



# *Breaking Down the Barriers*

## Peninsula Health: Using e-Discharge Summaries to Enhance Continuity of Care

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- Profile the Health Service

## Electronic Discharge Summaries...

- What we did
- Why did we do it?
- How it works
- Key barriers to engaging GPs
- What we have achieved
- How it fits with Health*Smart*
- Lessons Learnt

# Setting the Context

## Peninsula Health Profile...

- Multi Campus ~820 bed facility, over 10 sites
- Acute, Psychiatry, Rehabilitation Aged & Palliative Care
- 69,000 ED Presentations
- 58,000 Inpatient separations
- Serves a population of 300,000 + tourists!
- 2,583 EFT staff


# *e-Discharge...What we did.*

- Implemented ORION Health's **CONCERTO**<sup>TM</sup> MAP CIS in July 2002
- 5 months to Go Live!
- Current CIS functions: e-Discharge, e-Prescribing, e-Results
- ORION's Soprano Medical Records<sup>TM</sup> used to create EDS
- *Health*LINK selected as connectivity vendor

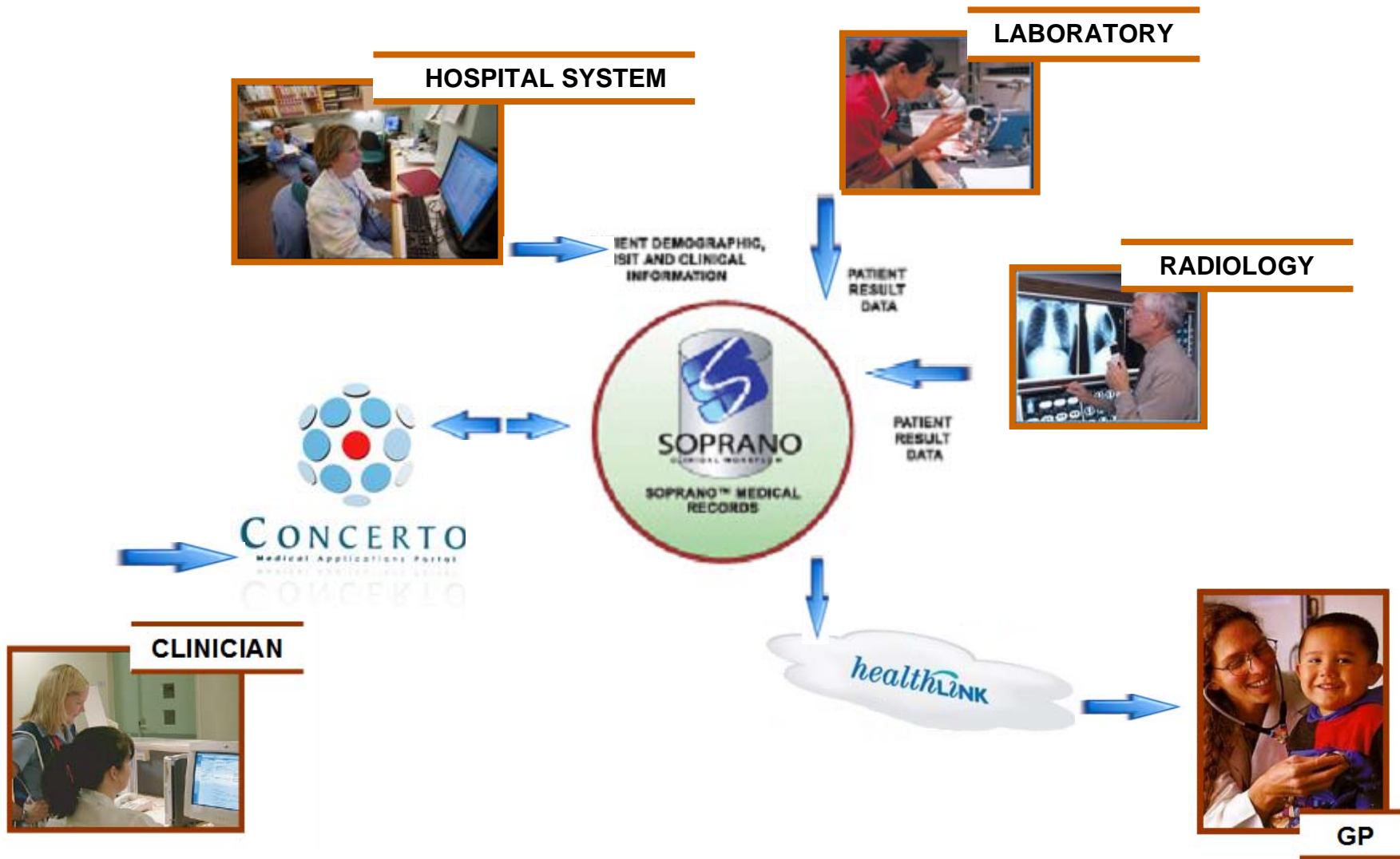


# *e-Discharge... Why did we do it?*


Issues with our “acute” discharge summary from within and outside the Health Service including:

