



**Karolinska  
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# **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.

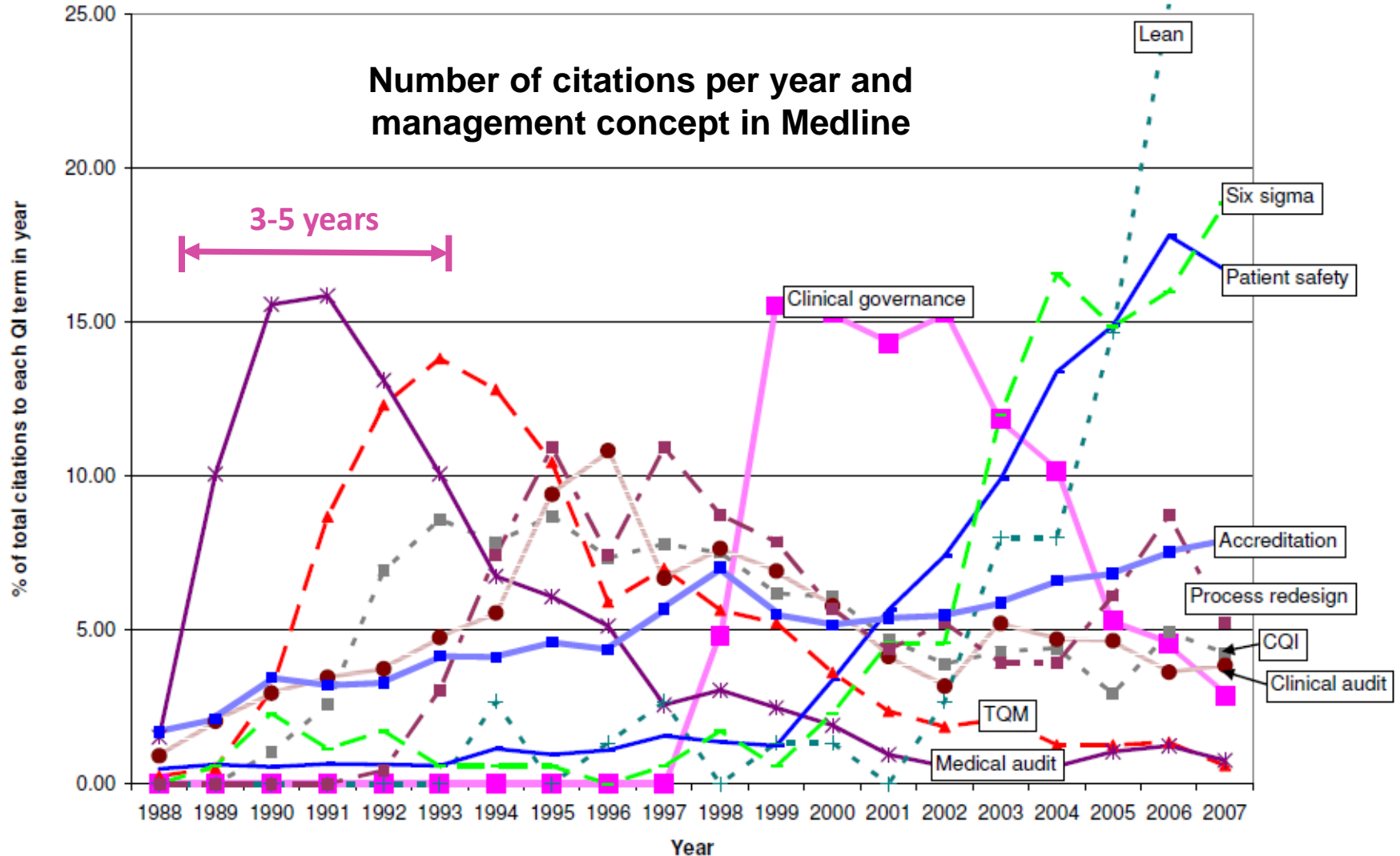
Now he has changed his mind. ”I have no doubt we can solve it,‑‑ he said. ”We know exactly what we have to do.‑‑

September 7, 2015. New York Times

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...



