



Implementation of a Full Electronic Patient Record Keeping System in the Emergency Department

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- Austin Health
- Eastern Health
- Mercy Health & Aged Care
- Peninsula Health
- St Vincents Health
- Alfred Health
- Melbourne Health
- Northern Health
- Southern Health
- Western Health

Source: Department of Health Victoria 2008.

Figure 4.1d



- Eastern Health campuses
- Primary catchment
- Secondary catchment
- Highways
- Arterial Roads

Source: Department of Health Victoria 2010.

Prior to Implementation

- Site visits to other campuses to develop criteria to assist in the tender process
- Three subgroups asked to review tenders
Finance IT and clinician group
- “Symphony” chosen as system of choice
- Another consideration for EH –
HealthSMART Clinicals

Perceived Benefits of using a full Electronic System

- Streamline work of clinicians
- Ability to accurately track patients flow through department
- Enhance communication between clinicians
- Minimise errors and duplication
- Anticipated increase in patient contact time
- Deliver consistent high quality patient care
- Improved data Integrity
- Provide consistent accurate statutory reporting of KPI's

Process Table

Appointment of Project Lead/Manager					April 2009
Implementation Planning Study and Gap Analysis undertaken					May- Nov 2009
Multidisciplinary configuration meetings Representation sought from all 3 sites					Attendee's ? Stakeholders ?
Medical	Nursing	Allied Health	Clerical	IT	
Setting up a User Group to manage ongoing change					1 Month before go live at each site
Training Needs What were they?	<u>Super Users</u> <u>1 Day of training</u> ED consultants Shift Coordinators Clinical Nurse Specialists	<u>End Users</u> <u>2 hours training</u> All ED Clinicians Bed Managers After Hrs Coordinators			
Appointing project lead at individual sites					No project lead at Angliss
Technical Environment Preparation					May 2009- May 2010
Utilising an online training package					Jan 2011