- Recommendation from 1999 ACHS survey;
- Need to meet Department of Human Services Effective Discharge Strategy (2000);
- Clinical Risk issues;
- Survey of referring GPs (2000) 

# e-Discharge...How it works.



# Key barriers to engaging GPs

- Very few...
- Some practices initially did not want to receive D/S electronically – need for auto FAX
- Junior Medical staff did not get it!
- Need to work closely with vendors to ensure accurate exchange of information 

# e-Discharge... What have we achieved?

## e-Discharge KPIs (pre and post implementation)

	Pre EDS †	Current ‡
<b>Timeliness</b>	16% within 3 days	88% within 24hrs
<b>Legibility</b>	27% legible	100% legible
<b>Completeness/Content</b>	40% useful	87% useful
<b>Delivery method</b>	67% FAX	~ 60% EDI

# How it fits with HealthSmart



- Functionally, we are  $>4\frac{1}{2}$  years ahead of HealthSmart Clinicals
- **Efficient** e-Prescribing must be an essential component
- ???..Use of HSD
- How will cost of transmission be covered?
- Where does NEHTA fit into the picture?

- Investment in capital equipment (healthcare IT) at the local level is critical
- Need for culture change (carrot & stick)
- Need for up-to-date listing of D/S recipients
- A number of stakeholders...All need to be consulted

# *e-Discharge...Lessons Learnt*

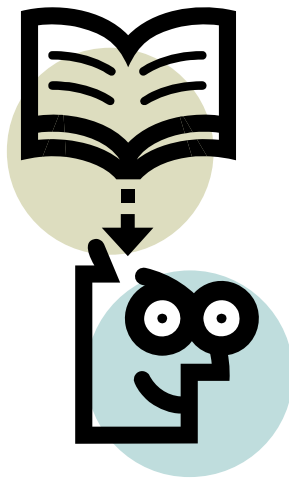
- Process needs to be quick and easy (point & click)
- Cost of transmission (esp. FAX costs)
- Liaise closely with GPs during testing & ongoing
- Support of GP Divisions is pivotal.

Questions?

Who?

What ?

Why?



When?

How ?





David JONES (File: 12926001)
DOB: 19/12/1945 - Age: 59 Yrs 7 Mths -
Record Privacy: All Users/ Brisbane  
Use of Information Consent: Unknown

130 Banner Street, Deasidale
Close

Allergies: Alerts: None Recorded
Selector

Current Consultation

History

Detail (Default)

- All Consultations
  - Progress Notes (Recent)
  - Progress Notes (All)
  - Documents Received
  - Doc Received - Default
  - Results - 151
    - 17/05/2005 discharge summary
    - 17/05/2005 medication

**Monday 08/08/2005 10:02:20 AM - Dr Brian O'Carler**

Report Received

**Result Received**

**Consultant:** DR JURN PAUL FURE  
**Specially:** General Medicine  
**Admission Date:** 10/05/2005  
**Discharge Date:** 17/05/2005  
**Discharge Ward:** 9C  
**Presenting Problem:** Chest pain and shortness of breath  
**Admission Reason:**  
**Principal Diagnosis:** left ventricular failure  
**Complications:** Nil

**PAST MEDICAL HISTORY #      Date      Past Medical History**

1		NTTINI - troponin rise to 15
2	31/08/2004	Chest pain - for medical management
4	16/06/2004	pulmonary oedema
6	06/05/2004	Multifactorial dyspnoea- COPD, anaemia
7	21/02/2004	Increasing angina : Angiogram -> patent grafts.
9		Ischaemic Heart Disease AMI 1980s, CABG 1993 (SVG to OMI of LCA) and AVE to calcific aortic stenosis
11		Elective angioplasty x2 to LCA Sep 2003
12		Revs CABGx2 Nov 2000, LIMA to LAD, radial artery graft to OMI (angiogram showed severe mid LAD, severe ostial LCA in-stent stenosis, proximal severe RCA, patent graft)
13		USA Apr 2003 - Angio showed mild distal L main, severe mid LAD and distally filled from LIMA, total occlusion proximal LCA stent, free anast LCA occlusion, small non-dominant RCA severely diseased, patent grafts (SVG to OMI, LIMA to LAD, radial to distal PLV), severe stenosis at distal marginal/PLV anastomosis
14		Aortic stenosis/regurgitation - St Patrick AVR 1993, Echo Mar 2003 -> normal LV size, mild segmental systolic dysfunction in basal inferior wall, mild to mod mitral regurgitation, AVD functioning normally
15		Asbestosis/pulmonary fibrosis/ex-smoker
16		HTN
17		Hypertension
18		Gastric ulceration from aspirin and NSAIDs
19		Right lower lobe pneumonia Aug 2002

