

Adult and Paediatric Hospital in the Home Guideline

Summary The Guideline provides direction and practical suggestions for the implementation of the Hospital in the Home Program with the purpose of standardising the operation of services across the state. It covers the provision of services to adults and paediatric patients.

Document type Guideline

Document number GL2018_020

Publication date 09 August 2018

Author branch System Performance Support

Branch contact (02) 9391 9538

Review date 09 August 2023

Policy manual Not applicable

File number 18/560

Status Active

Functional group Clinical/Patient Services - Aged Care, Governance and Service Delivery, Infectious Diseases, Medical Treatment

Applies to Local Health Districts, Specialty Network Governed Statutory Health Corporations, Public Hospitals

Distributed to Ministry of Health, Public Health System

Audience Facility/Local Health District/Health Network Hospital in the Home Coordinators

ADULT AND PAEDIATRIC HOSPITAL IN THE HOME

PURPOSE

The purpose of this Guideline is to support the implementation and expansion of the Hospital in the Home (HITH) program within NSW Health by providing standardised guidance for local health districts and networks. It will assist districts and networks develop, monitor and evaluate HITH services while meeting local needs and state-wide standards.

KEY PRINCIPLES

HITH is a hospital substitution program which means that the patient admitted to HITH would otherwise be accommodated in a hospital. Access is needs based and available regardless of age, diagnosis, disability, geography, culture or gender. The objective being to provide patient centred care as close to home as possible.

Admission to a HITH service is voluntary and should not result in the patient incurring costs additional to what they might have had they been admitted to hospital.

HITH services provide integrated clinical care that meets National Safety and Quality Health Service Standards.

USE OF THE GUIDELINE

Districts and networks should use this Guideline to:

- develop district/network level governance for HITH
- integrate HITH as part of an overall acute demand strategy
- establish appropriate systems for clinical engagement

REVISION HISTORY

Version	Approved by	Amendment notes
August 2013 (GL2013_006)	Director, System Relationships and Frameworks	First Guideline.
August 2018 (GL2018_020)	Deputy Secretary, System Purchasing and Performance	The document does no longer refer to Intermittent HITH, and Hospital Avoidance The document includes sections on governance and medication management,

ATTACHMENTS

1. Adult and Paediatric Hospital in the Home: Guideline

Adult and Paediatric Hospital in the Home



Issue date: August-2018

GL2018_020

CONTENTS

1	BACKGROUND	4
1.1	About this document.....	4
1.2	Key definitions.....	4
2	HITH AS AN IMPORTANT MODEL OF CARE	5
2.1	Acute care.....	6
2.2	Sub-acute care.....	7
2.2.1	Rehabilitation in the home.....	7
2.2.2	Palliative care.....	8
2.3	Paediatrics.....	9
3	HITH IN NSW	10
3.1	Increasing HITH in NSW.....	10
4	HITH PRINCIPLES IN NSW	11
5	SERVICE ENTRY	12
5.1	When to choose HITH.....	12
5.2	Providing referrals.....	12
5.3	Patient selection.....	13
5.4	Exclusion criteria.....	13
6	ADMISSION TO HITH	14
6.1	Admission after hours.....	14
6.2	Transfer from a ward.....	14
7	CARE SETTING	14
7.1	Home.....	15
7.2	Early learning centres and schools.....	15
7.3	Residential Care Facilities.....	15
7.4	Aboriginal Medical Services.....	16
7.5	Ambulatory settings and clinics.....	16
7.6	GP clinic.....	16
7.7	Private hospitals.....	17
7.8	Remote and rural settings.....	17
7.9	Telehealth and home-telemonitoring.....	17
7.10	Transport.....	18
7.11	Community packages.....	18
8	CLINICAL MANAGEMENT	18
8.1	Clinical governance.....	18
8.2	Clinical review on admission.....	19
8.3	Medical review.....	19
8.4	Daily clinical review.....	19
8.5	Multidisciplinary team reviews/case conferences.....	20
8.6	Personalised shared care plan.....	20
8.7	Self-administration of parenteral antimicrobial therapy.....	20

8.8	Clinical handover	20
8.9	Discharge and transfer of care to GP	21
9	CARE OF THE DETERIORATING PATIENT	22
9.1	Recognising clinical deterioration	22
9.2	Escalating care	23
9.3	Uncontactable patient	24
9.4	Death during a HITH admission	24
9.5	Anticipated death	24
9.6	Unexpected death	25
10	MEDICATION MANAGEMENT	25
10.1	Medication governance	26
10.2	Medication prescribing	26
10.3	Medication reconciliation	26
10.4	Medication chart orders	26
10.5	Administration of medication related to HITH care	27
10.6	Second person checks before administration	27
10.7	Self-administration of medication unrelated to HITH care	27
10.8	Self-administration of medication related to HITH care	28
10.9	Venous thromboembolism (VTE) prophylaxis	28
10.10	Storage and transport of medicines	28
10.11	Medicine supply on referral from another service	28
10.12	Discharge medication prescriptions and discharge summary	28
11	PROCESSES FOR MANAGING ANAPHYLAXIS	29
12	PATHOLOGY	30
12.1	Transportation of specimens	30
12.2	Point of care	30
13	ANTIMICROBIAL USE IN HITH AND ANTIMICROBIAL STEWARDSHIP	31
14	INFECTION CONTROL	32
15	VENOUS ACCESS DEVICES AND DEVICE CARE	33
15.1	Intravenous drug users and venous access devices	33
16	PATIENT COMMUNICATION AND EDUCATION	34
16.1	Teach-back method	34
16.2	Development of written information	35
16.3	Provision of patient information	35
16.4	Marketing	35
16.5	Engaging internal stakeholders	36
17	PATIENT SAFETY AND QUALITY	36
18	HITH SERVICE STRUCTURE AND LOCATION	40
18.1	Stand-alone HITH team	40
18.2	HITH integrated team	40
19	WORKFORCE	41

19.1 Staffing a HITH service	41
19.2 Work health and safety	41
20 FUNDING.....	42
21 FINANCIAL CLASSIFICATIONS	42
21.1 Privately insured patients in public hospitals	42
21.2 Department of veterans affairs and compensable patients	43
21.3 Ineligible	43
22 DOCUMENTATION AND DATA COLLECTION.....	43
22.1 Clinical documentation.....	43
22.2 Activity collection	44
22.3 Patient admission.....	44
22.4 Care type.....	44
22.5 Same day admissions.....	45
22.6 Transfer of the patient between emergency and wards	45
22.7 Leave while on HITH	45
22.8 Transfer from one facility to another.....	46
22.9 Discharge.....	46
23 KEY TERMS	47
24 REFERENCES	51

1 BACKGROUND

1.1 About this document

Hospital in the Home (HITH) is admitted acute/sub-acute care in the patient's home or in the community as a substitute for in-hospital care.

HITH is an opportunity for patients to receive care in their own environment. It also offers health services a model of care that supports patient flow and helps manage demand.

Successful HITH programs depend on strong executive sponsorship and strategic system planning at a senior management level.

Districts and networks should consider:

- developing a strategic plan to increase HITH capacity at their service and at district/network levels
- including HITH services in strategic planning with community partners such as Primary Health Networks, General Practices, and other service providers
- evaluating and monitoring HITH services regularly to ensure consistency, efficiency and best outcomes.

This document provides guidance and practical suggestions to implement and expand Hospital in the Home programs, while acknowledging some flexibility is needed to allow for local variations. It covers the provision of services to adults and paediatric patients.

Districts and networks can use this Guideline to:

- integrate HITH as part of an overall acute demand strategy
- develop district/network level governance for HITH
- establish appropriate systems for clinical engagement
- monitor and evaluate HITH services.

Paediatric HITH services should use this Guideline along with the NSW Paediatric Service Capability Frameworkⁱ, which supports safety and quality in paediatric services at specific sites.

This Guideline aims to standardise services across the state. It also provides guidance on monitoring and evaluating services.

1.2 Key definitions

NSW Health defines Hospital in the Home (HITH) as a clinical model that provides admitted acute/sub-acute care in the patient's home or the community as a substitute for in-hospital care. Instead of receiving care and hospital accommodation, patients receive hospital level care whilst being accommodated in their own home.

As care cannot always be provided in a patient's home or in a community setting, HITH services may include care in an ambulatory/clinic environment.

To be eligible for HITH care in NSW, a patient must:

- meet the criteria for hospital admission under the NSW Health Admission Policy
- be an admitted patient under the care of a designated admitting clinician
- receive daily clinical care or clinical review from a member of a multidisciplinary team.

HITH services usually offer care to patients who would have been admitted to hospital and provide post-acute care after a patient is formally discharged from hospital. If the HITH service was not available, this patient would be accommodated in hospital.

HITH services may work alongside ambulatory care, acute review, short stay and infusion clinics.

A list of key terms can be found in Section 23.

2 HITH AS AN IMPORTANT MODEL OF CARE

As in other developed countries, health care spending and demand for hospital beds in Australia is increasing. This demand is due to a growing and ageing population, advances in medical technology and treatments, and increasing consumer awareness of health-related issues.ⁱⁱ

NSW Health aims to provide integrated services and effective and efficient health care while managing this increasing demand. This means focusing on a person's needs while ensuring effective communication and connections between health care providers in primary care, community and hospital settings. It also means improving access to community-based services in the home or nearby.

Evidence shows that HITH provides the same quality of care as traditional, hospital-based care for medically stable patients^{iii,iv} and has superior outcomes in some cases. It is associated with reductions in mortality, readmission rates and increased inpatient and carer satisfaction while placing no extra burden on carers.^{v,vi}

Children receiving HITH services particularly benefit from not being separated from their primary carers and home environment for an extended time.

HITH is a key strategy in achieving the:

- NSW Health Plan: Towards 2021^{vii}
- NSW Rural Health Plan: Towards 2021^{viii}
- Healthy, Safe and Well: A Strategic Health Plan for Children, Young People and Families 2014-24^{ix}.

NSW Health encourages all districts and networks to use HITH services where appropriate.

Most HITH services in NSW provide acute clinical care. Sub-acute care is a growth opportunity for HITH services in NSW.

2.1 Acute care

Acute care is when a patient receives active treatment. The treatment goal in HITH is to:

- cure illness or provide definitive treatment of injury
- relieve symptoms of illness or injury (excluding palliative care)
- reduce severity of an illness or injury
- perform diagnostic or therapeutic procedures
- protect against exacerbation or complication of an illness or injury that could threaten life or normal function
- manage labour (obstetric home birthing).

HITH services can manage many diagnostic conditions. Common conditions include but are not limited to:

- cellulitis – minor and major complexity
- kidney and urinary tract infections
- postoperative and post traumatic infections
- trauma to skin, subcutaneous tissue and breast
- heart failure and shock
- skin ulcers – intermediate complexity
- multiple sclerosis and cerebellar ataxia
- bacteraemia
- infectious and parasitic diseases
- minor skins disorders – major complexity
- injuries – major and minor complexity
- venous thrombosis
- pneumonia
- osteomyelitis
- septic arthritis
- endocarditis.

2.2 Sub-acute care

Sub-acute care is specialised multidisciplinary care where the primary need is optimisation of the patient's functioning and quality of life.

As with an acute HITH patient, the subacute patient:

- must meet the criteria for hospital admission under the NSW Health Admission Policy
- be an admitted patient under the care of a designated admitting clinician
- receive daily clinical care from a member of a multidisciplinary team.

Rehabilitation and palliative care are two care types that can be further developed in NSW.

2.2.1 Rehabilitation in the home

Rehabilitation in the Home (RITH) is a developing area for NSW health districts. Its primary clinical purpose or treatment goal is improving the functioning of a patient with impairment, activity limitation or participation restriction due to a health condition. The patient actively participates in their own care.

It substitutes hospital-based care for home-based care under the governance of a consultant and provides a seven-day service from an interdisciplinary team.

