

Case Study: Student nurse infection prevention and control management

Aintree University Hospital NHS Foundation Trust's Infection Prevention and Control (IPC) Team have developed a structured five day bespoke placement for third year student nurses incorporating the management outcomes of their final placement relevant to IPC.

The Core Outcomes of the placement covers MRSA; Clostridium difficile and Norovirus, which were selected because they are the most common organisms encountered on the wards. Students are also able to suggest two learning outcomes of their own.

The premise of the placement is to increase the student's knowledge and practice in relation to IPC in order for them to prepare for the role of staff nurse and the responsibility that brings around IPC. Pre placement questionnaires determine the student's learning requirements which tailor the focus of the placement. Post placement questionnaires demonstrate learning has occurred.

Key Outcomes

- Comparison of pre and post questionnaires indicated an increased knowledge in the mode of transmission, the importance of the environment and students' understanding of how to prevent cross contamination.
- Formal evaluations of this placement received via the Higher Education Institutes provide positive qualitative data, examples of which include "It is very valuable to my learning needs" and "every student should experience time with the IPC team."

Background

Aintree University Hospital in Liverpool provides general acute services to a population of 330,000 in North Liverpool, South Sefton and Kirkby and specialist services to a population of 1.5 million across the North West and North Wales. Employing more than 4,000 staff, Aintree was authorised as a Foundation Trust on 1 August 2006, and has more than 13,000 public and staff members.



The IPC team at Aintree University Hospital NHS Trust consists of five whole time equivalent mentors available to support students on placement with the team. The team take one third year student weekly.

This team provide IPC advice and support for the Trust which currently has 700 in-patient beds and a busy Accident and Emergency Department.

The team is supported by a Practice Education Facilitator (PEF) who is responsible for the quality of the placement.

A review of evaluations from previous one day placements showed a need for a structured approach to the placement offered. With this in mind a five day placement was developed for third year students. The five day placement allows the IPC team to assess student's prior knowledge and to address their individual learning outcomes for the placement tailoring their needs to the programme of learning. The IPC team were keen to increase students' knowledge and practice in relation to IPC in order to support and educate our future workforce.

Key Aims

- Allow student nurses the opportunity to put theory into practice and increase their knowledge base around IPC
- Enhance student nurses' IPC practice before they qualify as Registered Nurses

Key Stages of Set-up

The concept was developed by Damian Burns, IPC Nurse and Student Support Facilitator. Damian wanted to provide newly qualified nurses with the knowledge and skills required in IPC. This would include assessment of their handwashing techniques, conducting hand hygiene audits on the wards and interpreting the results, learning about the management of diarrhoea, MRSA and CDT and care of invasive lines.

The IPC team have aimed this at third year students in order for them to learn the management of certain infections for when they qualify. The Trust currently employs newly qualified nurses so aiming this placement at those students allows them to be equipped with extra knowledge and skills for their new post as staff nurse.

Damian developed a questionnaire to determine the student's knowledge pre placement and then again at the end of placement and produced a study pack for students to utilise on the placement and thereafter. After discussions with the PEF the decision was made to offer this revised placement on the Trust's Choose and Book System. This is an electronic system that allows students to book onto a spoke placement from their Hub.

How it Works

The placement is offered via "Choose and Book." When students apply an email will be generated to the IPC team requesting that they review the student's application and confirm whether the placement has been granted. The student will be informed where to attend on their first day and an arrival time.

Students are given time to complete the questionnaire on their first day and agree a learning contract with their mentor. They are then given time to read the study pack and attend clinical areas. On the last day of placement students are asked to complete the questionnaire again and reflect on their experience with their mentor.

There is a detailed timetable for students to follow which allows time for theory and practice.

Students are able to take part in hand hygiene audits and interpreting the results and are able to review patients with invasive devices.

Resources

The placement required no extra funding but did require all Nursing and Midwifery Council (NMC) mentors to become “active” on the local register of mentors. This was facilitated by the PEF.

Time was initially required to produce the questionnaire and study pack. There is an ongoing requirement for the PEF to input placement availability onto the Choose and Book system.

Key Challenges

- Students applying for the placement who were not third years
- Students applying for the placement and asking for two days instead of the required five
- There is now a section on Choose and Book to state what year of training the student should be in and a note stating “Please do not apply for this placement if you cannot commit to five days”

Key Learning

At the end of placement the IPC team ask the students to complete an evaluation about their experience and use these to improve the experience if required.

Students welcomed the process and gave positive evaluations:

“Every student should experience time with the infection control team as it is very valuable to my learning needs.”

“The team were fantastic really made me feel welcome. They were really knowledgeable and I learnt a lot while I was there.”

Evaluations have noted that a five day spoke is more effective in increasing student’s knowledge base around IPC than the previous ad hoc shorter experiences.

Sustainability

Students are informed about this placement at induction and there is a Placement Learning Support System (PLSS) page for the IPC team where students can read about placement opportunities. There is a link from Choose and Book to PLSS. The IPC team promote the placement on their clinical areas.

Next Steps

- To expand the placement criteria to include students from other disciplines
- Explore a word recognition software programme to enable a more in-depth analysis of the questionnaire
- Evaluate the impact of the placement on the students practice once qualified
- PEF to look at introducing similar programmes with other specialist nurses/teams

Supporting Material

Appendix 1 - Pre-Placement Questionnaire

Appendix 2 - Post-Placement Questionnaire

Appendix 3 - Proposed student timetable



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