Plans for Go Live

- **Infrastructure needs**

 - Computer upgrade

 - Mobile computers – for use with SSU ward rounds

 - Tablets – to be used by second triage nurse in waiting room & escorts to CT

- **Staggered go live approach**

 - BoxHill 16/3/ 2010

 - Angliss 28/4/2010

 - Maroondah planned for May 2010 postponed till March 2011

- **Staff needs prior to go live**

 - Introduced at meetings across all staff levels

 - Training sessions

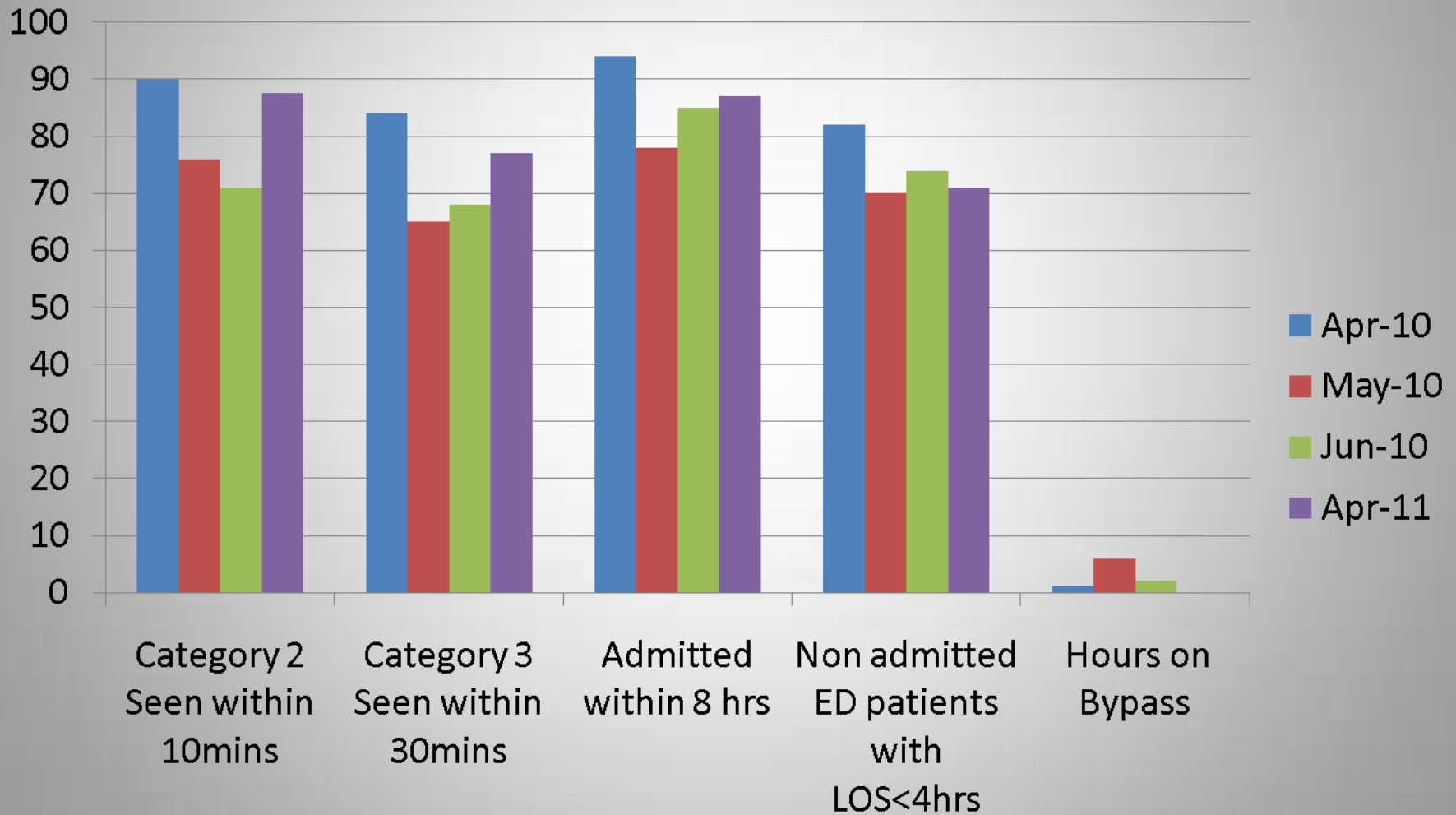
 - Exposure to the test system. Staff encouraged to practice using the system

Go Live Day

- IT staff present on morning of go live
- Extra nurse and doctor rostered on go live day
- Project manager worked night duty of go live week
- Extra Nurse rostered on across the am and pm shift for 5 days post go live



KPI's pre and post Symphony



Nursing e-notes

Initially we tried to replicate everything from the paper based nursing record into the electronic record.

The screenshot shows a web-based form titled "Initial Nurse Assessment". At the top left is a "Clear All" button. The form is organized into three columns. The left column contains fields for Date (14 February 2010), Time (11:05), Danger (Nil), Response (Alert), and Airway/Cervical Spine (Patent). The middle column contains fields for Breathing (Normal W/OB, Speaking in full sentences, Chest clear with equal AE to base), Circulation (Normotensive, peripheral pulses regular equal and strong, mildly diaphoretic), Disability and Discomfort (GCS-15, c/o Severe L Flank Pain - sudden onset, spontaneously moving all), Exposure and Examine (Changed into gown, skin intact, nil rash evident on arrival), and Fahrenheit (Afebrile, oral temp). The right column contains fields for Glucose, Gadgets and Vital Signs (BSL - 5.4), Head to Toe and History (Abdo soft, Bowel Sounds present, Last BA 1/7 ago normal, c/o pain on voi), Inspect the Posterior Surface (Intact, attends to own PAC), and Red Flags (Hx of cardiac disease). Each field is a text input box with a small icon on the right side.

