After the crisis: the maintenance model of effective change

implementing change following serious incidents and crises is often problematic . . . .

. . . . here’s a framework that proved to be extremely effective

Cranfield Healthcare Management Group
Research Briefing 2

How do they manage?
a study of the realities of middle and front line management work in healthcare

Colin J. Pilbeam: September 2010
Incidents that jeopardize patient safety are opportunities for organizational learning. However, if new guidelines and behaviours resulting from those situations are going to be sustained, these incidents must also be seen as triggers for change.

After a crisis, however, the normal rules of change management don’t always apply. While the ‘sense of urgency’ that John Kotter identifies as a precursor to change may well be in place, using the rest of his eight-step model is problematic. Participation and communication, for example, are often short-circuited by investigation and inquiry processes, the change agenda is more defensive than progressive, and the pace of change is likely to be determined by factors that are beyond management control.

Experience of containing an outbreak of the ‘superbug’ Clostridium difficile (C.diff) at Bedford Hospital NHS Trust suggests an alternative approach. We call this the maintenance model of effective change because the actions necessary to implement and to maintain the changes that are necessary in order to prevent a recurrence of a crisis like this are quite different from the actions required to manage the crisis in the first place.

The maintenance phase, after the immediate crisis is over, is as important as the initial crisis management and emergency response, in terms of success in avoiding another crisis.

### The event sequence

The first step in understanding why this hospital’s approach was so effective involved identifying the main phases in an event sequence narrative:

<table>
<thead>
<tr>
<th>phase</th>
<th>key features</th>
<th>C.diff rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-crisis</td>
<td>problem awareness</td>
<td>20 to 30 cases a month</td>
</tr>
<tr>
<td></td>
<td>no sense of crisis</td>
<td>perceived normal</td>
</tr>
<tr>
<td></td>
<td>limited action</td>
<td>increases to 47: November 2006</td>
</tr>
<tr>
<td>crisis</td>
<td>rated one of the worst ten hospitals in the country</td>
<td>‘bloody hell we’re in the bottom ten’: June 2007</td>
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<tr>
<td>emergency response</td>
<td>CEO signals top priority</td>
<td>rate reduced to 15 cases a month: August 2007</td>
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<tr>
<td></td>
<td>turnaround team established</td>
<td></td>
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<tr>
<td></td>
<td>additional resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>corporate reporting</td>
<td></td>
</tr>
<tr>
<td>maintenance</td>
<td>team continues meeting</td>
<td>‘spectacular improvement’: June 2008</td>
</tr>
<tr>
<td></td>
<td>new procedures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>new facilities</td>
<td>consistently 0 to 5 cases a month: October 2009 - to date</td>
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<tr>
<td></td>
<td>staff training, dress code</td>
<td></td>
</tr>
<tr>
<td></td>
<td>creative change agenda</td>
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</tbody>
</table>

After the crisis
The number of new cases of *C. diff* dropped below 15 a month in August 2007, and continued to fall. By the end of 2009, it was down to between zero and five new cases a month, a rate that has been maintained since:

Success was due to the combined impact of several actions managed as an evolving programme, a six-component ‘package deal’.

1. **turnaround team**: a cross-departmental clinical and managerial group with authority to act without permission from senior managers

2. **appraise and prioritize**: rapid decisions on immediate actions, delayed action on more difficult and sensitive issues

3. **emergency response**: quick demonstration that the problem was understood and was being addressed; autocratic, ‘no questions - no negotiations’ style; ‘political fix’ to reassure external stakeholders as well as ‘real fixes’ to resolve the problem

4. **systemic solution**: systemic problems need systemic solutions, including individual, team, organizational, financial, infrastructural, and other factors; in addition to many changes in working practice, communications were frequent, authoritative, and appealed to professional values rather than external targets

5. **measure and report progress**: infection rates monitored and published; all staff constantly aware of performance on key metrics; continuing success motivates staff to maintain the trajectory

6. **plan for continuity**: crisis over, turnaround team redundant? - No - team continues to work, maintain focus on the agenda, maintain and improve reduction in infection rates - shift from emergency response to maintenance phase was critical to success

What works in one setting will not always work elsewhere. However, this pattern of crisis intervention is an approach that other trusts should consider. This example shows that change can be implemented rapidly and be sustained through a combination of compelling evidence, autocratic management (where appropriate), a powerful cross-functional team, and innovative communications that encourage behaviour change by addressing beliefs and values.
Further commentary

We know a lot about crisis management, but the processes of implementing changes afterwards have attracted less attention. Liam Donaldson distinguished between passive learning - identifying lessons - and active learning - implementing them. Our interest lies with active learning. Here is some recent commentary:

Colin J. Pilbeam and David A. Buchanan (2010) ‘A very unpleasant disease: the rapid reform and maintenance of infection control’, paper presented to the 7th Biennial Conference in Organizational Behaviour in Health Care, University of Birmingham, April


If you have experience - positive or negative - of change following a serious incident, and you feel this could be developed into a case from which others could learn, please let us know.

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This case is based on interviews with hospital staff, drawing also on relevant documents, and reports from three Strategic Health Authority visits. This information was used to construct the event sequence narrative identifying the phases of the hospital’s approach to containing the C.diff outbreak and to maintaining their success.

Participating trusts

Bedford Hospital NHS Trust NHS Bedfordshire Primary Care Trust
Cambridge University Hospitals NHS Foundation Trust Gloucestershire Hospitals NHS Foundation Trust
Northampton General Hospital NHS Trust North Bristol NHS Trust
Whipps Cross University Hospital NHS Trust

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