Increase nursing time spent with patients: the holy grail.

A mixed method research evaluation in a live hospital environment of a digital bedside nursing chart

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This presentation

• Background
  – Efficiency opportunity
  – Hospital data
  – Care interactions

• Mixed Methods Study
  – Approach
  – Findings

• Discussion and Recommendations
  – Clinical governance approaches
  – Nursing minimum datasets
Efficiency opportunity

- 48% bed days (complex older patients)  
  AIHW 1997, 2013
- 27% hospital costs (nursing)  
  Watts 2000, AIHW 2014
- 40% health costs (public hospitals)  
  AIHW 2014

Need to:
- Maximise use of secondary data for analysis of nursing / care and decision making
- Untapped area for efficiency investigation

(no matter how great our genomics R&D, people will still get sick and die, probably in hospital, with nurses)
Untapped area for efficiency investigation. For example:

- **We know**
  - Up to 55 different comorbidities for every patient
  - Their length of stay
  - Any procedures during admission

- **We don’t know**
  - Whether the patient is self caring and independent
  - Or bed bound and nurse dependent
  - What kinds of staff did what, or for how long
E-health

We’ve used
- Implementation science
- Translational research
- Design science research
- Theoretical domains framework
- IT language/implementation review approaches
- Market based analysis.... Etc

• We know
  - Clinical decision support has had mixed uptake
  - Has not been as effective as hoped/sold
Older patient complexity:

- 49-70% have 5+ comorbidities - Australian Bureau of Statistics 2010
- 10.4% have dementia - Bail 2015
- 30% have cognitive impairment - Hickey 2007
- 90% need assistance for 1+ ADL - Barnes 2012
- Functional variability ‘fit or sick old’ - Parke 2010
Hospital complexity:

- People 65+ = 12% population, 30% admissions and 48% of bed days AIHW 2015
- 49% of 65-74, 70% of 85+ have 5+ comorbid’s ABS2010
- Decreased acute beds per population AIHW 2009, Sammut 2009
- LOS decreased, increased churn AIHW 2013, Duffield 2009
- Simple surgery goes to private or day Sammut 2009
- Lack of senior staff 75% of the week Garling 2008
- Increased casualisation Alameddine 2012, Greegan 2003
- Dilution of experienced nurses Garling 2008
Understanding nursing work

- Complete 72.3 tasks per hour
- Mean task length is 55 seconds
- Duration of 40% of nurses' work is less than 10 secs
- Consider a different patient every 6 minutes
- Multitask 34% of the time
- Interrupted every 6 minutes (colleagues, patients)
- Interrupted every 60 minutes (work system failures eg medications, orders, supplies)
- 55–98% leave at least one task undone

Bedside nurses

Findings support the existence of a causal relationship between RN staffing & mortality.

Post-operative mortality, missed care and nurse staffing in... Variation in post-operative mortality rates has been associated with differences in registered nurse staffing levels. When nurse staffing levels are lower there is also a higher incidence of nec... journalofnursingstudies.com

Deskilling Hospital Nurse Workforce is Associated With Poor Outcomes

- Each 10% decrease in proportion of nurses is associated with 12% increased risk of death
- Adding one assistant per 25 patients instead of adding a nurse is associated with a 21% increased odds of dying
- More assistants do not improve nurses' job satisfaction or reduce nurse burnout
- Deskilling occurs by adding assistants without adding more nurses or reducing nurses

covers 30 Countries using a common protocol #ICN2017
# Missed care in UK hospitals

