Health Intervention Project for Seniors (HIPS) Toolkit

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> *'To create great health we must create great systems of care for health. Improvement begins in our will, but to achieve improvement we need a method for systematic change, a model for improvement'*
>
> **Berwick, DM (1996) A primer on leading the improvement of systems. *BMJ,* 312 (7031):620**

Abbreviations

ACAT	Aged Care Assessment Team
ACD	Advance Care Directive
ACP	Advance Care Plan
AGS	Area Geriatric Service
AHPRA	Australian Health Professional Regulation Agency
AMU	Acute Medical Unit
CAMU	Cognitive Assessment and Management Unit
CEDRiC	Care coordination through Emergency Department, Residential Aged Care and Primary health Collaboration
CGA	Comprehensive Geriatric Assessment
CNC	Clinical Nurse Consultant
ED	Emergency Department
EDIS	Emergency Department Information System
EDMAR	Emergency Discharge Medication Administration Record
EMR	Electronic Medical Record
EPOA	Enduring Power of Attorney
FACEM	Fellow of the Australian College of Emergency Medicine
FTE	Full Time Equivalent
GEDI	Geriatric Emergency Department Intervention
GP	General Practitioner
HITH	Hospital in the home
IDC	Indwelling catheter
IV	Intravenous
JMO	Junior Medical Officer
LOS	Length of Stay
MHAT	Mental Health Assessment Team
MAPU	Medical Assessment and Planning Unit
NEAT	National Emergency Access Target
NOK	Next of Kin
NUM	Nurse Unit Manager
OT	Occupational Therapist
PHC	Primary Health Care
RACF	Residential Aged Care Facility
RN	Registered Nurse
SMO	Senior Medical Officer
SSU	Short Stay Unit
UK	United Kingdom
US	United States of America

Contents

Executive summary of findings from CEDRiC research evaluation

In 2015, over 20% of Sunshine Coast residents were aged 65 years and over compared to 15% in Australia (1). Emergency department (ED) presentations and hospital admissions for older persons is associated with an increased risk of complications compared to younger cohorts (2-7).

The Care coordination through Emergency Department, Residential aged care and primary health Collaboration (CEDRiC) is a healthcare model aimed at reducing potentially avoidable hospital admissions through improving care for older adults in Residential Aged Care Facilities (RACF) and community settings. CEDRiC provides specialist emergency department (ED) management and implementation of support services for clients aged 70 years and over through two interlinked services. These are the Geriatric Emergency Department Intervention (GEDI) team and specialist aged care services provided through the role of a Nurse Practitioner Candidate (NPC) delivering the Health Intervention Project for Seniors (HIPS) for older adults within an RACF. CEDRiC facilitates collaborative and coordinated care between RACFs, GPs, EDs and allied health professionals as well as community organisations, bridging the health funding divide.

Evidence supporting successful clinical interventions, such as the provision of additional clinical resources within RACFs, promotion of Advance Care Directives and End-of Life pathways for palliative care (8), rapid elderly assessment in Comprehensive Geriatric Assessment (CGA) in ED (9) and enhanced education in gerontology care were considered and built into the CEDRiC model (10-14). The CEDRiC model commenced development in early 2013 and has been evaluated through a structure, process and outcome model (15) and health economics analysis. Data were collected for the CEDRiC interventions during overlapping 12-month periods from July 2015 to August 2016. These data were compared with historical data from the pre-intervention periods: Pre-GEDI 2012, interim GEDI, January 2013 through until August 2015 and Pre-HIPS, April 2013-March 2014. Outcome measures included disposition, ED length of stay, hospital length of stay, and re-presentation to ED within 28 days. Qualitative data to understand the structures and processes of the CEDRiC interventions were collected from interviews with residents/patients, families or carers, ED staff, RACF staff and visiting GPs.

GEDI outcomes

Older people who presented to the ED during all three data collection periods were statistically similar, being on average 81 years of age, and 50–52% were female. The results of the data analysis indicated that older people who presented to the ED during the full GEDI intervention period benefited, with statistically significant reduction in ED length of stay and increased likelihood of discharge compared to pre-GEDI. No significant difference in risk of mortality or risk of same cause re-presentation to the ED within 28 days was found. Reductions in length of stay and increased rate of discharge resulted in average cost savings per ED presentation of $35 [95% CI: $21, $49] and savings of $1,469 [95% CI: $1,105, $1,834] per hospital admission. Aggregated data from interviews with seven GEDI patients, families and carers, and 23 staff determined that the service has become an integral part of ED patient care, it facilitates efficient time management, with better patient and staff satisfaction. The GEDI service is highly successful in improving the care of older people in the ED.

HIPS outcomes

Residents of the RACFs during the study periods were also statistically similar across pre-HIPS and HIPS intervention groups, being on average 85–87 years of age and 66–69% were female. During the intervention period, HIPS nurses completed 1790 consultations and self-identified residents for

review (44.4% NPC referral to HIPS) more often than referral by other staff. The majority of HIPS consultations were for review of ongoing management of previously identified acute conditions or acute exacerbations of chronic conditions.

Most transfers of residents from the RACF to the ED (61.8%) occurred when the NPC was not on duty and only 21.5% had been seen by the NPC in the 48 hours prior to transfer. Similar proportions of residents were admitted, transferred or discharged from the ED when comparing pre-HIPS and HIPS Intervention groups. Compared with pre-HIPS, HIPS intervention residents transferred to the local hospital had a significantly shorter length of stay in the ED (316mins Pre-HIPS, 280mins HIPS, $P<0.05$) with more meeting the National Emergency Access Target (NEAT) of less than 4 hours in the ED ($\chi^2(df) = 6.3\ (1)$; $P<=0.01$). Residents who were reviewed directly by the HIPS team had a much lower risk of ED transfer compared to residents who were consulted by HIPS indirectly via RACF staff (NPC did not directly see the resident) resulting in an average cost saving to the ED of $68 [95% CI: $25, $110] per resident transferred. During the HIPS intervention period, residents transferred to the ED from the intervention RACF cost less than residents from other RACFs: the average cost differences per ED presentation was $62 [95 CI: $12, $111]. The proportion of residents with any advance care planning in place increased significantly from 25.3% pre-HIPS to 74.7% during the HIPS intervention period ($P<0.0005$).

Structure and process evaluation determined that RACF staff and visiting GPs found the HIPS NPC provided thorough assessment and was highly regarded. RACF staff also reported that the NPC worked in conjunction with care staff to assist in problem solving to enhance care and provide education to staff as necessary.

Conclusions

The CEDRiC project achieved improved outcomes for residents of the participating RACFs and for older people attending the participating ED. Reductions in unplanned GP visits to participating RACFs and length of stay in the ED and hospital if transferred resulted in cost savings. These were demonstrated for the hospital and health service and local GPs including opportunity cost savings of releasing services for other uses. The CEDRiC model interventions were both feasible and highly valued by older people and staff within both the health service and aged care facilities.

Disclaimer

It is important to note that activities being undertaken through this project are not the only factors in influencing and impacting on the delivery of care to older people within the ED or RACF. The outcomes described will also be influenced to some degree by other initiatives being undertaken at a state–wide and local hospital and health service level to improve care for older people. The outcomes may also be affected by other operational and policy initiatives being undertaken.

Navigating the toolkit

The CEDRiC toolkit is an integral reference tool for implementing the CEDRiC model. This toolkit has been written in parts to provide:

PART ONE: An overview of the CEDRiC model

PART TWO: Health Intervention Project for Seniors - HIPS

- Step 1 — Pre-implementation planning
- Step 2 — What HIPS does and how it is done
- Step 3 — Service management
- Step 4 — HIPS service evaluation for sustainable funding and service delivery

Key Toolkit Elements
• The advice within this toolkit is **evidence based;** underpinned by research evaluation. • It is **applicable** to management and clinical staff. • The toolkit provides **evaluation tools** for implementation.

Scope of the toolkit

This toolkit provides information about an evidence-based model of care and includes pre-implementation planning strategies and evaluation tools. This has been designed to assist RACF and ED clinicians, administrators and policy makers in the implementation of this model, either in its entirety (CEDRiC) or individually as HIPS or GEDI. Further information on the research underpinning this model of care may be found in the publications listed on the CEDRiC website: www.cedric.org.au

Key to this toolkit

To augment the information and guidance within this toolkit, coloured boxes and boxes with symbols have been used to highlight key information, provide summaries of suggested work required and to give directions to further information provided. Sample documentation, educational information and evaluation tools have also been provided either within the appendices or through links within the document.

Key identifiers used within the toolkit.

Blue boxes

Resources for This toolkit
This is an example of boxes used throughout the toolkit. They are designed to provide you with key information or summaries relating to the section you are reading and may direct you to further information.

Symbol boxes

	This attention symbol provides information on key areas that are important to identify or monitor to facilitate a smooth implementation of this healthcare model.
	This stop sign identifies key information or items that need to be addressed or obtained before progressing further with the implementation.
	This work symbol identifies key work that need to be addressed before progressing further with the implementation.
	This meeting symbol identifies meetings required for this stage of the model of care implementation.

Key healthcare professional roles for implementation

Titles	Role
Registered Nurse (RN)	A nurse who has completed and met the Australian Health Professional Regulation Agency (AHPRA) requirements for nursing registration; provides day-to-day nursing care.
Clinical Nurse (CN)	An expert RN clinician and leader with experience in a specialist area, providing direct patient care; may assist the Nurse Unit Manager (NUM). This role is responsible for patients, Enrolled Nurses (ENs), and RNs working in their department.
Nurse in Clinical Leadership role — (for example, Queensland use the term Clinical Nurse Consultant (CNC))	An Advanced Practice RN providing consultancy to clinical areas in their field of expertise. Develops activities to meet specific clinical needs; may also have management and financial skills. Initiates research and quality improvement activities.
Nursing Manager (for example, Queensland uses the term (Nurse Unit Manager NUM) and Nursing Director (ND)	A first or second level manager relating to the clinical area where either HIPS or GEDI are being implemented.
Nurse Practitioner Candidate (NPC)	A RN engaged to undertake a course of study and clinical experience leading to endorsement as a NP. May be a nurse practitioner waiting for endorsement.
Nurse Practitioner (NP)	An experienced RN with master's level education in a specialty area endorsed by AHPRA to work in an independent and advanced level of clinical practice.
Emergency Department Consultant Physician (GEDI lead physician)	A physician with a Fellowship of the Australian College of Emergency Medicine (or equivalent). In this role, the lead physician is the medical clinical lead for the GEDI model of care.
Geriatrician	The geriatrician role within the ED focusses on the clinical, preventative, remedial and social aspects of illness in older people.
Ortho-geriatrician	An orthopaedic surgeon working as part of a collaborative, multidisciplinary team specialising in orthopaedic geriatrics.
General Practitioner (GP)	A medical physician, primary health practitioner, based in the community providing primary healthcare for acute and chronic illness, preventative care and health education.