**Allergies:** Aspirin  
**Adverse Drug Reactions:**  
**Clinical Findings:** On admission 10/5/05: Short of breath at rest. T 38.5, SpO2 88% RA, HR 60 reg CVS: JVP elevated 5cm, HS I + II, systolic murmur noted, radiating to neck. No S3A Resp: Percussion note dull at bases. Fine creps lower lobes Abdo: Soft, non tender  
**Operations & Procedures:**  
**Relevant Investigations:** 10/5/05: ECG: HR 79, reg. RBBB, Inverted T wave V1-3. No new changes FBC: Hb 127, Plt 242, WCC 10.4 E & E's: Na 141, K 3.6, Urea 12.5, Creat 140, Alb 39, Bill 19, ALK PHOS 202, ALT 46 Arterial Blood Gases: Ph 7.40, Pco2 37, Po2 52, HICAP 27, Base excess -4 Blood cultures: No growth MBU: No infection  
**Management Progress:** Mr. Jones was admitted to the long stay medical unit under the care of Dr. Prentice. At the time of admission he was short of breath and able to talk in short sentences only. Arterial blood gases revealed a pO2 of 52, base excess of -4, and pH of 7.40. He was placed on oxygen via Hudson mask at 6 L/min. Normal diet was continued. Perhexiline was ceased due to elevated blood levels. A septic screen was performed and was negative. The physiotherapy department performed a 6 minute walk test, and documented de-saturation throughout the test thus qualifying Mr. Jones for home oxygen after discharge. This has been arranged, and will be provided by Silver Chain. A high resolution CT chest was performed. This revealed extensive coronary artery calcification. Moderately extensive pleural plaques, and ground glass opacification, especially in the peri-hilar regions. Pulmonary atelectasis was related to the pulmonary plaques. Throughout the admission Mr. Jones was troubled by frequent attacks of angina. Blood was taken on several occasions to check troponin levels, which remained normal. The attacks subsided after the use of GTN spray. Perhexiline was re-introduced on 16/5/05 at 100mg. Mr. Jones was discharged on 17/5/05. On home oxygen.  
**Special Points of Concern:**  
**Additional Comments:**  
**Follow Up Treatment:** Monitor Warfarin  
**Follow Up Appointment 1:** Gen Med outpatients in 8/02  
**Follow Up Appointment 2:**

[Refresh] [H] [Print] [Test] c:\results\8942
C:\consno10353 condno

# Medtech 32

**View Provider InBox** [Minimize] [Maximize] [Close]

Main | Document | Audit

External Details  
Name: **Jones, David (19 Dec 1945)** simonchd # RPH TEDS 22000006

Internal Details  
Patient: **PATIENT NOT MATCHED** [Find...] [Up Arrow] Attention: System Administrator (ADM)  
Subject: Discharge Summary Date: 17 May 2005 Provider: System Administrator (ADM)  
Comment: [Dropdown] Folder: Referrals (REF)

**DISCHARGE SUMMARY**

**Consultant:** DR JOHN PAUL POPE  
**Specialty:** General Medicine  
**Admission Date:** 10/05/2005  
**Discharge Date:** 17/05/2005  
**Discharge Ward:** 9C

**Presenting Problem:** |  
Chest pain and shortness of breath

**Admission Reason:**

**Principal Diagnosis:**  
Left ventricular failure

**Complications:**  
Nil

**PAST MEDICAL HISTORY**

#	Date	Past Medical History
1		NSTEMI - troponin rise to 15

Inactive:  [Screening...] [File] [Next] [Previous] [Print] [OK] [Cancel] [Help]

Number 4 of 6 results

Result  
Estelle JONES  
Bob's Retirement V  
16/04/1930

00/00/00

Put On Hold Histology Item/s: [ ]

Delete Close

Match Last Link Unlink Redirect INR

simonchd Ordered by: Last? N  
DISCHARGE SUMMARY Copy to: Ref: RPH TEDS 22000002  
Requested: 00/00/00 00:00 Reason for test: Run: 0  
Collected: 26/05/2005

