Healthcare is 80% information management
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What percentage of healthcare IT is medically informed?
How to introduce IT into healthcare: two choices

- Mechanize clinicians & patients
- Humanize information technology
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Mechanize clinicians & patients
Humanizing clinician IT

450 BC
Humanizing clinician IT

*The StrokePad*

A fully comprehensive tablet-based electronic patient record for stroke in-patients

http://6pmsolutions.com/products/healthcare/stroke/
The StrokePad
Pen & paper baseline functionality

You either have analogue functionality or you are dysfunctional
Clinicians communicate in prose, not in tick boxes.

"This 79 year old right handed man presented from A&E in another trust with sudden onset of >60 minutes left positive visual disturbance, right severe facial weakness, left positive facial sensory disturbance, bilateral leg weakness, right hand ataxia, left positive leg sensory disturbance, partial loss of speech, reduced pace length, and alteration of consciousness."
The StrokePad
Automated discharge summary generation

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The average stroke unit dedicates ~1 doctor/day to discharge summary writing
The StrokePad
The back end

Automated audit, performance reporting, extraction of time data, clinical outcome prediction from machine learning-assisted analysis, etc

Only possible because the front end is right
Humanizing patient IT

*HeadCircle*

A mobile-based, socialized, life recorder for patients with chronic migraine
Migraine is richly multifactorial, in ways a patient need not be aware of, let alone report in a 10 minute consultation.
HeadCircle
Implicit lifestyle data collection

Explicit data

Implicit data
Mobility and exercise from motion sensors, social range and frequency of text and voice communication, sleep-wake cycle, anxiety from automatic voice analysis, geographic location via GPS, time spent indoors vs outdoors, weather, etc.

If you spend your life explicitly recording it you are not living it
We may be ignorant of many multifactorial patterns predicting improvement

*HeadCircle also teaches the clinician*
HeadCircle
Individuated peer support

HeadCircle automatically identifies others in the network with your migraine pattern, giving you tailored peer support.
HeadCircle
Gamified interactivity

HeadCircle will exploit game-derived techniques for motivating engagement
This is the choice...

- Mechanize clinicians & patients
- Humanize information technology

...it is time we chose better.