PART TWO: Health Intervention Project for Seniors – HIPS

Background

Since the introduction of Nurse Practitioners in United States of America in 1965, the role has been well established throughout the world. Nurse Practitioners in Australia were first recognised as endorsed professionals in 2000 (31). The importance and cost effectiveness of the NP role within the RACF has been well documented (32, 33). Interventions from Nurse Practitioners in the RACF have been shown to reduce the use of restraints and decrease rates of medication use and decrease depression, aggression, agitation, falls (including bed related falls), pressure ulcers, urinary incontinence, and reduce the transfer of residents to emergency departments thus improving health outcomes and quality of life of residents (32, 34-37). Despite this, many RACFs do not employ a NP and transfer from RACF to Emergency Departments is increasing (38). Early identification of residents' deterioration within the RACF has been cited as one way of reducing hospital admission for this group of vulnerable patients (3, 39) and the ability to provide some primary and acute care within the RACF may also reduce hospital transfers (40-42).

International evidence suggests that nurse practitioners working in primary healthcare settings and RACFs are well received by the public and studies have confirmed these results in an Australian context (41, 43, 44). Although ageing in place in Australia became a reality with the introduction of the *Commonwealth Aged Care Act, 1997*, it has been a slow transition for some RACFs (45). Previous low care facilities now have residents ageing in place with care requirements increasing over time and therefore nurses with advanced levels of skills are necessary. Research in Primary Health Care suggests NPs can assist with GP shortages, offering timely, quality care to patients with acute problems which is cost effective (46, 47). Although the research was conducted in a general practitioners' cooperative and not a RACF, van der Biezen et al (46) concluded that in areas of general practitioner shortage, the nurse practitioner can take over a substantial proportion of the caseload, offering "roughly the same" level of care (p. 1813). Therefore, it is reasonable to assume that a NP in the aged care setting would also be associated with good quality healthcare. A NP in the RACF can educate and support less experienced staff and can potentially assist with workforce shortages by provision of assessment freeing up other clinical staff. Additionally, the extended career pathway to nurse practitioner may attract more nurses into the aged care sector and alter the perception and attitudes regarding this specialty area.

The Health Intervention Project for Seniors (HIPS), one aspect of the CEDRiC project, was proposed to improve primary care in one RACF. In the initial model, implemented as part of the CEDRIC project, a Nurse Practitioner Candidate (NPC) was employed. A NPC is a registered nurse with at least four years' experience, currently undertaking the Master of Nurse Practitioner Studies or equivalent (NP) program at a university. This program includes theoretical study and clinical practice mentored by NPs and medical doctors. A NPC was utilised to enable RACF staff and visiting GPs to experience the model prior to endorsement as an NP and be a collaborator to enhance GP-led care. Funding was obtained for the NPC position through the then Medicare Local (now PHN) and advanced clinical skills placement and mentoring was undertaken with the GEDI team at the local emergency department as well as with a range of other medical and nurse practitioner mentors.

Collaboration internally between RACF care staff, the HIPS NPC/NP and externally with the visiting GPs was essential for the success of HIPS. RACF care staff were advised how and when to contact the NPC/NP and provided with information regarding the scope of practice of the NPC/NP. It was made clear that implementation of the HIPS model did not mean that nursing or care staff would lose any present responsibility or scope of practice but would be supported to improve and extend their care.

Benefits of the HIPS model

The benefits of the HIPS model include:

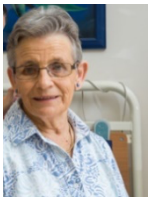
	Fast tracking: • The onsite NPC/NP can see the resident without delay
	Improved resident care: • Advanced assessment of physical and cognitive functioning and monitoring of deterioration • Formulates resident issues and goals of treatment — discusses with resident and family and contacts GP as required • Early initiation of independent NPC/NP actions (e.g. ordering of tests and medication
	Improved care coordination with medical and allied health professionals: • Can accompany GP on rounds or discuss the health of residents on the phone • Direct referral to specialist medical or allied health professionals • Coordination of care with ED staff to inform of goals of treatment
	Improved care coordination within the RACF between care assistants and nurses: • Upskilling/educating staff through provision of in service education • Working alongside nurses and carer
	Facilitation of care: • Influences/orders range and scope of diagnostic testing • Coordinates chronic disease management and further treatment • Resource for nurses and care assistants
	Reduced need for resident transfer to ED: • Educates care and clinical staff in management of condition
	If transferred to ED: • ED length of stay is reduced due to comprehensive information sent with resident and communication with GEDI • Goals of care/reasons for transfer are identified • Resident is discharged back to RACF in a more timely manner

Key areas the HIPS model of care addresses
• **Service gap** • **Funding shortage in aged care** • **Over-burdened acute health sector** • **Sustainability** • **Workforce development** • **Replicability**

The Resident Journey

In the RACF, health change or deterioration in the resident's condition may be identified by a nurse or carer who will notify the GP when necessary. The GP is not always available to visit the RACF when required. A NP or NPC in the RACF can assess and treat the resident more thoroughly than the nursing or care staff within the RACF due to their advanced training and education. They do not necessarily rely on the GP visiting the RACF for treatment to commence. This can prevent some residents requiring hospitalisation as depicted below in Figure 2.

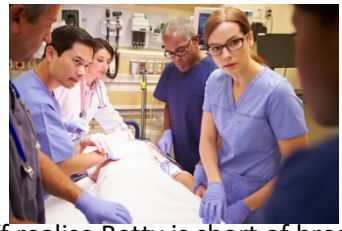
The resident journey without HIPS



Betty, 87 lives in a RACF. She has a wound on her leg which is not healing.

The carer calls the RN.

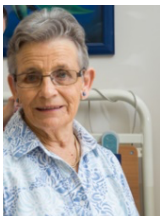
The RN trials different dressing types and notices Betty is short of breath. The RN calls the doctor. The GP is unable to come so an ambulance is called.



The ED staff realise Betty is short of breath and has peripheral oedema.

Betty is admitted for treatment of heart failure. Betty is at risk of an adverse outcome due to her hospitalisation

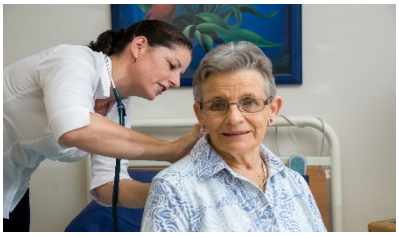
The resident journey with HIPS



Betty 87 lives in a RACF. She has a wound on her leg which is not healing

The carer calls the RN.

The RN trials different dressing types and notices Betty is short of breath. The RN calls the NPC/NP.



The NPC/NP conducts a full assessment which reveals that Betty is suffering exacerbation of heart failure. Additional wound assessment by the NPC/NP determines that wound healing has been impaired by peripheral oedema. Differential diagnosis is discussed with the GP, the ceiling of care is determined and an ongoing care pathway is developed. The resident is cared for in the RACF and hospitalisation is avoided.

Figure 2. The resident journey with and without HIPS

HIPS Step 1 – Pre-implementation planning

This section provides direction for an interested organisation regarding the pre-requisites, essential activities and issues to consider prior to implementing the HIPS service.

HIPS pre-implementation planning	
Identify the need and consider the current context	Review data on transfers of residents, hospital stay and outcomes. Ensure that this model of care will complement your RACF
Identify benefits and risks of implementation	Ascertain the impact of implementing HIPS
Engage RACF executive staff and identify key stakeholders	Identify who needs to be involved and how the interaction will occur
Identify/quarantine funding	Access/determine funding or potential funding sources to support the change
Identify a nurse practitioner candidate (NPC) or nurse practitioner (NP)	Determine appropriateness of a NPC or NP. Ensure that the person with the right motivation and clinical skills to fulfil this role is employed.
Identify HIPS model parameters	Define the system and processes that will need to be implemented
Establish governance	Consider the work practice changes required, who will do this and how it will be achieved.

Identify the need

Before implementing the HIPS model, it is important that the need is identified and change management principles are considered. Information such as numbers of resident transfers to the ED, disposition (discharged from the ED or admitted to hospital), length of stay in hospital and outcomes will assist in identifying the need for HIPS within your organisation. Contact any existing NPs operating in this area to find out more about implementing a similar model of care.

What you need to do

Before implementing HIPS model, identify:

- Number of transfers to hospital from the facility
- Reasons for transfer
- Time of transfer and staffing profile at time of transfer
- Average length of time spent in ED
- Number of residents discharged from ED
- Number of residents admitted to hospital

Identify benefits and risks of implementation

When implementing the HIPS model of care, it is important that both the benefits and risks are identified.

Benefits: *It is important that the potential benefits are identified. This information can be used to engage key stakeholders (such as care staff, management and GPs) and serves to provide motivation for engagement in the workplace changes. Potential benefits of the HIPS model include but are not limited to:*

Provision of onsite primary care;

- Advanced level of clinical assessment skills;
- Upskilling of clinical and care staff;
- Ability to communicate in medical language to GPs;
- Fast tracking, improved resident care;
- Improved care coordination with medical and allied health professionals;
- Improved care coordination within the RACF between care assistants and nurses;
- Reduced need for resident transfer to ED; and
- Better outcomes for residents transferred to ED.

The potential benefits of implementing the HIPS model can be communicated in the RACF itself through meetings and in-service or by utilising external groups (for example PHN and Division of General Practice) meetings and educational sessions. Developing a business case for a NPC/NP that outlines their potential earnings (once qualified and endorsed) will demonstrate how this model can be sustainable in the future and save money for the organisation.

Risks: Potential risks must also be identified during the pre-implementation phase. Establishing a new model of care is challenging, and working with multiple stakeholders from different health sectors brings complexity to the issues that can arise. Financial, organisational and clinical risks all need to be considered within this assessment and re-evaluated through every phase of the project.

Each organisation should have its own specific approach to risk management and the process should be identified and adhered to. It is suggested you utilise further information regarding evaluation from the CEDRiC research project, which is documented in the service evaluation section.

Professional liability insurance is required for NP practice. The organisation must consider if they will assume the responsibility or require the NPC/NP to source personal professional liability insurance cover.

	**What you need to consider** • What is the aim of this implementation? • Who are the like-minded, positive people to engage in the project development? • Identify what cannot be changed and develop alternate strategies. • How you will manage stakeholder expectations? • This is a new role, so minimising barriers to change — both internally and externally — need to be considered. • Education of the RACF staff, residents and their families prior to implementation of HIPS.

