Quality Improvement: Using a collaborative approach to improve infection prevention and control.

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Improvement challenge

NHS Improvement[1] supports NHS providers in England to give patients consistently safe, high quality, compassionate care. Infection prevention and control (IPC) remains high on the patient safety agenda. However, it is estimated that only around two-thirds of healthcare improvements go on to result in a sustainable change (Health Foundation, 2013). NHS Improvement developed a 90 day IPC quality improvement collaborative (QIC) programme for 24 acute trusts in England. Here we discuss the experiences of some of the trusts who participated: Royal Cornwall Hospitals (RCH)[2], Northampton General Hospital[3] (NGH), London North West Healthcare (LNWH)[4], North Bristol (NB)[5] and East Cheshire (EC)[6].

Innovation and methods

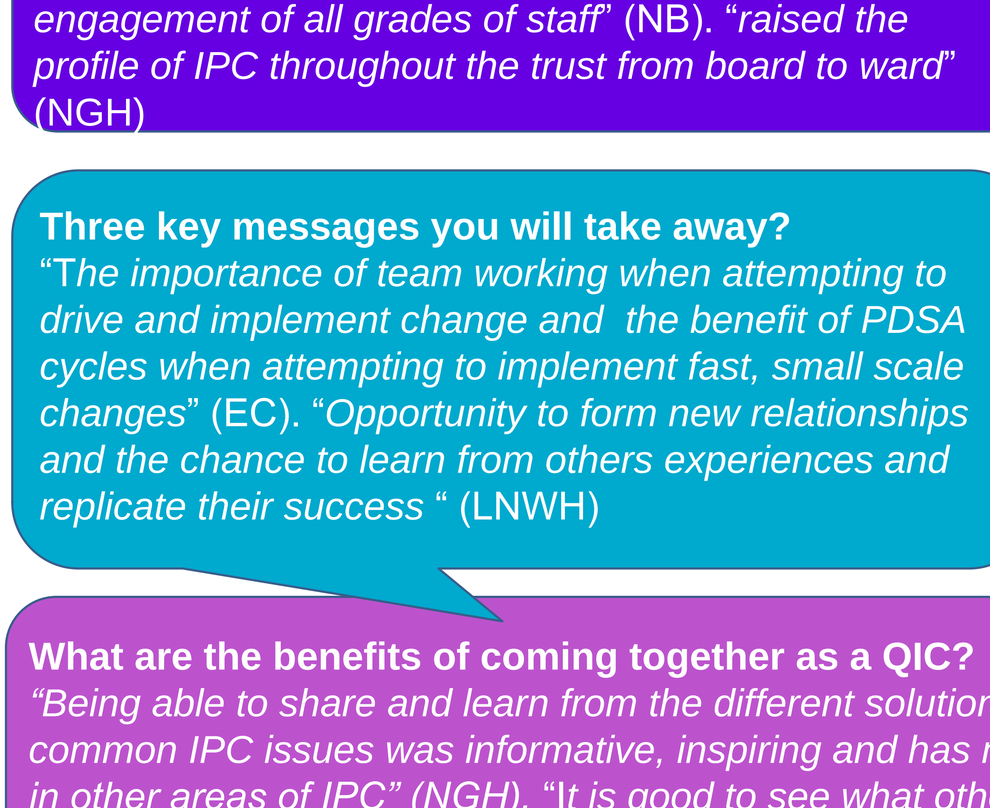
The Breakthrough Series QI methodology (IHI, 2003) was used for the IPC QIC: "*a short term (6 to 15 month) learning system that brings together a large number of teams from hospitals or clinics to seek improvement in a focused topic area*". The aim was better patient outcomes by improving IPC practice using three primary drivers:

- Providing the right leadership
- Ensuring that the environment is appropriate and complies with national guidance
- Ensuring the best systems are in place to improve IPC practice

This methodology incorporates undertaking small scale tests of change which, if successful, should be rolled out to deliver sustainable change. If unsuccessful the test should be stopped so as not to waste further time and resources (Figure 1). The organisations participating in the IPC QIC followed the Model for Improvement approach developed by Langley *et al* (2009) which asks three key questions:

1.What are we trying to accomplish? 2.How will we know that the change is an improvement? 3.What changes are needed to deliver the improvement?

Figure 1: Breakthrough Series (Adapted from IHI, 2003)



Experiences of trusts who participated in the IPC QIC

QI focus chosen: The focus of the QIC for each trust was determined upon their own risk assessment. These included: *Clostridium difficile* infection (CDI) reduction, ensuring accurate cleanliness data, improving timely isolation, improving decontamination of equipment and care of peripheral vascular catheters.

Barriers to change:
There is always a resistance to change and this should be factored into any QIC. The participating trusts identified a common theme: "*The 'I'm too busy' culture - initially staff were sceptical about the collaborative and the improvements that could be made by QI. They felt that they didn't have sufficient time available to commit to the QI process. Once the IPCT delivered QI training this barrier was overcome and the ward managers actually embraced the process, drove the improvements and owned the changes made"* (NGH).

Measurable outcomes:
CDI: "a *reduction of 36% compared to same time period last year* "(NGH).
Cleanliness: "*With regards to the cleaning of ward based equipment, our trial ward is now providing 100% compliance on a regular basis. The second ward has seen significant improvements which is visible when you walk onto the ward and is working to achieve 100% consistently"* (RCH)
Isolation: "*Prompt cards in clinical practice has improved staff confidence "*(EC).
Care of PVC: "*Compliance in audit is 95% + in the clinical areas*" (NB).

Key achievements observed:
In addition to delivering improvement there was an "*Cross directorate working increased practitioner engagement of all grades of staff*" (NB). "*raised the profile of IPC throughout the trust from board to ward*" (NGH)

Three key messages you will take away?
"T*he importance of team working when attempting to drive and implement change and the benefit of PDSA cycles when attempting to implement fast, small scale changes*" (EC). "*Opportunity to form new relationships and the chance to learn from others experiences and replicate their success* " (LNWH)

What would you say to another trust if they were invited to take part?
"*The QI process is so versatile, once you learn how to use it you will find yourself applying it to other areas of practice, often before you even realise!"* (NGH), "*Participating in the collaboration also enabled us to take away good practice and ideas from other Trusts who participated and allowed us to network and discuss current issues with other IPC Teams*" (EC). "*It motivates you to identify areas for improvement and gives you access to help and advise in order to plan, develop and implement improvements"* (LNWH).

What are the benefits of coming together as a QIC?
"Being able to share and learn from the different solutions that other trusts had taken to common IPC issues was informative, inspiring and has motivated us to implement QI work in other areas of IPC" (NGH). "I*t is good to see what others are doing and to realise that we also do good things* " (RCT)

Summary

Adopting the QIC methodology for IPC is still quite new. However, the feedback and evaluation from the trusts who participated in the approach to introducing change, improving local ownership and embedding change into practice, has demonstrated that it is worthy of further development.

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References

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