## Table 4 Missed care by levels of registered nurse staffing

<table>
<thead>
<tr>
<th>Overall number of missed care aspects</th>
<th>Patients per registered nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>up to 6.13</td>
</tr>
<tr>
<td></td>
<td>Mean 3.06 No.</td>
</tr>
<tr>
<td></td>
<td>6.14–7.33</td>
</tr>
<tr>
<td></td>
<td>7.40–9.25</td>
</tr>
<tr>
<td></td>
<td>9.33–11.50</td>
</tr>
<tr>
<td></td>
<td>11.67 and over</td>
</tr>
<tr>
<td></td>
<td>All</td>
</tr>
<tr>
<td>One or more aspects of missed care</td>
<td>472 78</td>
</tr>
<tr>
<td>Comfort/talk with patients</td>
<td>340 56</td>
</tr>
<tr>
<td>Educating patients and family</td>
<td>268 44</td>
</tr>
<tr>
<td>Develop or update nursing care plans/care pathways</td>
<td>225 37</td>
</tr>
<tr>
<td>Adequate patient surveillance</td>
<td>135 22</td>
</tr>
<tr>
<td>Adequately document nursing care</td>
<td>134 22</td>
</tr>
<tr>
<td>Oral hygiene</td>
<td>130 22</td>
</tr>
<tr>
<td>Frequent changing of patient position</td>
<td>136 23</td>
</tr>
<tr>
<td>Planning care</td>
<td>117 19</td>
</tr>
<tr>
<td>Administer medications on time</td>
<td>101 17</td>
</tr>
<tr>
<td>Skin care</td>
<td>78 13</td>
</tr>
<tr>
<td>Prepare patients and families for discharge</td>
<td>108 18</td>
</tr>
<tr>
<td>Treatments and procedures</td>
<td>46 8</td>
</tr>
<tr>
<td>Pain management</td>
<td>36 6</td>
</tr>
</tbody>
</table>

**Note:** The table above provides data on the number of missed care aspects per registered nurse for different ranges of patients per nurse.
Understanding the promise of EHR

- Consumer and carer directed, shared access
- Continuity of care, through transitions
- Communication: multidisciplinary and (?) transboundary

IF it collects as by product of care:
- Contemporary documentation of care and decisions
- Timely access to accurate information
- Data for analysis of trends, preferences, outcomes
- Financial reporting and accuracy?
- Stores and consumables?

- > Releasing time to care
Canberra mixed methods study

• Located at patient bedside and central nurses stations
• Replace current paper nursing documents
• Support nursing care processes
  – Plan, review and document patient care
  – Communicate changes in delivery
  – Flag unfinished tasks
  – Easily accessible, real time, legible
  – Available to whole multidisciplinary team
Implementation design

Overall Product Development
- 7 years of development of code generator with clinical and academic nurses
- 3 step clinical trials with Deakin Uni
- ‘point of care’ delivery and documentation and decision assist

Canberra Health development
- Multilevel stakeholder engagement
- Development with bedside clinicians
- Comprehensive and ongoing training, Champions, train the trainer
- 24 hour support, onsite
Research design

- Mixed methods evaluation
- Quasi-experimental pre-test/post-test design
- Ethnographic conceptual framework
- 3 month ‘trial of concept’ design

Quantitative data
- Nurse Pedometer
- Time and motion observation
- Questionnaires
  - Hospital data

Qualitative data
- Focus groups
- Hallway interviews
Implementation

• 26-bed ward
• Bedside unit at all beds
• Multidirectional touch screen
• 11 of 55 commonly used nursing documentation tools trialled, ie
  – Observation/vital signs
  – Nursing care plans
  – Admission assessment
  – Fluid balance chart
• Training for nursing, medical and allied health
Table 1. Summary of key data demographics

<table>
<thead>
<tr>
<th>Participants / Data</th>
<th>PRE implementation (Sept 2016)</th>
<th>POST implementation (April 2017)*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td>29</td>
<td>15</td>
</tr>
<tr>
<td>Nurses</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>Other staff</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>48</td>
</tr>
<tr>
<td><strong>Pedometers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse shifts</td>
<td>185</td>
<td>37</td>
</tr>
<tr>
<td><strong>Surveys</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients (MISSCARE)^</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Nurses (BERNCA)^</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Nurses (User satisfaction)</td>
<td>N/A</td>
<td>14</td>
</tr>
<tr>
<td><strong>Focus groups</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>N/A</td>
<td>2*</td>
</tr>
<tr>
<td><strong>Hallway interviews</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td>N/A</td>
<td>20</td>
</tr>
<tr>
<td>Staff</td>
<td>N/A</td>
<td>48</td>
</tr>
<tr>
<td><strong>Time and Motion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses – all collected</td>
<td>91</td>
<td>58</td>
</tr>
<tr>
<td>With nights (excluded)</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>With long breaks (excluded)</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Mornings</td>
<td>33</td>
<td>18</td>
</tr>
<tr>
<td>Evening</td>
<td>35</td>
<td>32</td>
</tr>
<tr>
<td>Total used</td>
<td>68</td>
<td>50</td>
</tr>
</tbody>
</table>

*All data from Post Deployment collected in April 2017, except the first focus group which was conducted in December 2016 following the false start in November

^MISSCARE = patient survey of missed care. BERNCA = nurse survey of missed care.

