

**NSW
TAG**

Activity Based Funding of Medicines in Hospitals

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NSW
Therapeutic
Advisory
Group Inc.

Advancing
quality use
of medicines
in NSW

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1. INTRODUCTION & SCOPE

This document was developed to assist NSW hospital pharmacy departments with their understanding of activity based funding (ABF) processes as well as clarify issues related to pharmacy costs and funding for outpatient supply of medicines and associated services and products. Note that as of May 2021, NSW Health PD 2005_395 Drugs-Funding Arrangements for Outpatient Use of High Cost Drugs Not Funded by the Commonwealth remains current but may be rescinded in the future ¹.

Although this document includes discussion on high cost medicines (HCMs) and refers to NSW Ministry of Health (NSW Health) processes, **the information is relevant Australia-wide for activity based funding (ABF) regarding:**

- **All inpatient medicines** i.e. medicines used during admitted care (ABF terminology); and,
- **All non-PBS outpatient medicines** i.e. medicines prescribed for indications not reimbursed on the Pharmaceutical Benefits Scheme (PBS) in outpatient clinics (non-admitted care in ABF terminology).²

This document is divided into 3 sections:

1. Background to activity based funding (ABF)
2. Funding considerations for High Cost Medicines
3. Appendices:
 - Appendix 1: Detailed Pharmacy related ABF information and worked examples.
 - Appendix 2: Additional sources of information on ABF.

2. BACKGROUND TO ACTIVITY BASED FUNDING (ABF)

2.1 General principles of ABF

ABF is a hospital funding method whereby hospitals are paid for the number and mix of patients they treat. ABF aims to facilitate the provision of public hospital services that are efficient, safe and of a quality consistent with national standards and that funding and delivery of services at public hospitals is transparent. In this way, it aims to empower the health sector to drive continuous improvement and value for money in the delivery of public health services.

ABF is an episodic funding model. This means that for the vast majority of patients, a single payment is made for their episode of care or hospital stay. This helps drive efficiency because it is a strong incentive that patients stay in hospital only as long as they need to be. ABF takes into account the varying complexity of patients and makes various adjustments to recognise that some patients require more care and treatment and ensure that hospitals are not disadvantaged by treating more complex patients.

The facilitation of quality and safety under ABF is enabled with the measurement of sentinel events and 16 hospital-acquired complications (HACs)* including medication complications.† Any public hospital episode that includes a sentinel event will not be funded and hospitals are required to report these events to Independent Hospital Pricing Authority (IHPA) and the Administrator of the National Health Funding Pool. Funding reductions related to the presence of one or more HACs during a hospital stay have been introduced in 2019. The level of funding reduction is based on the complexity of the patient (i.e. the patient's predisposition to experience a HAC during their hospital stay). This funding model aims to facilitate implementation of risk mitigation strategies for avoidable harms by hospitals and clinicians. ABF for Hospital Acquired Complications will not be discussed further and readers are referred to information on the IHPA and ACSQHC websites^{3,4}.

Since the introduction of activity based funding (ABF) in 2012, most Australian public hospitals receive their funding based on agreed levels of activity‡. ABF is allocated at a Local Health District (LHD) or Health Network (HN) level§. In NSW, the total amount of ABF allocation is negotiated annually between each LHD/HN and the NSW Ministry of Health (NSW Health) under Service Level Agreements.

Some services are not suitable for ABF and have continued to be 'block funded':

- teaching, training and research, population and Aboriginal health
- other activities not easily classified e.g. primary and community care
- smaller rural hospitals where application of ABF is impractical.

2.2 Methodology of ABF

- ABF aims to fund the actual work performed using annually agreed targets (between each NSW LHD/HN and NSW Health).
- Essential elements are:
 - *Targets* to specify the volume of activity to be undertaken by a facility/service. (The Service Level Agreements set the annual activity targets);
 - A *classification system* to group activity into classes with similar clinical profiles and resource use;
 - *Costs of an activity* to give indicative resource use of predicted activity targets (weighted activity units, WAU)**; and,
 - A *price* for each unit of weighted activity††.
- ABF for a hospital service (in simple terms) = price multiplied by the weighted activity units for that service.‡‡

* A hospital acquired complication refers to a patient complication for which clinical risk mitigation strategies may reduce the risk of that complication occurring in hospital. Conditions classified as HACs include pressure injuries, falls, healthcare-associated infection, venous thromboembolism, delirium, renal failure, gastro-intestinal bleeding and medication complications. For more information, see Australian Commission on Safety and Health Care, *Hospital-Acquired Complications Information Kit*, 2018 at https://www.safetyandquality.gov.au/wp-content/uploads/2018/06/SAQ7730_HAC_InfomationKit_V2.pdf

† Independent Hospital Pricing Authority. National Efficient Price Determination 2019-20. IHPA, March 2019. Pages 18 and 72.