Modified from Walshe K (2009) Pseudoinnovation: The development and spread of health care quality improvement methodologies.

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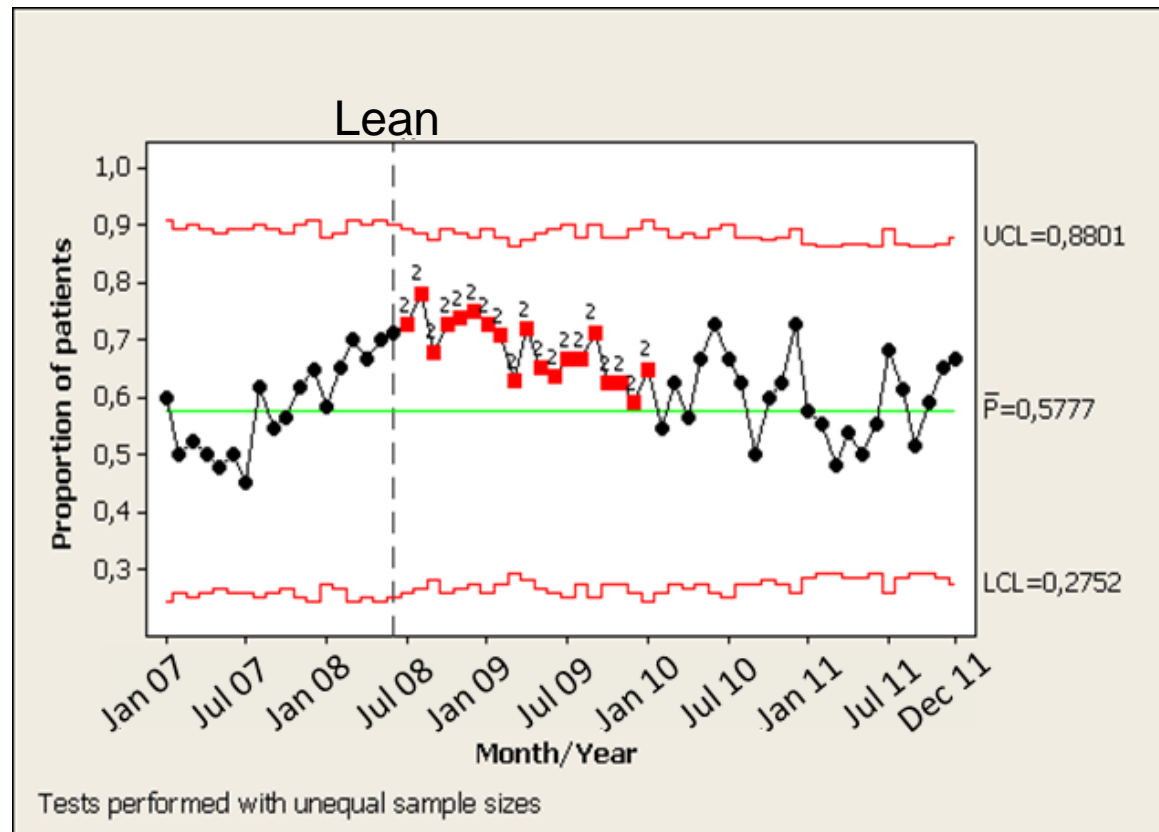


