

# **Introducing a new collaborative model of practice: Changing nursing services to meet ED demand**

## **Working Efficiently and Accurately**

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Emergency Department  
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# Where we have come from ?

- A need to reduce triage code waiting times, length of stay in ED and incidence of "Did Not Wait" (8% presentations, 1998)

## ACN 1998

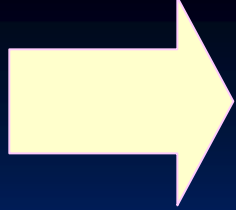
- Nurse initiated radiology
- Nurse initiated pathology
- Nurse initiated medications
- Focus on fast tracking of treatment, investigation and referral.

CIN- 2002

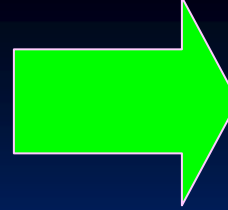
EMU- 2002

REAT- 2003

# ACN



# CIN



# EPN

- Oral analgesia.
- Intravenous narcotics.
- Bronchodilator therapy.
- Distal limb Xrays.
- Wound closure.
- Fracture immobilisation
- Fluid administration
- Tetanus administration
- Venous access/ABGs

Early referral to:

- Inpatient teams
- Hospital CNC's
- Mental Health Services
- Sexual Assault team
- Social Work

# Outcome of ED redesign unmet needs.

- No significant change in “Did Not Waits”
- No significant change in length of stay in ED for discharged/admitted patients.
- National triage code bench marks remained poor
- Access to an inpatient bed remained poor
- Presentations and acuity increased despite redesign

Why?

# Years 2001- 2005:

## 6% increase presentations

## 25% increase in admission rate

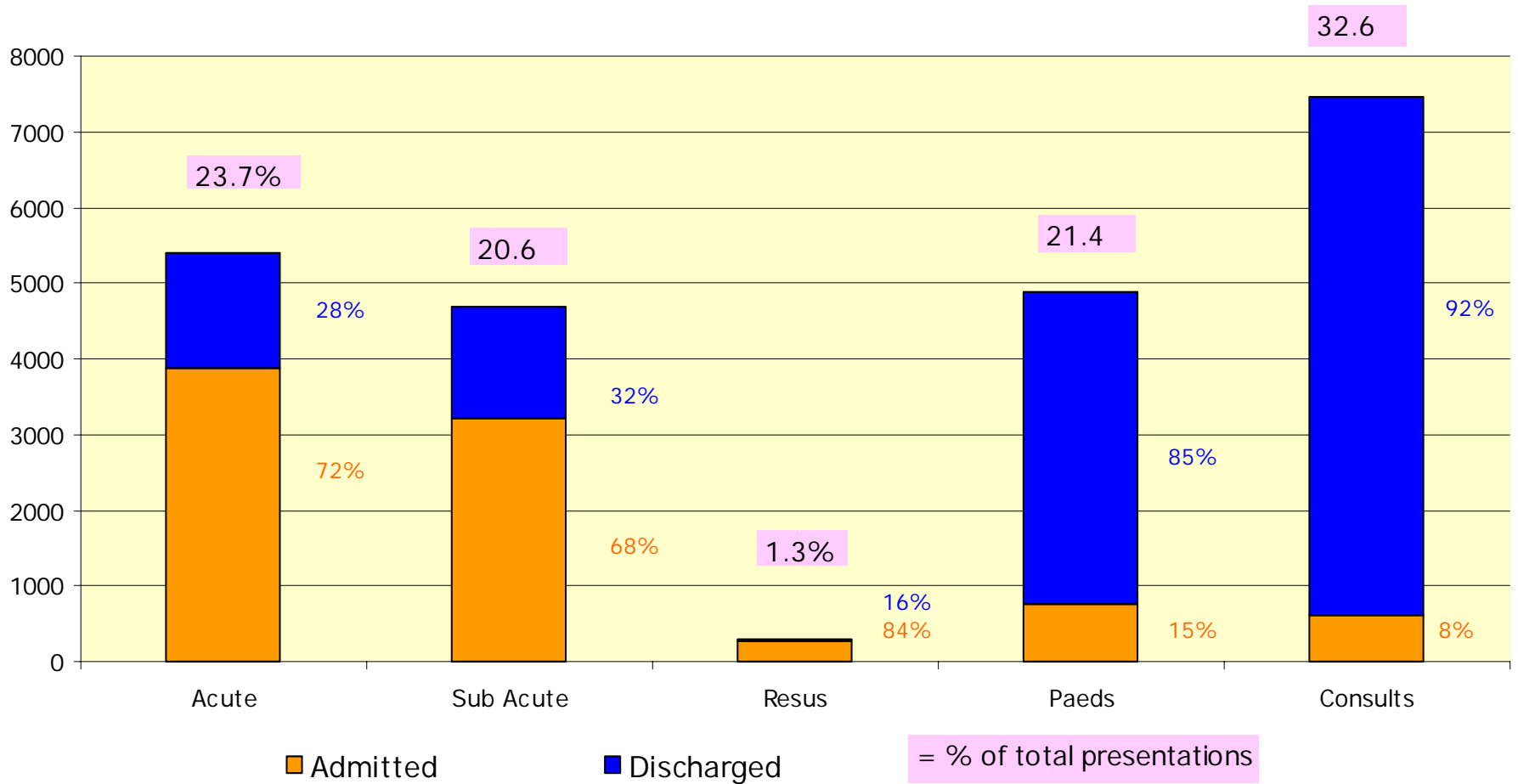
### Emergency Department Activity Attendances