‡ https://www.ihsa.gov.au/sites/default/files/publications/national_efficient_price_determination_2019-20.pdf

§ Some smaller regional and rural public hospitals still receive block-funding.

§ In this document, the abbreviation LHD refers to both local health district and health network.

** National Weighted Activity Units (NWAUs) (see Appendix 1).

†† The National Efficient Price (NEP) which is determined annually (see Appendix 1).

‡‡ Further information on ABF methodology and pharmacy related worked examples are in Appendix 1.

2.3 ABF implications for Pharmacy Departments

2.3.1 ABF documentation and reporting requirements

- It is important Directors of Pharmacy establish a close relationship with their LHD/hospital finance department and costing unit^{§§} to:
 - ensure accurate documentation and reporting of all relevant pharmacy costs for ABF purposes, and
 - be involved in annual ABF negotiations, especially where high costs medicines (HCMs) make up a significant proportion of a Pharmacy Department's expenditure and/or where annual fluctuations in usage of high cost medicines may severely impact the pharmacy budget. (See Section 2 for the definition of HCMs).
- It is essential that all pharmacy- related activity and associated costs for all medicines, (including purchase cost plus associated costs for procurement, dispensing/reconstitution and patient counselling), especially for HCMs, are accurately recorded in patient records and on various pharmacy dispensing and inventory databases so such data can be collected by the LHD finance departments and costing units to:
 - assist with accurate reporting of the true cost of each episode of treating a patient; and,
 - assist with the annual ABF funding negotiations between each LHD and NSW Health.
- Under ABF, it is the responsibility of each LHD's pharmacy and finance departments to institute a robust mechanism to clearly identify and claim any costs associated with the provision of all medicines, including expensive medicines.
 - In the case of expensive medicines such as home total parenteral nutrition (TPN) such a mechanism may be a single cost centre where all costs associated with the supply from various hospital departments and other suppliers of intravenous nutrition solutions, consumables and disposable items (e.g. giving sets, central line flushes, antiseptics) can be collected and tracked.
 - With the introduction of such a mechanism, all costs associated with the provision of medicines should be clearly identified, collected and tracked over time, providing important data for the following purposes:
 - claiming back costs incurred by the pharmacy department for procurement of all medicines, and especially expensive medicines — while such ABF revenue may be received by the LHD, it may not necessarily be allocated to the pharmacy department budget; and,
 - assisting with the annual ABF activity target negotiations between each LHD and NSW Health by providing data on annual fluctuations in:
 - numbers of National Weighted Activity Units (NWAUs) for admitted and non-admitted patients who incur significant pharmacy costs, and
 - costs of all medicines within a LHD, which may have significant financial implications for a LHD/SN e.g. 2018/19 ABF funding for one year of home TPN for one patient is \$ 146,000, of which approx. 67% is pharmacy costs for IV solutions (\$97,500). (See Appendix 1 for full details).

^{§§} Costing units may also be referred to by other term such as casemix or ABF units.

2.3.2 Key ABF information to assist with pharmacy reporting

Below is some key information from the Independent Hospital Pricing Authority (IHPA) on the costs that pharmacy departments should document and report to their hospital costing units to assist with the collection of accurate costing data Australia-wide and to facilitate appropriate ABF funding for their institution.