Engage RACF executive staff

To gain support for the HIPS model within an organisation you will need to engage with the RACF management. Presentation of supporting evidence such as health economic benefits, clinical outcomes and organisational reputation, will provide support and justify the systemic change. CEDRiC research outcomes may be a useful and influential tool in supporting your case. You may also consider collecting and presenting the data outlined in Step 4: HIPS service evaluation. The cost implications must be considered and it will be important at this stage to identify if there is funding available for this position.

	**Funding considerations for a Nurse Practitioner Candidate:** • If the nurse intending to apply for the nurse practitioner candidacy is already a clinical nurse at your facility, then no other funding may be required during candidac,y as their existing role could be extended. • Extra funding for a new NPC/NP role would be required if expansion to other clinical areas within the organisation is required. • Investigate scholarship opportunities through university, nursing associations and the community. • Identify any other opportunities to fund the program (such as PHN).

Table 1. Examples of key stakeholders required at pre, during and post-implementation

Stakeholder	Role
RACF CEO/COO/Administrator	Advocate for HIPS Project management/group governance structures
RACF Senior Accountant	Source funding for the position
RACF Quality and Safety representative.	Assist with accessing appropriate risk management policy and performing risk management assessment
Senior Nursing Management	Advocate for HIPS. Determine NPC or NP position. Assist in developing documentation for NPC/NP protocols
RACF clinical staff	Engage in learning opportunities with NPC/NP as they arise. Collaborative care of resident and referral as necessary
PHN	Provide support for clinical nurse wishing to commence as a NPC
GP liaison officer — PHN	Project management group/governance structures
GP	Work collaboratively with NPC/NP. Assist with review and development of collaborative agreements regarding roles and responsibilities of NPC/NP
Local ED staff	Clinical placement for learning of skills in the acute care of a deteriorating resident

Identify and engage stakeholders

Stakeholders are important to ensure your implementation of HIPS is effective and supported. Stakeholders may include management of the RACF, residents and their family members, and local health practitioners such as pharmacists, local hospital ED staff and GPs. Gaining support from GPs may be a key challenge, requiring specific attention. A useful strategy is to engage with your local PHN GP Liaison Officer prior to implementation and meeting with GPs. Clarity around the NPC/NP role and responsibilities must be presented to ensure GPs and that they remain the coordinating physician for the residents. Emphasising benefits, such as a reduced need for GPs to disrupt planned consultations to visit a resident and the potential for fewer after hours calls, will assist GPs to understand the value of the model, engage with the HIPS team, and participate in the change

process. Peer to peer engagement between NPC/NP and GP is highly effective and will be a key enabler for implementing the NPC/NP role.

Methods for engaging clinicians
• Involve clinical stakeholders when establishing a clinical advisory group, e.g. GPs, RACF nursing staff and pharmacy, in decision making and advice as and when appropriate • Identify and focus on the clinical benefits to the resident and communicate impact and outcomes of HIPS with the relevant key stakeholders • Give individual clinicians specific tasks during development • Provide incentives for attendance of key functions e.g. cater for events • Identify and communicate how GPs will benefit from HIPS implementation • Encourage GPs to engage with each other regarding the HIPS model of care

	**Meeting** Once the relevant data have been gathered and a business case has been developed, a meeting between the RACF executive and relevant stakeholders should be scheduled. Decisions can be made whether to commence HIPS with a nurse practitioner or nurse practitioner candidate

Collaboration with local PHN

The local PHN can be helpful in assisting collaboration for the implementation of HIPS. The GP liaison from PHN can assist with communication, dissemination of information and meetings with local GPs to assist in peer discussion and feedback of the model of care. During the CEDRIC research project, the GP liaison arranged a meeting with the Australian Medical Association.

Support for the NPC/NP is important in the early months as many will have limited support in commencing this role. The PHN can provide support and may also facilitate the NPC with finding a mentor, which is required during the training period.

The support and enthusiasm a PHN executive has for the model is invaluable. This enables dissemination of information with other senior health executives, associations, groups and GPs both locally and around the country.

Summary of how a PHN may assist in setting up HIPS
• Liaison between acute hospital ED and NPC/NP for HIPS model of care implementation • Assisting in identifying key senior clinical nurses who may suit the role of NPC • Liaison with a tertiary education facility should research on the implementation be required • Dissemination of information, documentation and communication to relevant parties • Providing information sessions for GPs and GP practices • PHN GP liaison officer assists in communication with GPs and provides peer support and information regarding any questions about the HIPS care model

Identify and quarantine funding source

There are many funding models that might be utilised to employ a NPC or NP. Project funding might be obtained if a NPC or NP is employed as part of a research project. As a NP can charge for service, the RACF may choose to employ a visiting NP model who manages their own funding, or pay the NP a wage and collect all Medicare refunds, or the RACF may supplement the earnings of a NP.

Nurse practitioner candidate or nurse practitioner?

HIPS can be implemented using either a NPC or NP and there are advantages and disadvantages to both, the difference being the scope of practice. (see Figure 2). CEDRiC utilised a NPC approach to build acceptance for the model of care in the RACF and in the community. During candidature, the NPC developed a collaborative working relationship with visiting GPs and established connections with the key staff in each practice. The NPC gained acute clinical experience by working in the local ED with the GEDI team. This arrangement was important in building close relationships between the hospital and RACF.

For a new NP, organising collaborative agreements with GPs, establishing billing procedures and prescribing authorisation with local pharmacies can be time consuming and some of the background work for this was commenced during the candidature of the NPC.

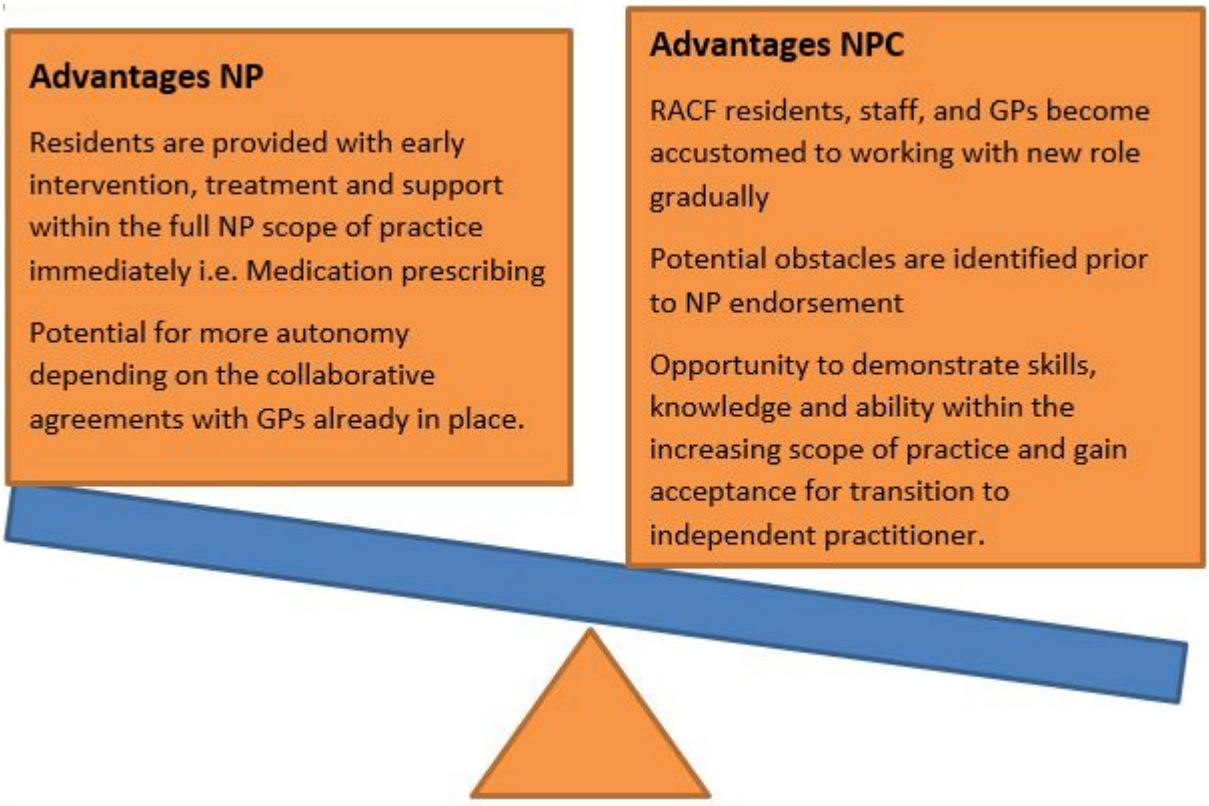


Figure 2. Comparing the NPC and NP role advantages

The Nursing Role Effectiveness model (21) can give insight into the different independent, inter-dependent and dependent roles of the NPC and NP so differences in scope of practice can be explored. The NP, working within their scope of practice and within the capacity of the Collaborative Agreement, performs more independent roles than the NPC, who is dependent on collaboration with the GP similarly to the RN. Interdependent roles include medication orders or pathology requests undertaken collaboratively with the GP based on their preferences. The decision to send a resident to hospital may be a dependent, interdependent or independent role for the NPC or NP.

Identify the nurse practitioner candidate/nurse practitioner

The NPC/NP must have advanced clinical skills and preferably management experience relevant to the position. The NPC/NP must be willing to work in an autonomous and collaborative manner with RACF staff and visiting health professionals.

	**NPC/NPs must be agents of change** For the HIPS collaborative model to work, NPC/NPs need to be willing to act as agents of change for all RACF staff

Determine HIPS model parameters

The scope within the RACF for the NPC/NP role requires early identification to determine the clinical areas that they will be working in, based on identified service gaps. For example, will the NPC/NP be working over more than one facility within an organisation or will they be shared between different organisations that are geographically close? What are the functions to be carried out by the NPC/NP? Ensure that key stakeholders are involved in these discussions and in establishing key requirements for the role. In determining the scope of the NPC/NP role, consider all partners i.e. visiting GPs, RACF clinical staff and carers, local pharmacists, collaborating ED staff.

Ensure acceptability of the HIPS model of care

When implementing the HIPS model of care, engaging RACF residents and families or consumer re-presentation is important within the pre-implementation planning and implementation phases. It is important that an explanation of the role and the potential benefits to residents is provided. It is important to stress that the NPC/NP role does not take over from that of their GP or existing nursing staff but enables timely clinical assessment and streamlined care. It is also important that the NPC/NP meets with the visiting GPs to answer any questions they may have regarding the role and to establish professional relationships with them. The NPC/NP role is complementary and collaborative and does not impinge on the GP role as the central care provider. Reiterating this with the GPs is important. For the RACF management, it is important to build the position into the model of care provided in the RACF. The NPC/NP role aims to be supplementary and supportive to the clinical care already being provided, not to replace that care or suggest care is deficient. Planning for potential challenges relating to the presence of this new role may pre-empt problem escalation.

