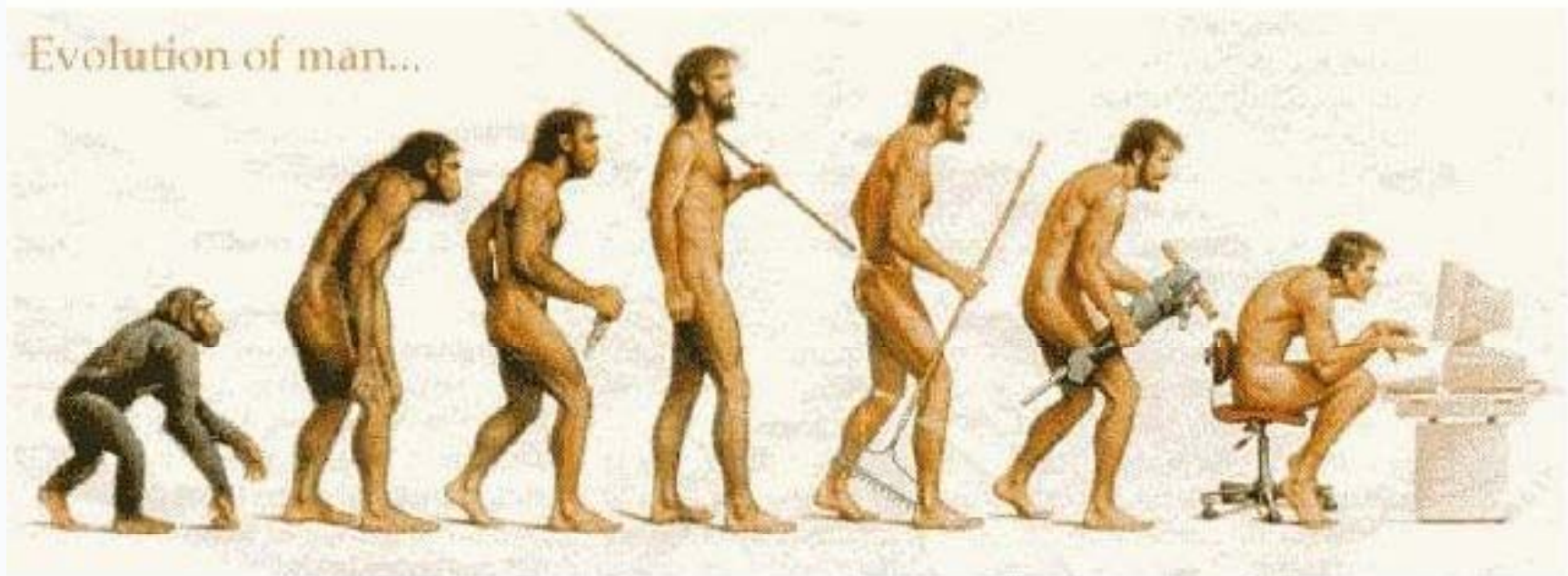


Informatics in Family Medicine

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Evolution of IM & ICT ...



- Source: <http://www.geocities.com/ariniem/pics/evolution.jpg>

Quality Care

LESSON 1:

Health care professionals have shown a willingness to embrace new technology if we can see that it makes a difference – either in terms of efficiency, or quality care, or improved outcomes.

Has health IM & ICT become an integral part of appropriate health care delivery?

AMA Medical Taskforce on Informatics

“IT is the lifeblood of the practice operations of pathologists”

“Killer applications”

Prescribing support for GPs

Dispensing support for pharmacists

Voice recognition and digitisation of images
by radiologists

Telehealth adoption by rural clinicians



- ***Health Online* - A Health Information Action Plan for Australia**
- Each nation needs a national strategy or a plan for implementation of ehealth

<http://www.health.gov.au/healthonline>

Computerisation of Australian General Practice

- 90% of Australia's GPs use a clinical software package. Of these GPs:
 - 98% e-prescribing
 - 88% check drug-drug interactions
 - 85% order pathology tests
 - 78% patient recall
 - 64% record progress notes
 - <20% access computerised information during consultations
- **Ref: DK McInnes, DC Saltman, MR Kidd. GPs' use of computers for prescribing and electronic health records. MJA 2006;185:88-91**

- Australian general practice has achieved near universal clinical computerisation.
- Electronic prescribing alone has probably improved efficiency and quality of care, and reduced medication errors.
- Increasing the use of other functions, such as accessing online decision support and maintaining registries of patients, is likely to lead to further health gains, especially in managing chronic conditions.