A. The IHPA 2018 Australian Hospital Patient Costing Standards (Version 4.0) – Part 1: Standards contains the following useful pharmacy related information⁵

i. Definition of pharmacy costs (at page 32):

*Pharmacy costs are goods and services used in the provision of a pharmaceutical service and consumables or the actual cost as billed by a provider. They include the purchase, production, distribution, supply and storage of drug products and clinical pharmacy services of both PBS reimbursed pharmaceuticals and PBS non-reimbursed pharmaceuticals. This includes the cost of Pharmacy staff.****

ii. Pharmacy-related Final Cost Centres (at page 45):

NHCDC Functions	Services	Specialty	Modality	Final Cost Centre*†††
Pharmacy	Manufacturing	Medicines	Manufacturing	MfedDrugs
Pharmacy	Manufacturing	Other	Parenteral / Enteral Nutrition (goods & services only)	Tpn
Pharmacy	Pharmacy general	Drug costs	Cytotoxic drugs	Cytotoxic
Pharmacy	Pharmacy general	Drug costs	General pharmacy	Genpharm
Pharmacy	Pharmacy general	Drug costs	Other Pharmacy (please specify)	Otherpharm
Pharmacy	Pharmacy general	Drug product supply: dispensing	Dispensing costs of drugs	Dispense
Pharmacy	Pharmacy general	High Cost Drugs	High Cost drugs	Highdrugs
Pharmacy	Pharmacy general	Imprest	Imprest (Ward)	Imprest

B. The IHPA 2018 Australian Hospital Patient Costing Standards (Version 4.0) – Part 2: Business Rules contains the following useful pharmacy related information.⁶

- i.** In addition to collated data obtained for overall hospital pharmacy services, where possible, additional data that best describe those services in more detail should be identified and reported to the hospital costing unit, including:
- general pharmacy
 - pharmacy classification (flags for high cost pharmacy or Pharmaceutical Benefits Scheme drug type)
 - chemotherapy pharmacy (at page 47).

*** Pharmacy is not included in the category of ‘Allied Health Salary and Wages’ cost of labour (page 31-32).

††† A final cost centre is a collection of costs, allocated from both Production and Overhead cost centres which are applicable to delivery of the Final Product.

3. FUNDING CONSIDERATIONS FOR HIGH COST MEDICINES

High cost medicines (HCMs) currently impose a significant budgetary burden for many LHDs and this is likely to increase in the future with the increasing introduction of more expensive medicines e.g. checkpoint immunotherapies that may be used on a chronic basis.

3.1 High Cost Medicines Definition

High cost medicines (HCMs) are prescribed in hospitals for both inpatients (admitted care) and outpatients (non-admitted care) and include treatments for cancer, immunological conditions and home total parenteral nutrition (TPN). The costs of these medicines to the health system can be significant especially when they are prescribed as long-term outpatient therapy for clinical indications for which there is no access to subsidised medicines on the Pharmaceutical Benefits Scheme (PBS)⁺⁺⁺. Approval processes for use of expensive medicines in NSW hospitals as with any other medicine is covered in *PD2016_033 Approval Process of Medicines for Use in NSW Public Hospitals*.⁷

There is no generally accepted definition of what constitutes a HCM in Australia.⁸ However, many state health departments have developed their own definitions of HCMs, and/or have released policy statements on prescribing restrictions for HCMs.^{3,9,10}

The NSW Therapeutic Advisory Group (NSW TAG) High Cost Medicines Working Party has defined HCMs as medicines that:

1. incur acquisition costs equivalent to or more than:
 - a. \$1,000 per week per drug per patient, and are used as long-term therapy e.g. for 12 months or longer; or
 - b. \$50,000 per treatment course per patient;
 2. require particular expertise for management of patient care; and,
 3. in the case of outpatient medicines, are prescribed for indications not reimbursed on the PBS;
- and which are being used:
4. in accordance with the sponsor's Approved Product Information, or
 5. in a manner supported by high quality clinical evidence or current expert consensus based guidance^{§§§}.¹¹

It follows that such treatments should only be initiated in tertiary units (principal or major referral hospitals) OR by Specialist Visiting Medical Officers at regional based major or district hospitals with the approval of the hospital/district/network Drug and Therapeutics Committee.^{****}

3.2 ABF of High Cost Medicines (HCMs)

As with any medicine, any episode of care involving a HCM must be documented in the patient's medical record. Costs associated with procuring and supplying the HCM may be substantial so all such activity must be recorded and readily identifiable so that all relevant

⁺⁺⁺ Including medicines reimbursed under Section 85 & Section 100 of the PBS, or under the Repatriation PBS.

^{§§§} See Council of Australian Therapeutic Advisory Groups (CATAG): *Rethinking medicines decision-making in Australian Hospitals; Guiding Principles for the quality use of off-label medicines*, November 2013.

