

# The Connected Clinician

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*Connecting Clinicians for  
Better Healthcare Outcomes*  
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## Introduction

- **Connectivity within Healthcare is usually in the context of **connected infrastructure****
- **Need to shift paradigm to **connected individuals****
- **Study at Royal Prince Alfred Hospital in Sydney undertaken to track “a day in the life of” six clinicians to understand the bottlenecks in their work practices with respect to connectivity**
- **Followed the six clinicians around during an entire day, recording and filming their day**
- **Culminated in workshop to discuss issues**

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## The Clinician

- Often ignored in technology projects
- Projects in health often fail as they do not take into account the clinician
- Those that do usually succeed
  - Kalgoorlie – 100% take up by stakeholders
- Remember
  - Need to demonstrate **value** to clinician and **better health outcomes**
  - Clinicians **not interested** in technology
  - Clinicians are **sceptical**
  - BUT Clinicians will **evangelise**



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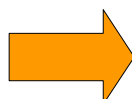
## Clinical Process



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## The Connected Clinician Project



IP



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## Royal Prince Alfred - Context

- **Incredibly dedicated staff**
  - Collegiate approach
  - Nursing staff: very high quality, actively involved in medical rounds
  - Sharing of knowledge between staff specialists/teaching of junior staff
  - Commitment to ongoing learning – journal reviews/inservices
  - Quick response from Medical records
  - Administrative staff excellent – e.g.. handling high volume of patients through the Perioperative unit
- **ICU state of the art**
  - CareVue – at every bedside
  - ICU staff can access data from home
- **Wide availability of computers**
  - Ability to order X-Rays online and readily access them when available
  - PACS with high resolution screens
  - Power Chart – summaries of patients, ability to order and access test results
  - Access to journals on line
  - Intranet



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## Findings

### DAY IN THE LIFE OF.....



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## ED Staff Specialist

No single view of who is in dept: use multiple mediums

Memory to retain patient details

Misplaced medical notes

One mobile that can call STD multiple users

Bed Management – waiting to go to ward- taking up emergency bed

Insufficient computer terminals

Considerable difficulty communicating with people outside the hospital. accessing No, tests, information



Constantly logging on/off

- MOBILITY
- CONNECTIVITY
- COMMUNICATION

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# VMO

Unit dependent IT system (Endoscribe)

Inability to access other hospital test results

Film X-Rays pose a problem

Large amounts of paper work

Manual scheduling of appointments/day list

Locating extension & pager numbers

Uncertain of delivery rate of reports to GPs

Waiting for return calls

Disconnect between Pharmacy & Drug committee

Number of calls to book Biopsy



MOBILITY



CONNECTIVITY



COMMUNICATION



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## Moving Forwards



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## Solutions

- Provide **integrated information environment** that will allow **access to the right information, at the right place, at the right time**, and **ensure secure, reliable access** to information from any location
- Develop **smart messaging solutions** to allow:
  - Directory services
  - Smart routing
  - Location-based services
- Provide access to radiology results **from anywhere** – and indeed from outside of the hospital
- Develop **mobility solution for clinicians** with integrated device to replace pager, phone and PDA that delivers results, alerts and significantly reduces wasted time

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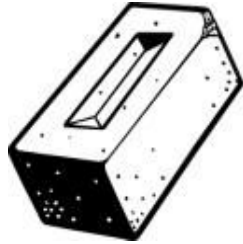
WHAT DOES INDUSTRY  
NEED TO DEVELOP FOR  
THE CLINICIANS?



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## According to the Clinicians



### Functionality Required

- Make & receive phone calls and SMS
- Wireless earpiece and automated PBX
- Receive & send emails
- Review images
- Receive messages by individual & /or role
- Ordering of tests
- Alert when tests results back
- Presence/location/status info about colleagues
- Access to Hospital internal directory
- Access to all Internal systems
- Allow completion of discharge summaries
- Access to all lists e.g. real time theatre list
- Allow creation of frequently used nos & extensions list
- Portable & wireless and can view any information at normal computer terminals
- Access to patient medical history

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