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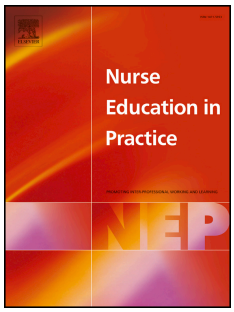

Teaching student nurses how to use electronic patient records through simulation: A case study

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Teaching student nurses how to use electronic patient records through simulation: A case study

Abstract

Like any skill in nursing, preparing students for the changes in technology needs to be incorporated into the curriculum. Electronic Patient Records (EPR) are an example of technological innovation in health care. This article presents a case study of how one faculty of healthcare, working collaboratively with a web designer, created and implemented a simulation activity to enable student nurses to develop their skills in using EPRs. An evaluation study was undertaken into students' perceptions of undertaking the simulation activity and using EPRs in the simulation activity. Findings showed that students were positive about the simulation activity and using the EPR app in the simulation, and felt well-prepared for using EPR in practice.

Key words: electronic patient records; simulation; nursing education; technology in healthcare

Introduction

In 2013 NHS England announced a vision for a fully integrated electronic patient record (EPR) system across all settings (NHS England 2013). The intention was to implement EPRs by 2018. EPRs are also referred to in the literature as electronic health records (EHR). An EHR is a repository of patient data in an electronic form that is stored and transmitted securely, and accessible by multiple authorized users (ISO. 2005). EHRs/EPRs are now used globally in primary, secondary and tertiary care and their main purpose is to support continuing, efficient and integrated healthcare.

All Trusts in England are preparing to implement this change which will result in the introduction of a new way of recording and documenting patient care. Student nurses will need to learn how to use EPRs as they will encounter them as part of their practice-based learning experiences and will be expected to be able to use them when they become registered nurses. This article presents how the school of nursing within the healthcare faculty at Kingston University/St George's University of London (KU/SGUL), in collaboration with a web designer at the university, developed and implemented a simulated EPR for teaching students about EPR. The aim of the article is also to present the findings from an evaluation of students' experiences of the simulation activity in terms of their engagement with the simulation, and its value and impact.

Literature review

In their systematic review, Chaudrey et al (2006) found that EPRs have three major benefits over paper health records. These are: increased adherence to guideline-based care, enhanced surveillance and monitoring, and decreased medication errors.

Although there is a wealth of literature about the use of simulation to teach students, there is relatively little literature on the use of simulation to teach students about EPR/EHR. Baillie et al (2012), undertook a qualitative study of students' experiences of EPRs. They found that students perceived that EPRs were beneficial because they provide better patient information and better quality record keeping. However, they expressed concerns about some practical and logistical aspects of EPR such as they appeared complicated and time consuming, and were extra work as paper records were also required to be completed leading to duplication. Time lapse between care giving and recording care on the EPR was also raised as an issue and, in some cases, the location of the computer away from the place where care was given presented challenges. Baillie et al (2012) concluded that those students who had a positive experience with EPR while on practice placements were more likely to support the implementation of EPR after qualifying. However, this study had a relatively small sample of 6 adult field students, 5 mental health field students and 6 midwifery students at one university in the United Kingdom and this small sample size makes it impossible to drawn any generalizable conclusions from the study.

There is some literature related to using simulation to teach medical students about EPR. Milano et al (2014) suggested that there are few formal EHR curricula that teach optimal use of EPR to students and other trainees. They report on the introduction of formal teaching for medical students about EPR at a university in the US. An evaluation was undertaken into students' perception of the effectiveness and of the facilitation of the simulated EPR activities they undertook. An electronic survey was conducted and 12 newly qualified doctors (interns) and 129 medical students were invited to complete the survey questionnaire. Response rate from the interns was high (100%) while from the medical students the response rate was 51%. Findings showed that many of the interns (98%) and students (51%) felt that the

simulation EPR training was effective or very effective. The training programme made them feel more comfortable with finding information, inputting orders, and updating a health maintenance tool after completing the Simulated HER training. Students indicated that it had improved chart navigating and documentation skills and helped prepared them for residency. Students who were less positive about the simulated EPR training indicated that they felt the EPR training was situated in the wrong part of the medical curriculum, was too time consuming and took away from time they needed for their other medical studies. Therefore, one of the weaknesses of the way simulated EPR training implemented in this study is that it took place at one point in time in the curriculum rather than over the course of the entire undergraduate medical curriculum. However, although this study examined the effectiveness and of the facilitation of the simulated EPR activities, it did not examine hoe students engaged with the simulation, nor the impact of the training on their subsequent practice.

