Developing an alternative funding model for small and regional hospitals

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Background

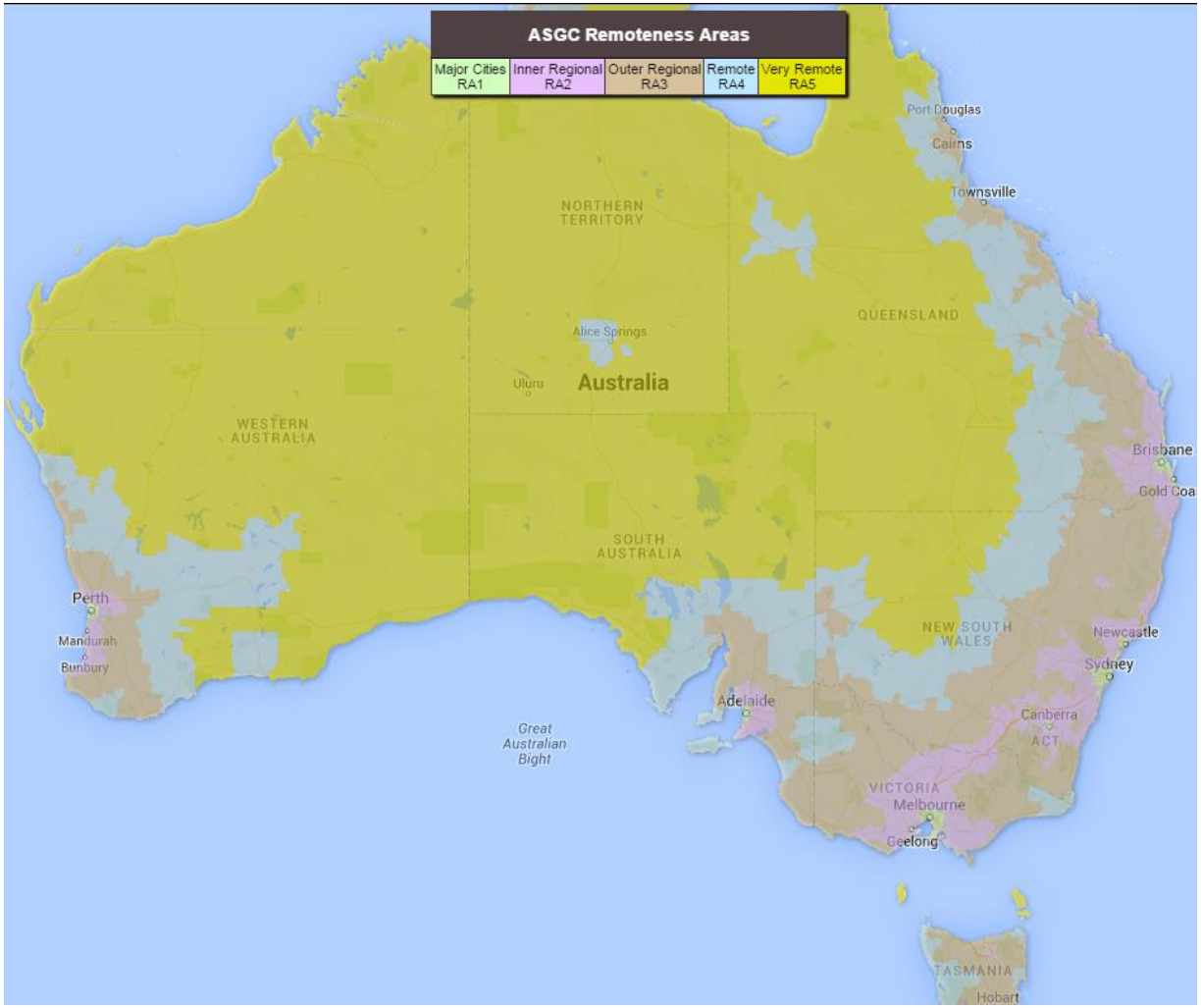
- Independent Hospital Pricing Authority (IHPA)
  - Independent government agency established by the Commonwealth
  - Implement Activity Based Funding (ABF) for public hospitals
  - Responsible to determine the Commonwealth's contribution to hospital funding
    - ABF hospitals (285 in 2015/2016)
    - Block funded hospitals (413 in 2015/2016)
      - Small and regional hospitals (385 in 2015/2016)

Block funding criteria (draft 2015/2016)

- technical requirements for applying ABF are not able to be satisfied
- absence of economies of scale that mean some services would not be financially viable under ABF

- Low volume threshold
  - ≤ 1,800 inpatient (casemix-adjusted) separations per year in major cities
  - ≤ 3,500 total (casemix-adjusted) separations per year in inner regional, outer regional, remote and very remote areas

Remoteness Areas of Australia



Source: http://www.doctorconnect.gov.au/internet/otd/publishing.nsf/Content/locator

IHPA's model (National Efficient Cost)

- National Efficient Cost (NEC) in 2013/14 is $4.738 million
  - Average cost of a block funded hospital