Rehabilitation care is always:

- managed or informed by a clinician with expertise in rehabilitation
- supported by an individual multidisciplinary management plan – this has negotiated goals, timeframes and formal assessment of functional ability and is part of the health care record.

A rehabilitation journey often starts with an acute presentation due to an acute illness (such as a stroke), trauma (fracture), elective surgery (joint replacement) or significant functional debilitation (exacerbation of chronic obstructive pulmonary disease). The setting depends on the patient's changing needs and the rehabilitation services available in their area. The patient's home is an ideal setting if staff and other resources are available.

Rehabilitation in the home sees an improved quality of life and reduced incidents of delirium and mortality compared to inpatient care. Patients are more motivated when treated in their own environment and benefit from the support of their family/carers. Evaluations of home based rehabilitation in Victoria show patients and their carers prefer care at home.

This is an established model in Western and South Australia. Reviews of these interstate services show the model is a safe and effective with a low rate of adverse outcomes and

very low rate of death. In South Australia, videoconferencing and mobile apps have proven successful, saving clinic time and money and increasing access for patients across the state.

A RITH service must be able to:

- offer daily interdisciplinary care comparable to in-hospital care (type and duration)
- provide specialised rehabilitation care from a qualified health care provider
- provide evidence of the individualised multidisciplinary management plan.

Resources

NSW Agency for Clinical Innovation: aci.health.nsw.gov.au/resources/rehabilitation

- NSW rehabilitation model of care (2015)
- Sub-acute care type policy guidance (2017)

2.2.2 Palliative care

Palliative care is where the primary clinical purpose or treatment goal is optimisation of the quality of life of a patient with an active and advanced life-limiting illness. The patient will have complex physical, psychosocial and/or spiritual needs.

It may be provided to a variety of diagnostic groups such as cancer, motor neurone disease, chronic obstructive pulmonary disease and congestive cardiac failure.

Palliative care is a key priority for the NSW Government.

Palliative care is always:

- managed or informed by a clinician with expertise in palliative care
- supported by an individual multidisciplinary assessment and management plan – this covers the patient’s physical, psychological, emotional, social and spiritual needs and negotiated goals and is part of their health care record.

Specialist palliative care is provided in settings including hospitals, hospices, community clinics, schools, residential aged care facilities and in the home. When care at home is a substitution for hospitalisation, this care should be classified and counted as Hospital in the Home.

In this case, the patient must be admitted by a palliative care specialist or the HITH admitting officer or GP. Daily care is delivered by the most appropriate team, usually by a combination of the patient’s own GP, specialist palliative care services, community nursing and HITH specialists as required. This may include school visits for children with life limiting illness to help teachers and other staff understand the support a child needs to attend school.

Palliative care at home can give the patient a sense of normality, choice and comfort, while recognising the best place for death to occur may change over time. For services to be responsive, coordinated and flexible in meeting these changing needs, there needs to be space and frequent opportunity for patients, carers and families to describe their changing needs and to reassess care plans and goals of care.

Resources

NSW Agency for Clinical Innovation: aci.health.nsw.gov.au/palliative-care-blueprint

- ACI blueprint for palliative care

NSW Health: www.health.nsw.gov.au/policies

- NSW Government plan to increase access to palliative care 2012–2016
- Verification of death and medical certificate of cause of death (PD2015_040)

2.3 Paediatrics

Paediatric HITH provides daily care to children aged up to 16 years with selected acute or sub-acute conditions.

The conditions a paediatric HITH service manages depend on local factors. These include the skills and experience of team members, referrals from other departments in the hospital, and after-hours resources.

All children in a NSW Health facility for longer than 24 hours, and earlier for those at risk, should have a paediatrician involved in their care.

Examples of conditions/treatments managed in paediatric HITH include but are not limited to:

- cellulitis
- endocarditis
- urinary tract infections
- upper respiratory tract infections
- pneumonia
- wound infections
- acute infections in cystic fibrosis
- eczema care/wet dressings
- overnight oximetry studies

- traction
- meningitis
- osteomyelitis
- bronchiolitis.

Paediatric HITH services may be co-located and share clinical staff with ambulatory and outpatient services that treat children with long-term conditions such as cystic fibrosis. These hybrid models are well placed to provide treatment to children who may experience acute infections and flare-ups associated with their chronic condition.

Long-term, complex treatments such as home total parenteral nutrition, home dialysis, intravenous immunoglobulin administration, or long-term home ventilation are usually provided as outpatient treatments.

3 HITH IN NSW

HITH services have operated in NSW for more than two decades under different names and with different responses according to patient needs, resourcing and geography.

In 2016-17 there were over 22,000 HITH separations in NSW, provided by over 50 adult and paediatric HITH services. The range of treatments provided is increasingly complex, with 80 per cent of HITH separations spread across 81 Diagnosis-Related Group (DRG) codes.

Every District and Network provides adult and/or paediatric services, but not every hospital has a HITH service.

HITH teams provide a mix of services depending on location and resourcing. As well as acute/subacute care, they may also provide post-acute care interventions/treatments and outpatient infusions.

Most paediatric acute services are provided by facilities located away from the state's three specialist children's hospitals. Establishing paediatric HITH across NSW is an opportunity to provide optimal care regardless of whether the location is rural, regional or metropolitan.

This Guideline aims to standardise services to develop a consistent practice across the state.

3.1 Increasing HITH in NSW

HITH services are an effective use of resources. They can improve:

- use of hospital bed capacity
- choice for patients on the setting of their hospital care
- safety and quality outcomes, particularly a reduced risk of infection.

Models of care for HITH are also evolving. With new drugs, technologies and minimally invasive surgical procedures, many conditions once treated in hospital can be safely and easily treated in the community.

Districts and networks should take a locally appropriate, district-wide approach to HITH service planning and delivery. This approach should clarify the service roles of related programs and integrate with primary and community care where possible.

Queensland, Victoria and Western Australia use non-government providers to increase HITH services in line with state policy targets. There is potential for non-government providers to deliver quality and efficient HITH services in NSW.

4 HITH PRINCIPLES IN NSW

Principle	What it means
Hospital bed substitution	<p>The patient would be accommodated in a hospital if not receiving HITH.</p> <p>This is acute/sub-acute care that requires the equivalent skilled staff and knowledge as those working in acute hospital environments.</p> <p>The patient is admitted under a doctor with admitting rights to the hospital.</p> <p>Daily clinical care, hospital in the home protocols and 24-hour escalation processes are in place.</p>
Care as close to home as possible	<p>Paediatric and adult services are provided in settings including the home, residential care, clinics, schools and the workplace.</p> <p>Care may be facilitated by telehealth/telemonitoring applications.</p>
Equitable care	<p>Access to needs-based care is available regardless of age, diagnosis, disability, geography, culture and gender.</p>
Patient and family centred care	<p>Patients/carers consent and are actively involved in their care.</p> <p>Patients/carers are informed of their clinical progress and changes in clinical management.</p> <p>Patients/carers receive a written management plan and instructions on how to escalate their care.</p>
Voluntary care	<p>Patients/carers choose to receive their care at home but have the option to be in hospital if they prefer.</p> <p>The success of treatment in the home depends on the patient's acceptance and willingness to consent and participate in their care.</p> <p>Patients/carers receive education explaining their role and responsibilities for care.</p>
Integrated care	<p>Acute, specialist care and general practice work together to ensure the most appropriate care for the patient.</p> <p>Clinical pathways are available for individual specialities such as surgery.</p> <p>A coordinated approach to care with other service providers.</p> <p>Holistic care that is not disease specific.</p>

Safe, high quality care	<p>Patients receive appropriate, evidenced-based care.</p> <p>Continuous quality improvement systems and processes are in place.</p> <p>Routine data collection takes place to support measurement and evaluation of outcomes.</p> <p>Clinical care and guidelines for HITH meet the National Safety and Quality Health Service Standards.</p>
Cost neutral care	<p>As a result of receiving HITH care, a Medicare eligible person does not incur costs additional to those they would have if treated in a hospital ward.</p>

5 SERVICE ENTRY

5.1 When to choose HITH

HITH is acute/sub-acute bed substitution that requires the same type of staff, skills and knowledge provided if the patient were in hospital. If the patient is clinically stable and safe to be treated in the home environment, HITH can be considered as a treatment option.

This is an acute/sub-acute, short-term service. It does not provide for lifelong, complex treatments, such as renal home dialysis, ongoing total parenteral nutrition and long-term ventilation. It does not replicate care provided by existing chronic care and community-based services.

5.2 Providing referrals

All potential HITH patients need a referral. The referral process should be easy to access and follow. Using a standard referral process with a referral checklist completed by the referring medical officer can streamline the process.

Common referral pathways include:

- emergency departments
- emergency department short stay units (or other short stay speciality unit)
- medical assessment units
- inpatient ward
- specialist rooms
- specialist inpatient clinical areas, including: paediatrics, special care neonatal units, cardiology, general medicine, gerontology, respiratory, endocrinology, haematology, obstetrics, infectious diseases, nephrology, urology, surgery, neurology,
- oncology
- palliative care
- General Practitioners
- Residential Care Facilities

- specialist tertiary hospitals
- other HITH services
- outpatient clinics
- Aboriginal Medical Services
- mental health
- other hospitals
- centralised intake services.

5.3 Patient selection

To be suitable for HITH treatment, a patient must:

- have an acute/sub-acute condition deemed by the clinician with admitting rights as appropriate for care outside the hospital ward setting
- consent to HITH treatment (or have consent from a substitute decision maker)
- not require continuous 24 hour assessment, treatment or observation^x
- be competent in managing their condition and know when to escalate their care or have a live-in carer who takes this responsibility
- have a suitable and safe location for care outside the hospital (subject to a home visit risk assessment including a domestic violence screen)
- have access to a reliable landline or mobile telephone
- meet the criteria for admission according to the NSW Health Admission Policy^{xi}.

If HITH care were not available, the patient would be admitted in hospital.

The admitting clinician should fully inform patients and carers of the benefits and risks of HITH. Patients should have the opportunity to decline this service if they prefer.

Services should have a local policy to standardise and document the patient selection criteria.

Resources

NSW Health policies: www.health.nsw.gov.au/policies

- Protecting people and property: NSW Health policy and standards for security risk management in NSW Health Agencies, Chapter 16 'Working in the community'
- Child wellbeing and child protection policies and procedures for NSW Health (PD2013_007)

5.4 Exclusion criteria

A patient may not be eligible for HITH care if they:

- are medically unstable

- have an unclear provisional diagnosis
- require complex care that exceeds the capacity of the HITH service
- are cognitively impaired or physically incapacitated with no live-in carer to take responsibility
- demonstrate poor compliance with medical care
- are in a remote location from the hospital.

Patients who do not require daily visits, medical oversight and governance may not be eligible for HITH services and should be managed as outpatients.

Preadmission care that can be managed on an outpatient basis is not appropriate for HITH unless clinical complexity indicates admission.

6 ADMISSION TO HITH

A HITH patient must fulfil the same criteria for admission as any other admitted patient. Admission is based on the decision of the clinician with admitting rights after a comprehensive medical assessment or nursing assessment/admission.

This decision is documented in the health care record and patient information is entered in the patient administration system. The health care record should note that the patient has received information on HITH and consents to treatment by HITH services.

Paediatric services may use the NSW Paediatric HITH Consent Form. The admitting clinician or their delegate assumes responsibility for ongoing care planning, treatment regimens and medication orders.

6.1 Admission after hours

After-hours admission to HITH can occur if the full medical or nursing assessment/admission is completed and pharmaceuticals arranged before the patient returns home. The HITH admitting clinician accepts the admission and ongoing care of the patient.

If the HITH service does not have capacity for after-hours admission, the Emergency Department may provide the first dose of medication to the patient based on clinical assessment. They can then send the patient home with provisions for HITH review and admission the following day.

6.2 Transfer from a ward

A patient can be referred and transferred to HITH from a ward. This is a continuation of the admission.