^{****} As per current NSW Health NSW Hospital Peer Groups 2016 Information bulletin.

http://www1.health.nsw.gov.au/pds/ActivePDSDocuments/IB2016_013.pdf

data can be collected by the district/hospital's costing unit and reported by the LHD for ABF funding purposes.

Under ABF, the LHD of the hospital that provides any HCMs as part of an admitted or non-admitted episode of clinical care will receive funding for an individual patient's treatment, regardless of whether the patient lives within the LHD of the treating hospital, or lives in another LHD. There are cross-border ABF funding arrangements for patients receiving treatment at a LHD in another state or territory to where they reside.

Under ABF there can be no-cross charging between LHDs if a patient is receiving treatment in one LHD but resides in another LHD, regardless of the cost or the duration of treatment of the HCM.

- Only one hospital can claim funding for an episode of care for a particular patient under ABF:
 - if a hospital procures and pays for the HCM, the same hospital must also supply all medical consumables and supplies required for administration of that HCM.
- Where a patient is commenced on a long-term HCM at a tertiary hospital in LHD A but resides in another LHD (LHD B), a number of treatment options are possible; all require a decision to be made by the patient's treating clinician, taking into consideration a number of factors including the patient's preferences, and availability of appropriate medical care. A decision should be made to adopt one of the following three treatment options:
 - A. Keep managing all of the patient's care including the supply of HCMs at LHD A — LHD A will provide, record and receive ABF for all of the patient's care including the HCMs.
 - B. Transfer all of the patient's care to their home LHD B provided there is appropriate medical care available at LHD B — LHD B will provide, record and receive ABF for all of the patient's care including the HCMs.
 - C. Use a shared care arrangement between various specialist services at a tertiary hospital in LHD A and a smaller hospital in LHD B:
 - negotiations may need to take place between the treating clinicians, pharmacy departments and finance departments at both LHDs to provide the best possible treatment options for individual patients;
 - such options may include the provision of medical supervision from a tertiary hospital via a telehealth platform and/or supply of medicine from a tertiary hospital to a patient living in a regional/remote area via a courier system, or split care arrangements;
 - ABF funding is complex in shared or split care arrangements, and both LHDs may end up providing, recording and receiving ABF for parts of the patient's care;
 - a worked example of split care arrangements for home total parenteral nutrition (TPN) is provided in Appendix 1.
- For funding purposes, it is recommended that patients on long-term HCMs are treated and receive their medicines at an ABF-funded hospital, rather than a block-funded hospital.

3.3 Special ABF arrangements for off-label or unregistered HCMs

ABF for long-term HCMs that are used in an off-label manner, or are not registered for use in Australia, is complex. Before treatment can start with medicines for off-label indications, or for use of medicines not approved for use in Australia, approval for such use is required from the Drug and Therapeutics Committee (DTC) in the LHD/SN where treatment is occurring as

per *PD2016_033 Approval Process of Medicines for Use in NSW Public Hospitals*.^{7,****}
Scenarios where such HCMs may be used include:

1. Medicines that are being used in “exceptional” or “conditional” circumstances (as described in *CATAG: Rethinking medicines decision-making in Australian Hospitals; Guiding Principles for the quality use of off-label medicines, November 2013*.¹¹; or
2. Medicines that are being used under the Special Access Scheme; or
3. Medicines that are being used in the context of a formal research protocol; or
4. Medicines obtained under the Commonwealth Personal Importation Scheme.

ABF in these scenarios is especially complex when a patient starts such therapy at a tertiary hospital in LHD A (which approved use of the HCM) but resides in another LHD (LHD B). Negotiations may need to take place between the treating clinicians, pharmacy departments, DTCs, the hospital executives, and finance departments at both LHDs to provide the best possible treatment options for individual patients.

In the above circumstance, the patient should continue to attend, and receive the HCM(s) from the tertiary hospital in LHD A until:

- a decision is made by the patient’s treating clinician (in conjunction with others) about which LHD will be managing all or part of the patient’s care long-term (see above for information on possible treatment options, and Appendix 1 for a worked example of split care arrangements).

Note: the decision to transfer all or part of the patient’s long-term care that includes a HCM to LHD B would require new approval for use of the HCM in this manner by a DTC in LHD B — LHD B will then procure, pay and receive ABF for the HCM.

