



National Casemix and Activity Based Funding Conference 2011

**Issues to be considered in developing a national
non-admitted patient services ABF model**

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ABF MODELS

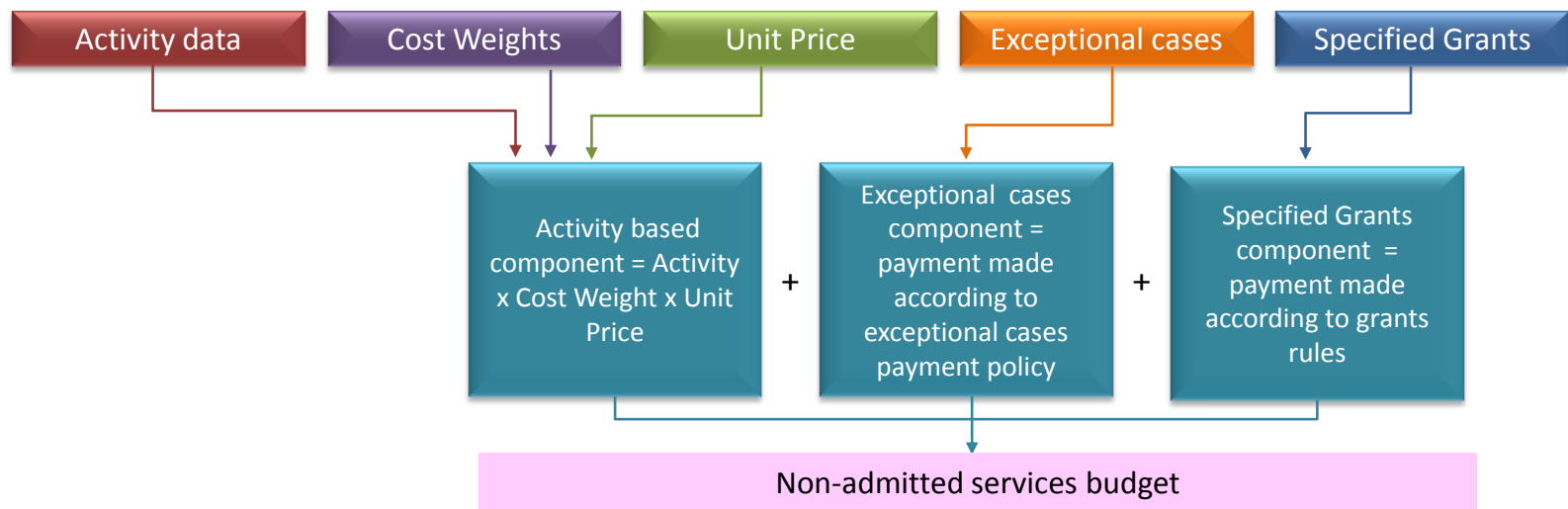
The most common design for ABF models involves a mixture of a:

- **pure activity based component** (i.e. calculated using the volume of activity measured using a defined classification, a unit of count, and an associated set of counting rules);
- **a fixed component** (i.e. to deal with the part of the services provided by an LHN that are difficult to fund on an ABF basis).

COMPONENTS OF A TYPICAL ABF MODEL

- **Activity data:** define the volume of services to be funded; there must be a classification system and a unit of count. The classification system and unit of count must be implemented consistently across all hospitals in the scope of ABF arrangements.
- **Cost weights:** define the expected relative costs of producing a unit of activity in each category of the classification system. The classification system for the cost weights must be the same as the classification system that is to measure activity volume.
- **Unit price:** the price that will be paid for a unit of activity that has a cost weight of one. In capped applications the unit price is determined by dividing the total available funds by the total volume of services to be funded. In un-capped models, the unit price is normally determined with regard to the efficient costs of service delivery.
- **Exceptional case payments:** payments that are made to deal with cases that cannot be effectively managed using ABF. Typical examples include outlier payments (e.g. abnormally high or low cost cases within a category in the classification system).
- **Specified grants:** payments that are made for products that are not well described by the classification system and/or for joint products (e.g. teaching and training).

CONCEPTUAL MODEL FOR ABF FOR NON-ADMITTED PATIENT SERVICES



THE CLASSIFICATION SYSTEM

- NHCDC Tier 2 clinics was chosen as the proxy classification for non-admitted patient care (includes both outpatient and hospital-auspiced community health services).
- There are really only 2 options for the classification system to be used in non-admitted patient services ABF as follows:
 - **current version of NHCDC Tier 2 Clinics:** the non-admitted ABF model could use the most current version of Tier 2 Clinics; or
 - **aggregation of Tier 2 Clinics:** the non admitted ABF could aggregate the Tier 2 clinics into higher level categories (e.g. the 109 classes could be reduced to say 50) for reporting of activity data and subsequently funding.