7 CARE SETTING

HITH treatment ideally takes place in the patient's home, but it can also take place in

settings such as clinics, schools and the workplace. The setting depends on the initial clinical and risk assessment, the local service delivery model, patient preference and available resources.

7.1 Home

Services should try to provide care in the home where the risk assessment and patient preference allows. Studies confirm that patients prefer to be treated in the privacy and comfort of their own home.^{xii xiii xiv}

7.2 Early learning centres and schools

All students are entitled to take part in education regardless of their health support needs. A student may sometimes be well enough to attend school or pre-school but still need a daily clinical assessment and treatment.

The risks and benefits of treating the student at pre-school/school should be carefully considered. If medication must be administered during this time, the HITH team should work with the parents/carers and school to develop an individual care plan. The care must be provided in a safe, timely and minimally disruptive way.

7.3 Residential Care Facilities

Residential Care Facilities (RCFs) mainly provide accommodation to elderly residents, who are frail and have multiple co-morbidities. Because of their health status, these residents often suffer acute illnesses and acute exacerbations of chronic illnesses and have a high rate of transfer to hospital.^{xv}

Residents do not always do well in hospital – transfer often leads to deterioration in activities of daily living function^{xvi} and an increase in adverse events^{xvii}. RCF staff should be informed about HITH services and residents/families/carers should be educated about treatment options.

The HITH service should establish a written agreement in regard to the roles and responsibilities of the RCF and the service. RCF staff must be given training and support if they are to assist in the clinical care and management of acutely unwell patients. For examples include administering continuous intravenous antibiotics through a central venous catheter.

An initial assessment by the HITH team should take place where possible in the RCF to avoid transferring a patient to hospital. A medical review will determine if the patient can be treated at the RCF or if they should be transferred to hospital for further treatment and assessment. Options to avoid hospitalisation may include fee for service mobile medical imaging, telehealth and pathology collection services.

HITH services should establish working relationships with the GP and specialist geriatric services to support these treatments. In particular, they should establish working relationships with GPs who support RCFs by providing home visits. Business rules should be developed for communication between RCFs, GPs, Emergency Departments, specialist geriatric teams and HITH services.

Residents are entitled to unlimited days of hospital leave.

There is no hospital leave for residential respite care. If a residential respite care recipient is admitted to hospital or requires any other break in care, the approved provider will not be paid subsidy for the period of the care recipient's absence from the facility, and cannot charge fees for the days when the care recipient is not in care. The approved provider is under no obligation to hold residential respite days for clients who are not using them.

7.4 Aboriginal Medical Services

More Aboriginal people live in NSW than in any other Australian state or territory and improving Aboriginal health is a key focus for the NSW health system. Relatively high numbers of Aboriginal people live in metropolitan Districts/Networks, with over 90 per cent of Aboriginal people in NSW living in major cities or inner regional areas.

Aboriginal Health Workers in Local Health Districts and ACCHSs are key team partners in planning and reviewing HITH services to ensure services are culturally appropriate and accessible to Aboriginal communities. ACCHSs are vital to increasing HITH access through referrals and in assisting with daily care provision and care coordination.

HITH care has significant potential to be a preferred option to substitute hospitalisation of Aboriginal people and may improve health outcomes through reducing discharge against medical advice when HITH is more appropriate than ongoing admission.

Resources

NSW Health: health.nsw.gov.au/aboriginal

- NSW Aboriginal Health Plan 2013–2023
- Aboriginal health impact statement (PD2017_034)

7.5 Ambulatory settings and clinics

For many HITH patients, treatment occurs at home with a hospital visit regularly for review. However, HITH treatment may take place in a clinic due to safety concerns or patient choice. HITH clinics may be in a hospital or in the community. In a hospital, the HITH clinic may be co-located with the ambulatory care service or short stay unit.

7.6 GP clinic

In some rural models, review by the admitting clinician takes place in the GP surgery where the admitting clinician may also be a local GP with admitting rights to HITH. In this case the clinician bills the local health service for an inpatient consultation instead of Medicare. The review is documented in the electronic health care record (eMR).

In some local health districts where the GP is also a visiting medical officer, remote access to the eMR is available from the GP's surgery. If this is not available, districts must develop other systems for documenting the review and medication orders on the patient's hospital health care record.

7.7 Private hospitals

Patients cannot be admitted in a private hospital facility and admitted to a public HITH service at the same time. If a private patient in a private facility requires HITH-related services such as IV antibiotics, the HITH service may offer to train the staff in the private service. It is the responsibility of the private facilities to deliver all aspects of care, including management of infusions.

7.8 Remote and rural settings

In rural areas, care in the home may not be possible due to travel distances. Hospitals may have to admit and accommodate patients even when they are suitable for HITH care. Other local accommodation options may include facilities such as Ronald McDonald House or a motel.

Resourcing and clinical governance may be a challenge. An in reach model may be offered where HITH patients attend a health facility to receive their daily treatments. This facility is an alternative acute or community care clinic space with safe medication storage. It should not be an emergency department.

When admitted for HITH services, patients should be advised that they will receive some or all of their care in an ambulatory setting.

7.9 Telehealth and home-telemonitoring

Telehealth is healthcare at a distance using information communications technology. It is a practical solution allowing patients to stay in their home while receiving clinical review and advice from their treating doctor or other member of the clinical team. For patients in rural and remote areas, it can provide quick access to health services.

Non-invasive home telemonitoring is a relatively new in Australia. Some non-government organisations use it to coordinate care for patients with chronic disease or as part of the Commonwealth Home Support Programme.

Telemonitoring can be:

- video-consultation with or without vital signs transmission
- mobile telemonitoring
- automated device-based telemonitoring
- interactive voice response
- web-based monitoring.

Resources

Agency for Clinical Innovation: aci.health.nsw.gov.au

- Guidelines for the use of telehealth for clinical and non-clinical settings in NSW

Local Health District information on telehealth:

- Hunter New England: hnehealth.nsw.gov.au/telehealth

- Western New South Wales: wswlhd.health.nsw.gov.au/telehealth

7.10 Transport

When HITH patients visit a HITH clinic for review they should not be financially disadvantaged by having to pay for transport.

The HITH services manager can issue taxi vouchers at their discretion when no other means of transport are available.

If a HITH patient is transferred back to hospital in an ambulance and is not eligible for free ambulance cover, the account should be sent to the hospital for payment.

7.11 Community packages

ComPacks are non-clinical, case managed packages of care for patients discharged from participating NSW public hospitals. Each package is available for up to six weeks from the time of transfer home^{xviii}. Patients can receive ComPacks while receiving clinical care from HITH.

Transition Care is a time-limited, goal-oriented and therapy-focused package of services for older people after a hospital stay. A patient cannot receive HITH and Transition Care at the same time.

The Commonwealth Home Support Programme is an entry-level home help program for older people who need help with daily tasks so they can live independently at home.

Home Care Packages help older Australians with complex care needs live independently in their own homes. The program is part of the continuum of care for older Australians and is positioned between residential aged care and Commonwealth Home Support.

If a patient is receiving support services from these two programs, such as personal care, domestic help or meals, these services can continue while the person is receiving treatment from HITH.

Resources

NSW Health: health.nsw.gov.au/ComPacks

- ComPacks general information
- ComPacks program guidelines (GL2016_023)

8 CLINICAL MANAGEMENT

All HITH patients receive a comprehensive nursing and medical assessment on admission, daily nursing or allied health assessment, and periodic medical review.

8.1 Clinical governance

Successful clinical care requires clear lines of responsibility and accountability. These

must be communicated to the patient and carers.

Clinical governance by the admitting clinician may be overseen by a:

- staff specialist/paediatrician
- visiting medical officer
- GP visiting medical officer
- GP with admitting rights to HITH
- nurse practitioner.

Partnership with primary health networks and general practice is essential for successful patient outcomes. Including GPs in clinical governance models for HITH requires clear interdisciplinary and organisational agreements, transparent remuneration strategies and shared decision support tools. A GP who admits a HITH patient must meet the requirements of the local facility's Medical and Dental Advisory Committee. They should be remunerated by the district for care provided to a HITH patient. They cannot claim a Medicare rebate for reviewing or managing a HITH patient.

Children may be admitted to healthcare facilities with no paediatrician or under the care of non-paediatric specialists for many reasons. If the admitting staff specialist is not a paediatric specialist, access to a paediatrician for advice and review must be readily available as described in the NSW Paediatric Service Capability Framework. The child's primary care clinicians are responsible for initiating this contact. The on-call paediatrician is responsible for responding to the request for assistance.^{xix}

HITH services should develop strong working relationships with primary health networks and individual GP practices through regular communication and collaboration. Services should work together on creating pathways for direct referrals to HITH, bypassing the emergency departments where appropriate.

8.2 Clinical review on admission

Clinical review should occur within 24 hours of admission or transfer to HITH by the designated HITH clinician. If the patient's condition is not within normal parameters, the admitting clinician should be notified immediately.

8.3 Medical review

The admitting clinician establishes subsequent medical reviews depending on the patient's condition, acuity and requirements. Frequent medical review ensures patients are not on treatments for longer than needed and discharged when appropriate.

Medical review may be in the patient's home, via telehealth or in a clinic.

8.4 Daily clinical review

HITH patients should be clinically reviewed in person every day by a clinician. This is usually an allocated nurse or allied health care professional.

A complete set of vital observations should be done at a minimum once per day as part

of the daily clinical assessment and documented on a standardised observation chart.

Monitoring vital signs is essential to assess the treatments and identify early signs of any clinical deterioration.

In some cases, telehealth may be appropriate for daily clinical review. A risk assessment should be done to determine the appropriateness of using telehealth for a patient. This also determines the vital observations that can be made remotely or by the patient themselves.

8.5 Multidisciplinary team reviews/case conferences

Structured multidisciplinary team reviews should occur, as in any inpatient setting.

Patients on the HITH program are discussed usually once or twice a week in a case conference. This conference includes all relevant members of the treating team and representatives from community nursing and allied health as required. Issues discussed include the patient's progress and management plan, any changes in condition or adverse events and the expected date of discharge.

Telehealth technologies enable offsite clinicians to take part in these reviews.

8.6 Personalised shared care plan

A collaborative care plan is developed for each patient and reviewed regularly. The care plan should consider the medical, nursing and allied health care required as well as the patient's social needs, functional status, and any existing advanced care plans.

8.7 Self-administration of parenteral antimicrobial therapy

Supervised self-administration is an effective and safe option for managing selected patients with infection requiring intravenous antibiotics. It can provide equivalent outcomes to health care worker administration.

A HITH nurse assesses the patient and carer for suitability for the self-administration of intravenous therapy. The patient or their carer is trained in administration of parenteral antibiotics with ambulatory devices before returning home.

The patient attends the HITH clinic once a week for medical review. They remain under the clinical governance of a doctor and receive daily phone calls from the HITH team to check on progress and monitor clinical status. These calls are documented on the ongoing clinical record. Daily home telemonitoring may also be used for closer monitoring of vital signs.

The benefits of self-administration include patient autonomy, reduced costs of care and a possible reduced risk of healthcare-acquired infections.

While patients may not be seen daily in person, this care model is accepted as hospital substitution.

8.8 Clinical handover

Clinical handover is the effective transfer of professional responsibility and accountability

for some or all aspects of care for a patient, or group of patients, to another person or professional group. This can be on a temporary or permanent basis.^{xx xxi xxii}

Structured clinical handover processes are essential to ensure continuity of care and patient safety. Breakdown in the transfer of information is often a main contributing factor in serious adverse events and a major preventable cause of patient harm.^{xxiii}

In HITH care, clinical handover varies depending on the model of care and patient circumstances. It can occur in hospital settings or with healthcare providers in the community.

Each HITH service should have formal documented clinical handover policies and processes tailored to the local model of care. Documenting in the electronic health care record (eMR) or in writing should not replace a verbal handover, particularly in complex cases or if a patient has deteriorated. Persons on call after-hours for the HITH service should have a list of current patients, their clinical and contact details, and any particular concerns.

