Kaizen practice in healthcare
A qualitative analysis of hospital employees’ suggestions for improvement

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"When I first started working in health care, like everybody I thought: 'Oh, my God. It's such a tough problem,'" Dr. Porter, the Harvard economist, said.

Now he has changed his mind. "I have no doubt we can solve it," he said. "We know exactly what we have to do."

We may know exactly what we have to do…

BUT DOES HEALTH CARE KNOW?
Management ideas often become trends that last 3-5 years before the next trend comes along...

Number of citations per year and management concept in Medline

3-5 years

% of total citations to each QI term in year

Year


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Continuous improvement

- Kaizen refers to activities to continually improve
  → involve all employees from the CEO to the first line workers

- Kaizen activities
  → Kaizen blitz, continuous process improvement teams, employee suggestion programs
But are we improving?

Proportion of patients ready to leave the ED within 4 hours

Mazzocato et al. (2014) Complexity complicates lean: lessons from seven emergency services. *J Health Organ Manag*
Limitations of lean applications in healthcare

- Large focus on operational aspects of performance, less on socio-technical aspects (Holden 2011)

- Most applications on manufacturing-like processes within single units (Brandao de Souza 2009)

- Most effective within simple care processes (Mazzocato et al. 2014)

- The incremental approach inhibits finding new ways of doing things (Palm et al. 2014)

- Limited compliance to a scientific approach on improvement (Taylor et al. 2013)
There is a need to better understand continuous improvement in lean

HOW IS KAIZEN PUT INTO PRACTICE IN HEALTHCARE?
Kaizen process

I. Kaizen input: Proactive/Reactive activities and action strategies

II. Organizational processes addressed
- Technical/Administrative processes
- Support processes
- Primary clinical processes

III. Degree of complexity addressed: Simple / Complex

IV. Kaizen outcomes: Operational / Socio-technical

Feedback

Mazzocato et al. (2015), manuscript
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Research questions

I. To what extent do the employees’ chosen improvement suggestions represent a reactive or proactive activity?

II. What types of organizational processes do the improvement suggestions address?

III. What level of complexity is involved in the improvement suggestions?

IV. What types of outcomes are addressed in the improvement suggestions?

V. What is the degree of compliance to the kaizen template (i.e. completion of template categories)?
Kaizen in a regional hospital in Sweden

- 500 employees
- 12 units (8 units included in this study, ca 170 employees)
- Kaizen approach since 2009
- Each unit has 1-3 kaizen representatives
  - Staff is encouraged to propose improvement suggestions through kaizen templates using a paper form
- 1 kaizen coordinator at the hospital level
  - Brings all representatives together a few times a year
- Bonus system linked to number of suggestions implemented
Directed content analysis of completed kaizen templates produced in one year

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<thead>
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<th>Löpnummer:</th>
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1a. Beskriv problemet:  
Kök i kök, korridor samt tidsboken och arbetsnum (Elisabeth, Contace V.) bl.a.

2. Förslag till lösning:  
Varmare och mer behagligt klimat i arbetstunnen och kök.

3. Förslaget ska prövas  
Ev nytt förslag;

4. Beslutad lösning:  
Vi anmäler i Weblord istruct, eftersom driften inte tar emot kaizenlappar

1b. Förväntat resultat när problemet är löst:  
Varmare temperatur. Varmare för personal och patienter.

4. Uppnådda resultat:  
Problem beskrivet  
Förslaget prövas/utvärderas  
Lösningen finns  
Ansvarig utsedd

Röstning genomförs vid behov vid punkt/spik 2 eller 3.

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2015-11-03
Problems were identified mainly in non-clinical processes and suggestions were developed to improve operational performance.
Low degree of compliance for items that relate to testing and implementation
How does kaizen work in practice?

- Kaizen empowers staff to improve operational performance in support and technical administrative processes.

- There is a partial connection between the kaizen process and the overall organizational goals.

- There is a need to combine kaizen practices with improvement practices that help staff and managers to address more complex issues.