THE UNIT OF COUNT

- There are multiple units of count used in counting and funding non-admitted patient services around Australia.
- Too confusing for the purposes of national ABF to adopt one unit of count as the basis for activity data reporting and another unit of count for the purposes of activity based funding.
- Two options for the unit of count to be used in non-admitted patient ABF model :
 - **Occasions of service:** the non-admitted ABF model could use a consistent count of OOSs; or
 - **Bundled occasions of service:** the non admitted ABF model could be based on a unit of count that bundles occasions of service (most logically by including ancillary services as part of a medical/surgical occasion of service similar to Victoria).

COUNTING RULES

- There are a variety of counting rules used in reporting non-admitted patient activity data around Australia (e.g. some jurisdictions only count face-to-face OOSs (one-to-one, group), some also count OOSs delivered via telephone or case conferences etc
- There are also issues about:
 - whether only non-admitted services provided to public patients are counted or patients in other financial classes (e.g. DVA, privately referred etc.) are also counted;
or
 - whether only non-admitted services provided by medical and allied health staff led clinics (and some nursing) are counted
or
 - whether all services are counted irrespective of the discipline of the lead service provider.

COUNTING RULES CONTD.....

- The two counting rules options, at the extremes, are:
 - **Restricted counting rules:** the non-admitted ABF model would use counting rules that included only face to face services (one-to-one and groups) for public patients delivered in a NHCDC Tier 2 Clinic led by a medical, allied health or nursing (restricted) professional (i.e. essentially the same counting rules as VACS); or
 - **Broad counting rules:** the non admitted ABF model would use counting rules that included all non-admitted patient services i.e. face-to-face, technology assisted and patient not present; one-to-one and groups; all patient financial classes; all professional disciplines; etc. (i.e. essentially the same counting rules as NSW).
- There are a variety of options in between the two extremes; and it is not necessarily the case that just because a type of non-admitted service is counted, it would appear in the funding model.

COST WEIGHTS

- There is national data collected on the costs of non-admitted patient services by NHCDC Tier 2 clinics.
- There is concern amongst some stakeholders that that existing data are not a fair reflection of the costs of non-admitted patient service delivery in Australia.
- There are significant variations in the approach to costing; and also in the range of non-admitted services that are being costed.
- There is little application of patient level costing for non-admitted services outside of Victoria and Queensland; which creates problems in developing cost weights for NHCDC Tier 2 clinics for a nationally representative set of hospitals.
- The unit of count and counting rules need to be chosen before any costing study on non-admitted services can be undertaken.

COST WEIGHTS CONTD.....

- Options include using existing costing data or undertake a new costing study as the basis for developing cost weights.
- The choice here is often made on pragmatic grounds. Commissioned costing studies are often expensive, and only offer short term solutions (i.e. a process is still required for ensuring that the costs weights reflect current clinical practice).
- The issue with using existing costs data is that it may have been developed using a different classification system, unit of count, and counting rules to what is intended to be used in the ABF model.

THE UNIT PRICE

- Setting the unit (efficient) prices is a matter for the IHPA.
- It is important to ensure that the infrastructure is in place to allow IHPA to make a reasonable determination.
- The key requirement is for a comprehensive set of data on non-admitted patient costs.
- The data must be available at patient level to allow IHPA to do the modelling that is likely to be necessary to determine the efficient price(s). For example, Victoria sets the medical/surgical unit price in VACS with reference to the available patient level cost data and pool of funds available for allocation.
- IHPA will no doubt consider a range of options in setting the unit price.

THE UNIT PRICE CONTD.....

- IHPA may set multiple unit prices either for:
 - subsets of the categories in the NHCDC Tier 2 clinic classification;
 - different categories of hospitals to compensate for weaknesses in the classification system in identifying case complexity;
 - hospitals in different locations that experience input price disadvantage.
- In practice, there are many options for the setting the unit price(s) to be used in non-admitted patient services ABF, with the extremes being:
 - **Single unit price:** the non-admitted ABF model would use only one unit price for non-admitted patient services for all hospitals within scope; or
 - **Multiple unit prices:** the non-admitted ABF model would use multiple unit prices for non-admitted patient services for all hospitals within scope that might recognise differences by type of hospital, location of hospital, nature of service, discipline of service provider, financial class of patient, etc.

THE UNIT PRICE CONTD.....

- There is also a strong relationship between the unit price setting and the classification system, unit of count, and counting rules.
- Multiple unit prices make the ABF system more flexible, but their use adds considerably to the complexity of the ABF arrangements.
- There is no correct choice here; it is really the interaction between the key components (classification system, counting unit, counting rules, cost weights and unit price) that makes the ABF system effective or ineffective.

