

Undergraduate Nurses' Attitude Change to Health Technology Implementation

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Abstract. The poster will report upon a longitudinal study exploring the attitudes towards the implementation of health technology into clinical and community nursing practice from the perspective of third year undergraduate students studying adult, child, mental health and learning disability nursing.

Keywords. Student nurses, health technology implementation, attitude change

1. Introduction

This poster reports upon a longitudinal study, undertaken over three academic years (2017/2018, 2018/2019 and 2019/2020) which explored undergraduate nurses' attitudes to the introduction, use and evaluation of health technology implementation. The degree programme prepares students to be registered nurses mainly within the National Health Service (NHS) in England. In the third-year undergraduate nursing programme is a module on evaluating evidence for practice and within the module is a four-hour workshop timetabled that enables the students to explore their understanding of the health information technology agenda across the NHS in England. There are approximately 500 students per academic year with these divided into groups of 30 meaning that the workshop is delivered 15-16 times per year.

The nursing programme is made up of 50% in a university setting and 50% in clinical/community placements. Thus the students attending the workshop have experienced health information technologies in their placements.

2. Methods

The longitudinal study used a repeated cross-sectional methodology. The students, in groups, discussed a set of key *issues that are derived from the policy documents* [1,2] as they perceived them and added the group feedback using a digital comment board. After the discussion and upload of feedback the facilitator drew themes from the comments and addressed these with the students. The students consent was obtained during the workshops for their unidentified comments being used in this research.

The workshop facilitators have extensive knowledge of health information technology in all fields, adult, child, mental health and learning disability nursing. Each

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workshop included some pre-sessional reading followed by an introduction using the policy documentation [1,2] available at the time which identified a need to increase the use of technology to improve patient outcomes whilst reducing the cost of health provision.

Following the workshops the comment data was saved and analysed using a thematic approach.

3. Results

In 2017 the students' responses did identify a slight positive response to the issues presented including more staff trained to use technology, improvement in care delivery and reduction in serious incidents within health care setting. Negative responses included questions data security and internet security after the Ransomware attack in 2016. The ability to access the internet specifically linked to the elderly was also raised as an issue by this cohort of students.

In 2018 the students' responses shifted towards educating the public about information sharing and the need for more training on using the main systems, particularly the electronic health record. A main theme from this cohort was around the terminology used within the digital patient records and health care professionals needing to be mindful of what that wrote in the records. Still presenting as a negative comment is data security and the need to reassure that public about the level of security in place to protect patient information.

In 2019 the theme around patient privacy and patient accessing their patient records online was more accepting as a normal part of health care for both patient and health care professionals. This was evident within the theme of inter-professional working and the sharing of patient records to improve patient outcomes and how the digital record would facilitate this through an input once use often approach. A negative theme was that there were still different systems in use that did not allow the sharing of information resulting in information missing from patient digital records, resulting in important information being missed or not considered when a patient was seen by a health care professional.

In 2020 the thematic analysis was representative of the current Covid-19 pandemic. Students identified that the pandemic had brought health informatics to the forefront of health care delivery including the NHS track and trace app, online ordering of prescription and online consultations with health care professionals. They also identified the need to consider digital poverty and how service users accessed these services as important factors when discussing the use of health informatics.

4. Conclusion

Undergraduate nursing students are commonly drawn from the millennial generation; they are unlikely to have ever licked a stamp or pushed buttons on a television cabinet to change channels or had to wait to hear from their community. Their experiences with health technology implementation offers us an insight into the wealth of knowledge they have which could be harnessed to progress this agenda, their voice should be heard and in our experience their voice makes a lot of sense in changing attitudes of those around them. The changing students' attitudes towards health technology is clearly driven and influenced by the experience that they have had whilst out in clinical practice. This

knowledge and experience needs to be harnessed to assist in development of staff and patients engagement with the health technologies as the develop further.

References

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- [2] NHS England Long Term Plan. National Health Service – England publication. (2019) Available at: <https://www.longtermplan.nhs.uk/>