Time and Motion Sample. Data collection which resulted in more than 50% of the session being ‘nurse on break’ were excluded from analysis. Night duty was excluded from analysis as the pilot was suspended in the POST deployment phase prior to the night duty observations occurring.
Findings: 5 areas of influence

- Hardware
- Software
- Environment
- Evaluation
- Implementation
## Findings

<table>
<thead>
<tr>
<th>Location of nurse activity</th>
<th>Pre implementation mean</th>
<th>Post implementation mean</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bedside</td>
<td>34%</td>
<td>36%</td>
<td>+ 2%</td>
</tr>
<tr>
<td>Nurse station</td>
<td>16%</td>
<td>21%</td>
<td>+ 5%</td>
</tr>
<tr>
<td>Bathroom</td>
<td>4%</td>
<td>1%</td>
<td>+3%</td>
</tr>
<tr>
<td>Hallway</td>
<td>31%</td>
<td>28%</td>
<td>-3%</td>
</tr>
<tr>
<td>Special rooms</td>
<td>11%</td>
<td>10%</td>
<td>-1%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
<td>4%</td>
<td>-1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nursing activity (as a proportion of all nursing time)</th>
<th>Pre implementation mean</th>
<th>Post implementation mean</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct patient care</td>
<td>34%</td>
<td>33%</td>
<td>-1%</td>
</tr>
<tr>
<td>Indirect patient care</td>
<td>49%</td>
<td>48%</td>
<td>-1%</td>
</tr>
<tr>
<td>Hunting and gathering</td>
<td>11%</td>
<td>12%</td>
<td>+1%</td>
</tr>
<tr>
<td>System care</td>
<td>7%</td>
<td>8%</td>
<td>+1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cognitive restacking requirements</th>
<th>Pre implementation mean</th>
<th>Post implementation mean</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multitasking minutes</td>
<td>55%</td>
<td>68%</td>
<td>+13%</td>
</tr>
<tr>
<td>Interruption by colleagues (as a proportion of ‘hunting and gathering’).</td>
<td>34%</td>
<td>38%</td>
<td>+3%</td>
</tr>
</tbody>
</table>

Not statistically significant
<table>
<thead>
<tr>
<th>Previous literature</th>
<th>Current data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses multitask 34% of the time (Kalisch and Aebersold, 2010)</td>
<td>Nurses multitask 54% of the time</td>
</tr>
<tr>
<td>Nurses consider a different patient every 6 minutes (Ebright et al., 2003)</td>
<td>Nurses consider a different patient every 3.5 minutes</td>
</tr>
<tr>
<td>Nurses are interrupted every 6 minutes (colleagues, patients) (Kalisch and Aebersold, 2010)</td>
<td>Nurses are interrupted 5% of their time by patients and colleagues</td>
</tr>
<tr>
<td>Interrupted every 60 minutes (work system failures eg medications, orders, supplies) (Tucker and Spear, 2006)</td>
<td>Nurses are interrupted by system failures 1.4% of their time (averages at once an hour)</td>
</tr>
</tbody>
</table>
Why it’s important –

Patient harm caused by the disconnect between clinical work and poorly designed clinical systems is real. Tell-tale signs of this occur when clinicians look for workarounds, use cut and paste features; or opt to bypass the system entirely thus creating parallel workflows. Current generation clinical IT systems are designed with the implicit assumption that clinicians are carrying out a single task and that their attention is devoted entirely to that task. Reality-check: clinicians multi-task, are constantly interrupted while in the middle of writing up a clinical note or medication order. If only computers could anticipate the highly distracted environment in which clinicians work and could support them in recovering from where they left off. Training, training and more training is not the solution. Rather than design IT systems to match complex ways of working, why not design them to decrease complexity and cognitive overload.
Holy grail – releasing time to care

Table 6. Category of nurse activity observed in the ‘time and motion study’

<table>
<thead>
<tr>
<th>Nursing activity (as a proportion of all nursing time)</th>
<th>Pre implementation mean</th>
<th>Post implementation mean</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
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</tr>
<tr>
<td>System care</td>
<td>7%</td>
<td>8%</td>
<td>+1%</td>
</tr>
</tbody>
</table>
Only 26% of my time is spent actually caring for service users.