CALCULATING THE PURE ACTIVITY COMPONENT

- The process for calculating the pure activity based component of the non-admitted patient services ABF model brings together the five key components into a formula that calculates an allocation for the LHN (simplified using only one unit price).

$$B = p * \sum_{i=1}^n a_i * w_i$$

where

B = activity based component of the LHN budget

p = unit price

a_i = units of activity in the LHN in clinic (i) in the NHCDC Tier 2 classification system

w_i = cost weight for clinic (i) in the NHCDC Tier 2 classification system

n = the number of classes in the NHCDC Tier 2 classification system that will be used for funding purposes (i.e. after any bundling has taken place)

THE EXCEPTIONAL CASES COMPONENT

- There are a number of possible circumstances in which payments for exceptional non-admitted patient cases might be considered.
- The two most common applications of exceptional case payments are:
 - payments for low and high end outliers
 - payments for highly complex cases

PAYMENTS FOR LOW AND HIGH END OUTLIERS

- Classification systems used in ABF applications are developed to describe the normal, or typical, case (in terms of expected resource use) in each category, known as inliers.
- Outlier cases are those which do not fit the normal pattern and, in terms of actual resource use, lie outside so called “trim points”.
- For non-admitted patient setting, it is possible to conceive of certain situations that may result in an OOS not being typical within an NCHDC Tier 2 clinic. For example:
 - a non-admitted service involving **more than three health professionals** providing service when the ‘norm’ for the relevant clinic is one (high end outlier); or
 - a non-admitted service that **runs considerably longer than the average time** implied in the cost weight for the relevant clinic; (high end outlier); or
 - a non-admitted service where a **patient presents for an ambulatory procedure but is found not to be fit to undergo an anaesthetic** (low end outlier).

PAYMENTS FOR LOW AND HIGH END OUTLIERS

CONTD.....

- It may be that there are insufficient data available to include an outlier policy in the first version of the ABF model for non-admitted patient services.
- A conceptual design choice to be made between a system with an outlier payment policy and one without:
 - **non-admitted ABF model with outlier payment policy:** the non-admitted ABF model would incorporate an outlier payment policy with the choice of the variable to be used to determine if an OOS is an outlier and the outlier trim points to be decided;
 - **non-admitted ABF model with no outlier payment policy:** the non-admitted ABF model would not have an outlier payment policy.
- This is a matter for IIHPA. However, if it is considered that an outlier payment policy is desirable, there is a need to determine what data would be collected to allow the identification of outlier cases.

PAYMENTS FOR HIGHLY COMPLEX CASES

- The other common application of exceptional case payments is in circumstances where the classification system and/or the associated cost weights cannot be made to deal easily with a particular set of cases.
- This situation occurs most commonly with respect to highly complex cases that require significant resources, which due to the need to keep the classification system simple, are not adequately reflected in the classes and/or the cost weights.
- For example, the VACS system provides for a grant that is effectively an exceptional case payment for non-admitted patient services relating to liver transplant, cochlear implant, and genetics.

PAYMENTS FOR HIGHLY COMPLEX CASES

CONTD.....

- It is likely that there will be insufficient data available to include exceptional case payments for highly complex cases in the first version of the ABF model for non-admitted patient services.
- A conceptual design choice to be made between a system with a highly complex case payment policy and one without:
 - **non-admitted ABF model with highly complex cases payment policy:** the non-admitted ABF model would incorporate a highly complex cases payment policy with the choice of the variable to be used to determine if an OOS is a highly complex case to be decided; or
 - **non-admitted ABF model with no highly complex cases payment policy:** the non-admitted ABF model would not have a highly complex cases payment policy.
- This issue is also matter for IIHPA. However, if it is considered that a highly complex cases payment policy is desirable, there is a need to determine what data would be collected to allow the identification of highly complex cases.

THE SPECIFIED GRANTS COMPONENT

- The three most common applications of specified grants:
 - payment for activity not counted
 - payment for service availability
 - payment for national or jurisdiction level reference services.
- Specified grants sometimes include teaching, training and research, however this will be dealt with at the level of the whole hospital, not as a subset of the non-admitted patient services ABF model (or indeed the ABF model for any other patient services work-stream).