Using ISBAR (Identify, Situation, Background, Assessment and Recommendation) is a simple and effective way of prioritising information when communicating about a patient's condition. It is widely used for HITH in NSW. Other communication memory aids include ISOBAR, SBAR and SHARED.

8.9 Discharge and transfer of care to GP

The decision to cease HITH treatment is made by the medical team when the patient no longer requires admitted care.

An Estimated Date of Discharge (EDD) is allocated and reviewed daily for each patient. It is documented and displayed in the patient health care record and on the electronic patient journey board. The patient and/or carer should be informed of the EDD during their stay^{xxiv}. Using EDD as a tool for managing length of stay is as important in HITH as it is on a ward environment. If EDD is not monitored, the patient length of stay is likely to be extended.

At the point of discharge the patient's ongoing care should be documented in a shared care plan and care transferred to the primary care clinician/GP. Referrals to community-based services should occur as soon as it is clinically appropriate.

On discharge from HITH patients and carers should be provided with:

- discharge referral information in plain language
- a medication management plan and follow up appointments for specialists, GPs and other agencies
- community support contact information with referrals made where appropriate
- discharge medications.

When a patient completes a HITH episode, the patient's GP should receive a discharge summary promptly, ideally within 24 hours.

Resources

NSW Health: health.nsw.gov.au/policies

- Care coordination: planning from admission to transfer of care in NSW public hospitals (PD2011_015)
- Clinical handover – standard key principles (PD2009_060)

NSW Health: health.nsw.gov.au/nursing

- Multidisciplinary ward rounds – a resource (2011)

Australian Commission on Safety and Quality in Health Care: safetyandquality.gov.au

- National safety and quality health service standards (2017)
- ISBAR toolkit
- National guidelines for on-screen presentation of discharge summaries (2017)

NSW Agency for Clinical Innovation: aci.health.nsw.gov.au/resources/acute-care

- Safe clinical handover: a resource for transferring care from general practice to hospitals and hospitals to general practice (2013)

9 CARE OF THE DETERIORATING PATIENT

9.1 Recognising clinical deterioration

Patients should be medically stable when admitted for HITH care. However, they are only seen once or twice a day and deterioration can happen rapidly over 24 hours. HITH services must have systems and processes in place to quickly recognise, respond to and escalate care for deteriorating patients.

Medical, nursing and allied health staff must be trained and competent in recognising and responding to signs of deterioration in children, adults and older people. HITH nurses play a particularly important role.

The Between the Flags Program is a statewide system designed by the Clinical Excellence Commission for improving recognition and response to deteriorating patients. It is designed for ward-based patients, but HITH services can adapt the principles to their local setting. See the resources at the end of this chapter.

Clinical algorithms should be available to support clinical decision-making when assessing a patient over the phone. The Alfred Hospital in Victoria uses a telephone assessment tool based on ISBAR with structured prompts^{xxv}.

Patients/carers should be educated and given written information on recognising the symptoms of deterioration and who to contact.

Vital signs should be recorded on a standardised observation chart such as the Standard Adult General Observation (SAGO) Chart or the age specific Standard Paediatric Observation Chart (SPOC) during home visits and kept in the clinical record. When deterioration is detected, clinicians must follow the agreed escalation plan.

Sepsis is a leading cause of clinical deterioration and should be considered in a

deteriorating patient with a vascular access device. If sepsis is suspected, the patient should be transferred to hospital immediately by ambulance. Sepsis identification and management tools are listed in the resources section below.

9.2 Escalating care

HITH services must have a clear system for patients that need urgent review and transfer. This should include documented escalation plans for staff and patients.

A Clinical Emergency Response System is a formal system for obtaining urgent assistance when a patient is clinically deteriorating. In HITH services, this should include the HITH team response (clinical review and rapid response) with documented referral and escalation steps.

This formal system must:

- clearly define who is responsible for obtaining and providing assistance
- operate 24 hours per day, 7 days per week
- ensure the provision of core emergency equipment
- be available for all inpatients
- be known and understood by all clinical staff.

DETECT Junior is for frontline clinical staff caring for infants and children and is part of the Between the Flags program. It helps these staff:

- recognise and manage infants and children who are clinically deteriorating
- know when to activate the Clinical Emergency Response System
- develop a co-ordinated approach to caring for infants and children who are clinically deteriorating.

If nursing is provided by a community partner, such as community nursing, the service must ensure nursing staff are trained and familiar with the escalation plan. Community nurses should have ready access to a HITH medical officer and be encouraged to contact them with any patient concerns. Discussion with the admitting clinician may result in immediate transfer or medical review, depending on the patient's condition.

HITH patients should be directly admitted to an inpatient ward unless they require care by the emergency department or if they are rapidly deteriorating. The hospital should be advised that the patient is already admitted to HITH.

If the patient's GP is involved in the HITH care, they should be advised of the patient's change in condition and transfer to hospital.

When escalating care, any advance care plan must be respected.

Resources

Australian Commission on Safety and Quality in Health Care: safetyandquality.gov.au

- Recognising and responding to acute deterioration standard

NSW Health: health.nsw.gov.au/policies

- Recognition and management of patients who are clinically deteriorating, (PD2013_049)

Clinical Excellence Commission: cec.health.nsw.gov.au

- Between the Flags, Sepsis kills and REACH program resources and fact sheets

9.3 Uncontactable patient

All services must have an escalation process if a patient cannot be contacted. Patients are admitted as inpatients and the service must take action when they cannot contact or locate a patient. The escalation threshold is earlier and lower than for non-admitted community patients.

Patients/carers must be informed of their responsibilities and obligation to be at home at agreed times for home visits. They must understand what will happen if they cannot be contacted at these times.

For adults, if the escalation process is followed and all attempts to contact the patient and/or their next of kin or carer have failed, contacting emergency services is the required response.

An 'inability to contact' paediatric patients is more often due to an issue with the carer/s than a clinical issue. If the escalation process is followed and all attempts to contact the carer have failed, the HITH team should:

- consider/exclude child safety/child protection issues
- act on any suspected issues according to legislative requirements
- inform the admitting paediatrician.

On contact if the parent/carer chooses to no longer receive HITH for their child, they are required to sign a discharge against medical advice form.

9.4 Death during a HITH admission

In some circumstances a patient may die while in the care of HITH, whether anticipated or not. Verification of death must occur in the home. This is a clinical assessment to establish that a person has died and may be carried out by the registered nurse who completes a verification of death form.

A medical practitioner must complete the Medical Certificate of Cause of Death within 48 hours of the patient's death.

9.5 Anticipated death

For patients where death is anticipated, it is recommended there is agreement in advance on who will complete the Medical Certificate of Cause of Death. This may be patients known to NSW Health palliative care and/or contracted to palliative care services, or HITH patients with a resuscitation plan in place. In these cases, the patient's

GP may agree to this responsibility.

9.6 Unexpected death

A medical practitioner must not issue a certificate as to cause of death under the Births, Death and Marriages Registration Act 1995 if the death is a 'reportable' death (S6 Coroners Act 2009).

Examples of reportable deaths in HITH include if the person died:

- a violent or unnatural death
- a sudden death of unknown causes
- under suspicious or unusual circumstances
- in circumstances where their death was not the reasonably expected outcome of a health-related procedure
- while in or temporarily absent from a mental health facility (under the Mental Health Act 2007) where they are a resident receiving care, treatment or assistance.

Hospitals, medical practitioners or any other person who has reasonable grounds for believing a death or a suspected death would be examinable by the Coroner must report this to the police, a Coroner or assistant Coroner as soon as possible (Sections 35 and 38 of the Act). See the policies below for details.

Resources

NSW Health: health.nsw.gov.au/policies:

- Verification of death and medical certificate of cause of death (PD2015_04)
- Coroner's cases and the Coroners Act 2009 (PD2009_083)

10 MEDICATION MANAGEMENT

'Medication handling in NSW public health facilities' (PD 2013_043) is the overarching policy for managing medications in NSW Health facilities and ensures services meet relevant legislation requirements. It includes best practice principles for medication procurement, possession, storage, prescribing, dispensing, supplying, administering and recording.

Managers of HITH services must also ensure their policies and processes comply with the medication safety standard (Australian Commission on Safety and Quality in Health Care). The standard ensures clinicians safely prescribe, dispense and administer appropriate medicines to patients and carers.

Local HITH policies and procedures should emphasise prescribing, supply, storage and disposal of medication to mitigate the risks associated with medication handling in community settings.

10.1 Medication governance

All HITH services should have access to a Drug and Therapeutics Committee to promote the safe, quality and rational use of medications. This committee determines the range, number and quantities of medications available for HITH care. It approves formularies, monitors medication treatment use and provides guidance to health care workers on medication use.

10.2 Medication prescribing

Accurate, timely and ongoing assessment and documentation of a patient's medicines is vital. Prescribers must ensure all medicines a patient is taking are recorded by a HITH team member and are safe and appropriate for the patient's clinical condition and needs.

Authorised prescribers in the HITH setting are medical practitioners, provisionally registered medical practitioners and nurse practitioners.

Prescribers must ensure patients are educated about their new medicines and the continuation of pre-existing medication. The patient must understand the importance of following their treatment and that they should contact the prescriber in the HITH team if any adverse reactions occur.

10.3 Medication reconciliation

Medication reconciliation ensures patients receive all intended medicines and that accurate, current and comprehensive medicines information follows them in transfers of care. Formal medication reconciliation processes are critical for patient safety.

A comprehensive medication history (best possible medication history) should be documented when a patient is admitted to HITH. This should include known allergies and previous adverse drug reactions.

This history is obtained by interviewing the patient and/or carer where possible. It is confirmed using the patient's own medicines or medicines list, or a list from their GP or community pharmacy. If the patient is transferred from an inpatient unit in the hospital, this information may be in the handover notes or ward discharge summary.

Clinicians must review a patient's current medicine orders against their history and documented treatment plan in line with national safety and service standards. They must reconcile any discrepancies on admission and at transitions of care.

The Medication Management Plan (MMP) is a standardised medicines reconciliation form used at hospital admission. HITH services can use the national MMP form or a locally developed version.

The form records the medicines taken before presentation at the hospital and helps reconcile a patient's medicines on admission, during intra-hospital transfer and at discharge. Clinicians can use the MMP form to improve the accuracy of information recorded, and make it available to the clinician responsible for prescribing medicines.

10.4 Medication chart orders

NSW Health facilities follow the National Inpatient Medication Chart standard by the Australian Commission of Safety and Quality in Health Care.

The medications administered for HITH care must be recorded in the NSW approved version of the Medication Chart. The MMP should clearly document these and all other medications the patient takes for pre-existing unrelated conditions.

10.5 Administration of medication related to HITH care

HITH services must ensure that clinicians administering medications have appropriate qualifications, training and demonstrated current competency.

Principles of safe medication administration (the 5 Rs) are outlined in the 'Medication handling in NSW public health facilities' policy (PD2013-043).

10.6 Second person checks before administration

NSW Health policy stipulates that a second person check should take place before certain medications are administered other than by an authorised prescriber.

This must include as a minimum (and in all situations where practicable):

- doses administered by injection
- doses administered to children aged 15 and under
- Schedule 8 medications.

Second person checks for high-risk medicines are detailed in the NSW Health 'High-risk medicines management policy'. However, these are often difficult to adhere to in the community when only one staff member is available.

In these situations, the second person check must take place in the health facility before the home/community visit. The person administering the injection in the patient's home or community setting must re-check the medication against the medication order at the time of administration.

HITH services should have written established processes and procedures to minimise the risk of medication administration errors, particularly for when a second person check at the time of medication administration is not possible. Examples include relaying individual doses that are labelled and dispensed by the pharmacist for a specific patient.

10.7 Self-administration of medication unrelated to HITH care

When assessing if a patient is suitable for HITH care, services must assess the patient's ability to safely administer their own regular medicines for pre-existing conditions.