Support for clinical decision making

- I want to provide the best quality care I can
- I need to have access to the latest evidence to support clinical care
- I need to have access to all important information so as to provide the best advice and care to my patients
- I need to be confident in my safe use of medicines, treatments and investigations

Questions to ask about clinical decision support tools

- Who created the information?
- How reliable is the information?
- Can I verify the quality and reliability?
- What is my legal responsibility if my patient is harmed through some “inadequacy” of the advice provided by a software product?
 - What is the provider’s responsibility?
 - What happens if I disregard warnings?

What is the quality of decision support advice?

- Quality of the advice being provided through decision support tools
- Australia has a National Privacy Commissioner
- Australia also needs a National Knowledge Commissioner

Rule of 5s for computer applications

- Canadian Centre for Health Evidence
 - 5 seconds or less to come up
 - 5 clicks or less to get the information required
 - 5 minutes or less to learn to use application
 - User should need to use the application at least 5 times per week
- In Australia it is the Rule of 2s

PATIENT EXPECTATIONS

LESSON 2:

Our patients' use of health IM & ICT has evolved – and so have their expectations. Health care providers need to keep up.

“This has become a major professional challenge since the Internet flattened hierarchies and deflated professional mystique”

– Wyatt & Sullivan

We are yet to see computers able to replace the cognitive and communication skills of a competent medical practitioner

“Any doctor who can be replaced by a computer, should be.”

- Michael Millenson

Keep an eye on the changes in consumer use and acceptance of technology

- Use of portable technology
- Use of web for personal information
- Facebook
- Desire for cyberconsultations
- Concerns about privacy and confidentiality
- Who owns information about me?
- Backlash against shared electronic health records
- Do nothing to put trust at risk

Health Information on the Internet

“On the Internet, no-one need know you’re a dog” Nicholas Negroponte. *On Being Digital*, 1995.

Cyberquackery & Cyberchondria

People using the Internet as the first step to determine possible causes for their symptoms and seeking cures for as yet undiagnosed health problems

Our patients need to be wary of all information gained through the internet

- and so do we

New teaching unit at one UK
medical school

“Unbreaking bad news”

Teaching medical students skills to assist
patients to understand that they do not
have the conditions they have self-
diagnosed using the Internet

HEALTH *Insite*

- Health *Insite* is an Internet gateway designed to provide consumers with easy access to reliable, high quality and relevant information about health and wellbeing so that they can make more informed healthcare decisions.

<http://www.healthinsite.gov.au>

Cyberconsultations

A challenge to our traditional method of clinical care delivery

Many people would like to communicate with their own doctor/s online

Email for pathology and radiology test results

Email follow up questions after a consultation

Email requests for repeat prescriptions and referrals

COMMUNICATION

“Our patients are most at risk when they cross the boundaries in our health care system”

LESSON 3:

Health IM & ICT has shown us that it is possible to overcome the information chasms in our health care system

At the same time I need technology that doesn't get in the way of communication with my patients



- Our national Electronic Health Record initiative
- What is driving the successes of *HealthConnect*?
- Projects have a focus on assisting communication between Health Care Workers and the sharing of personal health information to support quality clinical care

VeriChip™

“there when you need it”

- October 2004 - the world's first subdermal personal verification technology
- A microchip containing medical information that can be implanted into the arm has been approved for use in humans in USA
- Able to be scanned by health care workers to gain key health information
- Sign up now and be one of the first 100,000 to Get Chipped™
- <http://www.adsx.com/prodservpart/verichippreregistration.html>

ENSURING PRIVACY AND CONFIDENTIALITY

LESSON 4:

In Australia, privacy and confidentiality concerns must be addressed up front and in consultation with all stakeholders, or projects will fail.

“Whatever I see or hear, professionally or privately, which ought not to be divulged, I will keep secret and tell no one.”

I have a duty to ensure privacy and confidentiality as part of my use of this new technology

Balance with community expectations

There is a strong community belief that critical personal health information is already able to be shared between health care providers

Consent arrangements

Opt IN versus Opt OUT

Suppression of information

EDUCATION AND TRAINING

LESSON 5:

Education and training of our clinical workforce is essential, and so is appropriate IT support

I require training and education to assist me to make the most of this new technology

I am not a technician and I refuse to become one

EVALUATION

LESSON SIX:

We need to learn from our mistakes as our use of this technology evolves – this means solid proactive programs of evaluation

If I am going to put effort into involving myself and my patients in these initiatives then I need to be sure that they are going to be properly evaluated

“The majority of major health informatics projects funded in the past in Australia have failed”

We need to learn the lessons from the past and not repeat mistakes

We can also learn from the expensive experiments underway in other nation's healthcare systems

Rules for successful clinical IM/IT initiatives - 9 'c's and 1 'e'

Confidentiality

Consumer involvement

Clinician involvement, training & support

Clinical focus

Compatible systems

Common record structure

Communication standards

Change management

Cash

EVALUATION

The only thing we can say for certain about the future for certain is that it is certain to surprise us.

I hope all your surprises are pleasant ones.