# Continuous improvement

- 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

# Limitations of lean applications in healthcare

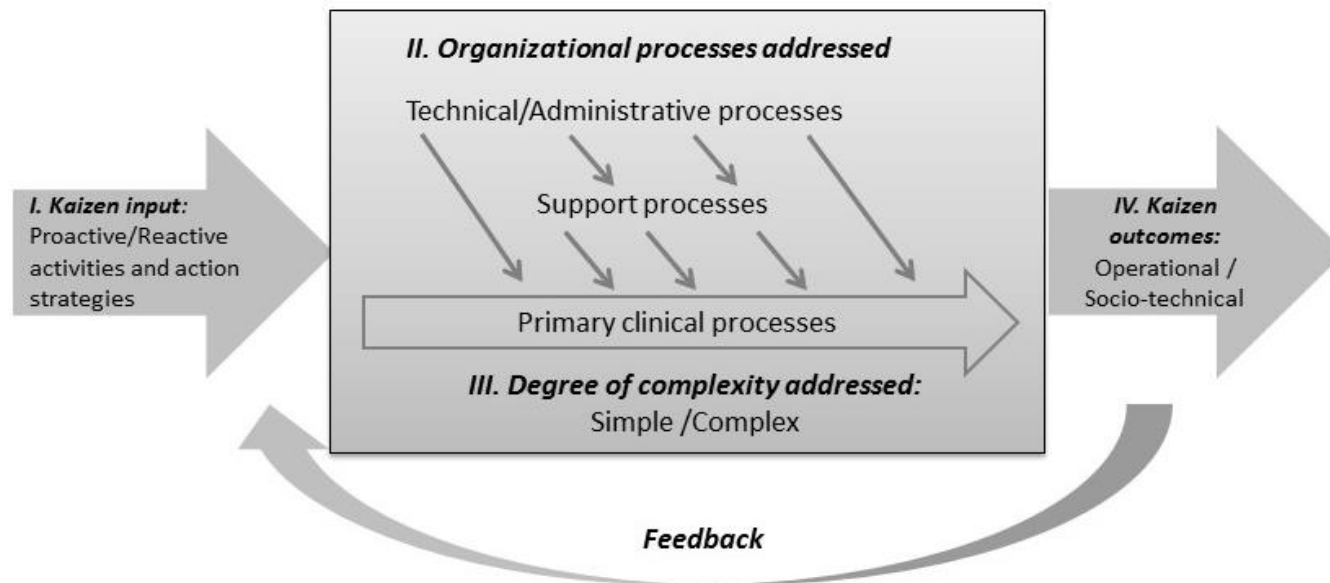
- Large focus on operational aspects of performance, less on socio-technical aspects (Holden 2011)
- Most applications on manufacturing-like processes within single units (Brandao de Souza 2009)
- Most effective within simple care processes (Mazzocato et al. 2104)
- The incremental approach inhibits 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



Mazzocato et al. (2015), manuscript  
Kaizen practice in healthcare: A qualitative analysis of hospital employees' suggestions for improvement

# 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

## Röntgen

<b>Löpnnummer:</b>	<b>Område:</b> <input type="checkbox"/> Service/Omhändertagande <input checked="" type="checkbox"/> Personal och Miljö <input type="checkbox"/> Kvalitet <input type="checkbox"/> Ekonomi	<h3 style="margin: 0;">Kaizen-lapp</h3>		
<p>1a. Beskriv problemet: <i>Kallt i kök, korridor samt tidsboken och arbetsrum (Elisabeth) Caroline N.) bla.</i></p>	<p>Skrivet av: <i>Enka (under skyddsbröda)</i></p>	<p>Datum: <i>27/5-13</i></p>		
<p>2. Förslag till lösning: <i>Värmare och mer behagligt klimat i arbetsutrymmen och kök.</i></p>	<p>Ansvarig:</p>	<p>Datum:</p>		
<p>3. Förslaget ska prövas</p> <p>Ev nytt förslag:</p>	<p>Ansvarig:</p>	<p>Prov genomfört och utvärderat Datum:</p>		
<p>4. Beslutad lösning: <i>Vi anmäler i webblord istället, eftersom driften inte tar emot kaizenlappar</i></p>	<p>Ansvarig:</p>	<p>Ny lösning införd Datum:</p>		
<p>1b. Förväntat resultat när problemet är löst: <i>Jämnare temperatur. Värmare för personal och patienter.</i></p>	<p>4. Uppnådda resultat:</p>	<p> <input checked="" type="checkbox"/> Problem beskrivet      <input checked="" type="checkbox"/> Förslaget prövas/utvärderat  <input checked="" type="checkbox"/> Föreslagen lösning finns      <input checked="" type="checkbox"/> Lösning dokumenterad                  Ansvarig utsedd.             </p>		