Consultant: DR TOM JONES  
Specialty: Geriatric Medicine  
Admission Date: 22/05/2005  
Discharge Date: 26/05/2005  
Discharge Ward: TR02

Presenting Problem:  
Transfer from Seams with NSTEMI

Admission Reason:  
Investigation and management of above

Principal Diagnosis:  
NSTEMI

Complications:  
none

PAST MEDICAL HISTORY

Date	Past Medical History
07/07/2004	RPT wound haematoma.
25/06/2004	syncope secondary to episodic asystole
	ischaemic heart disease
	hypertension
	hiatus hernia
	osteoarthritis
	peripheral vascular disease
	recurrent UTI
	diverticulosis
	vertebrobasilar insufficiency '00
	hysterectomy
	dupuytren's contracture release
	osteoporosis
	gastro-oesophageal reflux disease
	hypothyroidism
	R retinal detachment

Allergies:  
nitrofurantoin

Adverse Drug Reactions:  
none

Clinical Findings:  
No distress, HR 60, BP 120/70, satz 95% RR,  
AITS 8/10

Operations & Procedures:  
Given clexane, aspirin and clopidogrel. RPT ECG and trop. Angiography done with view to stent but not necessary.

Relevant Investigations:  
On Admission  
CXR 190  
FBC 131/12.1/373  
trop 0.67, CK 170  
UE: 132/4.3/19/9.3/123

ECG showed new TMI V2-6, Q waves V3-6  
Ca 2.65 phos 1.2

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NUM CAPS

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# GP Survey Results

The issues raised by the referring doctors were:...

- **Timeliness** (*only 16% received within 3 days*)
- **Legibility** (*27% were legible*)
- **Completeness/Content** (*40% were useful*)
- **Delivery method** (*67% preferred fax*)

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- Frankston ED
- Rosebud ED
- All Patients
- Favourites
- Common
- Prescribing Information

ph: 03 9784 7777, PO Box 82, Frankston, VIC 3199

Frankston Hospital  
**Discharge Summary**  
**CONTRACTED SERVICE FRANKSTON**  
 (Stroke / TIA)

**FRED DUMMY**  
 0000000 [DoB: 01/01/1920] Male  
 120 CHURCH RD, MT. ELIZA, 3930  
 Ph: 9787 9999

**To:** DR GEORGE M STATHAKOPOULOS  
 265 HUMPHRIES ROAD, HUMPHRIES RD CLINIC, FRANKSTON  
 3199  
 Ph: 9787 4266  
**Copy:** DR P BRADFORD

Referring Doctor: DR GEORGE M STATHAKOPOULOS

**Admitted:** 08/01/2007 11:25      **Discharged On:** 08/06/2007 14:15  
**Ward/Location:** ED HTH

**Principal Diagnoses (list all)**

**STROKE (Infarction)**

**Location**  
 Left Sided  
 Right Sided

**Actiology**  
 Occlusion  
 Stenosis

**STROKE (Haemorrhage)**  
 Hypertensive  
 Amyloid  
 Anticoagulant-assoc

**TIA**  
 Carotid  
 Vertebrobasilar

**Small Vessel**

**Large Vessel**

**Additional Diagnoses / Other Active Problems**

**Risk Factors**

None

Diabetes       Hypertension       High Cholesterol       Smoking       AF  
 Previous Stroke       Cardiac Disease       Family History       OSA

**Other Secondary Diagnoses**

**Discharge Destination/Information\***

**Details**

Discharged Home  
 Discharge to Hospital In The Home Unit  
 Patient discharged themselves at own risk  
 Discharged to Special Accom / Hostel  
 Enter name of facility  
 Discharged to Nursing Home  
 Enter name of facility

**Transferred to other PENINSULA HEALTH Facility..... (NB. GP, please phone 9788 1200 if you would like to have input into your patient's care)**

Aged Care / Rehab Unit  
 Palliative Care Unit

Enable Auto-Complete      **Save**      **Finish**      **Exit**

The layout and sections in a medical record are determined by the template on which it is based. New medical records are created from a default template determined by the patient's episode type and the speciality of the consultant responsible for their care. If alternative templates are available, they will be listed below and may be selected by clicking its title. It is not possible to select an alternative template for a medical record that has previously been saved or finalized.  
 10 templates are defined for the current speciality. Select a Template for the current Document Type:

- Birthing Service
- Ischaemic Heart Disease / LVF / AF
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- Acute
- Pneumonia
- Rosebud Acute
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- General Surgery

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