PAYMENT FOR NON-ADMITTED SERVICES PATIENT ACTIVITY NOT COUNTED

- Some types of non-admitted patient services it may be too difficult to collect activity data.
- This situation occurs when the costs associated with collecting the data are considered to outweigh the perceived benefit of directly including services in the ABF model.
 - For example, in the VACS system, the base grant, which is set on the basis of historical funding levels, compensates for services provided to patients outside defined clinical categories (e.g., phone consultations, administration of patients, etc.).
- It is possible to contemplate that there will be certain types of non-admitted patient services where it is considered not to be cost beneficial to collect activity data including:
 - a non-admitted patient service provided over the **telephone or internet** (patient involved);
 - a non-admitted patient service that involves a **case conference** (patient not involved);
 - a **consultation/liaison** non-admitted patient service (patient not involved); or
 - an **advocacy** non-admitted patient services (patient not involved).

PAYMENT FOR NON-ADMITTED SERVICES PATIENT ACTIVITY NOT COUNTED CONTD

- It is a matter for judgment (in the development of the business and counting rules) whether activity data on such services are collected and used in the ABF model or whether they are assumed to be ‘associated activities’ (i.e. work that is required as part of delivering the non-admitted patient services that are counted in ABF).
- If an ‘associated activities’ approach is taken, then it is important that the not counted activities are distributed evenly across hospitals in proportion to the counted activities, otherwise funding inequities will result from using a pure ABF approach.
- These inequities can be removed by using a specified grant to take account of potential uneven distribution of non-admitted patient services activity that is not counted.
 - rural hospitals serving highly dispersed populations may have a higher proportion of their non-admitted patient services delivered by telephone or telehealth and would therefore be disadvantaged if these activities were not counted.

PAYMENT FOR NON-ADMITTED SERVICES PATIENT ACTIVITY NOT COUNTED CONTD

- There is a conceptual design ABF model choice to be made between a system with a specified grant for activities not counted and one without:
 - **non-admitted ABF model with activities not counted specified grant:** the non-admitted ABF model would incorporate a specified grant reflecting the fact that a hospital may have a higher than average proportion of non-admitted patient services that are not counted directly for ABF purposes (basis for deciding whether a hospital is in this category to be determined); or
 - **non-admitted ABF model with no activities not counted specified grant:** the non-admitted ABF model would not have a specified grant relating to non-admitted patient services that are not counted.
- This is a matter for IIHPA. It does, however, need to be considered when developing the business and counting rules relating to the unit of count.

PAYMENT FOR SERVICE AVAILABILITY OR ACCESS

- A hospital may provide access to a service even though there is likely to be insufficient volume for the service to be effectively funded using an ABF approach that contains a price that is set with reference to a fully absorbed efficient production cost.
- These services are characterised by having a high fixed (standby or access) component in their costs that does not vary significantly with the volume of activity. The best known examples of these services are ED or the ICU.
- Similar situations occur in respect of services such as crisis counselling, community assessment teams (mental health), sexual assault/domestic violence care that may be delivered as a non-admitted patient service.
- These services have the essential characteristic that they are effectively emergency response services but they usually form part of the non-admitted patient services suite, rather than the ED (on occasions they may take over the care of a patient who initially presents to ED).
- There may be a significant fixed cost in delivering these services that creates funding shortages under ABF if activity is low.

PAYMENT FOR SERVICE AVAILABILITY OR ACCESS

CONTD.....

- There is conceptual design choice in the ABF model to be made between a system with a specified grant for access to certain types of services and one without:
 - **non-admitted ABF model with access to services specified grant:** the non-admitted ABF model would incorporate a specified grant reflecting the fact that there is a high fixed cost associated with some of the non-admitted patient services provided (basis for deciding what services fall into this category to be determined); or
 - **non-admitted ABF model with no access to services specified grant:** the non-admitted ABF model would not have a specified grant relating to access to services.
- This is also matter for IIHPA. It does, however, need to be considered when reviewing the NHCDC Tier 2 clinics to ensure that data on any services that may fall into this category are reported in the ABF system.

PAYMENT FOR SERVICE AVAILABILITY OR ACCESS

CONTD.....

- Reference services are a common concept in respect of laboratories where some tests are so highly specialised (and the need for them is rare) that they are performed in only one laboratory in each jurisdiction or sometimes in one laboratory nationally.
- Other types of reference services include information services of various kinds (e.g. with respect to poisons, with respect to infant health, etc).
- There is conceptual design choice in the ABF model to be made between a system with a specified grant for reference services and one without:
 - **non-admitted ABF model with reference services specified grant:** the non-admitted ABF model would incorporate a specified grant reflecting the fact that a hospital provides reference services (basis for deciding what is a reference service to be determined); or
 - **non-admitted ABF model with no reference services specified grant:** the non-admitted ABF model would not have a specified grant relating to reference services.
- This is also matter for IHPA. It does, however, need to be considered when developing the business and counting rules relating to the unit of count.

CONCLUSION

- Conceptual framework for the design of an ABF model for non-admitted patient services.

Thank you