	**Challenge:** Potential for GPs to see role of NP/NCP as competitive rather than collaborative **Cause**: Lack of understanding around the role of the NPC/NP and concern over overlapping services. False belief that GP is accountable for NPC/NP practice **Solution**: Information, communication, time to work with NPC/NP to see true nature of role and allay any fears. **Challenge:** Skills set of nurses as some RNs have had little experience in chronic disease management and early detection of deterioration. This has been increasingly required with ageing in place and the recognition that hospitals are not necessarily the best place for the elderly **Cause**: Aged care nursing has traditionally been focused on a wellness model or holistic care rather than disease management focus **Solution**: NPC/NP does not replicate the existing nurses' or carers' role and must play a role in the education/upskilling of RACF staff. **Challenge:** Potentially non-sustainable model **Cause:** Inequitable Medicare billing opportunities **Solution:** The formal business model needs to address efficacy and fiscal sustainability for organisations to consider undertaking the HIPS model of care. **Challenge:** Potential lack of support for the business model **Cause:** Executive level understanding of the non-fiscal benefits of implementing the HIPS model of care **Solution:** Identification of private billing models/alternative income streams.

Establish governance

Ensuring the right people with the right skills are involved with the implementation of HIPS is critical to its success. The transparency of the new role, clarity in decision making and the roles and responsibilities for the NPC/NP are important to identify at the outset.

HIPS governance committee

The main purpose of this committee is to:

- Provide input and oversight for critical milestones of the NPC/NP
- Develop risk mitigation strategies for the NPC/NP
- Provide oversight and approval for budget for the NPC/NP

The people to be included on the committee will vary depending on the organisation size. The committee may include: CEO/Administrator of the RACF, the care manager within the facility, a senior GP with patients at the facility, accountant responsible for funding the program, member of the safety and quality or clinical governance unit. This committee should meet regularly and formally with the NPC/NP, ensuring that appropriate issues are reviewed. Reporting on the achievement (or issues) of reaching milestones, emerging risks and mitigation strategies and financial status of the intervention is a necessary outcome of the committee.

HIPS Step 2 – What the HIPS team does and how it is done

In this section, we will outline the functions and activities of the NPC or NP and how this role can enhance the care provided by other members of the residents' healthcare team.

Collaborative approach

As discussed in the introduction, the HIPS model requires a collaborative approach. The duties of carers or nursing staff do not change with the inclusion of a NPC/NP to the RACF staff. Rather, they recognise a health event or deterioration in a resident and contact the NPC/NP. The NPC/NP works in collaboration with the RACF staff and GP as required to assess and treat the resident. The aim is to prevent unnecessary hospitalisation where possible and optimise the care of the resident.

	**PLEASE NOTE!** It is very important to stress that the NPC/NP <u>does not take over</u> the care of the resident but works collaboratively with the clinical team to assess the resident and contribute toward an ongoing plan of care.

Triggering a HIPS intervention

There are a variety of approaches to ensure residents in need may be assessed by the NPC/NP.

1. Resident request. The residents ring the NPC/NP themselves, or ask the staff to contact the NPC/NP on their behalf.
2. Staff request. RACF staff notice decline/deterioration in the condition of a resident, or ask for a second opinion in times of uncertainty.
3. GP request. The GP asks the NPC/NP to assess residents on their behalf. This may be due to many reasons such as: GP annual leave, GP inability to visit the RACF at that time, and to provide a follow up assessment and determine necessity of GP review.
4. Regular clinic hours – for example, residents with diabetes might attend a monthly diabetes clinic.
5. Regular rounding by the NPC/NP to assess residents who might be unwell.

A suggested daily work schedule is proposed in Appendix B. Further information may be found in Step 3 "Establishing the service and routine", further down.

HIPS Referral Pathway

The following diagram (Figure 4) depicts a referral pathway that might be utilised when a resident becomes unwell.

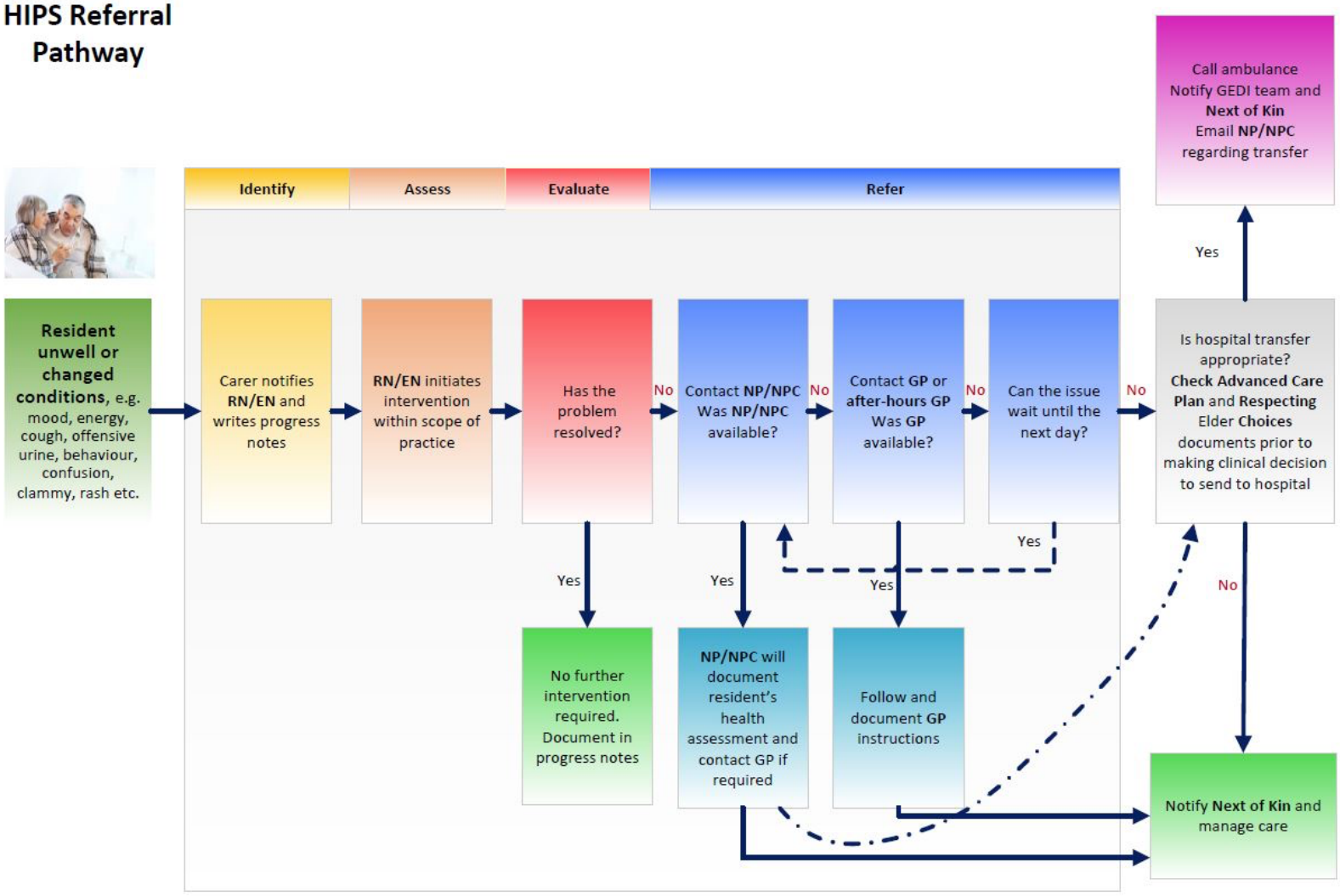


Figure 4. HIPS Referral Pathway

	**NPC or NP?** If your organisation has chosen to commence the model with an endorsed NP, move on to the next section.

Nurse Practitioner Candidate Role

The role of the NPC is to provide on site assessment and management of acutely unwell residents. Primary care may include optimising chronic disease management, addressing functional decline, palliative pathway support, pre-admission oversight and monitoring for residents awaiting surgery, and post-operative oversight for residents following routine surgery.

The NPC undertakes detailed clinical assessment of the resident, which is communicated to the GP to develop a collaborative plan. Assessment may include:

- Review of recent pathology/ward test urine/blood glucose levels/weight changes;
- Medication review;
- Medication administration and use of "as required" medications;
- Neurological/cognitive/behavioural observations; and
- Identification of triggers leading to the "tipping point" of health decline.

These assessment cues underpin the use of recognition primed decision making (17) by the NPC to determine the most likely explanation for an acute episode. Care planning is determined with the clinical and care staff as part of the NPC's inter-dependent role, to ensure provision of care can be provided. The plan of care is documented in the residents' health record and conveyed to the GP and care team with instructions if required.

When a resident is acutely unwell and requires transfer to hospital, and the advance care plan indicates 'for all active treatment', the NPC contacts the GEDI team and discusses the presenting problems. This includes what has changed and what is hoped to be achieved by transfer to hospital, i.e. what is the desired goal and outcome.

Refer to Appendix C for NPC/NP position description and specific key responsibilities and position description and Appendix B for an example of the NPC/NP daily work schedule.

The key attributes/elements important within the NPC role
• Identify elder most at risk • Pro-active and reactive care for residents most at risk of acute medical conditions. ➢ Red flags — acute deterioration identified and communicated to GPs ➢ Early identification of deterioration – facilitate timely intervention and initiation of treatment and ongoing monitoring • Build relationships with stakeholders • Collaborative practice between the key stakeholders to improve resident care • Acts as a change agent • Implement resources such as "*Stop and Watch*" from the INTERACT training suite (see Appendix D) • Upskill carers and nursing staff as required • Policy development

	**NPC role generates confidence** Through evidencing these key elements/attributes the NPC can generate confidence in others of their ability prior to evolution into the Nurse Practitioner role.

	**NPC or NP?** If your organisation has chosen to commence the model with an NPC, you can skip the next section.

Nurse Practitioner role

The role of the NP is like that of the NPC. The extended scope of practice of the NP after Endorsement by the Australian Health Practitioner Regulation Agency (AHPRA) and meeting the criteria for eligible Medicare billing enables prescribing of medications, ordering of specified diagnostic tests and billing for service.

Like the NPC, the NP will provide on site assessment and management of acutely unwell residents. Due to the further education and experience of a NP however, recognition and diagnosis of health issues, and the management of health issues, will be at an advanced level to that of the NPC. Primary care may also include optimising chronic disease management, functional decline, palliative pathway support, post-operative oversight for routine surgery, post admission oversight and monitoring.

The NP undertakes detailed clinical assessment of the resident, which is communicated to the GP as necessary. Assessment may include:

- Review of recent pathology/ward test urine/blood glucose levels/weight changes;
- Medication review;
- Medication administration and use of “as required” medications;
- Neurological / cognitive/ behavioural observations; and
- Identification of triggers leading to the “tipping point” of health decline.