Wald et al (2014) suggested that while EHR use is becoming state-of-the-art, planned and deliberate teaching of health care information technology (HCIT) competencies is not keeping pace with this and there is an absence of formal pedagogy about EHRs within undergraduate medical education. They proposed a long-term longitudinal approach throughout the medical curriculum to enable medical students to learn how to use EPR but in a way that linked EPR with theory, narrative medicine and reflection (Kern et al 1998). The aim was to maximise the benefits of EPR use and minimise the risks, and with a focus on physician-patient communication skills and development of core competencies within medical education.

One contribution to the literature related to teaching students to use EPRs was a literature review undertaken by Goveia et al (2013) who undertook a systematic review of evidence-

based EPR educational interventions and training. The aim was to provide evidence to guide healthcare educators in the design of EPR teaching and to find the best ways of teaching healthcare students about EPRs in order to to improve the meaningful use of EPRs in practice. Of the 4507 articles they initially found, 97 were potentially eligible for inclusion in the systematic review. Inclusion criteria were identified against which these 97 studies could be mapped. When these criteria were applied, 7 studies were found to be eligible for inclusion in the systematic review. All were related to EPRs in medical education. Analysis of the findings of these 7 studies indicated that the majority of studies were about teaching EPR to medical students. Goveia et al (2013) concluded from this systematic review that multifaceted interventions that combine classroom-based interventions with feedback seem most effective in providing meaningful use of EPRs. Healthcare educators need to take into account the differences in computer literacy among trainees and the teaching intervention should be flexible with regard to when, where and at what pace the material is completed. However none of the teaching methods used in the 7 studies included the use of simulation to enable students to learn about EPRs, suggesting that there is an absence of robust studies into the use of simulation to enable student to learn about EPRs. In addition, only literature related to medical students were included in this systematic review

The literature related to teaching nurses to use EPRs is still sparse, yet Risling (2017) outlines the key technological trends that will affect nursing education into the next decade, including the use of EPRs. However, apart from emphasising the importance of EPRs in the future, her article does not address how best to enable students to learn to user these technologies, and what teaching methods might best enable students to learn to use EPRs.

Kowitlawaku et al (2013) presented a preliminary evaluation of an electronic health record for nurse education (EHRNE) which was used in a simulation setting in a nursing curriculum in Singapore. This was a small qualitative study involving focus group interviews with 9 student nurses. Findings showed that the extent to which students were able to successfully use the software during simulation often was related to the extent to which they were comfortable with technology. However, overall the EHRNE software had a number of advantages including simplicity, accessibility, time efficiency, and being content specific for each nursing programme. Integrating the EHRNE program into the curriculum appeared to promote students' awareness of electronic documentation and enhances students' learning in the simulation laboratory. Kowitlawaku et al (2015) undertook a follow up study of 212 the factors that influence students' acceptance of EHRs. They found that an important factor in their acceptance was their overall attitude to the technology. When students are helped to cultivate a positive attitude, their acceptance of EHRs increases, as well as the extent to which they perceive EHRs as being useful to themselves and their patients. This was a small study and findings, although interesting, are not generalizable to other settings.

An analysis of the literature suggests firstly, that there is a paucity of literature related to using simulation to teach student nurses about EPRs and what little there is does not address issues of how students engage with the EPR simulations, and the value and impact of using simulation to enable students to become skilled and confident at using EPRs in practice.

The Development of the simulated electronic patient record

The School of Nursing at Kingston University/St George's University of London has a long history of using simulation to enable nursing students to learn clinical, communication and decision-making skills (e.g., Rush et al 2010; 2012; 2013). When the School's Trust partners

began moving towards EPRs, The School began exploring how they would incorporate use of EPRs into the undergraduate nursing curriculum. The intention was to develop a simulated EPR system that was compatible with the School's existing simulated ward environment, discussed by Rush et al (2010; 2012; 2013). For example, for many years, the school has used role-players who act as patients and relatives in simulation learning activities with student nurses, and the school wished to continue with this model for its simulated EPR training.

The main provider of EPRs for the National Health Service (NHS) in England developed an educational package for teaching students how to use EPRs. However, it became clear that the model of this learning package was not compatible with the way simulation is used at this school of nursing as it did not accommodate use of role players in simulation activities.