- Direct care: just 26%
- Other activities: 74%
Holy grail – ‘releasing time to care’

A systematic literature review of Releasing Time to Care: The Productive Ward.

Wright S*, McSherry W.

Author information

Abstract

AIMS AND OBJECTIVES: This systematic review provides an overview of the literature published on Releasing Time to Care: The Productive Ward between 2005 and June 2011.
Findings – the Canberra Experience

Implementation was (non-significantly) associated with:

• **Decreased missed care by nurses**
  – patients reported 26% less missed care
  – nurses reported 17% less missed care

• **Nurses’ walking distances were also lower**
  – by 17% post implementation.
Qualitative themes

1. **a positive potential** of the digital bedside chart
2. **evaluative suggestions** on what aspects needed to be improved.
3. **design fragmentation** in the process of the implementation which created a product which was disruptive to clinical practice.
4. **issue of pain and injury in nurses** to do with ergonomic design combined with chosen software workflow design
5. **unforeseen management decisions**, where 30% of beds were closed by the Hospital, removing six of the eight trained technology ‘SuperUser’ nurses.
(this picture is usually for software design but also works for research in clinical settings...)
## Extraneous variables

Table 1. Ward characteristics pre and post implementation periods

<table>
<thead>
<tr>
<th></th>
<th>Baseline control</th>
<th>Pilot control</th>
<th>Baseline</th>
<th>Pilot</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sep-15</td>
<td>Apr-15</td>
<td>Sep-16</td>
<td>Apr-17</td>
<td></td>
</tr>
<tr>
<td>Mean length of stay</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>5</td>
<td>-47%</td>
</tr>
<tr>
<td>Number of admitting doctors</td>
<td>31</td>
<td>31</td>
<td>37</td>
<td>38</td>
<td>23%</td>
</tr>
<tr>
<td>Number of admissions</td>
<td>82</td>
<td>93</td>
<td>119</td>
<td>122</td>
<td>31%</td>
</tr>
<tr>
<td>Urgent admissions</td>
<td>74%</td>
<td>70%</td>
<td>72%</td>
<td>80%</td>
<td>15%</td>
</tr>
</tbody>
</table>
Example 1 – nurse injury

**HARDWARE**
- No elbow support
- Not enough options for entry methods
- Hard to move
- Hard to tap

**SOFTWARE**
- Excess screen hopping
- Excess scrolling
- Particularly for any data entry longer than 10 mins

**IMPLEMENTATION**
- Replication ‘exactly like paper’
- Minimal automation
- Reluctant clinical contributors, working on top of normal duties to create something new
- ‘Top down’ driving of implementation, but minimal executive support in design and function despite clinical governance implications of the technology
- ‘Status quo is safest’ design culture
- IT developers with limited clinical nursing awareness, nurses with limited digital experience, creating a clash of cultures as a design environment
Example 2 - rounding

When asked what would help the nurses to spend more time with their patients (one of the goals of the pilot), the nurse responded “do away with hourly roundings” FG2.

- Nurses described that if they didn’t need to document this time checking on patients, they could spend more time to actually listen to patients.

“And especially in the droplet precaution room, we can usually watch the patient from outside for hourly rounding purposes, but with the computer we have to gown up, gloves, mask, everything, go in the room; it's just a waste of time and energy, material, everything” FG1.

“And the hourly round is difficult to start with because, um, if you're doing a paper one you go and check your patient with the torch, especially during the night, you go and check them. If they're sleeping and they didn't ask you anything it takes five minutes to check your seven patients, but if you go and do everything, ......because we used to get the hourly rounding from the bedside, not at the nurses' station, so you have to go and do it there. By the time you get to your seven patients, 25 minutes is gone, so you're 25 minutes late to do your next round” FG1.