Initial Nurse Assessment		
<input type="button" value="Clear All"/>		
Date	Breathing	Glucose, Gadgets and Vital Signs
14 February 2010	Normal W/OB, Speaking in full sentences, Chest clear with equal AE to base	BSL - 5.4
Time	Circulation	Head to Toe and History
11:05	Normotensive, peripheral pulses regular equal and strong, mildly diaphoretic	Abdo soft, Bowel Sounds present, Last BA 1/7 ago normal, c/o pain on voi
Danger	Disability and Discomfort	Inspect the Posterior Surface
Nil	GCS-15, c/o Severe L Flank Pain - sudden onset, spontaneously moving all	Intact, attends to own PAC
Response	Exposure and Examine	Red Flags
Alert	Changed into gown, skin intact, nil rash evident on arrival	Hx of cardiac disease
Airway/Cervical Spine	Fahrenheit	
Patent	Afebrile, oral temp	

Evolution of nursing e-notes

Search **James, Keith Henry (Mr), 0268453, Male, DoB: 02/06/1931, Age: 79 Years**
 Details AH-10-019789-1, Cubicle 8, Eye Problem (all), 14/10/2010, 20:46, Dr Peak Chan Looi

Next action x **Locations** Angliss

- Obs Summary
- e-Notes Summary
- Patient Expects
- Midas
- Patient Alerts
- Triage New Pat
- Re-Triage
- Change Stream
- Medical Records
- ED Clinician
- Clinician Handove
- Unassign Patient
- Nurse
- Nursing To Do List
- Nursing e-Notes
- Nursing Care Plan
- Extended Stay Nu
- Vital Signs
- Nursing Risks
- Ventilator Observa
- Ward Admission T
- Doctor e-Notes

Locations: Mcbride, Tara; Jones, George Henry; Adams, Sabrina Joanna; Test, Test; Wylie, Meagan Ann; Brown, James; Nisbet, James; Kopelis, Fotini; James, Keith Henry; Hemstrom, Nicklas; no staff; Lewis, Dale Kenneth

Nursing e-Notes

Last Updated By	Source	Notes
Madhu Chandra, 14/10/2010 21:14	e-NOTES, History of Presenting Complaint	patient complained of pain behind the rt eye last night and 2 episodes of pain today.
Madhu Chandra, 14/10/2010 21:14	e-NOTES, Airway, CSpine, Breathing, Circulation	pink, warm to touch.No distress upon breathing
	e-NOTES, Secondary survey / systems review	
Kathryn Roberts, 14/10/2010 22:55	e-NOTES, Past Medical History	Hypertension,Hyperthyroidism,Ca of the prostate; GOUT
Kathryn Roberts, 14/10/2010 22:21	e-NOTES, Medications	Antihypertensive Isoptin 240mg SR; Zantac; Zylprim; thyroxine -has had iodine at some stage- pt vague with details of thyroid problem.
Kathryn Roberts, 14/10/2010 22:21	e-NOTES, Allergies	NKDA
Madhu Chandra, 14/10/2010 21:14	e-NOTES, Progress Note 1	2110-Patient came in the cub-obs taken stable except b/p slightly high.Doctors taking hx at the moment
Kathryn Roberts, 14/10/2010 22:21	e-NOTES, Progress Note 2	patient alert and orientated. afebrile no c/o pain at this time. PEARL nil neurological deficit. s/b dr- for CTB scan. Nil nausea or vomiting. nil chest pain. C/o pain on both

Cancel Finish

NA						
NA						
216d 3h	53 Years	Abdominal Pain		Dianna Dekker	Pyelonephritis	
NA						
NA						

Inbox - Microsoft Outlook - \\Remote Attendances (1) whiteboard 52/52 Current Episode Within Attendances Showing All DEPs

Issues post go live

- Locked records
- Time taken to document notes
 - wide variations in keyboard skills
- Printing problems
- Training
 - How to simplify and sustain
- Standards of documentation

Documentation Audit

	October 2010	March 2010	% declined
Obs documented	60%	75%	15%
Obs frequency	49%	60%	11%
Nursing assessment	65%	79%	14%
Ongoing documentation	61%	74%	13%
Risk assessment	19%	46%	27%
Weight	34%	44%	10%
Obs documented	60%	75%	15%

	October 2010	March 2010	% improved
Triage			
Nursing assessment	82%	78%	4%
Vital Signs	61%	36%	27%
Allergies	90%	87%	3%
Weight	80%	58%	22%

Benefits

- Ability to look up previous emergency patient presentations at any Eastern Health campuses
- Clinicians can look at each others notes from anywhere in the department. Particularly useful for shift coordinators and senior consultants
- Investigating issues/complaints
- Legibility of written notes

