Lean and person-centred care: are they at odds?

VizMed a roundtable for visionary medical workplaces
May 26th 2016

Sean Paul Teeling, Lean Manager
Lean Six Sigma Master Black Belt
Adjunct Associate Professor, UCD School of Nursing, Midwifery and Health Systems
Affiliate member, Centre for Person-centred Practice Research, QMU Edinburgh
Lean Six Sigma organisations
Issue 1: The Complexity of Healthcare

Healthcare ‘the most complex of any industry’
Peter Drucker.
Issue 2: The Risk of Silo Mentality

Healthcare complexity can lead to a strong silo mentality.
Issue 3: ‘We’re not Japanese and we don’t make cars’

The most dangerous phrase in the language is "we've always done it this way."
Issue 4: The Process not the Person

“94% of Problems are caused by the system and 6% by the individual”

Deming’s 94/6 rule
Issue 5: Cutting waste not care
Motorola develops six sigma

MIT compares 40 co’s and Toyota production system ("The Toyota Way") outperforms all others. Named the LEAN production system.
The history of Lean Healthcare

**Mid 1990’s**
Auto Manufacturers’ and Health Insurance

**2000**

Early 2000 saw a backlash from clinical staff in the USA

**Mid - 2000**
Patient centred Lean Healthcare developed in USA

**Late 2000**

Lean in the NHS

**2000 onwards**
Lean Six Sigma for Healthcare, BICS, TPOT, Productive Ward etc.
Lean Thinking

- What are we doing?
- Who is doing it?
- Why are we doing it that way?
- How will we improve it?
- When will we improve it?
Before and After

BEFORE

1 → 2 → 3 → 4 → 5 → 6

AFTER

1 → 2 → 3 → 4 → 5
• Lean care practices are designed for sustainable change.

• The Lean framework serves to expedite your journey to ‘Non Value Add’ Waste Reduction.

• In the eyes of the customer or patient, this is most important.
Patients don’t feel the averages, they feel the variability.
Sources of Variation?

- Poor Service Design
- Changing patient needs
- No Measurement System
- Insufficient Process Capability
- Skills & Behaviors
How good do we need to be?

**The Classical View of Quality**
“99% Good” (Z = 3.8s)
- 20,000 lost articles of mail per hour
- Unsafe drinking water almost 15 minutes each day
- 5,000 incorrect surgical operations per week
- 2 short or long landings at most major airports daily
- 200,000 wrong drug prescriptions each year
- No electricity for almost 7 hours each month

**The Six Sigma View of Quality**
“99.99966% Good” (Z = 6s)
- Seven lost articles of mail per hour
- One minute of unsafe drinking water every seven months
- 1.7 incorrect surgical operations per week
- One short or long landing at most major airports every five years
- 68 wrong drug prescriptions each year
- One hour without electricity every 34 years
A Lean Hospital
what will it mean for the customer?

- Listens to the VOC
- Allows the customer to pull
- Increased service user satisfaction
- Empowers the customer
A Lean Hospital
What will it mean for Quality?

Synergy for Quality
“High quality error free care is the most cost effective”
(Rogers, 2008)
How does the customer view my process?
What does the customer look at to measure performance?
“Learning to separate motion (the things we do) from value is a critical step in the LEAN journey.”

Mark Graban “Lean Hospitals”
How do we recognise Value?

- The customer must be **willing to pay** for the activity
- The **activity must transform** the product or service in some way
- The activity must be done **correctly** the first time
In Healthcare there are typically only 4 types of value-add actions.................

Prevention  
Diagnosis  
Treatment  
Care

and any decision point relating to these 4
Seconds out round two
Quick recap on Lean

<table>
<thead>
<tr>
<th>Version 1</th>
<th>Version 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lean enables the healthcare provider to:</strong></td>
<td><strong>By the:</strong></td>
</tr>
<tr>
<td>• specify value, line up value creating actions in the best sequence, conduct these activities without interruption whenever someone requests them, and perform them more and more effectively. (Jones and Womack, 1996)</td>
<td>• application of a set of principles to identify and eliminate waste and deliver to the customer what they want when they want it. (MLA 2013)</td>
</tr>
<tr>
<td><strong>In healthcare:</strong></td>
<td><strong>In healthcare:</strong></td>
</tr>
<tr>
<td>• Lean is about shortening the time between the patient entering and leaving a care facility by eliminating all non-value added time, motion and steps (Jones and Womack, 1996)</td>
<td></td>
</tr>
<tr>
<td><strong>We spend 75–95% of our time doing things that increase our costs and create NO value for the customer!</strong></td>
<td></td>
</tr>
</tbody>
</table>
What is meant by Person Centred Care?

<table>
<thead>
<tr>
<th>Aims to:</th>
<th>• ensure a person is an equal partner in their health care. The individual and the health system benefit because the individual experiences greater satisfaction with their care and the health systems is more cost-effective. (RCN, 2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>By the:</td>
<td>• application of four core components: Relationships, Social World, Place, Self (McCormack, 2004)</td>
</tr>
<tr>
<td>In healthcare:</td>
<td>• person centred care is about every person, not just the patient. It is about the care environment. From a staff point of view this would include skill mix, effective staff relationships, and shared decision making (McCormack &amp; McCance, 2006)</td>
</tr>
</tbody>
</table>
| Therefore: | “... Care must be delivered by systems that are carefully and consciously designed to provide care that is safe, effective, patient-centered, timely, efficient, and equitable. ”
Institute of Medicine (2001) |

To be person centred we must learn to listen and learn from what the client/patient and colleagues say (McCormack, 2015)
McCormack et al (cited in McCance et al, 2012) describe person-centredness as:

‘An approach to practice established through the formation and fostering of therapeutic relationships between all care providers, people and others significant to them in their lives. It is underpinned by values of respect for persons, individual right to self-determination, mutual respect and understanding. It is enabled by cultures of empowerment that foster continuous approaches to practice development.’ (p 13).
Lean projects and training are interdisciplinary in nature and engender collaborative practice.