In the daily patient assessment, the HITH clinician should ascertain that the patient is self-administering their regular medication and document this in the patient's clinical record.

Patients at home and in Residential Care Facilities can access their GP and the Pharmaceutical Benefits Scheme for medications/Webster packs for pre-existing conditions unrelated to HITH care.

10.8 Self-administration of medication related to HITH care

In certain circumstances, the HITH nurse may educate patients or their carers to administer parenteral medications to manage their condition.

This decision is made by the HITH clinician and the patient /carer involved. It is based on an assessment that includes cognition and dexterity, and the ability to follow direction and perform the necessary techniques.

The HITH doctor charts the medication for the patient/carer to check against for each drug and its dose every time this is administered.

These patients and carers are given written step-by-step instructions and daytime and after-hours contact details.

10.9 Venous thromboembolism (VTE) prophylaxis

Adult patients in NSW public hospitals must be assessed for risk of venous thromboembolism (VTE) within 24 hours of admission, with follow up assessments as required. This applies to HITH patients as well.

Patients at risk of VTE must receive the appropriate pharmacological and/or mechanical prophylaxis. See the resources below for more information.

10.10 Storage and transport of medicines

The HITH service should have processes to ensure the safe storage and transport of medicines. This includes policies on using portable cooler chests and ice packs for temperature-sensitive medicines.

The 'Strive for 5 National Vaccine Storage Guidelines' published by the Australian Government has useful information on transporting and storing medications.

If medication is stored in a patient's refrigerator in their home, it must be clearly labelled and appropriately packaged. The patient/carer must be educated about the correct storage of temperature sensitive medicines.

10.11 Medicine supply on referral from another service

Processes for transparent acceptance of costs should be established for cross district referrals. A patient should not be disadvantaged if their medical management needs to be transferred to another HITH service due to the location of their place of residence.

If a patient is referred from a facility in one district to a HITH service in another, the referring HITH service is responsible for the cost and supply of at least one week's medication. The receiving service is responsible for the supply and cost of medication required to complete the course of treatment.

Any formulary and protocol differences should be clarified in the transfer of care.

10.12 Discharge medication prescriptions and discharge summary

An authorised prescriber must review the patient's medication regime as part of a general

review before discharge from HITH care.

If required, up to seven days supply of pharmaceuticals can be given to the patient at the end of the HITH episode, such as oral antibiotics.

The discharge summary should detail all medications at time of discharge.

Resources

Australian Commission on Safety and Quality in Health Care: safetyandquality.gov.au

- Medication safety standard
- Educational resources on medication reconciliation

NSW Health: health.nsw.gov.au/policies

- Medication handling in NSW public health facilities (PD2013_043)
- High-risk medicines management (PD2015_029)
- User-applied labelling of injectable medicines, fluids and lines (PD2016_058)
- Prevention of venous thromboembolisms (PD2014_032)

Clinical Excellence Commission: cec.health.nsw.gov.au/patient-safety-programs

- Continuity of medication management program
- VTE prevention

Australian Health Practitioner Regulation Agency: aphra.gov.au

- Guidelines and resources

Department of Health and Ageing: health.gov.au/internet/immunise

- National vaccine storage guidelines (2013)

11 PROCESSES FOR MANAGING ANAPHYLAXIS

Clinicians working in HITH services must be able to recognise and appropriately treat the clinical symptoms of mild to severe allergy and anaphylaxis.

All HITH services must have a policy on the appropriate management of anaphylaxis in the community and standing orders for its treatment. The policy should detail the drugs carried by a nurse to manage anaphylaxis. Examples include adrenaline and oral corticosteroids.

Paediatric HITH services will require specific doses, protocols and kits for children of differing ages and weights. Kits should be regularly checked to ensure medicines are within expiry dates.

The first dose of an antimicrobial that the patient has never previously received should be given in a setting where staffing and equipment allow appropriate monitoring and therapy for potential anaphylaxis. This is usually the hospital or HITH clinic. It can also be in the home if a supporting clinical guideline is in place.

12 PATHOLOGY

12.1 Transportation of specimens

All substances should be triple packed as follows.

1. The primary receptacle should be leakproof.
2. The primary receptacle should be placed in leakproof secondary packaging with sufficient absorbent material to absorb any likely spill. Multiple fragile primary receptacles must be packed with suitable cushioning material so that any release of liquid substance will not compromise the integrity of the cushioning material.
3. The secondary packaging/s should be placed in a third outer packaging of adequate strength for its capacity, mass and intended use and with a secure closure to prevent loss of contents.

When transported, the package should be securely placed and restrained within the vehicle. Where practical, this should be in a separate luggage compartment or boot.

12.2 Point of care

Point of Care is pathology testing done in close proximity to a patient by a health care worker, usually outside a traditional laboratory. It supports care in the home by facilitating immediate clinical decision and treatment. Where available, it is a valid and beneficial way of pathology testing for HITH services.

Pathology testing on approved Point of Care devices, such as international normalized ratio testing outside of NSW Health Pathology laboratories, must conform to the NSW Health policy below.

Resources

Australian Government Department of Health: health.gov.au

- Requirements for the packaging and transport of pathology specimens and associated materials (2013)

NSW Health: health.nsw.gov.au/policies

- Policy for managed Point of Care Testing (PoCT) service (PD 2015_028)

13 ANTIMICROBIAL USE IN HITH AND ANTIMICROBIAL STEWARDSHIP

Intravenous antibiotics are commonly used in HITH care. Choosing the most effective, safe and narrow spectrum antimicrobial agent with the least capacity for developing resistance is essential for an effective individual patient care program.

Other factors to consider are the limited capacity for multiple daily dosing in a home setting, drug monitoring requirements and the stability of a chosen drug in 24-hour infusion pumps.

HITH services should have electronic access to a current version of ‘Therapeutic guidelines: antibiotic and local antimicrobial policies and processes’. Services should follow local policy on prescribing antimicrobials for HITH patients.

Given the threat posed by emerging antibiotic resistance, HITH services must support the broader NSW Health agenda. Services should always consider the use of oral antimicrobial therapy in place of parenteral therapy when suitable clinical trials have demonstrated efficacy.

Intravenous (IV) antimicrobial therapy should only be used when oral therapy is not appropriate, and should be switched to oral therapy when IV therapy is no longer required. For some antimicrobials, oral administration is as effective as parenteral therapy and these drugs can be given orally rather than by IV.^{xxvi}

The checklist by the British Society for Antimicrobial Chemotherapy is a useful guide for HITH services.

Key elements of the checklist are to:

• have HITH service representation on the hospital’s Antimicrobial Stewardship Committee
• ensure all antimicrobials in use by the HITH service are approved by the committee
• prescribe and administer antimicrobials in line with locally agreed protocols
• monitor antimicrobials where appropriate for toxicity and sub-therapeutic concentrations
• have a multidisciplinary component (doctor/pharmacist/nurse) to the service
• provide links to infectious disease specialists where the service does not have a specialist physician for advice
• do weekly multidisciplinary reviews for HITH patients on long-term IV antibiotics
• provide ongoing continuing professional development for all staff on antimicrobial stewardship, infection prevention and control, and vascular access
• report healthcare associated infections in line with locally agreed policy
• review and consider antimicrobial resistance data
• have an active intravenous to oral switch program in place

Resources

Australian Commission on Safety and Quality in Health Care:

safetyandquality.gov.au/our-work

- Preventing and controlling healthcare-associated infection standard
- Antimicrobial stewardship clinical care standard
- Antimicrobial stewardship in Australian hospitals 2011

Clinical Excellence Commission: cec.health.nsw.gov.au/patient-safety-programs

- Antimicrobial stewardship program

National Centre for Antimicrobial Stewardship: ncas-australia.org

- Various resources

National Prescribing Service: nps.org.au

- e-learning modules on antimicrobial stewardship

National antimicrobial prescribing survey: naps.org.au

- National antimicrobial prescribing survey for HITH

14 INFECTION CONTROL

Each HITH setting (private home, residential care facility, school or workplace) should be assessed for its potential to promote or spread infection.

Staff must follow guidelines on infection control for clinical duties in a community setting, with additional precautions where appropriate. Containing waste (including sharps) and medical equipment for transport must be consistent with infection control principles.

The HITH service must ensure appropriate equipment is supplied to the healthcare worker with an appropriate means for disposal.

Resources

NSW Health: health.nsw.gov.au/policies

- Infection prevention and control policy (PD2017_013)

Australian Commission on Safety and Quality in Health Care: safetyandquality.gov.au

- Medication safety standard

Clinical Excellence Commission: cec.health.nsw.gov.au

- Infection prevention and control practice handbook (2016)

National Health and Medical Research Council: nhmrc.gov.au/guidelines-publications

- Australian guidelines for the prevention and control of infection in healthcare (2010)

15 VENOUS ACCESS DEVICES AND DEVICE CARE

Venous access devices used for antimicrobial therapy include midlines, peripherally inserted central catheters, tunnelled central venous catheters and implanted ports. Peripheral cannulae are also used for short-course home therapy.

Secure venous access must be in place before the patient is transferred home. The choice of device should reflect the patient's needs. This includes their clinical status, diagnosis, age, vein condition, current vascular access, antimicrobial therapy prescribed, frequency of administration and duration of therapy.

The HITH service must have standards and policies for venous access devices and the administration of intravenous medications. There are also national guidelines for the prevention of catheter-related infection.^{xxvii} HITH services should use information from established national guidelines and local hospital policies, adapting them to their context as needed.

Catheter-associated complications include mechanical complications (dislodgement, occlusion, phlebitis) and non-mechanical complications (local and systemic catheter infections). The risk of these increases over time. Close monitoring and cessation of IV therapy at the earliest possible time is essential.

HITH services are encouraged to monitor the rate of complications per 1,000 catheter days for benchmarking with other HITH services.

Patients and carers must be educated in the care of the venous access device before being sent home under HITH. They must be instructed on the early identification of any complications and escalation of concerns.

For patients in Residential Care Facilities, there may not always be a registered nurse available to manage the central venous access device between HITH clinician visits. In such instances, a risk assessment determines if the patient should receive their care in hospital.

Resources

NSW Health: health.nsw.gov.au/policies:

- Central venous access device insertion and post insertion care (PD2011_060)
- User applied labelling of injectable medicines, fluids and lines (PD 2016_058)
- Peripheral intravenous cannula (PIVC) insertion and post insertion care in adult patients (GL2013_013)

15.1 Intravenous drug users and venous access devices

Intravenous drug users (IDUs) are among the most vulnerable patient groups, often coming from disadvantaged conditions including poverty, homelessness, co-existing mental illness and violence.^{xxviii xxix}

Infections are the leading cause for hospital admission for IDU patients and are generally severe and complex, requiring prolonged intravenous treatment. It is often difficult to

retain IDUs as inpatients for long courses of intravenous therapy, with many discharging against medical advice or being switched to a partial course of oral antibiotics with potential sub-optimal outcomes.

HITH services can play an important role in ensuring suitable IDU patients receive the entire course of the recommended treatment.^{xxx} There are no clear guidelines for HITH services on managing antimicrobial infection risks for IDUs, despite HITH services in Australia safely managing IDU patients for many years.

This success has been linked to comprehensive patient assessments, which include factors such as compliance with medical care, co-morbidities, continuing drug use in hospital, social circumstances and concerns for patient and staff safety.

HITH services should manage each IDU patient case by case. A peripherally inserted central catheter (PICC) provides easy access to veins for continued drug use. If the patient uses this line for injecting drugs of addiction it increases the risk of infection and thrombosis.

Patients should be advised of the risks and the service should document an agreement with the patient that they will not access the line for injecting drugs of addiction. PICC lines should ideally be assessed daily for signs of misuse and have tamper evident seals where available. Alternatively IDUs may be required to come to the HITH clinic and have a butterfly cannula inserted and removed each day for a bolus injection.

