# Aged Care Emergency model evaluation

Nepean Hospital

Nepean Blue Mountains Local Health District

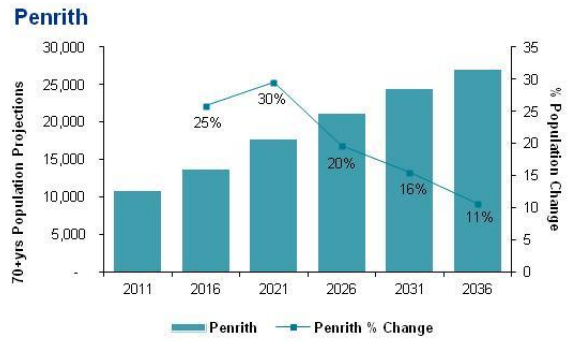
## 1. Overview of the implementation of Aged Care Emergency (ACE) program

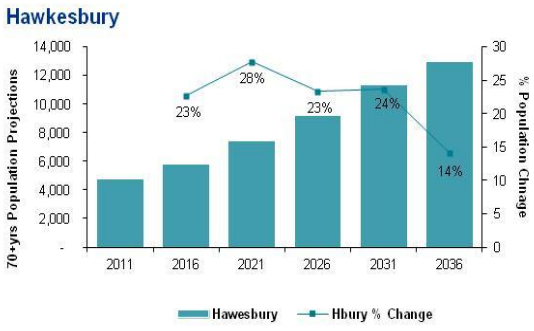
*Please provide a concise overview of why you applied for funding to implement the ACE model. How did you assess the need for implementation of the ACE model?*

The aim of the intervention was to reduce the number of transfers from RACF's to the ED by providing clinical support and education to designated RACF's. It was anticipated that the process of admission to and discharge from hospital would be streamlined allowing for a smoother patient journey.
The Aged Care Emergency Project will be based at Nepean Hospital and will provide service to the Penrith, Lower Blue Mountain and Hawkesbury areas.

Demographic data related to the areas the ACE project will impact upon

- Nepean Blue Mountains LHD will experience a much higher rate of growth in the ageing population compared to the rest of NSW to 2036
- NBMLHD 134% change compared with 104% for NSW
- Year on year the percentage change is double digit growth greater peaking at 26% for NBMLHD
- Notably both Penrith and Hawkesbury LGA will experience even higher percentage changes at 149% and 173% respectively
- Both Penrith and Hawkesbury LGA will experience even higher percentage changes year on year at 29 and 27 % respectively




The major driver applying excessive 'stress' on Nepean Hospital Emergency Care is demographic followed by processes, people, technology and government as outlined below

### Demographic

Population growth
Ageing population
Seasonal demand
Geographical separation and distance of the hospitals
Shift in the makeup of demand

### Process

Changing models of care
Coordination and collaboration between departments
ED referral processes
Bed management and patient flow practices

**People**
Ageing workforce
Skills shortage and skills adaption
Recruitment and retention of staff
Higher customer expectations

**Technology**
eMR
Advances in medical technology

**Government**
Changing funding models
Changes in bulk billing
NEAT
NEST

## 2. Objectives of the implementation of ACE

### Goal

The implementation of the ACE model of care will enhance the Virtual Aged Care Service (VACS) model of care and provide greater flexibility to treat the patient in their place of residence, Emergency Department (ED) or Emergency Department Medical Assessment Unit (EDMAU).

This is with a view to return the patient to their familiar place of residence as soon as possible thus meeting the needs of patients who are acutely unwell and residing in one of the LHD RACFs.

This is expected to improve patient outcomes by reducing adverse events that may occur with transfer for this cohort of patients. The psychosocial, communication and patient preferences will also be enhanced through the coordination of relevant service provision.

The ACE model of care at Nepean hospital will:

1. Provide an initial point of contact to RACF's for clinical referral and/or nursing assessment. It is anticipated that the ACE CNC will provide appropriate referral to the VACS team in order to provide speciality service in the RACF either by home visits or telepresence.

2. Streamline patient admission to EDMAU therefor bypassing ED

3. Provide ongoing education and advance care planning in the nominated RACF - 6 in total

4. Monitor journey for admitted patients from the RACF to ensure safe and smooth discharge to the RACF.

5. Endeavour to support the NSW 2021 Health goals, to keep people healthy and out of hospital, whilst providing world class clinical services.

