



# GOING PAPERLESS

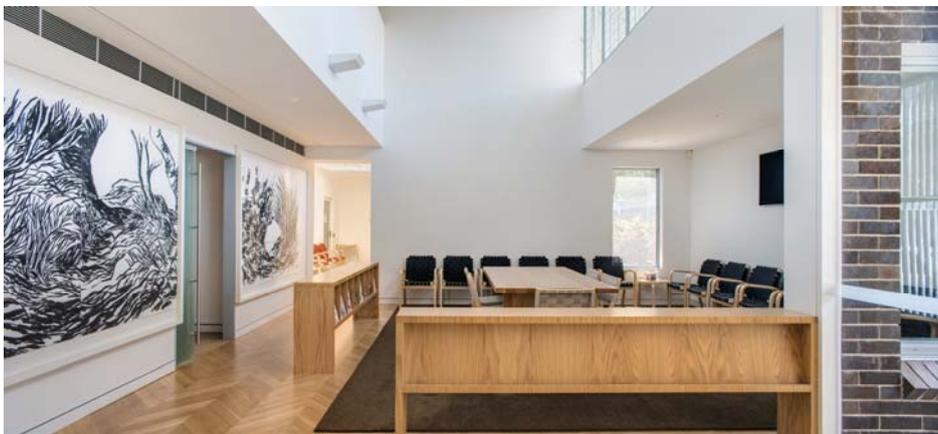
Dr Richard Smith RANZCO 2016

Financial interest in systems discussed in this presentation



**FOCUS**  
EYE CENTRE

FOCUS EYE CENTRE Kingsford and Double Bay Sydney  
Group practice with day theatre and laser suite



## 2011 before our paperless evolution



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## PRACTICE MANAGEMENT SYSTEM

- Patient data base
- Appointments
- Patient accounts
- Day hospital accounts

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## IMPLEMENTATION OF ELECTRONIC MEDICAL RECORDS 2012

- We had used the Houston VIP Practice Management System for appointments and billing since 2010. This system supports electronic medical records.
- We extended our computer network to include terminals in every clinical room.
- Imaging instruments were interfaced to the system;  
Humphrey Visual Field Analyser, IOLmaster, Corneal topographer, OCT, Retinal Camera.
- Old paper records were scanned in colour by an external provider and made accessible on the system as PDF files.
- Pre-implementation testing was done by creating some EMRs in parallel with manual records
- We set a date in 2011 for commencement of EMRs and took the plunge.

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## MOVE TO THE CLOUD 2013

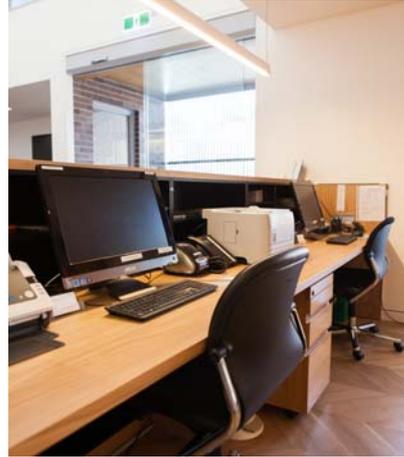
- We upgraded and relocated our server to a data centre and procured fibre-optic links to our two locations
- Now off site back up and maintenance well covered
- Response at computer terminals much better
- Significant benefit from internet telephony, reduced power bills

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## BENEFITS OF ELECTRONIC RECORDS

No record cabinets in reception and elsewhere, major space saving  
No record handling;  
drawing files for clinics  
finding misplaced files  
bundles for dictation  
culling, archiving, retrieval  
Hours and hours of drudgery gone  
Major cost benefit in time and space

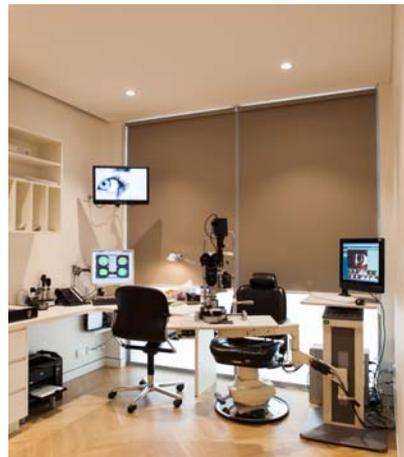


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## BENEFITS OF ELECTRONIC RECORDS

