

1. Introduction

In 2015, Sherwood Forest Hospitals were struggling with poor compliance with Infection prevention guidelines, inadequate staff involvement in infection prevention, high *Clostridium Difficile* acquisition rates and a diminished infection prevention team

2. Intervention

The board supported a business plan citing how the initial investment would be quickly offset by reduced Healthcare Associated Infections (HCAI) & increased capacity for audit, training & surveillance within the IPC team. The Medical Audits auditing & quality assurance system was live on all 3 sites in the Trust by end May 2015 enabling increased audit capacity, extra staff training and improved local ownership.

3. Method



3.1 Smarter Resource Usage

Using the Medical Audits system's comprehensive training and education system with inbuilt auditing guide in every audit, the team were able to utilise their support staff to carry out non clinical auditing, such as sharps and equipment audits, safe in the knowledge that they would be auditing in the same way and to the same standard as the IPCNs would.

This smarter usage of resources freed the IPCNs up to increase their clinical hours and focus on management of Intravenous devices and Urinary catheters. The Medical Audits system freed up time due to the faster more efficient way of auditing. No longer having to re-enter audit data onto excel spreadsheets, or design reports also saved time. This time was then used to complete extra audits and more frequent and detailed prevalence studies.

4. Results

4.1 Tripled Audit Capacity

The team reported a tripling of their audit capacity, with an increased auditing of the environment, equipment, sharps and commencement of auditing of intravascular device and Urinary catheter management.

4.2 Individual Accountability and Ownership of Audit Data

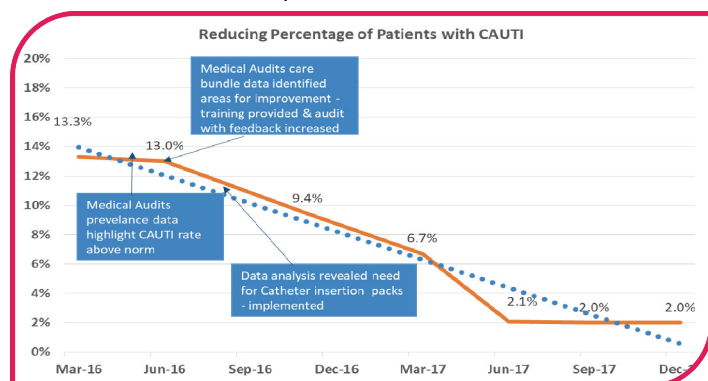
As staff became accustomed to getting real time results, their interest in the audits increased. With the support of the Medical Audits clinical team, each department manager was trained to access the web based system to view, edit and close issues raised against their individual departments during audits. This promoted a sense of ownership of the audit data among ward staff and served to increase interaction with the IPC team and the audit process.

4.3 Analysing Trends to Make Better Clinical Decisions

Trend analysis and quality audit data provided the IPC team with more knowledge and understanding of compliance with hygiene standards. This knowledge enabled cross-reference of new *C. Difficile* cases against ward cleanliness, commode cleanliness and hand hygiene compliance rates. Identifying a possible cause, or out-ruling the environment as the source allowed us challenge Medical teams to look at other causes of *C. Difficile*, like antibiotic usage and use our audit data to drive improvements in care.

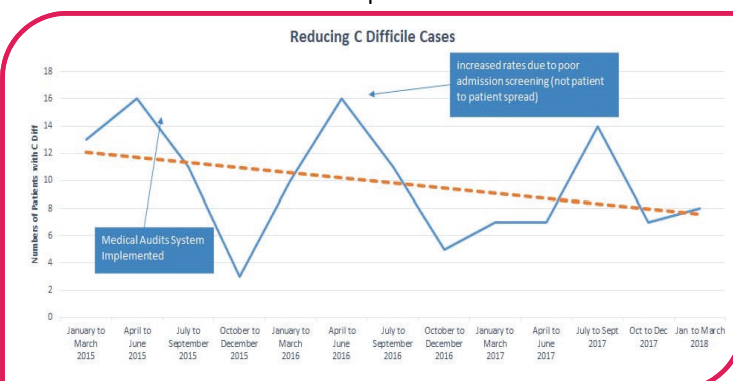
4.4 Utilising Audit Data for Quality Improvement

Rates of CAUTI reduced by 63% between 2016 and 2017.



4.5 Safe Care and Better Outcomes for Patients

Sustained decrease of 50% in hospital attributable *C. Difficile*.



4.5 Huge Cost Savings for the Trust

Using National Institute for Care Excellence attributable costs of healthcare associated infections (NICE, 2015) the cost savings to the Trust over the same time period of 3 years was over £900,000.

5. Conclusions

Utilising the Medical Audits auditing and quality assurance software released IPCN time to increase clinical audit, training and feedback. Empowering staff with individual access to issues raised against their departments increased accountability. Together, these interventions reduced rates of HCAI and saved the trust over £900,000 in 3 years. In an era of funding deficits, this is an example of how spending cleverly can generate real savings, improve patient outcomes and importantly, increase staff morale.