16 PATIENT COMMUNICATION AND EDUCATION

Health literacy is about how people understand information about health and health care. It is also about how they apply that information to their lives, use it to make decisions and act on it.^{xxxi}

People with low health literacy skills may experience difficulty understanding their condition, treatment options and care choices. They are more likely to have an adverse health outcome than someone who is health literate.^{xxxii}

By providing meaningful and relevant health information to each patient, HITH services can improve the safety and quality of their care and empower patients to take a greater role in their own care.

16.1 Teach-back method

Teach-back is a best-practice communication method for addressing health literacy, and can be used with patients to reduce misunderstanding.^{xxxiii}

The method confirms the patient understands what they have been told using their own words. The health professional gives information, and then asks the patient to respond and confirm their understanding before adding any new information.

Written and visual material (including pamphlets, diagrams and models) can reinforce the teaching points and appeal to different learning styles (auditory, visual and tactile learners).^{xxxiv} The Health Care Interpreter Service and multilingual medication information leaflets should be used for culturally and linguistically diverse patients.

16.2 Development of written information

Written materials for patients and carers should:

- present information that is of greatest use to the patient first
- group information into meaningful sections
- use clear headings and emphasise main points
- use plain language (short words, short sentences and active voice)
- explain technical terms using practical everyday language
- use designs with white space, legible fonts, and visual elements such as charts and illustrations.

Services should pilot test written materials with consumers before final publication.

16.3 Provision of patient information

The patient must be given information on:

- their presenting condition
- their rights and responsibilities
- how to contact the HITH service
- early recognition and management of deterioration
- what to do in an emergency
- the treatment plan and expected date of discharge
- chronic disease self-management (where applicable)
- signs, symptoms and management of anaphylaxis
- self-care measures
- medication management including the safe use, storage and disposal
- consumer medicines information where applicable.

16.4 Marketing

As HITH services usually operate in the community, they are often unseen. HITH facilities or districts/networks can consider local marketing or media strategies to increase their visibility with health staff, partners, referral sources and consumers. This can include:

- articles in local media
- social media links and purchased advertising
- patient experiences using a variety of media including written, video, photos and patient stories

- engagement and partnering with local health councils or advisory/consumer groups
- health facility phone waiting messages to include information on HITH
- promotions information on HITH on TV screens in waiting rooms
- pull-up banners (double sided) on HITH outside clinics or in waiting rooms
- clear signs
- posters and brochures for referrers with easy referral information.

16.5 Engaging internal stakeholders

The medical director or clinical lead has an influential role as a clinical champion in shaping a successful HITH service^{xxxv}. They are particularly important for changing the traditional notion that patients must be in hospital to receive care.

The clinical champion convinces colleagues of the value of HITH for patients and the health service. They educate, advocate, build relationships and navigate boundaries between professionals/units.^{xxxvi}

Engaging internal stakeholders is a cyclical process, especially in units with a frequent staff turnover of junior medical officers.

Resources

Australian Commission on Safety and Quality in Health Care: safetyandquality.gov.au

- Health literacy: Taking action to improve safety and quality (2014)
- The Australian charter of healthcare rights: a guide for patients, consumers, carers and families
- Partnering with consumers standard (2012)

Clinical Excellence Commission: cec.health.nsw.gov.au

- Health literacy guide

Therapeutic Goods Administration: tga.gov.au/consumer-medicinesinformation-cmi

- Consumer medicines information (2014)

17 PATIENT SAFETY AND QUALITY

Any healthcare system aims to ensure safe, effective and patient centred care, while keeping patients free from avoidable harm.

A systematic approach to quality improvement focuses on safety and quality risks, ensures monitoring takes place, and identifies those accountable for taking actions to improve services.

Regular data collection and reporting on agreed quality and safety outcomes provides transparency and highlights achievements and areas for improvement.

By focussing on quality and safety, HITH services ensure that:

- patients receive appropriate, evidenced-based care
- continuous quality improvement systems and processes are in place
- routine data collection takes place to support monitoring and evaluation
- clinical care and guidelines meet the National Safety and Quality Health Service Standards and NSW Health policies
- trends in HITH uptake and hospital avoidance can be identified to inform business and workforce planning.

Successful HITH services take a ‘local solutions for local problems’ approach. Services should use a wide range of strategies to assess service outcomes and quality measures. These should support evidence-based approaches. They should also be in line with the National Safety and Quality Health Service (NSQHS) Standards and the NSW System Purchasing and Performance Safety and Quality Framework.

The table below shows indicators used in acute inpatient units that HITH services can also collect in order of priority. As HITH settings are residential or community-based, some of these will need to be adapted. Indicators will vary for adult and paediatric services.

The level of data collected depends on the HITH service’s size and maturity, location, area of practice and workforce.

Service managers may collect only the priority measures below. Or they may include the recommended measures and their own additional measures.

Quality measures suitable for HITH services in NSW

PRIORITY
<p>1. HITH separations – The number of HITH separations should be measured routinely by all HITH services. The number of patients admitted to HITH as a percentage of the total acute overnight hospital separations indicates the extent to which the service is used.</p>
<p>2. Length of stay – Acute patient length of stay is a key driver of hospital costs. It also affects the capacity of the health system in terms of bed availability and costs. Services should aim to minimise the time patients spend in HITH without compromising health outcomes. Services should monitor length of stay against hospital length of stay for the same diagnostic related groups.</p>
<p>3. Bed days – Bed days are a function of separations and length of stay. The measure may be used to quantify release of physical capacity within a health service for patients who require admitted care.</p>

4. Incidents, adverse events, complaints and near misses – NSW Health staff members must report all incidents (clinical, security/property/hazard, staff/visitor/contractor) and complaints in the state-wide Incident Information Management System (IIMS). See NSW Health Incident Management Policy PD2014_004.

Below are common incident measures while patients are under HITH care.

<p>Venous/pulmonary embolism and bleeds from anticoagulants</p>	<p>Any significant unexpected change in a patient's condition relating to VTE prophylaxis including embolism and bleeding, should be considered an adverse event and recorded in IIMS.</p>
<p>Pressure areas</p>	<p>All pressure injuries must be reported in IIMS and reported to the appropriate medical team. This includes pressure injuries present on admission, new pressure injuries, and those that have significantly deteriorated (progressed to the next stage of pressure injury) since admission.</p>
<p>Falls</p>	<p>Some patients are at greater risk of falling, particularly those in rehabilitation and palliative care in the home.</p> <p>Patients flagged as high-risk in the electronic medical record (eMR) or at time of HITH risk assessment should have a falls risk management plan. Any reported falls, even if not in the presence of the HITH clinician, should be reported in IIMS.</p>
<p>Healthcare acquired infections</p>	<p>Any healthcare associated infections and the transmission of multi-resistant organisms should be documented in IIMS.</p> <p>Treating patients in HITH significantly reduces the risk of hospital acquired infections. This measure shows the benefits of treating patients in HITH.</p>
<p>Drug pharmacodynamics and pharmacokinetic events</p>	<p>A large proportion of HITH patients require regular drug level monitoring.</p> <p>Anaphylaxis, severe drug reactions requiring alerts, drug related events such as interactions resulting in hospital admissions/ morbidity for patient must be recorded.</p> <p>Adverse pharmaceutical events may indicate inadequate monitoring or dosing errors.</p>
<p>Medication/IV fluid errors and near misses</p>	<p>A large proportion of HITH patients receive IV medication. Low IV errors in HITH demonstrate that intravenous care out of hospital is suitable and safe.</p> <p>Any incidents related to IV errors/near misses should be recorded in IIMS.</p>

Un-contactable patient events	Actions taken to contact patients and the outcomes of these actions should be monitored, recorded by the HITH service and documented in medical records. Un-contactable events and near misses should be recorded in IIMS.
Discharge against medical advice, including by Aboriginality	<p>This measure provides indirect evidence and data for the extent to which services respond to patient needs, and particularly Aboriginal patient needs.</p> <p>See Aboriginal and Torres Strait Islander Health Performance Framework (Section 3.09) 2017 at pmc.gov.au</p>
RECOMMENDED	
<p>5. Transfers from HITH to health facility – Transfers back to the hospital facility may be captured in IIMS. This provides a numerical measure and qualitative information on patient response to HITH treatment or patient deterioration requiring an escalation of care.</p>	
<p>6. Patient reported experience or patient reported outcome measures – Feedback on patient/consumer experiences and outcomes are important for shaping health services and policy.</p> <p>Carer reported experiences are also an important source of HITH patient feedback, including the Carer Strain Index.</p>	
<p>7. Patient compliments – Sites should maintain a formal patient register with the ability to use collected data for service development and workforce planning.</p>	
<p>8. NSQHS accreditation – HITH services may be included in general hospital accreditation cycles to varying degrees, dependent upon size and auditing processes. Self-assessment and involvement of HITH services in accreditation cycles are encouraged to identify gaps and improvements.</p>	
<p>9. Direct referral/admission to HITH – The number/percentage of patients referred/admitted to HITH from emergency departments and/or out-of-hospital settings can demonstrate awareness of, ease of referral and confidence in the HITH service.</p>	
<p>10. Potentially preventable hospitalisations – Potentially preventable hospitalisations are those considered as preventable through timely and accessible, quality primary and community-based care.^{xxxvii} While HITH is a hospital substitution service and prevents hospitalisation in a hospital bed, HITH services can monitor the number of these events referred and treated in the HITH service.</p>	
<p>11. Readmissions with 28 days of discharge – Readmission rates reflect patient management practices and post-discharge care. A low rate may indicate good practices while a high rate may indicate a problem with the clinical care pathway.</p>	

12. Healthcare partners – Surveying health care partners or referrers can provide useful information for quality and service planning. This might include GPs in local practices or local Primary Health Networks, medical specialists or other departments who refer or transfer patients to HITH.

Resources

NSW Health policies: www.health.nsw.gov.au/policies

- Patient safety and clinical quality program (PD2005_608)
- Incident management policy (PD2014_004)

Australian Commission on Safety and Quality in Health Care: safetyandquality.gov.au

- Guide to the National Safety and Quality Health Service Standards for community health services (2016)

Clinical Excellence Commission: cec.health.nsw.gov.au

- Quality improvement tools and resources

National antimicrobial prescribing survey: naps.org.au

- National antimicrobial prescribing survey for HITH services

Australian Council on Healthcare Standards: achs.org.au/programs-services

- Clinical indicator program

18 HITH SERVICE STRUCTURE AND LOCATION

How a service provides HITH care depends on the team composition and workforce capacity – there is no preferred structure. However, services must have systems in place for regular and rapid communication for safe patient care. Teams must have well developed working relationships with the emergency department, staff specialists/visiting medical officers and general practice.

18.1 Stand-alone HITH team

This is a team formed specifically for HITH care. The medical, nursing, pharmacy, allied health and support staff are employed by the hospital/district. This model allows the HITH team to be based in the acute facility or a primary/community setting.

18.2 HITH integrated team

This is a devolved team with medical, nursing, pharmacy, allied health and support staff employed by a mix of hospital and community care providers. This model allows for flexibility to meet system demands. More clinicians can be part of the team in periods of high demand, or released back to their primary, acute and community teams as required.

Clear protocols and policies around medical management of the patient are essential when using this model.

Some smaller rural HITH models run on this model, with 24-hour service provision shared between the community and acute nursing workforce. The model is necessary due to the smaller and more generalist nature of rural facilities. It requires all available nurses and their managers to be knowledgeable about the HITH service and its current clients.

The acute nursing workforce is responsible for and may also provide after-hours HITH care, coordination and services. This often takes place in an allocated clinical space off the inpatient unit or emergency department, and less frequently in the home. The success of this model depends on the involvement of nursing leaders and staff as well as effective communication and handover.

19 WORKFORCE

19.1 Staffing a HITH service

A HITH service needs to provide a specific mix of skills and competencies to ensure safe and high quality care. The services provided depends on the staffing mix and influences the diagnostic groups the HITH service can manage.