### Objective

- To reduce ED presentations and representations of the identified group
- To reduce ED length of stay (LOS)
- To reduce hospital LOS
- To improve the patient journey
- To expand and enhance clinical capacity in the RACF through regular education and improved linkages to existing services

**Changes to the initial plan:**

The ACE model at Nepean did achieve many of the objectives set out in the original plan.

The ACE project initially set out to concentrate on 6 RACF's however within a short time frame of two months the service had expanded and currently provides a service to 17 RACF's in the designated areas.
The 17 RACF's have a combined total of 1794 high and low level care beds.

The one point of contact for RACF's works as it was planned however with changes to staffing particularly senior staff in the RACF's ongoing education and increasing the awareness of the ACE service is ongoing.

Monitoring the patient journey to ensure a safe discharge for those presenting from RACF to Nepean is challenging. Throughout the months of May until August 2013 the total number of presentations from RACF to Nepean was 302. Of the 302 presentations approximately half are admitted to an aged care bed the remaining numbers were either discharged from the ED/ED MAU or admitted to various wards throughout the hospital.

The service has not had as many patients admitted through the ED MAU as was originally anticipated, several reasons for this are

- The aged care team has set hours in ED MAU, 0800 – 2000hrs 7 days per week
- After hours the ED does not always transfer patients directly to MAU.
- Patients with a triage category of 1 and 2 must be seen by ED staff prior to transfer to ED MAU.
- Limited beds (4) in ED MAU.

## 3. Scope of the implementation and ACE model used

*What were the specifics of the ACE model you implemented in your Hospital? In what ways did you deviate from the documented NSW ACE model and why? How did you determine the elements of the model that would suit your Hospital's purposes?*

The model of care involved a one point of contact for RACF during business hours Monday to Friday.

The ACE service at Nepean unlike other models is physically situated within the Aged Care department, having the advantage of building strong links between the ED and Aged Care Department.

The model at Nepean was influenced by the dynamic Aged Care department established at the hospital. This department has been operational for 8 years and in this time has become a leading service provider across the state. The reputable VACS service gave confidence to the ACE Model.

The ACE model enhanced the VACS service which up until that time had been staffed by Medical and allied staff with no input from the discipline of nursing.

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## ACE Model of Care Nepean

**The triage of a resident in response to a phone call will identify one of the following**

1The CNC resolves the issue using the ACE manual over the phone

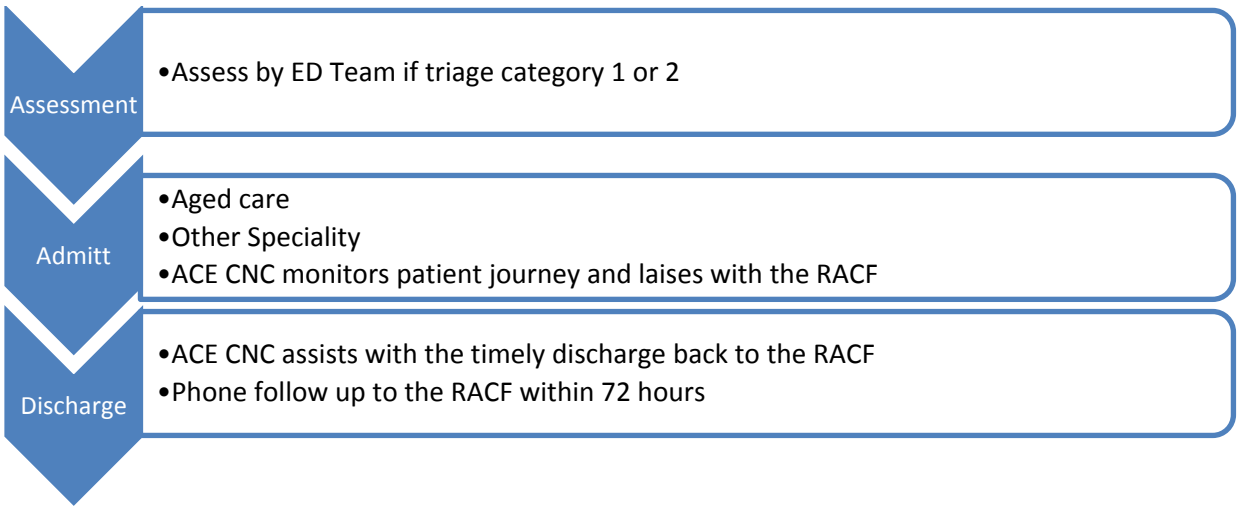
2 If non urgent a VACS review at the RACF within 48hours or next business day if over the weekend