Care planning is determined with the clinical and care staff to ensure provision of care can be provided. The plan of care is documented in the resident’s health record and communicated with the GP and care team with instructions if required.

When a resident is acutely unwell, and the advance care plan indicates ‘for all active treatment’, the NP contacts the GEDI team and discusses the presenting problems. This includes what has changed and what is hoped to be achieved by transfer to hospital, i.e. what is the desired goal and outcome.

Refer to NPC/NP position description and key responsibilities Appendix C and an example of a NPC/NP daily work schedule Appendix B.

The key attributes/elements important within the NP role

• Identify elders most at risk
• Pro-active and reactive care for residents most at risk of acute medical conditions:
  • Red flags – acute deterioration identified and acted upon, then communicated to GPs
  • Early identification of deterioration — facilitate timely intervention and initiation of treatment and ongoing monitoring
• Build relationships with stakeholders
• Collaborative practice between the key stakeholders to improve resident care
• Acts as a change agent
• Upskill carers and nursing staff as required
• Implement resources such as Stop and Watch from the INTERACT training suite (see Appendix D)
• Policy development

Additional HIPS staffing

Staffing required for HIPS will depend on budget constraints, geographical location and number of residents. During the CEDRiC research project, the staffing model incorporated a NPC, a Clinical Nurse (CN) and an Administration Officer (AO). The CN provided support for the NPC, to ensure a continued service when the NPC attended meetings and training and during leave. The AO was useful in data collection during the project and can be useful in booking NP appointments and billing Medicare for services provided. The CN and AO are optional roles, but for maximal effectiveness of the model, all three roles are recommended.

Clinical Nurse (CN)

The CN provides clinical support for the NPC/NP. During the CEDRiC research project the CN assisted with clinical assessment (within the CN scope of practice and competency) and troubleshooting when there were competing priorities for the NPC. The CN also assisted with education and presentations within the RACF for staff, residents and/or their families/carers. The CN supported the NPC with roll-out of proactive interventions, such as health assessments, personally controlled health records and promotion of increased uptake of advance care plans. The CN supported the NPC with administrative tasks, such as:

- Prioritisation of competing health needs within RACF;
- Data collection and analysis of data collected;
- Compilation of residents' clinical profiles; and
- Assisting with information for the administration officer to plan NPC reviews and follow-up of resident's care.

Refer to Appendix E for Clinical nurse job description and key responsibilities

Administration Officer (AO)

Whilst this role is not mandatory, it can a useful position in a HIPS service. The administration officer provides support for the NPC/NP during the implementation of the HIPS model. The AO can be responsible for input of the data collected for the assessment and evaluation of the model, and can maintain a booking list of which residents are scheduled for routine check-ups with the NPC/NP.

Refer to Appendix E for the Administration Officer role description and key responsibilities

HIPS assessment, decision making, advocacy, intervention

What follows is a detailed explanation of the core components of the NPC/NP role in the HIPS model and suggestions for practice. Appendix F contains links to further information specific to the geriatric nurse practitioner.

Assessment

Assessment of a resident — the NPC/NP undertakes extensive assessment of physical and cognitive functioning. This may be undertaken dependently, independently and interdependently of medical assessment. Initial assessment may have been undertaken by nurses and/or the care staff. This may indicate a reason for referral to the NPC/NP. Alternatively, on rounding the NPC/NP may identify a resident in need of assessment.

Assessment
Assessment may include the following domains: • Presenting problem; • Formulation of differential diagnoses — these are then investigated and diagnostic tests ordered, such as blood, urine and/or sputum pathology. (This is an independent and a dependent function depending on NPC/NP qualifications and collaborative agreements in place); • Current medication; • Activity level and recent change; • Current activities of daily living and any recent changes i.e. bathing, dressing, eating; • Mobility; • Continence and elimination status i.e. bowel regularity, consistency, voiding patterns, bladder scan; • Nutrition and hydration i.e. weight, fluid overload, dehydration; • Pain status including verbal and non-verbal cues of pain, triggers, relieving factors; • Physical assessment including vital signs, O2 saturations, chest sounds, abdominal assessment, skin, peripheries etc.; • Cognitive assessment including orientation, neurological observations, deviations from baseline; • Social assessment including interaction with friends and family; and • Risk assessment — falls history and risk, pressure injury risk etc.

The NPC/NP may not be familiar with the baseline functional status or goals of care of each resident and therefore seeks vital information from:

- The staff member who raised the concern;
- Other staff from carers to ENs and RNs;
- The written progress notes and medication orders;
- Pathology results;
- Advance Health Directive (AHD) or Statement of Choices;
- The GP, who is contacted when necessary to provide further history and background information; and
- The resident, their Enduring Power of Attorney (EPOA) if available and family members.

Decision making

The NPC/NP uses a recognition primed decision-making framework (17) to determine possible treatment options for the resident. Using a shared decision-making framework, the NPC/NP will discuss possible treatment options with the GP, nursing and care staff, and family members. A provisional diagnosis is discussed and treatment options are considered, including medication prescribing/de-prescribing by the GP or NP interdependently and/or dependently within the NPC/NP scope of practice.

Resident Advocacy

Advocating for the resident and ensuring all intervention is in accordance with the wishes of the resident is of utmost importance. To accomplish this the NPC/NP can:

- Be a trouble-shooter to clarify areas of incongruence where the written Advance Care Plan (ACP) or Advance Health Directive (AHD) and current wishes of the resident do not align;
- Initiate the difficult conversations or clarify with the resident or their Enduring Power of Attorney (EPOA) to ensure accurate documentation of residents' wishes and understanding of the implications of documented decisions;
- Identify health deterioration and prompt the GP to document when the resident has transitioned to the terminal phase of illness, which clarifies for staff that the instructions under that section of the AHD are now applicable;
- Initiate or prompt development of a formal AHD for residents who have capacity;
- When there is no AHD for a resident who lacks capacity, assist nursing staff with Advance Care Planning involving the resident, their EPOA or statutory health attorney, family, significant others, GP and other health professionals;
- If the EPOA is unable to be contacted in an emergency and the ACP/AHD instructions are not clear for the scenario, coordinate with the resident if able, GP or other medical/health teams, family and significant others to determine the appropriate and preferred course of action for the resident; and
- Explain End-of-life options to residents and families to ensure they can make informed decisions/choices.

Intervention

Interventions are independent, interdependent and dependent according to the Collaborative Agreements in place and scope of practice of the NPC/NP. Interventions are determined according to the resident's need, diagnosis of acute episode, AHD/ACP. Interventions may include but are not limited to:

- Presenting problem — specific interventions to address the presenting problem including initiation of treatment or transfer to emergency department as necessary (see box below);
- Determination of differential diagnoses - and commencement of appropriate treatment;
- Medication management — initiate new medications, including antibiotics, usually in collaboration with the GP if available as all GPs have their own preferences. This ensures treatment continuity for the resident;
- Activities suited to the current activity status, such as knitting or reading in bed as an option to TV;
- Encourage independence in activities of daily living and refer to physiotherapist or occupational therapist (OT) as necessary;
- Encourage mobilisation or bed rest as required;
- Continence and elimination management such as in/out catheter if required or suggesting frequent toileting assistance;

- Diet and nutrition recommendations such as soft diet or increased protein;
- Hydration management — develop a fluid management pathway that is centred on the needs of the resident. For example: increase or restrict fluids. Referral to dietician or speech pathologist as necessary;
- Pain management — document or prescribe full use of prn medications as sometimes care teams are unsure when to initiate — this is best ordered as a short course for periods of exacerbation. Develop a strategy to relieve pain including heat or ice packs, distraction techniques, warm drink etc;
- Physical — commence oxygen therapy if required;
- Cognition — management of delirium. Referral to Older Persons Mental Health as required;
- Social — encourage the resident to join in activities; and
- Falls — educate resident to ask for assistance or educate in use of walker as required.

Transfer to hospital
Factors to consider when deciding if transfer to Emergency Department is appropriate: • Wishes of the resident/Advance Health Directive/Advance Care Plan; • Ability of RACF to care for the resident within limitations of staffing skill mix; • Requirement for equipment not available at the RACF; • Requirement for medications not available at the RACF due to delays between ordering and receiving new medications; and • Goals of transfer — is the hospital likely to be able to improve the outcome for the resident? If your local ED has a GEDI team, ring and speak to them prior to transfer to establish the goals of care and provide opportunity for GEDI to gather other vital information.

Collaborative care with GP

All NPCs must work in collaboration with the GP. Once endorsed as a NP, Collaborative Care Agreements are necessary. NP—GP Collaborative Agreements are an essential requirement of some pharmacies to enable ordering of medications utilising the facility medication sheets. Without collaborative agreements in place, the NP must have all medication prescriptions signed by the GP.

Further information on Collaborative Care Agreements may be found in Appendix F. Some of the ways in which the NP works collaboratively with the GP include:

- NPC must have all medication prescriptions signed by the GP;
- Presenting an available GP with a comprehensive assessment enables them to prioritise and determine if urgent RACF on-site visit, transfer to hospital or RACF care is most appropriate; and
- Depending on the working relationship, NPC/NP scope of practice and NP/GP collaborative Agreement, the NPC/NP may provide leave coverage for the GP and review the resident when the GP is unable to attend the RACF.

Resident care when the GP is not available

When the GP is not available, the NPC/NP works within their scope of practice to provide appropriate care to the resident. The NPC/NP makes decisions independently if the GP is not available, to the limit of their scope of practice. To communicate any decisions/actions a letter with the plan of care is sent to the GP to review and change as they deem appropriate.

Referrals to other healthcare providers

The care of the resident is a team approach and it is important that all care is coordinated. The referral pathway process is decided upon utilising a consultative approach with the GP. For example: staff call the NPC/NP first, who refers on to the GP or escalates it if required.

Documentation

Accurate, clear and comprehensive documentation of clinical decisions is vital for care coordination and legal protection for residents and staff. Some elements that should be considered when establishing the system of care documentation are:

- Systems of communication between the NPC/NP and the RN must be established so that a formal process is in place;
- Medical practice software enables prompt Medicare billing and provides a record for Key Performance Indicators (KPI's). It is recommended that a product such as Best Practice is used;
- For NPC/NPs who are not billing Medicare independently and are employed within an organisation, documentation within the organisation's clinical systems may be sufficient for interventions and collation of clinical history;
- Organisations will have different documentation systems and requirements. Many RACFs have electronic clinical records. Electronic records are preferable and may enable off-site clinicians to review progress notes directly;
- The NPC needs to complete a clinical diary to inform their clinical portfolio and reflection on practice;
- Follow-up letter to the GP is part of the core documentation and is recommended even when the NPC/NP has spoken directly with the GP, particularly when there are changes recommended or implemented. This provides documented evidence of what was discussed and can be filed into the notes by the GP and the NPC/NP and may be referred to later;
- Provide written documentation after discussions with other health professionals such as GEDI, geriatricians, physiotherapists; and
- Document planned reviews.