Lean looks at the organisations processes from the perspective of the front line (GEMBA).

Lean Projects elicit the VOC to ensure that all stakeholders are informed and engaged.

“Not just procurement but a systems improvement process”. Lean is systems improvement.

Lean Management in the Academy utilises a Person Centred Philosophy.

Organisational & clinical processes

Engaged, informed individuals & carers

Person-centred, coordinated care

Health & care professionals committed to partnership working

Commissioning

Person centred approach is the intended focus

LSS can potentially facilitate the crossing of departmental boundaries and allow staff to focus on meaning-making processes, rather than implement actions by rote (Teeling, 2014)
A Lean community of practice

“Communities of practice are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an on-going basis.”

(Wenger et al, 2002)
What is Knowledge Management?

“... the discipline of creating a thriving work and learning environment that fosters the continuous creation, aggregation, use and re-use of both organizational and personal knowledge in the pursuit of new business value.”

(Cross, 1998)

“... the explicit and systematic management of vital knowledge – and its associated processes of creation, organization, diffusion, use and exploitation.”

(Skyrme, 2003)
## Facilitators of Person Centred Care

- Having skilled, knowledgeable and enthusiastic staff, especially with good communication skills
- Providing the opportunity for staff to reflect on their own values and beliefs and express their concerns
- Opportunities for staff training and education, including feedback from service users
- Organisational support for this approach to practice
- Opportunities for involving service user, carers, family and community (e.g. volunteers) in health care
Opportunities for improvement in patient care

- People: 5 - 15%
- Systems and Processes: 85 - 95%

(Bohmer et al, 2006)
Leveling the Load
“Lean is a bottom-up approach to identifying and fixing broken systems; for example, a medication delivery system responsible for high rates of hospital errors, or a patient intake process that produces long backlogs and waiting times that muck up schedules and frustrate patients. ‘Bottom up’ means that Lean relies on people closest to the work to fix systemic problems.”

(Californian Healthcare Foundation 2015)
“An organisation that is ‘skilled at creating, acquiring and transferring knowledge and at modifying its behaviour to reflect new knowledge and insights’.”

(Garvin, 1993)

“Knowledge management is 70 per cent people, 20 per cent process and 10 per cent technology.” (Baker, 1998)
A Lean Hospital

What will it mean for the customer?

- Provide better patient care
- Improve the patient experience
- Offer better value for money processes
- Ensure quicker access to diagnostics
Similarities between Lean and PCC

LEAN

- Understands value from VOC
- Defines a value stream to deliver value
- Improves flow of patients, information, material
- Aims to pull the patient to the next step
- Promotes a relentless pursuit of perfection

PCC

- Sees the Patient experience as integral
- Seeks clarity on the patient pathway
- Improves flow of patients, information, material
- Wants to pull resources to the patient
- Aims to continually improve performance in pursuit of perfection

(Williams, 2015)
Differences between Lean and PCC

**LEAN**

Value is considered from the perspective of the end consumer
The emphasis on Lean is on improving processes and limited attention has been paid to socio-technic aspects
First principle is to understand value
Standardisation to deliver safe and reliable care

**Value is considered in a wider context**
(Patient, staff, social values)

**PCC**

PCC is focused on people – patients and staff
Prerequisite stage to assess professional competence, commitment to practice and clarity of beliefs and values
Standardisation seen to stifle flexibility and individualised care

(Williams, 2015)
Synergy

Lean/Six Sigma

- Quality
- Safety
- Employee engagement
- Service/ Patient satisfaction
- Cost

Person Centred Coordinated Care

(Cooper, 2014)
Developing Lean for PCC

PHILOSOPHY
Person-Centred Care

OUTCOME
Patient Experience

APPROACH
Patient and Family Engagement

(CCO, 2016)
Some success stories

**Outpatient services**
Overall Clinic duration reduced by 50% and capacity added to service

**ECHO Department**
echo report turnaround time reduced by 60%

**Ward Cleaning**
ward cleaning costs reduced by €224,000

**Drugs Round**
8am drugs round time reduced by over 50%

**Referrals to Community**
Patient referral time from hospital to community reduced from up to 8 days to 100% same day referral

**Thrombolytics Pathway**
Door to Needle time reduced from 80mins average to 48 mins average*

*Measured by median
## Some success stories

<table>
<thead>
<tr>
<th>Hip Fracture Pathway</th>
<th>MDA Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>24% increase of patients reaching theatre for hip surgery within 48 hours</td>
<td>104 hours released p.a. for pharmacy and 434 for nursing in streamlined MDA order process</td>
</tr>
</tbody>
</table>

### CT referral process
- 20% improvement in CT order to report time and 61% improvement in accuracy of report

### Ultrasound Waiting
- Wait time for patients in Ultrasound department reduced by 42%

### Stores Ordering
- 76% reduction in time to order in stores procurement

### Outpatient Scheduling
- 83% reduction in waiting list inaccuracies and improved scheduling for outpatients
THANK YOU

GO RAIBH MAITH AGAT!