in Australia regardless of what happens at the Commonwealth level

Task now is to progressively develop and implement the best model possible
AN-SNAP

Australian National Subacute and Non-Acute Patient classification
AN-SNAP


◆ Version 1 based on a study of 30,057 episodes in 104 services in Australia and New Zealand

◆ 124 classes in Version 4
  - Version 4 to be implemented nationally from 1 July 2015
Scope

◆ Care in which diagnosis is not the main cost driver

◆ Subacute Care
  – enhancement of quality of life and/or function

◆ Non-Acute Care
  – supportive care where goal is maintenance of current health status if possible
AN-SNAP classification

5 Care Types:

– Palliative care
– Rehabilitation
– Psychogeriatrics
– Geriatric Evaluation and Management (GEM)
– Non-acute
AN-SNAP classification

4 episode types:

- Overnight admitted inpatient
- Same day admitted
- Outpatient
- Community (home)
Key Cost Drivers - 1

- **Care Type** - characteristics of the person and the goal of treatment
- **Function** (motor and cognition) - all Care Types
- **Phase** (stage of illness) - palliative care
- **Impairment** – rehabilitation
- **Behaviour** – psychogeriatric
- **Age** - palliative care, rehab, GEM and non-acute

Complexity factors?
Key Cost Drivers - 2

There are additional cost drivers in ambulatory care:

- problem severity - palliative care
- phase - psychogeriatric
- usage of other health and community services

and probably:

- availability of Carer
- instrumental ADLs (eg. medication management, food preparation)

Complexity factors?
AN-SNAP Version 4

Hot off the press!
## AN-SNAP Version 4

<table>
<thead>
<tr>
<th>Care Type</th>
<th>Overnight</th>
<th>Ambulatory</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Palliative Care</td>
<td>12</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Paediatric Palliative Care</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Adult Rehabilitation</td>
<td>50</td>
<td>8</td>
<td>58</td>
</tr>
<tr>
<td>Paediatric Rehabilitation</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>GEM</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Psychogeriatric Care</td>
<td>6</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Non-acute Care</td>
<td>6</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>89</strong></td>
<td><strong>35</strong></td>
<td><strong>124</strong></td>
</tr>
</tbody>
</table>
AN-SNAP Versions 4 and 5

Paediatrics

- 8 classes – 4 inpatient, 4 ambulatory
- Based on clinical consensus, not data
- Uses adult Phase definitions for now
- Costing and pricing yet to occur
- Further consideration of moving to three Phases for paediatrics – Stable, Complex (Unstable and Deteriorating together) and Terminal
# AN-SNAP v4 - paediatric classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>4FB1</td>
<td>Palliative Care, Stable phase, Age ≥ 1 year</td>
</tr>
<tr>
<td>4FB2</td>
<td>Palliative Care, Unstable or Deteriorating phase, Age ≥ 1 year</td>
</tr>
<tr>
<td>4FB3</td>
<td>Palliative Care, Not Terminal phase, Age &lt; 1 year</td>
</tr>
<tr>
<td>4FB4</td>
<td>Palliative Care, Terminal phase</td>
</tr>
<tr>
<td>4SO1</td>
<td>Palliative Care, Stable phase, Age ≥ 1 year</td>
</tr>
<tr>
<td>4SO2</td>
<td>Palliative Care, Unstable or Deteriorating phase, Age ≥ 1 year</td>
</tr>
<tr>
<td>4SO3</td>
<td>Palliative Care, Not Terminal phase, Age &lt; 1 year</td>
</tr>
<tr>
<td>4SO4</td>
<td>Palliative Care, Terminal phase</td>
</tr>
</tbody>
</table>

4 identical classes, 2 settings – FB (inpatient) and SO (ambulatory)
AN-SNAP Version 4

◆ **INPATIENT** – basic structure maintained but differences in detail of classes
  
  – No “Assessment only” class
  
  – Unstable split into “First phase this episode” versus “Not first phase this episode”
  
  – Splits on function (measured by the RUG-ADL) revised for Stable and Unstable and removed from Terminal
  