ASGC Remoteness Classification	Service Volume Grouping (Total NWAU)						
	Group A 0-199.9	Group B 200-374.9	Group C 375-674.9	Group D 675-1049.9	Group E 1050-1499.9	Group F 1500-2649.9	Group G 2650+
Major Cities	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inner Regional	0.329	0.629	0.677	1.012	1.221	1.829	2.995
Outer Regional	0.346	0.454	0.699	0.908	1.469	1.923	3.382
Remote	0.25	0.436	0.605	0.923	1.98	N/A	3.823
Very Remote	0.237	0.454	0.737	1.154	1.95	N/A	4.328

- Funding of a hospital determined by multiplying the cost weight in the table by the NEC
- Additional Service Capability payment ($498/casemix-adjusted separation) for Hospitals in Group F and Group G

Project objectives

- Test the NEC model
- Develop an alternative funding model for small and regional hospitals
  - Simple and transparent

Methodology

- Data analysis of patient-level activity and cost data available for 2011/12 and 2012/13
  - Summary statistics and linear regression
- Stakeholder consultations
  - Health regions

Types of hospitals

- Three types of hospitals included in data
  - Group 1: All other hospitals
  - Group 2: Hospitals in Peer Group C2
  - Group 3: Multi-Purpose Service with Residential Aged Care facility (MPS/RAC)

- Groups subject to different regulation

Initial investigation

- Cut the data in all possible ways

- Is the composition of costs different?
- What costs should be considered fixed and variable?
- What is due to local arrangements?
- What is within or beyond the control of hospital?

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Three Components for Funding

- Activity-based
  - Patient related
- Structural
  - Basic infrastructure and administration
- Historical
  - Beyond local control
  - Ability to recruit staff
  - Buildings

Activity-Based Component

- Costs driven primarily by patient activity
  - Casemix systems unable to capture true level of activity
  - Funding per bed day or per episode
- Per diem funding for
  - Nurse and allied health staff cost
  - Drugs and medical supplies
  - Food
- Episode funding for
  - Theatre episodes – identified by surgical AR-DRG
  - Dialysis – identified by AR-DRG L61Z or Tier 2 Service events
  - Chemotherapy – identified by AR-DRG R63Z or Tier 2 Service events

Structural Component

- Costs in relation to administration
- Structural funding for
  - Administrative and domestic staff cost
  - Administrative expenses and Goods and Services costs

Historical Component

- Expenditure unrelated to patient activity
- Expenditure partly outside local control
  - E.g. unable to recruit medical staff

- Historical funding for:
  - Medical staff/VMO cost
  - Other clinical costs (imaging/pathology/blood/prostheses)
  - Other cost (Repairs, Maintenance & Replacements, transport, utilities, Area/State flows …)

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Funding matrix

Payment mechanism	Funding Groups			% of total allocation
	Group 1	Group 2	Group 3	
Fixed by Funding Group	$ 140,554	$ 674,805	$ 143,807	17
+ per bed day equivalent		$ 146		
Per bed day equivalent	$ 491	$ 491	$ 521	
Loading per episode				
Surgical Partition ON DRG		$ 1,560		
Surgical Partition SD DRG		$ 840		50
other Partition DRG		$ 533		
Chemotherapy		$ 472		
Dialysis		$ 56		
historical				33

Bed day equivalences

- Bed day equivalences for different types of care
  - Adjusted to acute overnight bed day
- Local autonomy in provision of care

	Admitted				Non-admitted	
	Acute overnight	Acute same-day	Subacute	Nonacute / RAC	Outpatients	ED
Group 1	1.00	0.67	1.10	0.55	0.16	0.16
Group 2	1.00	0.43	0.93	0.70	0.15	0.20
Group 3	1.00	0.44	1.28	0.38	0.19	0.19

Safety net mechanism

- Safety net ensures that activity component covers two clinical staff
  - Important for hospitals with very low volumes
  - Two levels: 24/7 and 12h per day cover
  - Group 1: minimum 7.5 (and 3.5) bed day equivalents
  - Group 3: minimum 6.7 (and 5.3) bed day equivalents

		Example Hospital in Funding Group 1
Non-Admitted	Acute overnight	400
	Acute same-day	14
	Subacute	85
	Non-acute / RAC	2,800
	Outpatients	1,400
	ED	1,500
	bed day equivalent	(400*1+14*0.67+85*1.1+2,800*0.55+1,400*0.16+1,500*0.16)/365
		6.87
	Bed day payment	(Safety net adjustment) 491*365*7.50
		$1,344,113
AR-DRG	Overnight surgery	0
	Same-day surgery	0
	Other partition	0
	Chemotherapy	0
	Dialysis	0
	Episode payment	0*1,560+0*840+0*533+0*472+0*56
		$0
	Funding Group payment	140,554+146*365*6.87
		$506,656
	Historic payment	**$885,000**
TOTAL		$1,344,113+0+$506,656+$885,000
		$2,735,769

Conclusion

- No casemix in a classical sense
- Model recognises fixed and variable cost drivers
  - Distinction between structural (17%) and activity-based costs (50%)
- 33% of expenditure remain unexplained/funded historically
- Model supports alternative models of care by specifying bed day equivalents
- Safety net mechanism guarantees minimum funding
- Model design enables hospitals to identify areas for improvement

Thank You!

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