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>2001</b>	3876	3637	3975	3734	3689	3693	3717	3741	3923	3821	3603	4256	<b>45665</b>
<b>2002</b>	3737	3488	3996	3874	3985	3877	3889	4026	3804	3813	3783	4034	<b>46306</b>
<b>2003</b>	3916	3534	3893	3802	3688	3672	3943	4183	3801	3747	3655	4162	<b>45996</b>
<b>2004</b>	3852	3710	3955	3747	3845	3584	3530	3669	3598	3509	3621	4131	<b>44751</b>
<b>2005</b>	4078	3513	3966	3956	4054	3872	3964	4315	4185	4094	3941	4426	<b>48364</b>

### Emergency Department Activity Admissions

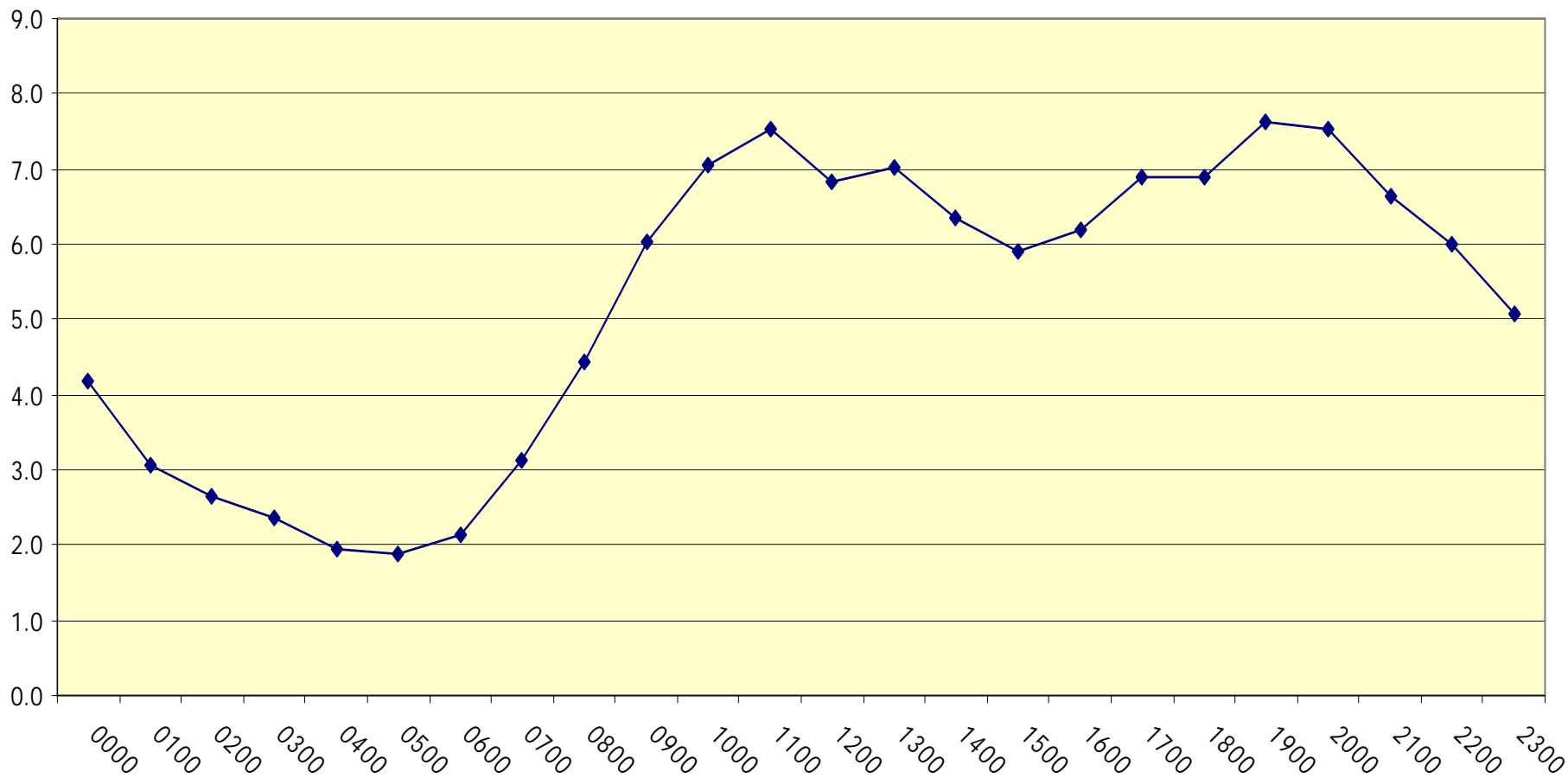
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>2001</b>	1127	1168	1313	1235	1351	1265	1300	1314	1330	1307	1238	1350	<b>15298</b>
<b>2002</b>	1271	1261	1383	1422	1462	1295	1206	1296	1346	1409	1343	1356	<b>16050</b>
<b>2003</b>	1420	1277	1381	1376	1363	1358	1483	1506	1475	1494	1344	1465	<b>16942</b>
<b>2004</b>	1396	1355	1502	1409	1495	1406	1390	1449	1406	1341	1385	1548	<b>17082</b>
<b>2005</b>	1605	1397	1449	1514	1602	1615	1704	1780	1704	1551	1567	1585	<b>19073</b>

## Patient Information by Location 01/10/04 - 31/03/05



# Average Patients Per Hour

01/10/04 - 31/03/05



# Introducing a collaborative nursing model: A TENP model of practice

## Stage 1

- Evaluate ED service, patient casemix and work load
- Funding for 3 FTE TENP positions (16 hours/7 days)
- Jointly developing a service model support by both medical and nursing colleagues (study other successful models)
  - TENP Patient management groups
  - Meeting service demand

# TENP model of practice...

## Stage 2

- Model development
  - 'See and treat'
  - Collaborative
  - Model endorsed by medical and nursing staff

## Stage 3

- Development of a Job description
- Recruitment of TENP's
- Securing funding for education necessary to support the model

# TENP model of practice...

## Stage 4

- Implementation
- Evaluation processes
- What is necessary to make the model work for staff and patients