The School then embarked on an ambitious plan to work with the web and multi-media team within the university to create its own simulated EPR system that meets our specific simulation learning experience needs and addresses the principles of EPR. The lead academic staff from the simulation and skills laboratory of the School first wrote a list of wants and needs from the simulated EPR system. A member of the university's web and multi-media team then spent time observing simulation activities currently undertaken by students to develop their clinical, communication and decision-making skills. It was decided that the simulated EPR system needed to include:

- A static patient ID bar
- A dashboard for navigation
- A nurse ID/signature on data entry
- A date and time stamp for all entries

The result was the development of two systems: an administration system which included the simulated patients, cases, wards created. The system was web-based using the Firefox browser. The second system was the development of an App version where students can view patients, cases and the simulated ward using their iPads. This means that students can access the system anytime and from anyplace. The simulations were in the form of scenarios created by nursing staff and nurse lecturers. Examples of the scenarios used in the EPR simulations can be found in Figure 1.

(Insert Figure 1 near here)

For each scenario, the following information was recorded in each EPR:

- Presenting complaint
- Past medical history
- On examination
- Investigations
- Diagnosis
- Plan

Students were given ipads to access the EPRs during the simulation which helped to address the issue raised in the study by Baillie et al (2012) where students found that too much time was needed to travel between patients and the one computer to record or obtain information.

Pilot testing the EPR simulation app

In May 2014 a very basic part of the system was tested on a small group of 3rd year student nurses using a simulated ward area of 2-4 patients/beds. All students testing the system had

not yet used EPRs in clinical practice placements. All students gave positive verbal feedback on the use of the system. However, they felt that the simulated EPR activity was difficult to manage in the time allocated (1 to 1 ¼ hours). They also expressed concern that using the system to record and document care may detract from time available to give patient care.

In January 2015 the full system was tested by one whole cohort of 2nd year student nurses in the adult field. Testing of the simulated EPR system took place over 1 week using all 8 role-played patients in the simulated ward. Evaluation of this test of the system was carried out which showed that overall the simulation activity was positively received with a few minor issues that were able to be corrected easily. The majority of students indicating that the EPR was easy to navigate and logical to use. Over 70% indicated that they felt comfortable using the iPad for the EPR simulation. The evaluation of the test also showed that 51% of the group had not used EPRs in practice prior to the simulation and 35% had received some training on EPR in their clinical placements. Of the students who had used EPR before, 93% found that the app related to the basic principles of EPR that they used in practice. However, 26% of students also felt that using the iPad hindered their patient care in the simulation ward.

From the test of the EPR app simulation, a decision was taken to increase the number of iPads available for the EPR simulation activity, to increase the assessment tools to include a pain assessment, to increase staff and student training in EPR, including the development of a resource to support learning and teaching related to the EPR simulation.

Full evaluation of the system, January 2015 – January 2016

The aim of the evaluation was twofold: to evaluate students engagement with the EPR simulation activity and to ascertain the value and impact of the simulation EPR activity. This

evaluation was judged to be a service evaluation as defined by the National Research Ethics Service (2009) and, as per their guidelines, ethical approval was not required. However, all questionnaires administered anonymously and confidentiality was assured.

All cohorts of students (n=296) engaged in the EPR simulation activity between January 2015 and January 2016 and immediately following the simulation, all were asked to complete an evaluation questionnaire of the EPR app. It seemed appropriate to collect data through a questionnaire developed for this evaluation that would elicit quantitative data. The questionnaire aimed to elicit how students engaged with the EPR simulations, and the value and impact the simulation activity had on them. For each component of the EPR a series of statements were written with a Likert-style scale and for each statement students were asked to indicate the degree to which they strongly agree to strongly disagree with each statement on a 6 point scale. A total of 296 completed evaluation questionnaires were returned (response rate = 100%). Simple descriptive statistics were used to analyse the data and responses between 1and 3 on the Likert scales were deemed to suggest disagreement or strong disagreement with statements, and responses between 4 and 6 were deemed to suggest agreement to strong agreement to statements. Tables 1 - 2 shows the results of the first 2 sections of the questionnaires.

(Insert Tables 1 and 2 near here)

Findings from Table shows that 260 respondents (87.8%) agreed or strongly agreed (scored 4 – 6 on the Likert-style scale) that the EPR app was easy to navigate which suggests a high degree of student engagement. In addition, 276 respondents (93.2%) agreed or strongly

agreed that the EPR app was logical. Table 2 shows that 251 respondents (84.8%) felt comfortable using the iPad to undertake the EPR simulation activity.