Clinical staff in positions requiring registration must meet standards set by the Australian Health Practitioner Regulation Agency and national health boards.

Staff should be recruited at the appropriate level to reflect the autonomy of providing care in a community setting. Nursing staff conducting home visits should ideally have experience in the acute care setting and some community nursing experience.

Staff must work within their scope of practice and professional frameworks and delegate according to their professional standards. Specialist acute paediatric skills (medical, nursing and allied health) are required for the best outcomes for children and families receiving HITH care.

Continuous professional development is required to maintain patient and staff safety. Staff training and competencies should be tailored to the community setting and include regular professional development in relevant areas, for example, antimicrobial stewardship and infection control, new medications and medication safety updates.

19.2 Work health and safety

HITH staff should be given with appropriate resources. Work health and safety considerations include:

- local safety and security procedures for staff, including patient lists, contact details, expected duration of visits, and use of the Home Visiting Safety Checklist (NSW Health), with GPS safety trackers in some cases
- after-hours protocols
- access to basic mobile tools including cars, mobile phones, wireless laptops, mobile equipment for biometric measurements
- access to home visiting specific equipment like ergonomic trolleys, car packs to

store short-term supplies, home visit bags to take into homes, pumps, intravenous poles

- annual manual handling training
- reasonable workloads or system planning to manage service capacity and workloads.

20 FUNDING

HITH is funded using the same approach as hospital based admitted acute or sub-acute episodes.

All acute admitted episodes of care (overnight and same day) are within the scope of the acute admitted activity based funding (ABF) stream. Sub-acute episodes of care are covered under the sub-acute and non-acute classification (SNAP) funding stream.

HITH can be classified, costed and priced by the bed type and its associated clinical care.

HITH is an admitted service and should be provided to public patients free of charge. Services provided to public HITH patients for the admitted episode of care should not generate charges against the Commonwealth Medicare Benefit Schedule. This includes radiology and pathology.

Non-admitted services such as attendance at outpatient clinics, provided to an admitted HITH patient are funded by the admitted stream – not the non-admitted stream. This includes public specialist visits as well as other hospital based services. The clinical service provided to the patient and the financial class code should identify the patient as NAN.09 Non-admitted: Service to Admitted Patient. The Consultation Liaison Indicator should identify non-admitted services provided to a current inpatient.

GPs can claim Commonwealth MBS for clinical care unrelated to the principal diagnosis of the HITH admission. For example, if a patient is admitted to HITH for cellulitis but attends their GP for ongoing diabetes management, the GP can claim against the MBS for the diabetes appointment.

See Section 24.7 for more information about patients receiving care while on leave.

21 FINANCIAL CLASSIFICATIONS

21.1 Privately insured patients in public hospitals

Health services must have individual agreements in place with each private health insurer to establish rates and terms for payment for HITH services. If there is no agreement in place, no claim for HITH services can be made.

If no agreement exists with a private health insurer for a patient with a private election who is treated in HITH, the patient's election status should be a 'public overnight' financial classification.

If, during the same episode of care, the patient is transferred from the HITH model to

facility based care, the financial classification should be changed back to 'private overnight' or 'day only'.

21.2 Department of veterans affairs and compensable patients

There is no requirement to change the financial classification for Department of Veterans Affairs or compensable (Motor Accidents Authority, WorkCover, and 'other compensable') patients who are transferred to the HITH model of care.

21.3 Ineligible

There is usually no requirement to change the financial classification for ineligible patients who are transferred to the HITH services. However, some patient administration systems and billing systems may require a change to the financial classification code to ensure the correct billing rate.

22 DOCUMENTATION AND DATA COLLECTION

22.1 Clinical documentation

Documentation and data collection requirements for HITH patients are the same as for admitted patients. The health care record must provide an accurate description of each patient's episode of care.

Recording the full complexity of an episode of care is critical. It ensures the funding allocated to the local health district reflects the resources they need to deliver this care. It also shows the complexity of care managed by HITH services.

A principal diagnosis must be reported for every episode of admitted patient care. This is the diagnosis established as chiefly responsible for the episode of admitted patient care.^{xxviii} If a patient transfers to HITH from an inpatient unit, the diagnosis responsible for the HITH admission may be different to the initial diagnosis at hospitalisation.

If these diagnoses are different, the reason for admission to HITH should be clearly documented. An example of different diagnoses for admission is an inpatient admitted for a total hip replacement and transferred to HITH for treatment of a resulting infection with IV antibiotics.

When a patient is a direct admission to HITH, all conditions that impact the patient's care, including chronic conditions, should be listed. Additional diagnoses are those conditions that affect a patient's management by requiring:

- a start, alteration or adjustment of therapeutic treatment
- diagnostic procedures
- increased clinical care and/or monitoring.^{xxix}

All HITH interventions/care and conditions treated must be documented in the clinical notes. If a patient acquires a condition such as an infection while they are admitted, the notes should specify the source – in hospital or home setting.

A discharge summary with the principal diagnosis and any additional diagnoses must be completed at the end of the episode of care.

22.2 Activity collection

Data must be collected according to NSW Health policy.

HITH patient activity must be reported on the Admitted Patient Data Collection and the SNAP Data Collection where relevant. This means an appropriate classification and National Weighted Activity Unit can be allocated.

HITH beds are identified by Bed Type 25 – Hospital in the Home – General.

If after discharge from HITH, the person requires further care by either the HITH or community service, the non-admitted services must be reported on the Non-Admitted Data Collection as Service Type 15 – Post Acute Care.

Services provided to HITH patients by outpatient/community teams (non-admitted service unit) must be identified as “services to an admitted patient”. See the Non-admitted Information Bulletin for the reporting approach.

Services doing significant volumes of non-admitted patient services after patient are discharged from HITH should register a service unit for activity reporting.

22.3 Patient admission

As admitted patients, HITH patients must be registered with the health service and their episode of care recorded in the patient administration system.

22.4 Care type

HITH care types can include acute, newborn, rehabilitation and palliative care. The care types must accurately reflect the care given.

Correct assignment of care type will ensure that each episode is classified correctly. The classification will determine how the episode is reported, weighted, costed and funded.

The care type must be evidenced by documentation in the patient health record:

- acute and newborn care is classified using the Australian Refined Diagnosis Related Group (AR-DRG).
- sub-acute care (rehabilitation and palliative) is classified using the Australian Subacute and Non-Acute (AN-SNAP) Classification.

When rehabilitation and palliative care is delivered and meets the criteria for HITH, AN-SNAP data must be collected at the beginning and end of the episode.

The AN-SNAP classification is a ‘front end classification’, meaning data collected by the clinical team at the start of the sub-acute episode determines the class allocation. This differs from Diagnostic Groups (DRGs), which classify the patient at the end of the episode as with acute HITH.

The AN-SNAP data collection requirements vary according to the care type allocation, but usually include a clinical functional measure.

Staff providing care to rehabilitation and palliative HITH patients require training in the tools, documentation and data entry required for AN-SNAP.

Resources

NSW Health: health.nsw.gov.au

- Inpatient Statistics Collection (ISC) – Public Facilities Separations (PD2005_210)
- Non-admitted patient data collection: classification and code standards from 1 July 2017 (IB2017_025)

Independent Hospital Pricing Authority

- Activity-based funding resources: <https://www.iHPA.gov.au/what-we-do>

NSW Health Activity Based Management (note that the referenced documents are updated annually and are available on the NSW Health Intranet)

- NSW Activity Based Management Compendium
- NSW Casemix Classifications Handbook

22.5 Same day admissions

A same day admission is where the admission date and separation date occur on the same calendar day.

For procedures and interventions that may be delivered as either admitted or non-admitted care, the decision to admit must be made by a clinician with admitting rights to that facility. It must be based on the condition, acuity and specific clinical and support needs of that patient.

This decision should be made prudently and should not be based on financial incentives or the duration of the intervention provided.

Many conditions classified historically by HITH services as same day care, such as infusions, can be safely and effectively treated on a non-admitted basis.

Admission warrants clinical review by the attending medical officer or their delegate and should be documented in the patient's health record.

See the NSW Health Admission Policy for more information.

22.6 Transfer of the patient between emergency and wards

When the patient moves from the inpatient hospital ward to receive HITH services at home, a ward transfer is executed to Bed Type 25 – HITH.

If the patient presents at the emergency department during HITH care, the visit should be classified in the patient administration system as Service Type 13 – Current Admitted Patient Presentation.

22.7 Leave while on HITH

If a patient admitted to HITH requires predicted and scheduled care such as renal

dialysis in a different hospital, the patient should be put on leave from HITH care for the day. Collaborative care rules apply. Collaborative care arrangements include public to private contract arrangements. They also include arrangements between two public facilities where both provide a continuous service to the patient, and one facility provides a same day service on behalf of the other hospital.

Under the National Health Reform Agreement, patients accessing primary care services on their leave days from hospital can claim the Medicare rebates.

22.8 Transfer from one facility to another

Between health districts: Transferring an admitted patient from a hospital or HITH service to a HITH service in another district, requires discharge from the originating facility and admission to the new service. If patient returns to the original district for specialist review, this is recorded as 'non-admitted activity to an admitted patient'.

Between facilities in same local health district: Transferring a HITH patient from one hospital or HITH service to another, requires discharge from the original facility and admission to the new service.

Hub and spoke model: Rural/remote areas may choose to operate a hub and spoke model for HITH services. The hub is a larger health facility that operates a HITH service under the governance of a HITH attending medical officer.

The spoke is a smaller facility with no attending medical officer but is able to provide daily nursing care.

The patient is admitted at the hub and daily treatment provided at the smaller facility close to where the patient resides.

This model requires local protocols outlining each site's responsibilities, effective communication, handover, patient support and remote site staff via telehealth, videoconferencing and home telemonitoring.

The activity data collection must comply with NSW data collection requirements. Duplication of reporting must be avoided.

22.9 Discharge

If a patient is discharged to non-admitted care, they are discharged from the admitting facility and activity reporting against Hospital in the Home Bed Type 25 ends.

Resources

NSW Health: health.nsw.gov.au/policies

- Health care records – documentation and management policy (PD2012_069)
- Bed numbers data collection – NSW procedures policy (PD2012_054)
- Inpatient statistics collection (ISC) – public facilities separations dated from 1 July 2001(PD2005_210)
- Non-admitted patient data collection and code standards from 1 July 2017 (IB2017_025)

23 KEY TERMS

Acute bed substitution	Care provided at a patients place of residence, workplace, RACF or school instead of in a hospital.
Acute care	A patient receives active but short-term treatment for a severe injury or episode of illness, an urgent medical condition, or during recovery from surgery.
Acute care facility	Provides immediate care for trauma and injuries, severe or sudden illness, or recovery from surgery. Generally, stays in acute care are brief and patients are discharged home, managed through ambulatory care clinics or transferred to non-acute facilities.
Advance care plan	This states an individual's preferences about health and personal care, and preferred health outcomes. It guides decision making about their care. An advance care plan is the outcome of an advance care planning discussion with the patient and their carer.
Adverse drug reaction	A drug response that is noxious and unintended, and which occurs at doses normally used or tested in humans for the prophylaxis, diagnosis or therapy of disease, or for the modification of physiological function.
Antimicrobial	A chemical substance that inhibits or destroys bacteria, viruses and fungi, including yeasts or moulds.
Antimicrobial stewardship	A program implemented in a health service organisation to reduce the risks associated with increasing microbial resistance and to extend the effectiveness of antimicrobial treatments. Antimicrobial stewardship may incorporate a broad range of strategies including the monitoring and review of antimicrobial use.
Attending Medical Officer (AMO)	The Attending Medical Officer (AMO) is the senior medical practitioner who has primary responsibility for the patient during admission, and under whose care the patient is to be admitted. This medical officer is a consultant who may be a visiting medical officer, staff specialist or GP with admitting rights.