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**** For further details of approval processes for clinical use of these medicines see NSW PD2016_033 Approval process of medicines for use in NSW Public Hospitals.
https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=PD2016_033

APPENDIX 1: Detailed pharmacy-related ABF information and worked examples

1. ABF terminology

The National Weighted Activity Unit (NWAU): an NWAU is a measure of health service activity expressed as a common unit, against which the national efficient price (NEP) is paid. It provides a way of comparing and valuing each public hospital service (whether it is an admission, emergency department presentation or outpatient episode), by weighting it for its clinical complexity.

Each hospital service has an individual *price weight* (see examples in Table 1) calculated by its clinical complexity. The average hospital service is worth one NWAU – the most intensive and expensive activities are worth multiple NWAUs (i.e. price weights more than 1), and the simplest and least expensive are worth fractions of an NWAU (i.e. price weights less than 1). The NWAU is updated annually.

The National Efficient Price (NEP): based on the average cost of public hospital activity per NWAU (changes each year). **The NEP for 2018-19 is \$5,012 per NWAU 2018-19^{****}.**

Total cost of a hospital service (i.e. ABF funding for that service) = the NEP multiplied by the NWAU (i.e. individual price weight for that service) (in simple terms)

2. Outpatient pharmacy related services – useful ABF information

Definitions of some relevant pharmacy related outpatient services

Below are definitions of some outpatient services that may be relevant to pharmacy-related ABF documentation and reporting. All information comes from: Tier 2 Non-Admitted (outpatient) Services Definitions Manual – 2018-19. Version 5.0.¹²

2.1 Total parenteral nutrition – home delivered

Number	10.17
Name	Total parenteral nutrition – home delivered
Category	Procedures
Affected body part	MDC 6 Diseases and disorders of the digestive system
Definition of service	The administration of nutrition by means of an infusion of an intravenous nutrition formula self-administered by the patient. Total parenteral nutrition (TPN) is generally only used when it is not possible to meet a patient's nutrition requirements through an oral or enteral route.
Activity	<i>Inclusions:</i> <ul style="list-style-type: none">• TPN performed by patient at home without a health care provider present <i>Exclusions:</i> <ul style="list-style-type: none">• enteral nutrition performed by the patient in their home without a health care provider present (10.18)• consultation or TPN education with a gastroenterologist where no TPN is undertaken (20.25)

^{****} NEP for 2019-20, released 5 March 2019, is \$5,134 per NWAU 2019-20.

https://www.ihsa.gov.au/sites/default/files/publications/national_efficient_price_determination_2019-20.pdf

	<ul style="list-style-type: none"> consultation or TPN education with a dietitian where no TPN is performed (40.23)
Conditions	<i>Inclusions:</i> intestinal failure

2.2 Gastroenterology

Number	20.25
Name	Gastroenterology
Category	Medical consultation
Affected body part	MDC 06 Disease and disorders of the digestive system
Definition of service	Gastroenterologist
Activity	<p><i>Inclusions:</i></p> <p>Management of the following conditions:</p> <ul style="list-style-type: none"> gastro-intestinal disease, liver disease, Crohn's disease, coeliac disease, hepatitis, peptic ulcers upper gastro intestinal (oesophagus, stomach) cancers bowel conditions inflammatory bowel disease; and includes the review of colorectal patients and pancreatitis surveillance of patients and providing advice on bowel function and healthy lifestyle <p><i>Exclusions:</i></p> <ul style="list-style-type: none"> chemotherapy treatment for neoplasms (10.11) gastrointestinal endoscopies (10.06) management of hepatobiliary disorders in specialist clinic (20.26) management of gastrointestinal conditions in allied health/clinical nurse specialist gastroenterology clinic (40.41) management of hepatobiliary disorders in allied health/clinical nurse specialist hepatobiliary clinic (40.43)
Conditions	

2.3 Clinical pharmacy

Name	40.04
Category	Clinical pharmacy
Affected body part	Allied health and/or clinical nurse specialist interventions
Definition of service	Multiple MDCs
Activity	<p><i>Inclusions:</i></p> <p>Consultations on the following services:</p> <ul style="list-style-type: none"> review of medicine orders, new and repeat for clinical appropriateness identify and resolve medicine related problems with the prescriber before processing the medication order counsel patients or carers to ensure that the patient understands all information required for safe and proper use of the medicine provide consumer medicines information required for the safe and proper use of the medicine <p><i>Exclusions:</i></p> <ul style="list-style-type: none"> Consultations that only involve the dispensing of medication, signing of prescriptions and/or filling in the stamp on a prescription do not constitute adequate clinical consultation and documentation for a clinical pharmacy service to be counted as a non-admitted patient service event.
Conditions	