	**NPC/NP — RN communication** It is important that care delivery teams recognise the RACF RN/EN as their team leader. After a plan is prepared, the NPC/NP works with the RN/EN to 'action' the plan to ensure their role as clinical team leader is maintained. The NPC/NP writes notes in the resident's record and outlines a plan of care for the acute episode, however the documentation of the formal comprehensive aged care plan is completed by the facility RN or EN with RN sign off.

HIPS Step 3 – Service management

Having implemented the HIPS model, the next challenge for the organisation is to ensure the sustainability and ongoing management of the service. The principles of service management include:

- Support NPC education and endorsement;
- Monitor NP professional development;
- Establish protocols in the RACF that ensure the best care for residents e.g. establish palliative care pathways;
- Ensure the NPC/NP engages in the development of clinical expertise of the RACF staff;
- Ensure funding models have the capacity to enable NP Medicare billing;
- Embedding HIPS and service delivery management within the RACF and ensuring the model evolves in line with the needs of the residents, stakeholders — in particular GPs, the RACF and surrounding community it serves;
- Ensure sustainability of the model by engaging in succession planning for the NP role; and
- Monitoring and evaluation of HIPS process and outcome indicators.

Establishing the service and a routine

As each facility will have differing priorities and service requirements, the NPC/NP will need to be flexible in the establishment and delivery of their service. However, a routine needs to be established so staff know when they can contact the NPC/NP and to make the NPC/NP visible in the organisation. Consider the following:

1. Rounding and routine:

- Start with reviewing the health record and clinical notes to see if there are any red flags or concerns with the residents;
- Do the rounds of each wing and speak to clinical staff and carers about residents that they are concerned about and see residents considered urgent as a priority;
- Attend handover when possible;
- Establish routine times to go to each area so that staff know when to discuss any non-urgent concerns;
- Meet the GP and do joint rounds; and
- Identifying residents who are not at activities or meals, may be an indication of deterioration or change in activity level.

2. Care of residents with chronic conditions

- Establishing clinics at regular intervals and specific times may be useful; and
- Routinely assess residents with chronic illness who are likely to require hospitalisation in the future.

3. Upskilling

- Upskilling of RACF staff to care for residents with higher acuity conditions needs also to be considered;
- Education of care staff can occur informally and ad hoc as the need arises but also contribute to formal education sessions; and
- The NPC/NP must continually work towards their own professional development needs.

4. Administration requirements

- Data storage and documentation requirements; and
- Billing requirements for NPs.

5. Pathway Development: Set aside time to create/adjust organisation specific protocols and care pathways to assist with streamlining care and improving resident healthcare out of hours such as the following:

- shortness of breath
- asthma and COPD
- indwelling catheter troubleshooting
- palliative care pain management
- insertion and care of catheters such as nasogastric, gastroscopy, suprapubic
- chest pain
- heart failure
- pneumonia

Equipment requirements also need consideration. Refer to Appendix G.

NPC education to endorsement/registration

In Australia, a Nurse Practitioner is a specific qualification on a register with the Australian Health Practitioner Regulation Agency (AHPRA). A Masters qualification is necessary to practice as a NP. Potential university course titles include Master of Nursing (Nurse Practitioner) (MN (NP)) and Master of Nurse Practitioner Studies (MNPractSt). Requirements for entry vary between universities but the minimum is four to five years of full-time equivalent experience as a registered nurse and at least one year at an advanced practice level. Courses are usually one and a half years full time and may be undertaken part time. It is advisable to contact local universities for specific course and entry requirements.

Clinical placement requirements embedded within the course of study may be undertaken outside the RACF. During the MN (NP) program, candidates should consider opportunities that link with the local hospital and health service, such as case conferencing. Attendance at specialist geriatric inpatient multi-disciplinary team meetings can assist in strengthening networks with the hospital and enhance knowledge of hospital inpatient care.

Transition from NPC to NP

The transition phase may last for approximately six months. During transition, there are processes that must be established to practice as a NP. During this time, it is advisable to identify the key personnel in each general practice so that Collaborative Agreements can be signed. The PHN GP liaison officer can assist with this. As each GP will have varying numbers of residents, this process can be quite lengthy.

While waiting for registration to be approved through AHPRA, the NPC can begin the process of applying for Medicare Provider Numbers and a Prescriber Number. The Medicare application process involves submitting forms and paperwork and may also involve further information being requested from the applicant. It is advisable to review the professional liability insurance so that it continues to meet the requirements of the role.

Collaborative Agreements

NPs are required to have an approved document detailing their scope of practice and this document may be used as a reference for the Collaborative Agreement with the GP. When the NP works with more than one GP, it is recommended that the Collaborative Agreement is the same or similar with each GP to avoid confusion. Different parameters may exist with different GPs for which separate agreements will be required. The Royal Australian College of General Practice (RACGP) published an extensive NP – GP Collaborative Agreement document and it is advisable to refer to the current version for the most up to date information. See Appendix F.

A review procedure should be established to determine how well the collaborations are working and to identify any changes that might be necessary. The timing of the review may be weekly, monthly or yearly etc. as deemed appropriate by the NP and GP.

Collaborative agreements

According to the RACGP collaborative agreements have been developed with three key aims:

1. to offer Australian patients access to the safest, highest quality primary care
2. to clearly identify roles and responsibilities, mutually agreeable processes for consultation, referral and transfer of a patient's care, and to provide clarity between both parties before the commencement of a Collaborative Care Agreement
3. to facilitate a continuum of care, and to minimise the potential litigation risk to medical practitioners, NPs and their staff.

Collaborative agreements do not make the GP accountable for the practice of the NP.

Medicare billing

The NP may bulk bill or charge each resident directly to enable the resident to claim from Medicare and pay an additional fee. The process for an NP to establish Medicare billing arrangements involves:

- completing Masters level education;
- registering with AHPRA;
- obtaining Medicare provider and prescriber numbers;
- completing e-learning modules online; and
- selecting the best method for the organisation to process the claims (e.g. paper based or software facilitated on-line claiming).

Department of Human Services has this information online and you may liaise with the facility accountant to assist with the process. See Appendix F for the link to further information.

Pathology Register

RACFs tend to be serviced by one pathology service (such as Queensland Medical Laboratory or Sullivan Nicolaides Pathology). A NP can request pathology through any provider and most accept request forms from other companies. In the interests of continuity of care for the resident, it is important to ensure the pathology service has the NPs provider number/s registered on file to:

- prevent delay in the test being carried out; and
- have the cost of the service covered by Medicare and not billed to the resident.

Radiology

It is advisable to speak with the radiology service prior to sending a patient for the first time to avoid any problems caused by their potential lack of understanding of the NP scope of practice.

Pharmaceutical Formulary

Some of the issues surrounding the prescribing of medication include:

- Prescription pads can take 6—8 weeks to be printed and delivered;
- A different provider number is required for each location the NP works from;
- Multiple script pads are necessary unless the NP carries the PBS prescription printer paper and can access medical practice software to enable printing of prescriptions remotely when required;
- Legislation may vary between states therefore it is necessary to refer to state legislation regarding issues such as the use of handwritten prescriptions and medication administration within aged care facilities; and
- Consider the requirements and processes for access to emergency medication stock particularly after hours.

Governance Framework

Establishing governance for the role is essential to sustainability. Speak to a trusted GP regarding possible governance and review of clinical concerns. Explore peer review opportunities with hospital staff and other NPs in the local area. Revisit when establishing collaborative agreements, once endorsed.

NP professional development

Following graduation, attendance (and presentations) at conferences can provide valuable networking and learning opportunities and membership of professional organisations is also recommended. For example, the Australian College of Nurse Practitioners (ACNP) https://www.acnp.org.au/ is the national peak body for nurse practitioners in Australia, providing services such as:

- Conferences;
- Scholarships and awards;
- Professional networking;
- Education; and
- Professional support.

	**PROFESSIONAL DEVELOPMENT** Currently in Australia, NP's are expected to provide evidence of 30 hours of attendance at professional development each year. Where possible, exposure to acute care is a good adjunct to the role and this may be undertaken at the local ED. The GP may also provide ongoing training.

Professional development courses to improve or extend the NPs scope of practice may also be desired. Certification of skills increases the capacity of the NPC/NP to provide care for residents in the facility that may prevent transfer to hospital. Such skills may include:

- Suturing;
- Plastering;

- IV cannulation; and
- Aural healthcare.

See Appendix H for examples of resources to provide support and online training.

Leave planning

Time away from the RACF for professional development activities, annual leave and attendance at meetings or conferences must be considered and planning for leave will be facility dependent. A Clinical Nurse or short-term agency NP may take over some of the NPC/NP responsibilities or the service may not provide backfill during times of absence. Management of fatigue must also be considered.

Care coordination with GEDI

The aims of HIPS is the early identification of RACF resident clinical deterioration and increasing risk of hospital admission. The HIPS team enacts preventative measures, investigations and early GP liaison to prevent (where possible) or mitigate the need for hospital admission. Whilst GPs do attend RACFs, there may be barriers to timely visits, including the level of remuneration they can obtain from Medicare and clinic/practice work-loads making unplanned visits unviable. The NPC/NP provides enhanced assessment and diagnostic skills, enabling intermediary services in collaboration with the GP to prevent deterioration in health and possible hospital admission. When a resident becomes acutely unwell the NPC/NP contacts the GP to collaborate regarding the best approach and treatment options. If the resident is unable to be managed within the RACF and hospital transfer is required, the NPC/NP coordinates with the GEDI team providing the goals of transfer. This results in improved communication and streamlining of resident transfers, assessment and admission.

HIPS Step 4 – Service evaluation for sustainable funding and service delivery

Health service evaluation

The aim of evaluation of the HIPS service is to compare outcomes before and after implementation of the service. The majority of Queensland/Australian RACFs are privately operated and rely on funding through the Commonwealth Government Aged Care Funding Instrument (ACFI) scheme (now AN-ACC). As a result, data management is different for facilities and often difficult to navigate.

Developing a relationship with the data manager and financial management team is recommended to access accurate information on resident absences relating to transfer to the ED and hospital. Utilisation of 'Best Practice' or similar software for Medicare billing offers the ability to collect data on NP consultations that may be useful for business case development for sustainable funding and ongoing support from facility management. An evaluation may include but is not limited to:

- Quantitative analysis of occasions of service for NP and GP, referrals, types of visits, advance care directives established, resident outcomes;
- Quantitative analysis of numbers of transfers to the ED, post transfer disposition, time away from the facility (length of stay in the ED or length of stay if admitted), re-presentations to the ED up to 28 days and mortality;
- Health economic analysis of the cost of the service compared with saving to the facility; and
- Qualitative structure and process analysis to identify issues and quality improvement opportunities for residents, families and staff with the new service.