Clean contemporary consulting rooms  
Diagnostic instruments on line  
Savings in printers, cartridges, toners,  
paper  
Access to records from anywhere by  
laptop, tablet, phone



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# Barriers to use of EMRs

- Uncertainty about speed and capacity of our network over two locations with numerous terminals. This fear was well founded. You must have adequate computer resources and be prepared to upgrade further.
- Love of hand drawn diagrams in records. I quickly moved to cryptic notes and increased use of online imaging. Inclusion of drawings possible but has not proved important in our centre.
- Security and privacy of data.
- Colleagues have expressed concern that working at a terminal will detract from relating to the patient. I find that it enhances the contact and enjoy explaining images at the screen e.g. long term glaucoma patients, M.D. patients.
- Doctor resistance was not an issue for us, but can be for others.

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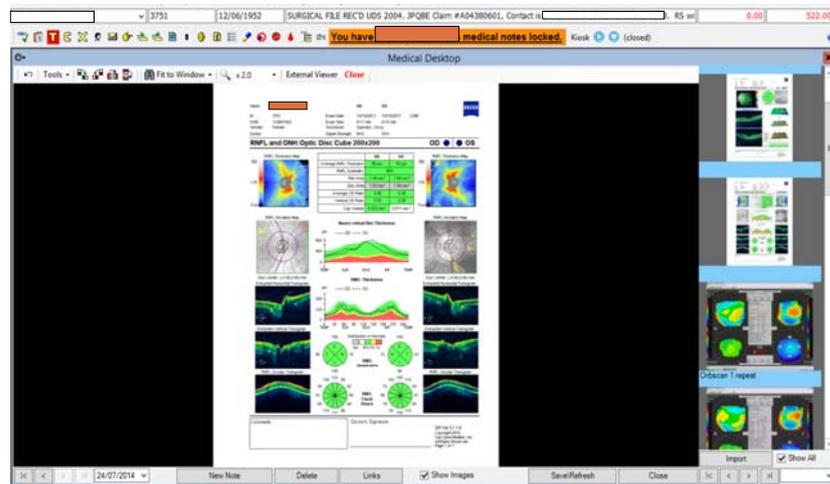


# DRAMATIC IMPROVEMENT IN CONSULTING ROUTINE

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## DISPLAY AND DISCUSS WITH PATIENT



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## AN IMAGE IN KEEPING WITH THE DIGITAL AGE



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## MANAGEMENT AND ACCOUNTING

- Practice management system captures all payments and feeds these automatically to XERO via our own software bridge
- XERO accounting system also captures all banking transactions in real time
- Bank reconciliation is greatly simplified
- Product ordering is done online using our own templates
- INVITBOX software receives and digitizes supplier invoices and feeds to XERO
- Payroll is run via XERO system
- Staff rostering done via DEPUTY software
- Doctor payments reckoned with our own software

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## QUALITY MANAGEMENT

- As a day hospital we must comply with all NSQHC standards and with ISO or ACHS accreditation standards (in due course all practices must comply with NSQHC standards via accreditation)
- We now use the LOGIQC cloud-based system for this activity
- LOGIQC provides document management, task distribution to all staff, feedback and incident reporting, maintenance scheduling, meeting management etc.
- Accreditation for compliance with NSQHC standards will become a requirement for all practices in future. RANZCO is currently developing a voluntary accreditation system.

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## Surprising reduction in administrative space requirement Aesthetic benefit of clean uncluttered spaces



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## PROBLEMS and DIFFICULTIES

- Outgrowing the server
  - Within 2 years our in-house server was inadequate
  - We bought a higher capacity unit, located in a data bureau and procured fibre-optic links to both locations
- Offsite location better for backup and maintenance
- Sluggish response at terminals
  - A significant problem as our data base and usage grows; demands upgrade of resources, increased data transmission costs
- System outages
  - This happens occasionally for various reasons. I dreaded this possibility at first but reality is not so bad. Must have good I.T. provider.

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- Remains a work in progress
- Have not (yet) implemented electronic day surgery record
- Have not adopted voice activated recording
- Remain ready to explore and adopt better systems
- Would never go back