2.4 Chemotherapy treatment

Number	10.11
Name	Chemotherapy treatment
Category	Procedures
Affected body part	MDC 17 Neo-plastic disorders (haematological and solid neoplasms)
Definition of service	Specialist clinic dedicated to the administration of chemotherapy for the treatment of abnormal cells.
Activity	<p><i>Inclusions:</i></p> <ul style="list-style-type: none"> chemotherapy, adjuvant hormonal treatment, palliative chemotherapy <p><i>Exclusions:</i></p> <ul style="list-style-type: none"> medical oncology (consultation) (20.42) allied health/clinical nurse specialist oncology consultation (40.52)
Conditions	<p><i>Inclusions:</i></p> <ul style="list-style-type: none"> solid tumours, haematological neoplasms

2.5 Price weights and 2018-19 ABF of some relevant pharmacy related outpatient services

Price weight information comes from: National Efficient Price Determination 2018-19.¹³

Table 1: Price weights of various classes of care for non-admitted patients

Tier 2 clinic class (V5.0, 2018-19)	Description	Price Weights
10.17	Total parenteral nutrition – home delivered*	2.4334
20.25	Gastroenterology	0.0827
40.04	Clinical pharmacy	0.1083
10.11	Chemotherapy treatment	0.0420

* The price weight for clinic 10.17 is priced on a per calendar month basis.

3. Worked examples

3.1 Calculation of ABF for pharmacy-related outpatient services

The NEP for 2018-19^{§§§§} is \$5,012 per National Weighted Activity Unit 2018-19 (NWAU). The ABF values in Table 2 are calculated by multiplying the Price Weights for each clinic class in Table 1 by the NEP (\$5,012).

Table 2: Relevant ABF items for non-admitted patients, 2018-19 (per episode)

Tier 2 clinic class	Description	Price Weights	ABF
10.17 *	Total parenteral nutrition – home delivered*	2.4334	\$12,196.20*
20.25	Gastroenterology	0.0827	\$414.49
40.04	Clinical pharmacy	0.1083	\$542.80
10.11	Chemotherapy treatment	0.0420	\$210.50

* The price weight for clinic 10.17 is priced on a per calendar month basis.

§§§§ NEP for 2019-20 due to be released March 2019. <https://www.ihsa.gov.au/what-we-do/national-efficient-price-determination>

3.2 Cost breakdown for supply of home total parenteral nutrition (TPN) solutions and associated resources

Home delivered TPN is a very expensive, complex form of treatment often involving patient care from multiple health providers as well as delivery of medical products from a number of different hospital departments/cost centres.

Under ABF, only one hospital can claim funding for an episode of care for a particular patient. If a hospital supplies and pays for the intravenous (IV) TPN solutions, the same hospital must also supply and pay for all consumables/disposables medical equipment and supplies required for administration of the TPN at a patient's home e.g. sterile dressing and IV giving sets, central line patency locks, antiseptics, sterile gloves.

Below is a worked example highlighting some of the ABF issues associated with the provision of home TPN IV solutions and associated resources.*****

Cost of providing home TPN IV solutions and associated resources

A more detailed breakdown of costs associated with the provision of medical products for home TPN can be obtained from a number of data sources:

- the calculated ABF for home TPN for 2018-19 – see Table 2 above
- a 2015 costing report commissioned by IHPA that included detailed costing for home TPN (the IHPA Home TPN costing study).¹⁴

The 2015 IHPA Home TPN costing study provided the following breakdown of the major costs contributing to the overall expenditure on home TPN services:

- pharmacy costs — 66.6%, largely related to the IV TPN solutions and additives
- corporate overheads — 18.0%
- medical/surgical supplies — 14.4%.¹⁴

Combining all the above data enables the calculation of the detailed costing breakdown for home TPN services presented in Table 3.