3 Booked admission to hospital using a *request for admission*

4 Refer to other service, Palliative care, Wound management etc

5 Transfer to hospital for assessment, see flow diagrams

## Transfer to hospital for assessment in the Ed



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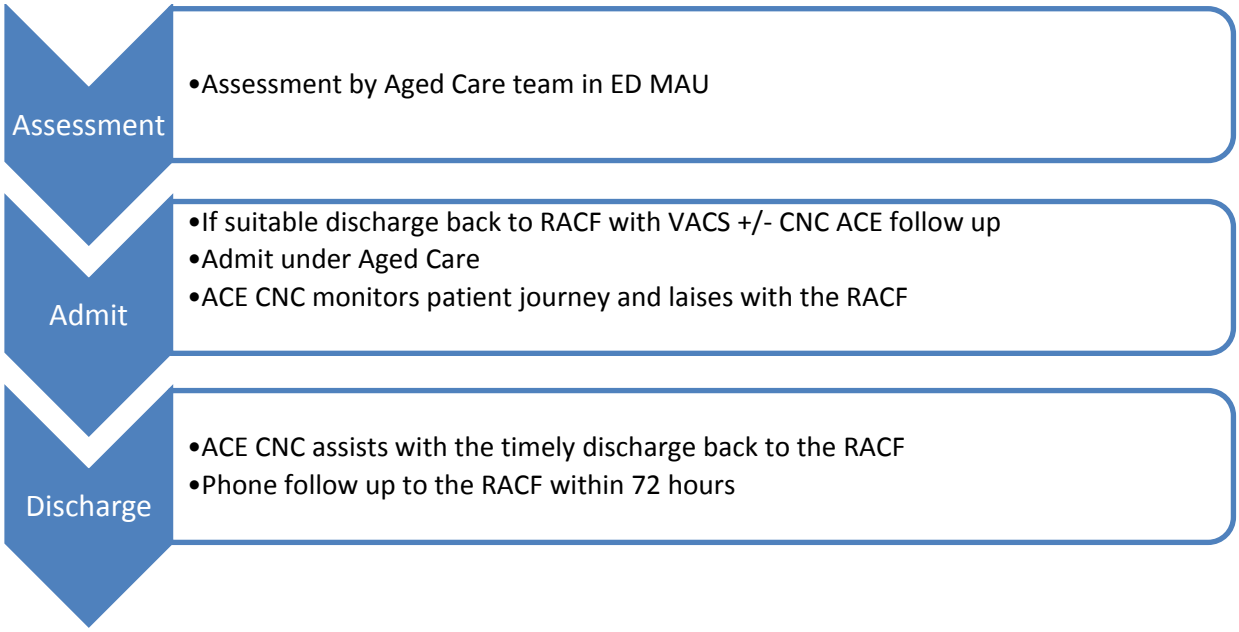
## Transfer to hospital for assessment in ED MAU




When residents are sent to hospital and the ACE CNC has not been contacted prior to the admission the resident is identified using iPMS and/or Cerner. This admission is then tracked and the resident is followed up by the CNC and discharge planning is implemented in the same way as for a planned transfer.