# Patient Casemix: Adults & Children

- Musculoskeletal injuries
- Wound management
- Infections (soft tissue, bony and dental)
- Minor illness
- O&G conditions
- UTI
- Urinary retention
- Ophthalmic injuries
- ENT conditions
- Problems in early pregnancy <20 weeks
- Gastroenteritis
- Constipation
- Minor head injuries
- Pneumonia/respiratory conditions
- Drug concealment
- Suspected DVT
- Referral processes  
Inpatient / GP

# Educational workshops

- 2 week intensive education course- theory, clinical examination, procedures.
- 11 participants- from within the Area Health service
- Presenters- Emergency Physicians, CNC's, Nurse Practitioners
- Focus- Adults and Paediatric patient groups

# Implementation

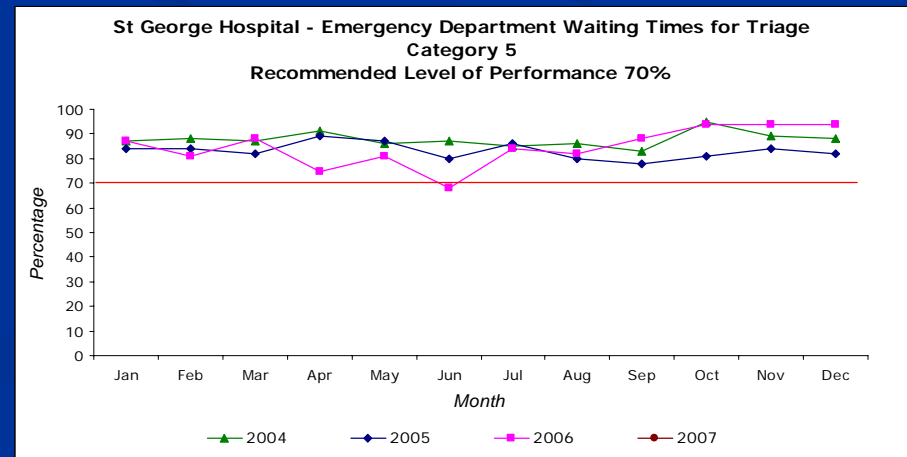
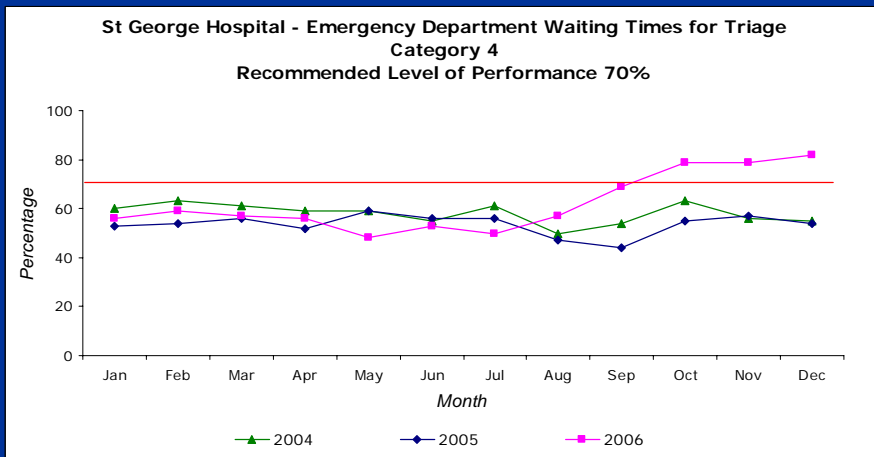
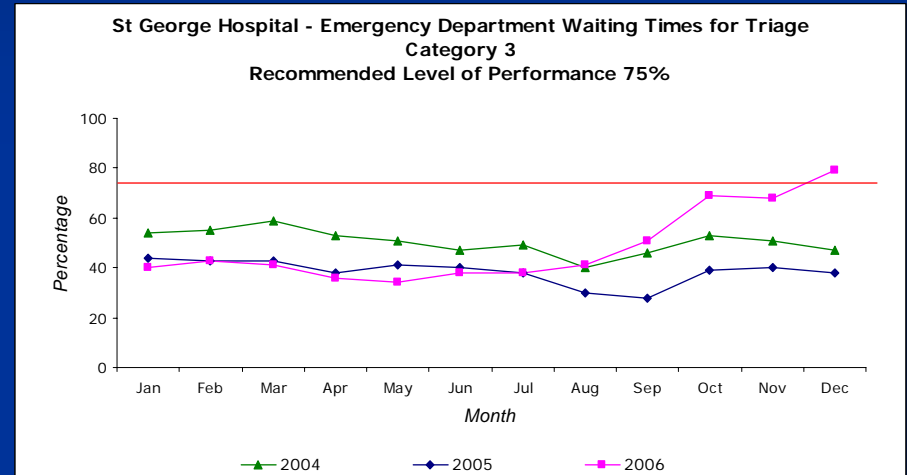
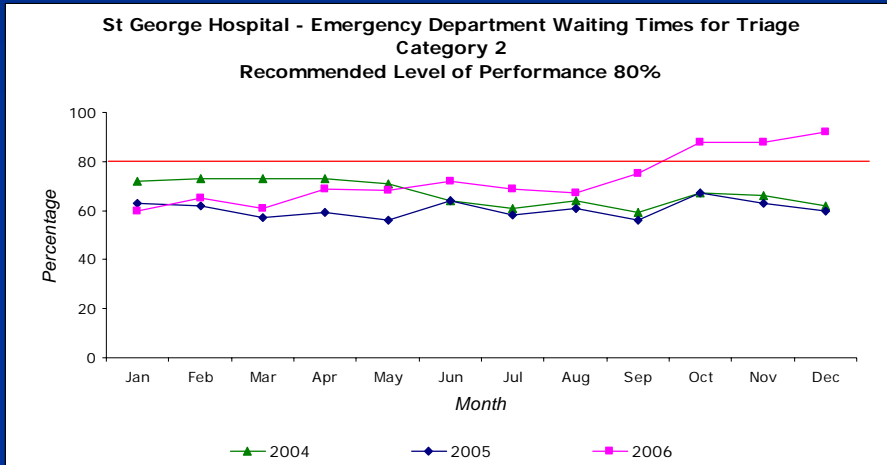
- Commenced 17 July 2006
- 16 hour/day cover, 7 days
- NO FUNDING for annual/sick leave
- Practice “supervised” – ED SS, Registrar
  - Discussion of patient presentation, clinical management and referral plans with the ED SS/Reg