Table 3: Home TPN for one patient– cost breakdown for IV TPN solutions and associated resources (2018-19)

Description (Tier 2 clinic class)	Price weight	ABF per episode of care/month	Estimated pharmacy costs/month	ABF for 12 months of home TPN	Estimated pharmacy costs/ 12 months
Home TPN (10.17)	2.4334	\$12,196.20	\$8,122.67	\$146,354.40	\$97,472.03

Thus it is in the financial interests of hospitals with patients on long-term home TPN to ensure that all such patients are included in the annual ABF targets negotiated between their LHD/SN and NSW Health to ensure that the LHD receives annual ABF funding per patient of \$146,354, of which \$97,472 is estimated to be pharmacy costs.

3.3 Split care arrangements for home TPN between LHDs

Note: the below examples use ABF costs for 2018-19.

***** Home TPN patients also receive regular review from medical specialists. See Worked example 3 below for information on costs for outpatient medical consultations for home TPN patients.

Home TPN patients require regular reviews by a medical specialist overseeing their home TPN therapy. Such review is generally conducted by a specialist such as a gastroenterologist in an outpatient clinic. 2018-19 ABF for an outpatient gastroenterology visit is \$414.49 (Table 2). The care of home TPN patients may be retained wholly within one LHD or split across 2 LHDs.

A. All care associated with home TPN provided in LHD A

A home TPN patient may receive all their care, including IV TPN solutions, associated resources, and outpatient review by a medical specialist, at the same hospital in LHD A.

- LHD A would record each episode of care in an individual patient's medical record for the following:
 - provision of home TPN solutions and associated resources; and
 - outpatient clinic medical specialist consultations for regular review⁺⁺⁺⁺.
- LHD A would claim and receive ABF for the provision of home TPN solutions and associated resources (see Table 3), plus the cost of each outpatient clinic medical specialist consultation (see Table 2):
 - home TPN:
 - \$12,196 per patient per month; or
 - \$146,354 per patient for 12 months of therapy.
 - outpatient clinic medical specialist consultations for regular review⁺⁺⁺⁺:
 - \$414.49 per clinic visit.

B. All care associated with home TPN **split** between LHD A and LHD B

A home TPN patient may receive all their IV TPN solutions and associated resources through their local hospital in LHD A, but see the gastroenterologist supervising their long-term treatment a few times a year as an outpatient clinic at a larger specialist hospital in LHD B.

- Both LHD A and LHD B would record each episode of care in an individual patient's medical record for the following:
 - LHD A only – provision of home TPN solutions and associated resources
 - LHD B only – outpatient clinic medical consultations for regular review¹³
- LHD A would only claim and receive ABF for the costs of home TPN solutions and associated resources (see Table 3):
 - \$12,196 per patient per month; or
 - \$146,354 per patient for 12 months of therapy.
- LHD B would only claim and receive ABF for the cost of each outpatient clinic visit to the supervising medical specialist for review¹⁴ (see Table 2):
 - \$414.49 per clinic visit.

⁺⁺⁺⁺ Home TPN is reported on a monthly basis, outpatient clinic visits are reported each time a visit occurs.

⁺⁺⁺⁺ Assumed to be a gastroenterology medical consultation.

APPENDIX 2: Sources of useful ABF information

1. Health Education and Training Institute (HETI)

Activity based funding — eLearning modules

<https://www.heti.nsw.gov.au/education-and-training/courses-and-programs/activity-based-funding->

2. Independent Hospital pricing Authority (IHPA)^{§§§§§}

Independent Hospital Pricing Authority (IHPA) Education tools: <https://www.iHPA.gov.au/what-we-do/education-tools>

IHPA Australian Hospital Patient Costing Standards – Version 4.0 (2018)

- Part 1: Standards
- Part 2: Business Rules
- Part 3: Costing Guidelines

<https://www.iHPA.gov.au/publications/australian-hospital-patient-costing-standards-version-40>

IHPA National Efficient Price Determination 2018-19

https://www.iHPA.gov.au/sites/g/files/net4186/f/publications/national_efficient_price_determination_2018-19.pdf

IHPA Tier 2 Non-Admitted Services Definitions Manual 2018-19

https://www.iHPA.gov.au/sites/g/files/net4186/f/publications/tier_2_non-admitted_services_definitions_manual_2018-19.pdf

^{§§§§§} The IHPA references are updated annually. Check the IHPA web-site for the latest version.

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