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

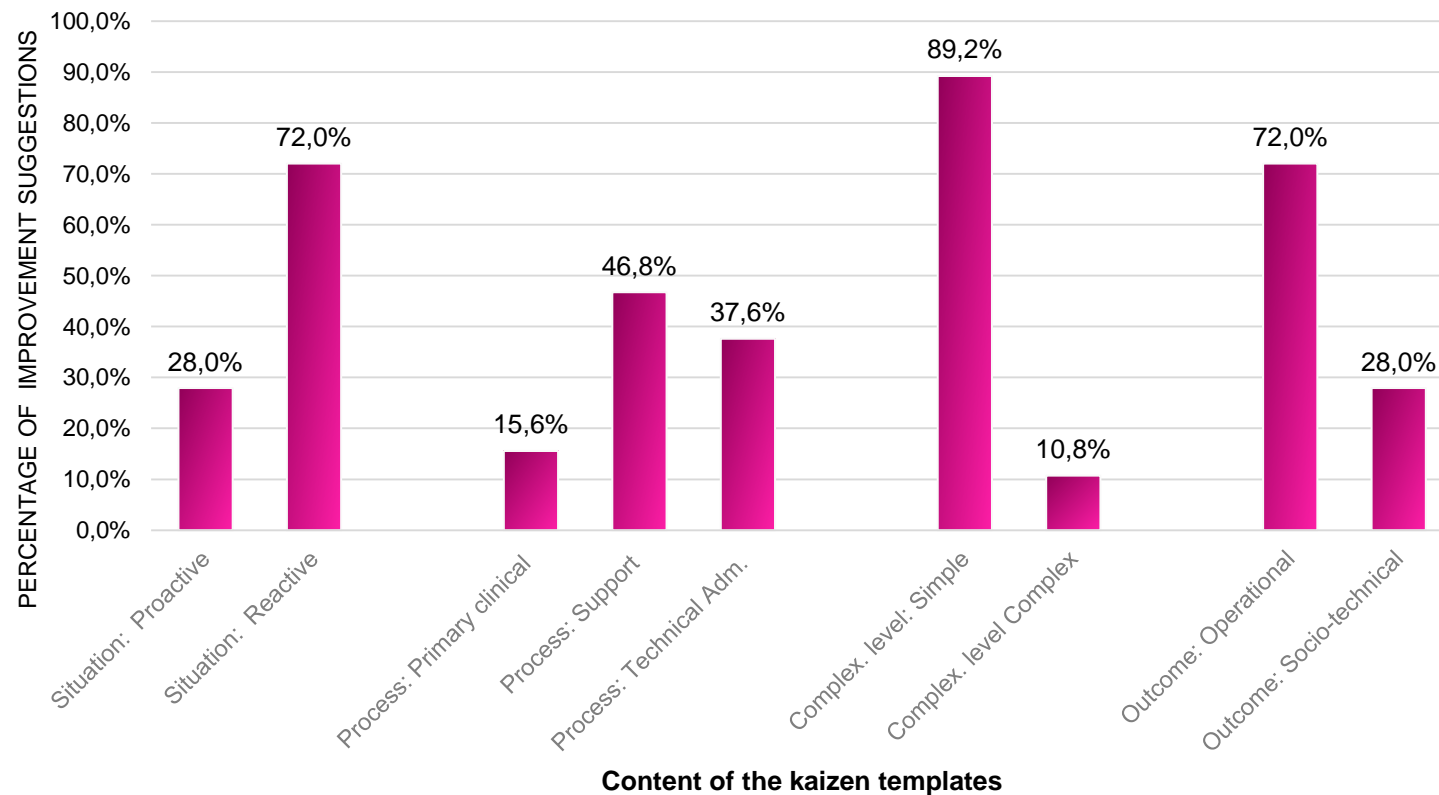
Godkänt beslut  
Chef:.....