Service evaluation may occur at any time-frame prefered by the organisation. It may be prudent to evaluate the service prior to each Collaborative Agreement Assessment. Data to consider collecting for service evaluation include:

- Occasion of service
- Time spent with client
- Billable codes
- Transfer to ED
- AHD update
- GP visits
- Alignment with GP
- Resolution

The PHN is a valuable resource to assist with data collection for service evaluation and may provide GP and ED specific data if necessary. Quantitative data analysis will determine the value of the NP service in reducing hospital visits and qualitative data will ascertain staff and resident satisfaction.

Key documentation for evaluating your implementation

Discussion with the facility data manager will determine the data items that can be accessed from currently collected data. Items that are not available in other databases can be collected through Best Practice or similar software. Suggested data items for monitoring of performance over regular 3, 6 and 12 month periods are presented in Table 1.

Table 1: Suggested data items for collection for HIPS evaluation

Description of data item for collection	Use in service evaluation
Numbers of residents seen/billed to Medicare	Descriptive data collection to describe NP service activity
Numbers of referrals to NP	
Age at time of consultation	
Gender	
Type of consultation — face to face; consulting with staff about resident	
Type of face to face consultation — new or review	
Who referred	Identify where referrals are arising from to ensure all staff are reminded of presence of the NP service PRIOR to calling the GP
Date and time of departure from facility to hospital	Return date and time minus departure date and time = length of stay in the ED/hospital admission
Date and time of return to facility from hospital	
Reason for transfer to the ED	Descriptive data collection to describe resident illness and acuity

Additional Data for collection if commencing HIPS with NPC

Most of the clinical activity of the NPC will involve close collaboration with the GP. In addition to the information above, extra data that might be useful to collect includes the NPC — GP correlation between:

- Provisional diagnoses
- Tests ordered
- NPC suggested prescription and GP ordered prescription
- Treatments
- Decision to refer to other healthcare providers.

Refer to Appendix I for further suggestions regarding service evaluation.

Appendix A — National and international guidelines and position statements

The American College of Emergency Physicians (ACEP) — Geriatric Emergency Department Guidelines
The Geriatric Emergency Department Guidelines document is the product of two years of consensus-based work that included representatives from the American College of Emergency Physicians, The American Geriatrics Society, Emergency Nurses Association and the Society for Academic Emergency Medicine. The purpose of these Geriatric Emergency Department Guidelines is to provide a standardised set of guidelines that can effectively improve the care of the geriatric population and which is feasible to implement in the ED. These guidelines create a template for staffing, equipment, education, policies and procedures, follow-up care, and performance improvement measures.
https://www.acep.org/geriEDguidelines/

Australia & New Zealand Society for Geriatric Medicine (27). **Position Statement no. 14. The management of older patients in the emergency department.**
http://www.anzsgm.org/managementofolderpatientsintheemergencydepartment.pdf.pdf

Queensland Government (72), **Clinical Services Capability Framework CSCFV3.2 Geriatric Services – Emergency Geriatric Care.**
https://www.health.qld.gov.au/__data/assets/pdf_file/0029/444269/cscf-geriatric.pdf

Australian College for Emergency Medicine (ACEM) (29), **Policy on the care of elderly patients in the emergency department.** https://acem.org.au/getattachment/fc1be790-5545-4405-b462-a1f6834f09ab/Policy-on-the-Care-of-Elderly-Patients-in-the-Emer.aspx

Care of Older Australians Working Group on behalf of the Australian Minister's Advisory Council (AHMAC), **Age-Friendly principles and practices: managing older people in the health service environment**. Endorsed by Australian Health Ministers (July 2004).
http://seniorfriendlyhospitals.ca/files/Australian%20Health%20Ministers'%20Age%20Friendly%20Principles%20and%20Practices.pdf

World Health Organization (16). **Making Health Systems Work: Technical Brief No. 1: Integrated health services - what and why?** Online:
http://www.who.int/healthsystems/service_delivery_techbrief1.pdf

Australian Commission on Safety and Quality in Health Care (73) **Delirium Clinical Care Standard.** (ISBN 978-1-925224-06-1). Sydney: ACSQHC. Online:
https://www.safetyandquality.gov.au/wp-content/uploads/2016/07/Delirium-Clinical-Care-Standard-Web-PDF.pdf

Appendix B — NPC/NP daily work schedule

The daily schedule will change according to the health and whereabouts of residents, and the routine of the facility. Some wings may prefer the NPC/NP not visit during handover or medication administration time, and others might prefer it. Resident meal times might be a consideration for visiting but seek direction from the nursing staff as it is usually best to not interrupt the meal, especially if the resident has dementia.

At the commencement of a shift, a good routine might be to: review the resident list from the previous day, check phone messages and emails about any urgent resident requirements, or read progress notes of any residents flagged for assessment that day. The work-load should be prioritised according to the needs of the residents. For example, those residents returning from hospital, or who are palliative or acutely unwell will be prioritised over routine reviews or procedures.

If no residents are flagged for assessment, commence rounds as per established routine. (Make times to go to each area so that staff expect the NPC/NP at certain times on certain days for more routine concerns).

On arrival to each wing, liaise with the RN or EN in charge about any resident they are concerned about and check with carers as they have the most direct contact with the residents. Prompts for questioning might include: hospitalisation of residents or any residents scheduled for return from hospital, deterioration, disposition changes, falls, GP visits/orders and care, medication issues. Those residents reaching end-of-life care may require a palliative care plan or changes to their plan.

Conduct each resident assessment within the scope of care applicable to the NPC/NP clinical scope of practice, employment role and in accordance with the AHD and collaborative agreements. Assist with updates to the AHD as required. Order pathology/medication as required and contact and collaborate with the GP as necessary.

Document in resident's notes and provide education and/or written instructions to the residents, family members and nursing staff as necessary. Remember, the RN or EN in charge is responsible for the day-to-day care of the resident and for updates to the care plan and it is important not to cross over into their role.

Meetings are an important consideration and must be scheduled around resident assessments and prioritised needs.

Effective collaboration and communication is key to ensuring optimal outcomes for the residents.

Appendix C — NPC/NP position descriptions and key responsibilities

The following document provides an extensive list of items to consider for inclusion in a NP or NPC position description.

The purpose of the NPC/NP role is to establish a collaborative working environment across a multi-disciplinary healthcare team, with a view to provide comprehensive healthcare sensitive to the needs of residents within the aged care facility. The NPC/NP will provide advanced assessment to contribute toward diagnosing and initiating therapeutic interventions and make referrals where appropriate, in collaboration with the GP and nursing staff. The NPC/NP identifies deterioration and performs timely interventions to stop decline in the resident's condition where possible.

The NPC/NP will empower residents through increased choice of care provision, complement the role of the GP and multidisciplinary team and promote development of advanced nursing practice through mentoring and sharing of skills and knowledge.

The NPC will establish an environment of trust and respect with the GPs to ensure a smooth transition to the evolving nurse practitioner role within the aged care environment.

The NP will also enable mentoring for future nurse practitioner candidates.

The NPC/NP role may provide a flexible service involving occasional week-end or after hours work as required by the facility.

Key result areas/key performance indicators

Key performance indicators are outlined and agreed within the parameters of the performance agreement established annually between the NPC/NP and the care director or appointed organisation representative.

The NPC/NP works autonomously and collaboratively and always within their scope of practice and competence.

Clinical responsibilities

- identify deterioration in residents; assessment and diagnosis of health issues;
- select and recommend appropriate diagnostic and therapeutic interventions and regimes, based upon advanced holistic health assessment, within the boundaries of accountable safe practice, intervention, acceptability and efficacy;
- triage residents' needs and provide prompt appropriate referral to other services when required;
- develop, review and utilise Clinical Practice Guidelines using the best available evidence;
- Implement therapeutic interventions independently or in collaboration with GP where appropriate;
- Participate in review of pharmacotherapy in a cooperative approach with GPs and/or pharmacist;
- advocate for residents at their, or their families, request regarding clinical care/interventions including end-of-life choices to promote quality of life;
- work autonomously and in close collaboration with GPs, nursing staff and other healthcare professionals to plan and ensure timely delivery of person-centred care to the residents; and
- promote Advance Care Planning.

Administrative Responsibilities

- Establishment, facilitation and updating of policies and procedures relative to the role;
- Creation of new or updating of current clinical pathways for chronic disease management and other common conditions; and
- Participation in relevant meetings that will enhance the clinical service that is delivered to residents, e.g. clinical practice meetings; medication advisory committee meetings.

Staff education responsibilities

- Provide education to residents and/or their families about their health conditions and prescribed medications;
- Provide formal and informal education of nursing staff on topics relevant to the nursing care of the residents in the facility. This includes, but is not limited to, health promotion, medications and wound management; and
- Act as a resource and support for staff and residents regarding complex clinical matters, including medical emergencies.

Reporting

- Periodic monitoring/auditing and evaluation of own performance utilising a tool developed in collaboration with clinical governance and quality risk and safety teams;
- Participate in data collection as required for continuous improvement and research purposes; and
- Actively participate in the RACF and external benchmarking processes.

Continuous improvement and planning process

- Integrated approach to care service delivery at the facility level;
- Implement any appropriate continuous improvement initiatives as deemed suitable to enhance clinical outcomes for residents and RACF reputation;
- Contribute to the ongoing development of policy and practice;
- Attend, as required, further education including short courses and conferences to maintain currency of knowledge and as evidence of continuing advanced practice for ongoing NPC/NP education and NP endorsement;
- Work with the GEDI team at the local ED to increase knowledge of the residential aged care facility/community to hospital interface, implementing streamlined processes where identified to improve the healthcare experience for residents and to increase knowledge and skills for self-improvement; and
- Evaluate outcomes to inform ongoing practices and processes within continuous improvement model.

Sustainability

- Work towards a sustainable business model for the NPC/NP role within the RACF;
- Appropriately bill for services with Medicare in collaboration with the GP and collaborative agreements in place; and
- Ensure that a cohesive working relationship is maintained with all parties to create an effective working environment.

Professional development and training

- Ongoing professional development and training to keep abreast of developments in the aged or disability care sectors, covering residential and community care delivery;
- Ongoing development in information technology to maximise use of organisation systems; and
- Self-directed management regarding targeted education opportunities.