# Evaluation of the TENP Model of Service: 24 weeks

- Total cover 131 (of 168 days)
  - Lost days due to annual, sick and conference leave- n= 37 days
- Total patient presentations n=22,533
- TENP managed patients n= 2,580 (11.4%)
  - TENP 'see and treat' n =1,840 (71%)
  - TENP collaborative n=740 (29%)
  - ~10 patients / shift

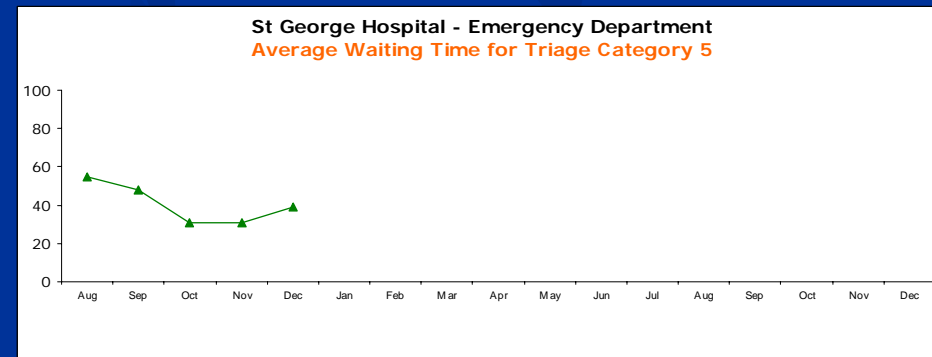
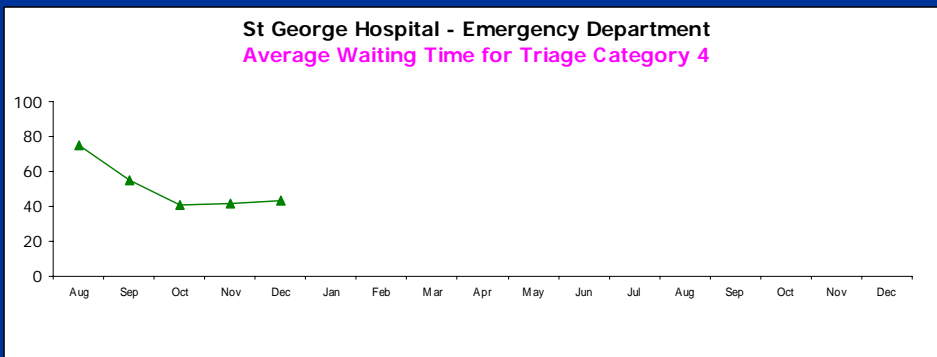
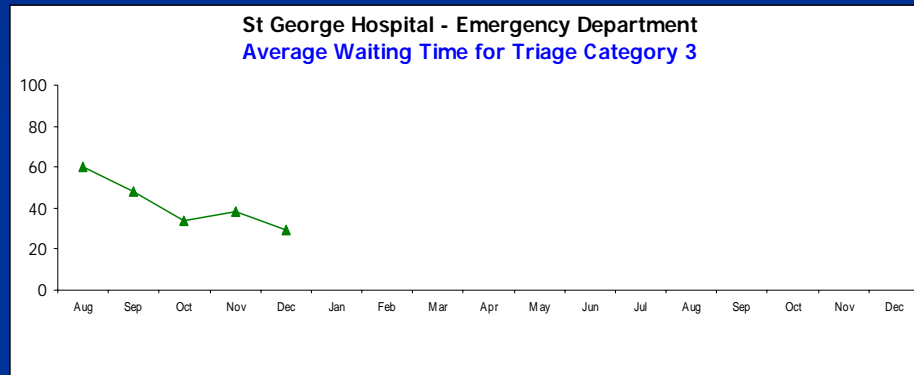
# ED Performance Evaluation

- Improvement in meeting national benchmarks- all triage categories.



# Waiting time for treatment

Dec 2006- record monthly presentations  
Cat 5 increase- few GP's open over Xmas & NY



# Did Not Wait for treatment: “DNW’s”

- Reduced from 8% to 4.4% in the 6 months since the redesign/TENP
- Also influenced by improved data collection for the “nurse seen by time” in ED
- Redesigning care
- Nurse initiated patient discharge policy

# Acceptance of TENP model

- Timeliness, efficiency and appropriateness of TENP care and management
- No patient complaints
- Patient letters/ feedback complimenting TENP service
- Referral hospital complimenting TENP service
- No refusal by a patient of TENP service
- Nursing integration- positive
  - Resource and mentors, career pathway
  - Preceptor the extend practice nurse
  - Medical acceptance and integration- positive
  - Improved relationships with medical staff

# Evaluation Outcomes

- Documentation audit- 23-25 /25 scores
- Review of investigations- appropriate
- Review of ED benchmarks- improved
- TENP appraisals- in progress
- Competency achievement- in progress

# Evaluation of TENP Performance

- Review of case loads
  - Appropriate case mix
  - Sufficient educational support
  - Identifying potential presentations for TENP management
- Patient referral audit- no inappropriate inpatient or outpatient referrals

# Ongoing issues

- Annual/sick/study leave cover
- Ongoing education- calendar
- Clinical release time- clinic visits etc
- Resource allocation
- Expanding the service

# Where to from here??

- Development of expertise and independent practice
- Completion of competencies
- Refinement of the model: investigation of successful models- UK
- Ongoing audits- documentation, clinical practice, appropriateness of investigations/referral, patient surveys
- Ongoing education programs
- Authorisation of TENP's
- Funding applications for additional TENP positions