Can the role of Emergency Nurse Practitioner be adapted to work in an urgent care centre and reduce Emergency Demand?

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The Northern Hospital

Emergency Department

> 70,000 patients p/a

25% paediatric

25% admission rate

Triage distribution

Cat 1:	(immediate)	0.6%
Cat 2:	(within 10mins)	7.6%
Cat 3:	(within 30mins)	26.8%
Cat 4:	(within 1 hour)	48.9%
Cat 5:	(within 2 hours)	16.1%

The Nurse Practitioner -Emergency

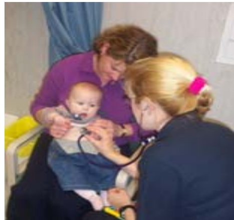
1998- DHS commenced 'Seed funded' Nurse Practitioner Projects

2004- Phase 3- Multiple Metropolitan Emergency Nurse Practitioner Projects initiated to address issues of service demand -9 hospitals/ 14 candidates

2005- Expanded to Regional Emergency Departments

2006- Expanded to Rural Emergency Departments

The Nurse Practitioner -Emergency



The Emergency NP Projects were evaluated using the following parameters

- waiting times
- length of stay in ED
- use of 5 extensions
- patient and staff satisfaction

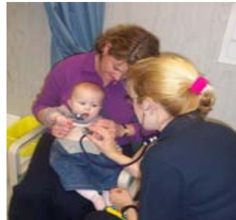
The Nurse Practitioner was established as safe and effective, and became a part of the collaborative health care team.

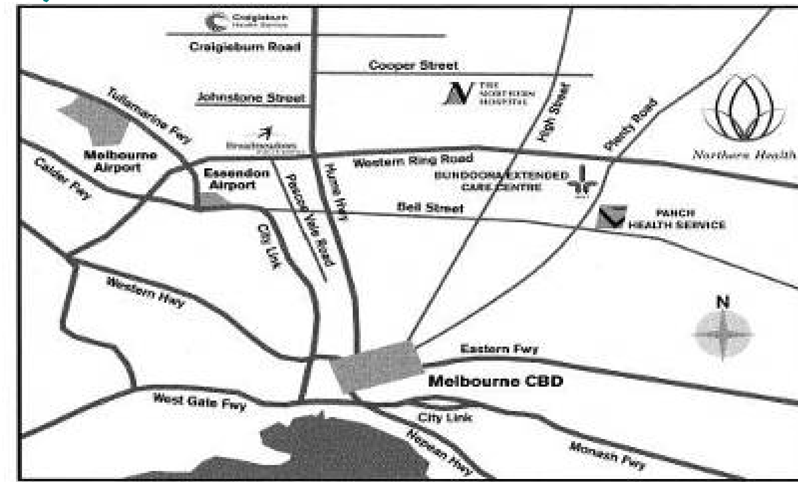
Craigieburn Health Service

The super clinics are purpose built facilities designed to trial innovative service delivery and funding models.

Growth Corridor Demographics:

	Hume	(Craigieburn)
2001	135,984	(15,614)
2008	156,673	(23,539)
2015	178,076	(32,757)





New methods of service delivery

- Minor Injury and Illness Clinic
  - based on UK urgent care model
    - Alternative to ED presentation
    - Convenient to population
    - Complementary to LMO services

New methods of service delivery

- A Minor Injury and Illness Clinic (MIIC) provides multi-disciplinary, episodic primary health care over extended hours. Patients are treated on a walk-in basis.

- Nurse Practitioner (candidate) was identified as a valuable team member in this new service

- Organisational support for implementation of NP

Establishing the NP service:

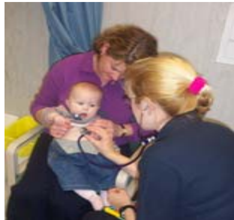
- Is an Emergency NP role directly transferable from ED to MIIC?

- Are there organisational, demographic, geographic, political barriers?

Clinical Practice Guidelines

- Identified as a basis for majority of presentations in both ED and MIIC
  - Multidisciplinary
  - Due for revision (3yrs)/ adaptations
  - Extensive literature review
  - Educational opportunity

Clinical Practice Guidelines- Adult



Allergic Reaction – Minor
Bite or Sting – Non-Venomous
Bleeding – Vaginal in the first trimester of Pregnancy
Blood and Body Fluid Exposure (community)
Blood and Body Fluid Exposure (Staff)
Breast Pain and Inflammation suggestive of Mastitis
Burn Injury - Minor
Calf Pain suggestive of Deep Vein Thrombosis
Cellulitis – symptoms suggestive of
Elbow Injury
Emergency Contraceptive
Eye Injury - Minor
Fever and cough suggestive of Pneumonia
Foot Injury
Forearm / Wrist Injury
Hand Injury
Knee Injury
Laceration and Wound Management
Loin Pain suggestive of Renal Colic
Lower Leg / Ankle Injury
Plaster of Paris Complication
Respiratory Depression post Opiate administration
Ring Removal
Upper Respiratory Tract Infection - Viral symptoms of
Urinary Tract Infection / Pyelonephritis – symptoms suggestive of
Vomiting and Diarrhoea
Vomiting in Pregnancy (hyperemesis)

Clinical Practice Guidelines: Paediatric

Bite or Sting – Non venomous
Burn Injury - Minor
Cough - Barking
Earache suggestive of Otitis Media
Foreign Bodies - Ingested or Intra-nasal
Head Injury - Minor
Laceration and Wound Management
Lower Limb Injury (or non use)
Plaster of Paris Complication
Ring Removal
Upper Limb Injury (or non use)
Vomiting and Diarrhoea
Wheeze

Establishing Mentorship

- Identified need
  - For exposure to patient numbers
  - Developing competency
    - Clinical internship across sites
    - Supernumerary time allocation at tertiary ED facility
    - Mentorship from multidisciplinary team
      - Nurse Practitioner (ED)
      - Career Medical Officer (CHS)
      - Emergency Physician (ED)
      - Pharmacist (CHS/ED)
      - Allied Health/Nursing specialties
- Engaging Key Stakeholders

Where are we now?

- NP role -across campus similarities/ differences
- Patient Age

TNH	MIIC
8mths-88yrs (av 28yrs)	2wks-94yrs (av 36yrs)

- Triage categories:

TNH		MIIC
1%	ATS Category 2	0%
5.5%	ATS Category 3	4%
63%	ATS Category 4	15%
30%	ATS Category 5	81%

- Top 5 Presentations for NP care:

TNH	MIIC
Lacerations	Upper Resp Infections
Cellulitis	Fracture/ soft tissue inj
Soft tissue injury	Cellulitis
Upper limb fracture	Diarrhoea/ vomiting
Plaster of paris r/v	Ear infections

Where are we now?

- Initial increase in ED workload– positive input in developing candidate competency
- Development of NP(C) has improved service delivery at CHS MIIC
- Service delivery- Increasing MIIC demand
- Initial survey demonstrating 14% of MIIC pts would have presented to TNH ED

Future Directions:

- Ongoing data review to direct CPG development relevant to identified needs

- Increasing NP services across both sites

- Promotion of expanding CHS/ MIIC services

- Survey of patients to document a reduction in ED demand (ongoing)

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