Best possible medication history	A list of all the medicines a patient is using at presentation (including all prescribed, over-the-counter and complementary medicines) obtained by interviewing the consumer (and/or their carer). This is confirmed, where appropriate, by using several different sources of information.
Care plan	An integrated and individualised plan of care that includes medical, nursing, allied health and other information necessary for providing comprehensive care to the consumer
Carer	A person who provides unpaid care and support to family members or friends who have a chronic or acute medical condition, mental illness, disability or who are frail and, elderly. Carers include parents and guardians caring for children.
Clinical audit	A quality improvement process that seeks to improve consumer care and outcomes through systematic review of care against explicit criteria and the implementation of recommended change.
Clinical governance	A system through which health service organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care. This is achieved by creating an environment in which there is transparent responsibility and accountability for maintaining standards, and by encouraging excellence in clinical care.
Clinical handover	The transfer of professional responsibility and accountability for some or all aspects of care for a patient or group of consumers, to another person or professional group on a temporary or permanent basis.
Clinician	A clinician trained as a health practitioner, including registered and non-registered practitioners. Clinicians may provide care within a health service organisation as an employee, a contractor or a credentialed clinician, or under any other working arrangements not specified here. They may include nurses, medical practitioners, allied health practitioners, technicians, scientists and students who provide health care under supervision. This guide uses the term 'clinician' to refer to individuals who provide clinical care.
Episode of care	The period of admitted patient care between a formal or statistical admission and a formal or statistical discharge, characterised by one care type.

Estimated date of discharge	This is the likely date that a patient will be transferred from hospital back into the community. It provides everyone involved in the patient's care, including the patient and their family/carer/s, with a projected date to coordinate the patient's requirements. While for some patients, the date may change due to clinical issues, an accurate estimated discharge date can be set for most patients.
ISBAR	A structured method of clinical handover. ISBAR stands for Introduction, Situation, Background, Assessment and Recommendations.
Multidisciplinary ward round	A structured round where key clinicians involved in the patient's care meet to discuss the patient's care and coordination of that care. The round is a place where dialogue and feedback occurs in relation to the needs of the patient and provides the multidisciplinary team an opportunity to plan and evaluate the patient's treatment and transfer of care together. The round is patient-centred and is based on the needs of the patient/carers. The frequency of the round is determined by the needs of the patient/carer population.
Patient	An inclusive term that refers to clients, consumers, inpatients and outpatients.
Post-acute care	This provides community-based services and home-based therapy to help patients recover at home after leaving hospital. Post-acute care services include: <ul style="list-style-type: none"> • community nursing • allied health • home and personal care assistance.
Potentially preventable hospitalisation	This is an admission to hospital that could have been prevented through appropriate individualised preventative health interventions and early disease management, usually provided in primary care and community-based care settings. This includes care by general practitioners, medical specialists, dentists, nurses and allied health professionals.
Scope of practice	The extent of an individual clinician's approved clinical practice within a particular organisation. It is based on the clinician's skills, knowledge, performance and professional suitability, and the needs and service capability of the health service organisation.
Screening	A process of identifying consumers who are at risk or already have a disease or injury. Screening requires sufficient knowledge to make a clinical judgment.

Separation	The total number of episodes of care for admitted patients. This can be total hospital stays (from admission to discharge, transfer or death) or portions of hospital stays beginning or ending in a change of type of care. Examples include a change from acute care to rehabilitation.
Sub-acute care	Specialised multidisciplinary care in which the primary need for care is optimisation of the patient's functioning and quality of life. A person's functioning may relate to their whole body or a body part, the whole person, or the whole person in a social context. It may also relate to impairment of a body function or structure, activity limitation or participation restriction. Subacute care comprises: <ul style="list-style-type: none">• rehabilitation care• palliative care• geriatric evaluation and management care• psychogeriatric care.

24 REFERENCES

- ⁱ NSW Ministry of Health 2017, NSW Paediatric Service Capability Framework GL2017_010, NSW Ministry of Health, Sydney
- ⁱⁱ Eckstein. A, 2015, *2015 health care outlook Australia*, deloitte.com, viewed 15 November 2017
- ⁱⁱⁱ Varney, J, Weiland, T, Jelinek G, 2014, 'Efficacy of hospital in the home services providing care for patients admitted from emergency departments: an integrative review', *International Journal of Evidence-Based Health Care*, 2014 June, vol. 12 issue 2, pp. 128–41
- ^{iv} Caplan, G, Sulaiman, N, Mangin, D, Ricauda, N, Wilson, D, Barclay, L 2012, 'A meta-analysis of "hospital in the home'. *Medical Journal of Australia* , vol. 197, no. 9, pp. 512–19
- ^v Shepperd, S, Doll, H, Angus, RM, Clarke, MJ, Iliffe, S, Kalra, L, Ricauda, NA, Tibaldi, V, Wilson, AD 2009 'Avoiding hospital admission through provision of hospital care at home: a systematic review and meta-analysis of individual patient data', *Canadian Medical Association Journal*, vol. 180, no. 2, pp. 175–82
- ^{vi} Leff, B, Burton, L, Mader, S, Naughton, B, Burl, J, Inouye, S, Greenough, W, Guido, S, Langston, C, Frick, K, Steinwachs, D, Burton, R 2005, 'Hospital at Home: Feasibility and Outcomes of a Program to provide hospital-level care at home for acutely ill older patients', *Annals of Internal Medicine Journal*, vol. 143, no. 11, pp. 798–808
- ^{vii} NSW Ministry of Health 2014, *NSW State Health Plan: Towards 2021*, viewed 26 April 2017, health.nsw.gov.au/statehealthplan/Publications/NSW-state-health-plan-towards-2021.pdf
- ^{viii} NSW Ministry of Health 2014, *NSW Rural Health Plan: Towards 2021*, NSW Ministry of Health, Sydney
- ^{ix} NSW Ministry of Health 2014, *Healthy, safe and well: A strategic plan for children, young people and families 2014-24*, Ministry of Health, Sydney
- ^x 'Hospital-in-the-Home' definition, Caremeteor.aihw.gov.au, viewed 15 November 2017
- ^{xi} NSW Ministry of Health 2017, *NSW Health Admission Policy PD 2017_015*, NSW Ministry of Health, Sydney.
- ^{xii} Leff, B, Burton, L, Mader, S, Naughton, B, Burl, J, Clark, R, Greenough, W, Guido, S, Steinwachs, D, Burtin, J 2006, 'Satisfaction with Hospital at Home Care', *Journal of the American Geriatric Society*, vol. 54, issue 9, pp. 1355–63

- ^{xiii} Cryer, L, Shannon, SB, Van Amsterdam M, Leff, B 2012, 'Costs for 'Hospital at home' Patients were 19 Percent Lower, with equal or Better Outcomes to Similar Inpatients', *Health Affairs*, vol. 31, no.6, pp. 1237–43
- ^{xiv} Shepperd, S, Iliffe, S 2005, 'Hospital at home versus in-patient hospital care', *Cochrane Database System Reviews*
- ^{xv} Robinson J, Boyd M, O'Callaghan A, Laking, G, Frey, R, Raphael, D, Snow, B, Gott, M 2015, 'The extent and cost of potentially avoidable admissions in hospital inpatients with palliative care needs: a cross-sectional study' *BMJ Support Palliative Care*, Vol 5, pp. 266-272
- ^{xvi} Fried T, Gillick M, Lipsitz L 1997, 'Short-term functional outcomes of long-term care residents with pneumonia treated with and without hospital transfer', *Journal of the American Geriatric Society*, vol. 45, issue 3, pp. 302–6
- ^{xvii} Boockvar KS, Gruber-Baldini AL, Burton L, Zimmerman S, May C, Magaziner J 2005, 'Outcomes of infections in nursing home residents with and without early hospital transfer', *Journal of the American Geriatric Society*, vol. 53 issue 4, pp. 590–596
- ^{xviii} NSW Ministry of Health 2016, ComPacks Program Guidelines GL2016_023, NSW Ministry of Health Sydney
- ^{xix} NSW Ministry of Health 2017, NSW Paediatric Service Capability Framework GL2017_010, NSW Ministry of Health, Sydney
- ^{xx} Australian Medical Association 2006. *Safe Handover: Safe Patients. Guidance on clinical handover for clinicians and managers*, AMA, Kingston ACT
- ^{xxi} National Patient Safety Agency 2004, 'Seven steps to patient safety', London
- ^{xxii} NSW Ministry of Health 2009, *Clinical Handover – Standard Key Principles PD 2009_060*, NSW Ministry of Health, Sydney
- ^{xxiii} Wong, MC, Yee, KC, Turner, P, eHealth Services Research Group, University of Tasmania 2008, *Clinical Handover Literature Review*, commissioned by Australian Commission on Safety and Quality in Health Care
- ^{xxiv} NSW Health Policy Directive 2011 *Care Coordination: Planning from Admission to Transfer of Care in NSW Public Hospitals PD2011_015*, Sydney
- ^{xxv} Kattula, A, Way, M, Dee, L-O, Fuller, A, Neave, K, Wickham W, Lang S and Keogh, M, Telephone Assessment of Patients (TAP) Tool in Hospital in the Home Listen for the Cues & Put Together the Clues, Alfred Health, Poster presented at: APAC Forum 2016 www.koawatea.co.nz

^{xxvi} tgldcdp.tg.org.au/etgcomplete

^{xxvii} National Health Medical Research Council, Commonwealth of Australia 2010, *Australian Guidelines for the Prevention and Control of Infection in Healthcare*

^{xxviii} Conrad, K 2016, 'Is It Safe to Discharge a Patient with IDU History, PICC for Outpatient Antimicrobial Therapy?' *The Hospitalist*, July 2016(7)

^{xxix} Lun, J, Pollard J 2016, 'Incidence of peripheral inserted central catheter tampering in individuals with current or prior intravenous drug use managed in a hospital in the home program, presented at 9th Annual Scientific Conference of the HITH Society Australasia, Adelaide, South Australia, November 2016

^{xxx} Dobson P, Loewenthal M, Hoy C, Lemessurier J, Jorgensen J, Orford N, Roberts K, and Bates PW 2016, The non-compliant patient in HITH – a potential governance gap, 9th Annual Scientific Conference of the HITH Society Australasia, Adelaide South Australia, November 2016

^{xxxi} Australian Commission on Safety and Quality in Health Care 2017, *Health literacy: Taking action to improve safety and quality*. Sydney: ACSQHC, 2014, viewed 26 April 2017

safetyandquality.gov.au/wp-content/uploads/2014/08/Health-Literacy-Taking-action-to-improve-safety-and-quality.pdf

^{xxxii} DeWalt D, Berkman N, Sheridan S, Lohr K, Pigone M 2004, 'Literacy and health outcomes: systematic review of the literature', *Journal of General Internal Medicine*, vol. 19, issue 12, pp. 1228–39.

^{xxxiii} Health Issues Centre, Teach-back: A technique for better communication, viewed 26 April 2017 healthissuescentre.org.au/news/detail/teach-back-a-technique-for-better-communication

^{xxxiv} Department for Health and Ageing, Government of South Australia 2013, *Tools for promoting health literacy – Tool 4*, Adelaide

^{xxxv} mckinsey.com/industries/healthcare-systems-and-services/our-insights/when-clinicians-lead

^{xxxvi} Soo, S, Berta W and G.R Barker, Role of the champions in the implementation of patient safety practice change, 2009, *Healthcare Quarterly*, 12 (Sp)

^{xxxvii} Falster, M and Jorm, L 2017, *A guide to the potentially preventable hospitalisations indicator in Australia*, Centre for Big Data Research in Health, University of New South Wales in consultation with Australian Commission on Safety and Quality in Health Care and Australian Institute of Health and Welfare, Sydney

^{xxxviii} Reference – ICD10AM Australian Coding Standards, 10th Revision, ACS 0001
Principal Diagnosis

^{xxxix} Reference – ICD10AM Australian Coding Standards, 10th Revision, ACS 0002
Additional Diagnoses