“And next time, if you start from the other end, the same. When you get to the other end it's 25 minutes late again, because after you touch the computer screen the light is on, the patient will ask you something, then you get delayed for other things because you have to, you know, put your PIN number in and then you write what they asked for or what you have to enter by the time you finish seven of these......[you’re late again]” FG1.

Would have been alleviated if automation of ‘rounding’ was done by computer when nurses were entering data in the patient room.
### Table 1. Recommended actions in order of responsibility and priority

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>No.</th>
<th>Action</th>
<th>Priority</th>
<th>Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared Responsibility</strong>  (vendor and health organisation)</td>
<td>a, d</td>
<td>Maximise computer automation and ‘smart’ functions</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>b, c,</td>
<td>Plan a pathway to include and integrate patient notes and medication charts, and minimise ‘hybrid’ soft and hardware systems of documentation</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>l, j, k, l</td>
<td>Conduct comprehensive simulation software testing with experienced clinical bedside nurses, and pay them for their expertise</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>h</td>
<td>Provide swipe access</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Vendor Responsibility</strong>  (IT supplier)</td>
<td>e, f</td>
<td>Improve ergonomic design</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>d</td>
<td>Provide multiple documentation modes</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>a, e</td>
<td>Minimise scrolling and maximise user friendly design for varied and specific clinical work</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Customer responsibility</strong>  (Health organisation)</td>
<td>h, c</td>
<td>Review governance and policy related to nursing documentation practices</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>l, k</td>
<td>Provide employees who can communicate and understand clinical nursing and IT languages</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>l, i</td>
<td>Provide administration and other workload support to clinicians</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>j, k</td>
<td>Have effective pathways for clinician communication and support</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>m</td>
<td>Keep trial environment as stable as possible</td>
<td>Medium</td>
<td>Medium</td>
</tr>
</tbody>
</table>
If we want system implementation, we need good data

• If we want good data
  – We need to understand clinical work flow
    • Clinician work flow vs Governance work flow
      – Need to anticipate/understand the conflict

E-Health will highlight what are currently invisible problems:
• Errors of omission -> errors of commission
• Implicit rationing of care -> explicit rationing
Explicit and implicit rationing: taking responsibility and accountability

Abstract
Rationing health care in publicly funded health care systems is becoming more challenging because of the growing gap between the possibility of effective medical intervention and limited resources. This poses both an economic challenge and a political puzzle. On the basis of experience in those systems that have adopted a systematic approach to rationing, it can be suggested that the dilemmas involved should be addressed by strengthening both the information base to support decisions and the institutional framework in which decisions are taken. The contribution both of experts and of lay people is needed to inform decision-making, and the processes adopted need to allow for this as well as being transparent and accountable. In practice, rationing is likely to combine explicit and implicit criteria, with exclusion of services at the margins and the development of guidelines in the mainstream. The politics of rationing are emerging, and the evasion of responsibility by those in power will be difficult to sustain in an environment in which public accountability is growing.
Untapped area for efficiency investigation. For example:

- We know
  - Up to 55 different comorbidities for every patient
  - Their length of stay
  - Any procedures during admission

- We don’t know
  - Whether the patient is self caring and independent
  - Or bed bound and nurse dependent
  - What kinds of staff did what, or for how long
Implementing e-health factors (Ross 2016): Reviewing the study against the evidence

- **Innovation** (evidence, source, advantage, adaptability, trial-ability, complexity, quality, packaging, cost)
- **Outer setting** (patient needs, peer pressure, external incentives/policy)
- **Inner setting** (structure, networks, communication, culture, tension, compatibility, priority, readiness, incentives, learning climate, leadership, resources, information access)
- **Characteristics of individuals** (knowledge, belief, self-efficacy, stage)
- **Process** (planning, engaging, champions, stakeholders)
- Executing
- Reflecting and evaluating
Implementing e-health factors (Ross 2016)

- **Innovation** (evidence, source, advantage, adaptability, trial-ability, complexity, quality, packaging, cost)
- **Outer setting** (patient needs, peer pressure, external incentives/policy)
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- **Executing**
- **Reflecting and evaluating**

**Workflow fit?**

**CLINICAL GOVERNANCE FIT??**

(missing from most E-Health guiding models)
Nurse as conduit

**THE LIFE-SAVING TECHNOLOGY AROUND A PATIENT’S BED**

1. **HAEMO-FILTRATION DEVICE**
   Treats acute renal failure following septicaemia by cleaning a patient’s blood.