  – Age split in Deteriorating phase modified
  
  – No bereavement class
AN-SNAP Version 4

**AMBULATORY** – same day admitted, outpatient, outreach and day program

- Now only for multidisciplinary palliative care
  - 12 classes (8 adult, 4 paediatric), down from 22 adult classes in last version
  - Splits on Phase, problem severity (PCPSS) and function (RUG-ADL)
- Single discipline care classified as Tier 2 outpatient clinic classification
AN-SNAP Versions 4 and 5

CONSULTATION-LIAISON / INREACH

◆ Patient is the medico-legal responsibility of another stream
◆ Not recognised by IHPA as separate ‘activity’ for ABF purposes
◆ But considered best practice
◆ In AN-SNAP V4 we have treated for classification purposes as ambulatory care. States can then price
Implementation issues

Palliative care, AN-SNAP and PCOC
Implementation at hospital level

- Made much easier because of participation in the national Palliative Care Outcomes Collaboration (PCOC)
  - A national program that utilises standardised clinical assessment tools to measure and benchmark patient outcomes in palliative care
  - The data required for AN-SNAP have been collected by PCOC since 2006
  - Data quality is excellent because the information is used for clinical assessment, to measure patient outcomes and for clinical benchmarking
PCOC quality and outcome measures

- Phase movements
- Change in function
  - RUG-ADL and AKPS
- Change in problem severity
  - PC Problem Severity Scale and SAS
- Mode of start/end
- ALOS (days seen) x phase
- Place of death x Level of support
- Access measures
  - Postcode
  - ATSI
  - Language / country of birth
- Time between being ready for care and episode start
- Time in Unstable Phase
Casemix-adjusted improvements over time

PCOC national data – adjusted for changes in phase and symptom start scores over time
Change in symptoms relative to the baseline national average
Change in symptoms relative to the baseline national average

![Graph showing the change in symptoms from Jul-Dec 2009 to Jan-Jun 2014. The graph indicates an increase in symptoms over time, with distinct lines for Family/carer, Psychological/spiritual, and Other symptoms.]

- **Family/carer**: Shows a steady increase from below 50% to just over 80% by Jan-Jun 2014.
- **Psychological/spiritual**: Starts around 55% in Jul-Dec 2009 and rises to just below 85% by Jan-Jun 2014.
- **Other symptoms**: Begins at around 55% in Jul-Dec 2009 and reaches 85% by Jan-Jun 2014.
Bigger design issues

Counting and funding models for palliative care
Cost drivers

◆ Need to distinguish between the classification, the funding model and the price
◆ What classification variables are required to explain differences between patients?
◆ What variables are better dealt with as a price loading rather than a classification variable?
  – Eg, bereavement, indigenous, remoteness
◆ Are there other factors that explain legitimate cost differences between providers and how to use this information in pricing?
Person

Episode of illness 1

Episode of illness 2

Episode of illness etc

Episode of care 1

Episode of care 2

Episode of care etc

Phase 1

Phase 2

Phase etc

Day 1

Day 2

Day etc

Service event 1

Service event 2

Service event etc

Provider carries most risk

Purchaser carries most risk
A classification is not a funding model (and vice versa)

◆ First you develop a classification

◆ Then you design a funding model that contains the right incentives
  – How high up to bundle? What is the unit of counting?
    ♦ Per diem, per phase, per episode of care, per episode of illness
  – What incentives?
    ♦ Technical, allocative and dynamic efficiency
  – What’s possible?
    ♦ Now, soon, later? What transition strategy?
Blended Payment Model

3 elements:
- Per Phase (rate varies by AN-SNAP class)
- Per day (rate is the same across all classes) and
- Outlier days (rate varies by AN-SNAP class)

These 3 elements converted to total cost weights

Average rate per bed day is similar to the rate for acute medical admissions
  – based on annual national hospital cost study
Future developments?

◆ New models of care?
  – Consultation liaison?

◆ Price for quality and outcomes, not based on current average cost?
  – Pay for Performance (P4P)?

◆ How to deal with gaming?
  – Manipulating data so patients are assigned to higher-paying classes
  – This is not in the interests of quality care
  – How do we get the message through?
Australia is keen to collaborate and learn from experience internationally.