© KAIZENsupport

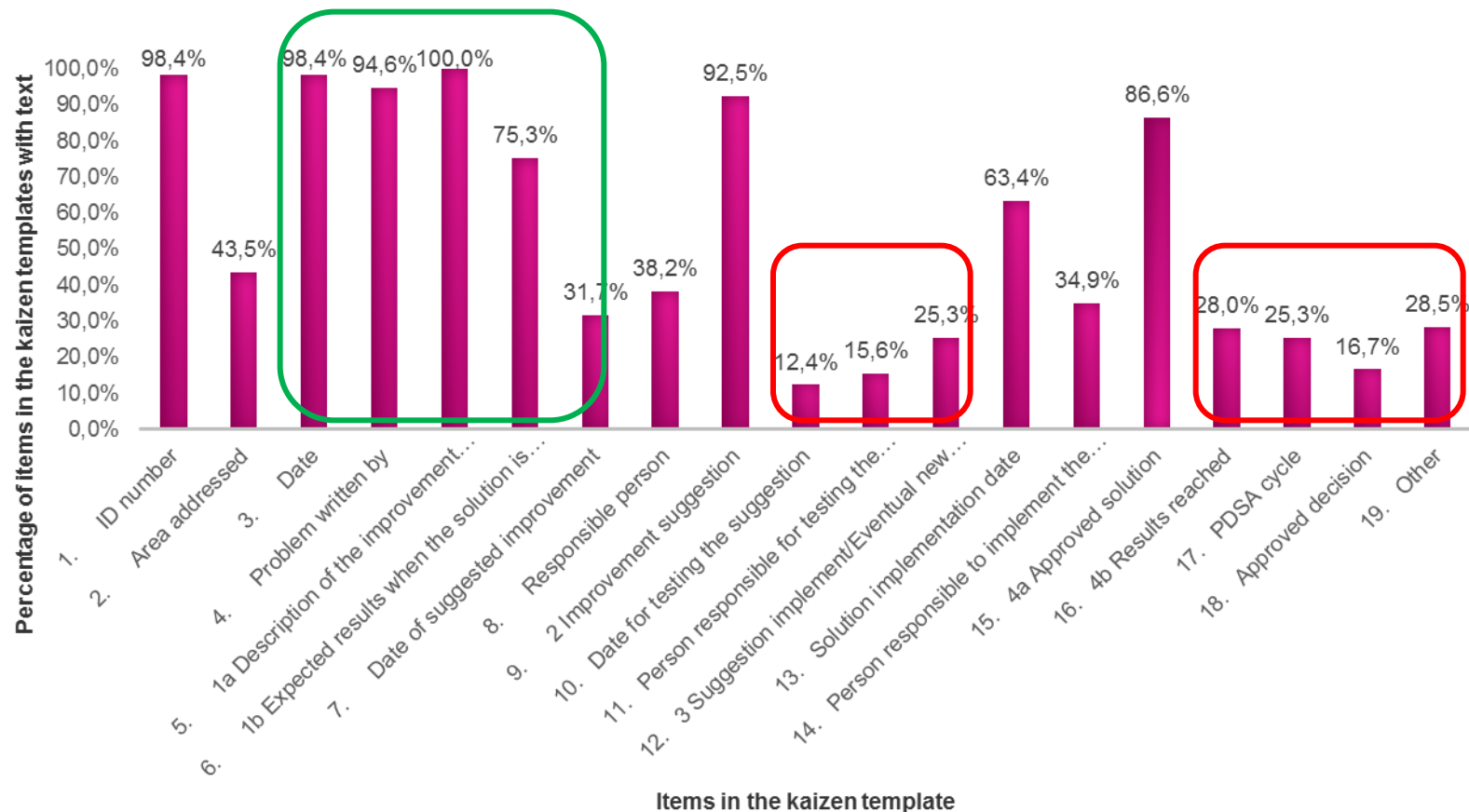


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# Problems were identified mainly in non-clinical processes and suggestions were developed to improve operational performance



# 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