2. **VITAL SIGNS MONITOR**
   Displays oxygen saturation levels, cardiac activity and blood pressure via a tube linked to an artery.

3. **ANAESTHETIC Drip**
   Needs to be given continuously and rate is altered by nurses if patient is uncomfortable or not sedated enough.

4. **NASO-GASTRIC FEED PUMP**
   Feeds patient via a tube through the nose, past the throat and down into the stomach.

5. **INTRAVENOUS FLUIDS AND DRIPS**
   Gives medication such as adrenaline, noradrenaline, insulin, magnesium and phosphate. Also drugs that raise blood pressure.

6. **HEART MONITOR**
   Shows how effectively the heart is pumping when a patient is seriously ill and is struggling to keep their blood pressure up.

On the other side of the bed, not photographed, would be a ventilator. Nurses watch this for signs of blockage or tube problems, high pressures, the amount of air entering the lungs and how they are stretching and expanding.

Still need a temporary data storage device to transmit data.
“Clinical governance”:

• **Over-reliance on documentation as a solution** to the many complex challenges facing health care and service provision (Francis, 2013, Garling, 2008, Jackson 2011).

• The organisational response to achieve **auditing and checklists** is logical in a managerial sense

**BUT**

• There is increasing recognition that policies, audit tools and compliance checklists
  – provide *‘illusions of assurance’*,
  – but are rather a form of *‘documentation hysteria’* (Jackson, 2011),
  – described as *‘the regulatory beast’* that must be fed’ (Darbyshire, 2008).
  – sets the scene for risk as a negative and to be avoided
    • can be contrary to patient-focussed care (Clancy and Happell, 2017).
Death by (electronic) paperwork?

• Data should a byproduct of care
  – Otherwise it’s just digital polyFORMacy
    • Allen 2017

• We need to get skilled in FORMocology
  – What is essential and non-essential documentation?
    • Redley 2017
Nurse to patient contact: Not just ‘nice to have’

- 4 complications cost $225 million (NSW, 1 yr) (4 times MRSA) (just for over 50s)
  - Urinary tract infections
  - Pneumonia
  - Pressure injuries
  - Delirium

- Associated with nurse care rationing
  - Communication
  - Mobilisation
  - Hydration, nutrition
  - Hygiene, skin care
Current dominating factors:

- New public management
  - Market based business units
- Economic rationalism
  - Relies on being about to count the costs
- Disease model of health
  - We actually want more than just the absence of disease
- Activity based funding
  - It’s not efficient if you don’t know what quality (or sustainability) you’ve actually paid for
Nursing Classification Systems

- North American Nursing Diagnosis Association Taxonomy (NANDA)
- Visiting Nurses Association of Omaha (OMAHA system)
- Home Health Care Classification (HHCC)
- Outcome and Assessment Information Set (OASIS)
- Nursing Interventions Classification (NIC)
- Nursing Outcomes Classification (NOC)
- Systematised Nomenclature of Medicine (SNOMED) and nursing terms
- International Classification of Nursing Practice (ICNP)

‘If we cannot name it, we cannot control it, finance it, teach it, research it, or put it into public policy’.
(Clarke & Lang 1992, p.109)
THE GREY TSUNAMI

- 48% bed days (complex older patients) AIHW 1997, 2013

- 27% hospital costs (nursing) Watts 2000, AIHW 2014

- 40% health costs (public hospitals) AIHW 2014

$31 billion
What next?

- Determine quality:
  - Structure indicators
  - Process indicators
  - Outcome indicators

Collect data on all

- Measure costs
- Identify efficiencies

Please email for further information:
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What next?

MEDICAL ALPHABET

A B C D E
F G H I J
K L M N O
P Q R S T
U V W X Y
Z

...new golf clubs, and an Electronic Health Record system that is easy to implement and qualifies for federal incentives, and ....

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