Appendix D – INTERACT tools

Based in the United States of America, INTERACT® (Interventions to Reduce Acute Care Transfers) is a quality improvement program that focuses on the management of acute change in the resident's condition. It includes clinical and educational tools and strategies for use in every-day practice in long-term care facilities. The overall goal of the INTERACT® program is to reduce the frequency of transfers to the acute hospital. Transfers to the hospital can be emotionally and physically difficult for residents and result in numerous complications of hospitalisation, and they are costly.

There are four basic types of tools:

1. Quality Improvement tools
2. Communication tools
3. Decision Support tools
4. Advance Care Planning tools

The specific tools are designed for use by selected members of the care team. However, in order for the INTERACT® team to be successful, all members of the care team should be aware of all of the tools and their uses. The INTERACT® project champion will assist your team in using the tools. The tools have been designed to help staff improve care, but not increase unnecessary paperwork. http://www.pathway-interact.com/

Appendix E — Position description and key responsibilities for additional HIPS staff

Clinical Nurse (CN) position description

The CN needs to be able to work semi-autonomously, being self-directed and using their initiative in the absence of the NPC/NP. The role requires full responsibility for actions and willingness to work towards best practice.

Key personal attributes

- Aims to work harmoniously within a flexible team environment through effective communication, building relationships with the residents, fellow team members and other health professionals;
- Possess a positive attitude and pro-active approach;
- Be an effective facilitator;
- Actively work towards improvement activities;
- Provide support, knowledge and skills in all areas of care delivery, accepting associated responsibilities;
- Ability to promote effective team effort in the work place; and
- Foster commitment to standards of excellence in the clinical care role.

Qualifications and experience

- Current AHPRA Division 1 registration; and
- At least 3 years post graduate nursing experience in aged care.

Clinical Responsibilities

- Assist with education/presentations as necessary;
- Clinical support for NPC/NP as competing priorities arise to assist with troubleshooting and clinical assessment within scope of practice and competency;
- Assist with roll-out of pro-active interventions, such as, but not limited to: scheduled health assessments, enrolments for personally controlled electronic health records (PCEHR), promotion of increased uptake of Advance Care Planning; and
- Review documented resident conditions and match to the equivalent hospital code for diagnostic related group (DRG).

Administrative responsibilities

- Using clinical expertise to assign treatment codes to clinical care episode with high degree of consistency;
- In absence of NPC/NP assist with informing the Administration Officer to plan NPC/NP reviews and follow-up of resident's care;
- Work closely with NPC/NP to document bundled interventions used for primary care;
- Work closely with NPC/NP to document interventions likely to prevent avoidable hospital admissions;
- Work closely with NPC/NP to prioritise competing care needs across RACF entities
- Assist with identification of trends and analysis of RACF data collected; and
- Assist with collection of data and compilation of elder clinical profiles to obtain minimum data set for each resident residing in eligible RACF entities.

HIPS Administrative Officer (AO) position description

The administrative officer role requires a high level of problem solving skills that will be utilised to assist streamlining processes to maximise efficiency within the project, enabling the clinical team to maximise their clinical time and focus on residential care, assessments, review and follow-up.

Key personal attributes

- Accepts full responsibility for own actions
- Practical knowledge of RACF systems is a distinct advantage
- Preparedness to work harmoniously within a flexible team environment
- Positive outlook and pro-active approach
- Active participation in the process of improvement activities
- High degree of organisational and time management skills
- High level understanding of privacy and confidentiality.

Qualifications and experience

- Advanced computer skills including RACF systems, Excel and SharePoint.
- Maintenance of database to a high degree of accuracy
- Experience with scheduling systems
- Excellent phone manner with customer service focus
- Well-developed written and verbal communication skills
- Proven track record for working effectively within a team
- Demonstrated knowledge and skills in all administrative tasks and customer service
- Demonstrated ability to work autonomously.

Key responsibilities: administrative

- Phone receptionist
- Scheduling of resident assessments and reviews across eligible RACF entities, as per priorities identified by clinicians
- Active participation in the planning of targeted pro-active interventions such as, but not limited to: scheduled health assessments, enrolments for personally controlled electronic health records (PCEHR), auditing resident files for information such as Advance Health Directives or Advance Care Plans being in place
- Assisting the clinical team in the process of reviewing documented resident conditions to match the equivalent hospital code for DRG
- Participation in the HIPS team discussions regarding strategies to increase productivity
- Provision of practical assistance with education/presentations as needed
- Assistance with data collection for key project indicators, e.g. hospital admissions, hospital length of stay, etc.
- Liaison with HIPS project team and other key stakeholders as required.

Appendix F — Useful websites for Nurse Practitioners

The following websites are specifically useful to Geriatric Nurse Practitioners:

Department of Health Eligible Nurse Practitioners Questions and Answers
http://www.health.gov.au/internet/main/publishing.nsf/Content/midwives-nurse-pract-qanda-nursepract

Endorsement as a Nurse Practitioner
http://www.nursingmidwiferyboard.gov.au/Registration-Standards/Endorsement-as-a-nurse-practitioner.aspx

Medicare Billing
https://www.humanservices.gov.au/organisations/health-professionals/services/medicare/bulk-billing-nurse-practitioners-and-midwives

Royal Australian College for General Practitioners (RACGP)
https://www.racgp.org.au/practicesupport/cca

Collaborative Care Agreement Guide
https://www.racgp.org.au/download/Documents/PracticeSupport/2011collaborativecareagreement.pdf

Collaborative Care Agreement template for General Practitioner(s) & Nurse Practitioner(s)
https://www.racgp.org.au/download/Documents/PracticeSupport/2011collaborativecareagreementform.pdf

Please note — State specific information is also available. For example:

Advance Health Directive
Qld https://www.qld.gov.au/law/legal-mediation-and-justice-of-the-peace/power-of-attorney-and-making-decisions-for-others/advance-health-directive
WA http://www.publicadvocate.wa.gov.au/A/advance_health_directives.aspx
NSW http://www.health.nsw.gov.au/patients/acp/pages/default.aspx

Clinical Governance for Nurse Practitioners in Queensland
https://www.health.qld.gov.au/__data/assets/pdf_file/0032/158837/np-impguide-1.pdf

Nurse Practitioners in Primary care — scheduled drugs (Victoria)
https://www2.health.vic.gov.au/public-health/drugs-and-poisons/nurses-midwives-and-registration-endorsements/nurse-practitioners-and-others-registration-endorsements/nurse-practitioner-lists-approved-by-minister/nurse-practitioners-primary-care-scheduled-drugs

Appendix G — Useful equipment for HIPS

Key equipment required for the implementation of HIPS within your organisation will vary depending on individual need, however the following items are suggested:

Pocketalker (or similar) – to enable amplification of voice for improved communication with residents (https://www.williamssound.com/pocketalker)

ECG

Bladder scanner

Doppler

Drug stock:

- prescription documents
- PBS prescription printer paper
- emergency medication stock (particularly for use after hours).

Best practice (or similar) software for PBS and MBS billing records

Transport (if required at more than one site)

Mobile phone

Office space and office equipment

Advertising materials such as:

- Business cards
- Brochures to advertise the service
- Posters in the facility to advertise the service

Appendix H — Online training and support resources

The British Geriatrics Society: The Silver Book
The British Geriatrics Society (BGS) is a professional body which draws together experts from all the relevant disciplines within the field of geriatrics. Its aim is to inform and influence the development of healthcare policy in the United Kingdom and ensure design, commissioning and delivery of age appropriate health services. The *Silver Book* was first published in 2012 and provides information addressing how older people are cared for within the first 24 hours of an urgent care episode. The focus of the *Silver Book* is the skills and competencies required by healthcare professionals to better assess and manage frail older people. http://www.bgs.org.uk/silverbook/campaigns/silverbook

Decision Assist
Decision Assist is a national program providing education, resources and advisory services to support aged care staff and general practitioners in palliative care and advance care planning.
http://www.decisionassist.org.au/

Geriatric ED
The Geriatric ED website provides wide-ranging information for creating a more senior-friendly ED department. Information on policies, procedures and protocols, the interdisciplinary team, accessibility equipment and the environment is provided. There is also information on planning for change, sustaining change and examples of change. The site provides relevant and recent posts from clinicians working in this field.
https://geriatric-ed.com/

Geri-EM
Geri-EM is a personalised E-learning website targeted at those working in geriatric emergency medicine. Although this site is designed primarily for physicians working in ED wanting to provide optimal care to older clients, the site will also be of interest to all health-care professionals caring for older patients. The site welcomes members of the public with an interest in geriatric care, so may also be of use to carers. The site contains group discussions and interactive content such as: recommended readings and resources for use in the ED, knowledge assessments (pre-tests), knowledge checks (post- tests), teaching material, question and answers with immediate feedback, videos of simulated patient encounters and discussion boards.
http://geri-em.com/

ConsultGeri
ConsultGeri is the clinical website of The Hartford Institute for Geriatric Nursing. This website provides education for any healthcare professionals who require integration of care of the older client within their practice and educational curriculum. Information is provided for both undergraduate and graduate students.
https://consultgeri.org/education-training/e-learning-

UCLA Health System

The UCLA Health System has developed a Geriatric Age Specific Learning Module for Clinical Staff. The aim of this learning module is to enable clinicians to list age-related changes for the normal older person, describe changes in the older person that relate to medication usage and to differentiate between delirium and dementia.
https://www.uclahealth.org/hr/workfiles/AgeSpecificSLM-Geriatric.pdf

Palliative care

Palliative care is an approach that improves quality of life of patients and their families facing problems associated with life-threatening illness, through prevention of suffering by early identification, and impeccable assessment and treatment of pain and other problems — physical, psychological and spiritual. There are many internet sites regarding palliative care such as:
http://www.centreforpallcare.org/
http://www.emrpcc.org.au/
https://www.health.qld.gov.au/cpcre

Appendix I — Service evaluation

A satisfaction survey for residents, care staff and the GP could be as simple as a short questionnaire on Survey Monkey. Yes/No answers, short free-form answers or a Likert Scale would be appropriate for such surveys.

Questions for residents could include:
How long did you wait to see the NPC/NP?
Were you happy with the care they provided?
Were you transferred to hospital?
Has your health problem resolved or improved?

Care staff questions could include:
How long did you wait for the NPC/NP?
Did the NPC/NP involve you in the assessment?
Did the NPC/NP keep you up to date on treatment plans for the resident?
Has the health issue improved?

Questions for GPs might include:
How did the NPC/NP assessment align with your assessment?
Did the treatment suggested by the NPC/NP align with your prescribed treatment?
In your opinion, have the actions of the NPC/NP prevented this resident from being transferred to ED?

To determine transfer to ED rates, a tick sheet may be considered:

ED Transfer record

Resident name:

Date:

Time of transfer:

Transferred by: RN ☐ **NPC/NP** ☐ **GP** ☐ **Family request** ☐

NPC/NP notified **Yes** ☐ **No** ☐ **N/A** ☐

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