4. **Methodology used in the implementation**

**Methodology**

Pre and post intervention ACE Model of Care data collection used various data sources

1. Cerner data to measure NEAT data sets
2. Performance Analysis Unit data set - to measure hospital LOS and representations
3. Manual data collection to measure preventable admissions to hospital

**Barriers**

1. Hospital wide acceptance of the ACE service
2. Hospital wide recognition of the ACE service

*(which at this stage seem to have been overcome by continual education and information sessions)*

3. Turnover of staff at RACF requires ongoing introduction and education on the benefits of ACE

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**Enablers**

1. Program supported by Directors of Aged Care and Emergency Departments.
2. ACE service physically located within the Aged Care Department.
3. Established links with RACF's within the LHD by monthly meetings at facilities involving Facility staff, Medicare Local, NSW Ambulance and various members of interested staff at the acute care hospital
4. VACS team to support the ACE service
5. Access to ED MAU beds to directly admit patients through the 'third door'

**Communication**

1. Establishment of a stakeholder committee prior to roll out of the ACE Service, members included hospital executive, department heads from medical, nursing and allied health, care managers at selected RACF, Medicarelocal, NSW Ambulance and a consumer representative.
2. Monthly meetings with Care Managers at RACF.
3. Education sessions in selected ward areas of the hospital including ED.
4. Ongoing education and support meetings at RACF.
5. Presentation of the ACE service at hospital wide meetings, including to nurse leaders and at grand rounds

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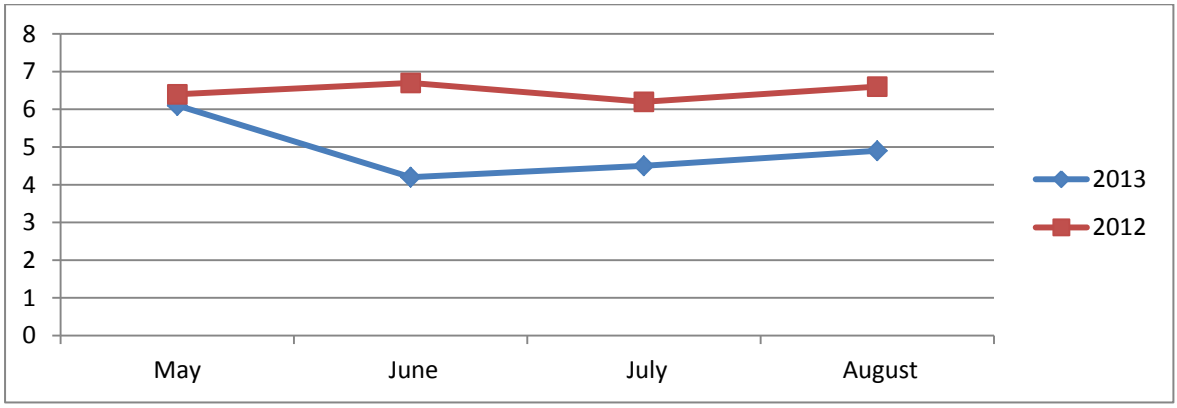
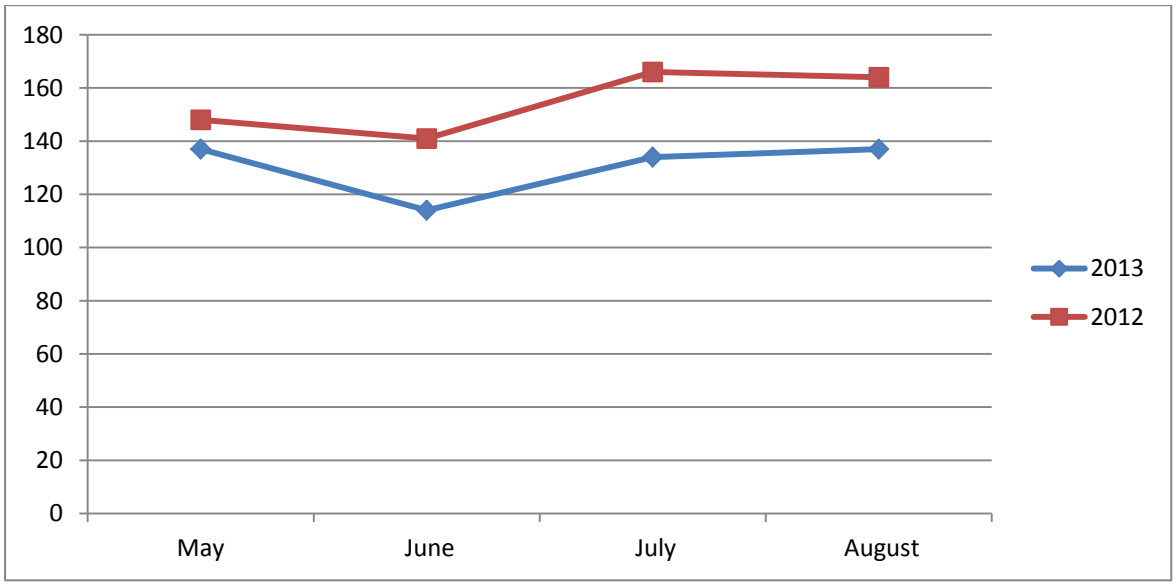
**6. Measures of success of the implementation of ACE**

