

Case study 2: The reduction in Healthcare associated infections (HCAIs)

Introduction

Hello. We look forward to you joining us for our digital workshop on Monday 2 November, 2.30–4pm. We'll be looking at what we can learn from how the NHS tackled healthcare associated infections such as MRSA.

Please read this short case study before the event. The workshop will be full of interesting discussions, and this background reading will enable you to participate fully in those.

What was the change?

- In 2000 the National Audit Office criticised the lack of strategic focus on infection control in hospitals. Not enough was known about infections and teams were poorly organised in hospitals.
- At the same time, there was intense media scrutiny and interest as a patient safety issue. Attention was focused on MRSA and *C. difficile*, with reported deaths of 90 patients from *C. difficile* infection in [one hospital](#).
- Reported infections dramatically reduced, following various interventions, from mandatory reporting to evidence-based bundles to address infection risks. Certified deaths from MRSA fell from 1652 in 2006 to 292 in 2012.
- In 2004 the Government introduced a national target to halve the number of MRSA infections by March 2008 from a 2003/4 baseline. The target was exceeded, reducing from 7,700 cases in 2003/4 to 2,935 in 2008/9.
- In 2007 the Department of Health set a target to reduce *C. difficile* infections by 30% by March 2011 from the 2007/8 baseline. The number of cases halved from over 1000 to less than 500 between 2009 and 2017.

How was this change achieved?

There were multiple and varied initiatives to reduce infections in hospitals, and it is difficult to attribute improvement to one factor on its own. A combination of top-down drive to monitor, set targets and compare performance was matched by national campaigns and activities as well as local improvement activity and initiatives in hospitals. A key insight from [research](#) by Mary Dixon-Woods on infection reduction in the US was the way that it was framed as a social problem that could be fixed, where previously hospital infections had been seen as unavoidable without easy action.

National leadership

There were combined performance and policy pushes to reduce infection control, especially in hospitals. These included particular bundles of evidence-based practice in areas like catheter-related infections, hand hygiene, central line and surgical site infections. These were sometimes part of a wider patient safety and awareness campaign, such as the 'cleanyourhands' campaign in 2004. An

important central initiative was the early introduction of mandatory surveillance for MRSA infections. There was clear leadership and attention from the chief medical officer, chief nurse and others on the topic.

Sustained change

[Research](#) on the implementation of infection control policies emphasised the importance of leadership at multiple levels within the organisation with clinical champions throughout.

Since 2004, all NHS trusts have had to identify a director of infection prevention and control reporting to the chief executive and board. But for this role to have effect, there needs to be effective distributed leadership across the hospital with input from senior nurses, clinical directors, directorate managers, ward managers, pharmacists and others. The evaluation of the Michigan programme showed success of gaining local traction by using a combination of data comparing practice across trusts, indicating achievable improvements, together with patient stories to engage individuals.

Targets and accountability

Together with mandatory surveillance, the Department of Health set targets for reducing infections. It set targets to reduce MRSA infections by 50% over 3 years in 2005 and for *C. difficile* infections by 30% over 3 years from 2008. These targets were met and exceeded. Evaluation suggests that national performance targets are successful in raising the agenda and getting the attention of chief executives on key issues. As well as national targets, many hospitals also signed up to local commissioning incentives to achieve compliance with infection targets.

Further reading

Dixon-Woods M, Bosk CL, Aveling EL, Goeschel CA, Pronovost PJ. Explaining Michigan: developing an ex-post theory of a quality improvement program. *Milbank Q.* 2011;89(2):167-205.

Health Foundation (2015). Infection prevention and control: lessons from acute care in England.

Holmes A., Ahmad R., Kiernan M. Lessons in implementing infection prevention. *J. Infect. Prev.* 2016;17:84–89. doi: 10.1177/1757177415619027

Nuffield Trust (2017). Ten crucial trends: Quality in the NHS 2009 to 2017.

<https://www.nuffieldtrust.org.uk/news-item/10-crucial-trends-quality-in-the-nhs-2009-to-2017>