*Please include data as follows pre and post implementation of ACE (as indicated in the NSW ACE Model of Care document)*

- *Hospital Average LOS*




- *Episodes*



- ***Rates of re-presentation to same ED within 48 hours***

*For the months of May, June and July 2013 from a total of 203 presentations 3 represented within 48 hours*

- ***Adverse outcomes monitoring (IIMS)***

There has been no IIMS recoded as a result of ACE

- ***NEAT***

**Nepean ED comparative data of patients presenting from RACF's**

**This data represents 3 months May, June and July 2011, 2012 and 2013**

| | 2011 | 2012 | 2013 |
|---|---|---|---|
| Total ED presentations | 13 283 | 14 712 | 15 067 |
| Total RACF ED presentations | 143 1% | 177 1.2% | 203 1.3% |
| NEAT | 21 15% | 30 17% | 75 37% |
| Triage 1 & 2 | 30 | 43 | 56 |
| DC'ed from ED | 49 | 71 | 50 |
| Admitted to a ward | 88 | 101 | 150 |
| RIP ED | 3 | 5 | 3 |

- ***Compliments and complaints***

  We have had many verbal compliments of the service from within the hospital, especially the ED plus from the staff at the facilities.
  To date we have had no complaints.

- ***ACE phone call record***

Phone record from May to October recorded 94 calls from RACF requesting clinical advice on resident management, 40 of these calls resulted in the resident not being transferred to the acute care facility

## 6. Discussion

*Was the implementation of ACE successful, why or why not? What were the lessons learnt during this implementation? What impact has this model had on management patients from Residential Aged Care Facilities? What would you do differently next time and why? What strategies did you put in place to ensure sustainability of ACE?*

The implementation of ACE at Nepean hospital has been successful mainly due to the dynamic aged care department. Prior to the service introduction links had been made with the local RACF by way of the monthly multidisciplinary meetings which had been taking place for 2 years pre implementation. These links made for a smooth roll out of the ACE project as the facilities now had a

one point of contact. The nursing staff in the facilities also welcomed the project as they felt more supported by the acute care facility.

Management of unwell residents at the facilities has become more streamlined, with fewer presentations for minor problems. The ACE CNC has been able to expedite access to specialist services within the acute care facility making for timely intervention and reduced presentations. Staffs within the facilities have become more empowered to make contact with the acute care facility due to the one point of contact. The introduction and use of the ACE manual has assisted with this empowerment.

The availability of beds within the ED MAU in which to assess residents within business hours has assisted with reducing acute ED presentations. Staff, residents and relatives welcome this initiative as it eliminates time spent in the busy acute ED. The resident is seen in a timely manner by a specialist aged care doctor thereby removing the numerous medical teams the resident may otherwise have to see.

The support of the VACS team has been very important to the ACE CNC, timely referrals by the ACE to the VACS team has assisted in many unnecessary presentations to the ED.

Both the ACE and VACS team have assisted with reducing LOS by timely follow up by phone and home visit of residents on discharge from the acute care facility. This is achieved by discharging residents early and providing the much needed acute care service in the facility. It is anticipated that LOS will be further reduced by introduction of the telehealth service.

It is anticipated that the introduction of the telehealth service will provide funding to continue with the ACE service at Nepean hospital.

## 6. Conclusion

*Where to from here? Please include plans for further evaluation of the impact of ACE on your Hospital and sustainability of this model in your Local Health District.*

Due to the success of the project at Nepean hospital the ACE service will continue to be an integral part of the aged care department. There has been a delay in the implementation of the telehealth service to compliment both the VACS and ACE services, however it is anticipated that this will commence in early 2014. The telehealth service will assist in the ongoing funding of the ACE project.