Table 2 shows that 287 respondents (96.9%) indicated that the EPR app was useful. However, only 159 respondents (53.7%) had used EPR in clinical placements. Of these, 136 (85.5%) perceived that the EPR app adhered to the principles of EPR that they experienced in placements while only 92 (57.9%) had received any teaching or training about EPR inn clinical placements.

In terms of using the iPad to undertake the EPR simulation, 89 respondents (30.1%) felt that using the iPad hindered the patient care they were meant to be giving to patients in simulation; 181 respondents (61.1%) did not feel that using the iPad hindered their patient care. Finally, 243 respondents (82.1%) enjoyed using the EPR app.

The next sections of the questionnaire invited students to indicate the extent to which they strongly agreed to strongly disagreed (on a 6 point scale) with a number of statements about their developing skill in using a number of specific components of the EPR including: clinical notes; patient details; vital signs and progress report. Findings are shown in Table 3.

(Insert Table 3 near here)

Scores between 4 and 6 were assumed to represent agreement/strong agreement with the statements. Table 3 shows that 73% of students agreed/strongly agreed that the clinical note information page easy to read. Additionally, 58.1%, 51% and 58.5% respectively

agreed/strongly agreed that the clinical notes were logically structured, they were able to enter clinical data easily and the clinical information provided was relevant.

Similar percentages of students (See table 3) agreed/strongly agreed that the patient detail information was what they needed to know, that the page was clearly presented, entering patient details was straightforward, inputting vital signs was easy, NEWS scores were easy to track and VSM data was easy to interpret. Just over 10% felt that they vital signs page of the simulated EPR was busy and confusing. Similar responses were found for the section of the EPR related to progress reporting (See table 3).

Three remaining sections of the questionnaire addressed the SBAR tool as part of the EPR, drug chart and handover notes. SBAR (Situation, Background, Assessment, Recommendation) is a tool that provides an electronic means of collecting and then communicating the correct information about patients to the correct people (Institute for Healthcare Improvement 2015). Patient information from the EPR is automatically transferred to the SBAR and students had the opportunity to use the SBAR during the simulations. In addition, the EPR simulation activity included the patient's drug chart and handover notes.

Only 80 students used the SBAR during the simulation and 52 students did not respond to the question about using the SBAR. Those who did agreed/strongly agreed that the SBAR tool was easy to follow/complete and that it was helpful having all information automatically imported into the SBAR tool. Just over a quarter of the students used the SBAR tool when making a phone call during the simulation and a smaller number of students added notes and recommendations to the SBAR tool during a phone call about a patient. Again, there were a

high number of students who did not respond to these questions/statements as they did not use the SBAR during the simulation. However, 37.5% of respondents indicated that the EPR and SBAR tool improves patient safety, including those who did not use the SBAR during the simulation.

With regard to the drug chart component (See Table 4) of the EPR, 53%, 49.3% and 51.7% of students respectively agreed/strongly agreed that they were able to distinguish between regular and as required drugs, could easily identify when drugs were last administered and were able to find and read the full prescription for the required drugs. The majority of students had the opportunity to administer drugs as part of the simulation and were able to easily document and sign for the drug administered.

(Insert Table 4 near here)

The EPR has a section on completing handover notes on each patient. In total, 51%of respondents agreed/strongly agreed that they were able to complete the handover notes at the end of the simulation. Many had simply run out of time to complete this activity in the time allotted for the simulation. In addition, 40.2% of students agreed/strongly agreed that the information was automatically pulled through to the handover note ready to use and similar numbers of students agreed/strongly agreed that they used the handover page in their feedback and reflection session after the simulation and using the handover notes improved their clinical handover skills.

Discussion of the findings

In the literature review it was noted that like any skill in nursing, preparing students for the changes in technology needs to be incorporated into the curriculum (Risling 2017).

The primary aim this article was to present the findings from an evaluation of students' experiences of the simulation EPR activity. Evaluation of an innovation in teaching should examine student engagement with the teaching approach, and its value and impact (Marks-Maran 2015). The findings of this study are mapped against these three components of educational evaluation and against the small amount of literature available.

Student engagement with the EPR simulation

The positive results shown in Tables 1 and 2 suggest that student engaged well with the EPR simulation learning activity. This appears to be true both for those who had already experienced EPRs in practice and those who had not, as most of those who had experience these had not had any ward-based training in EPRs. Just over half of the nursing students in this study had experienced EPRs in practice yet only half had received any practice-based training in EPRs. The findings also suggest that student engagement with the various components was also good, especially with regard to developing skill in using specific components of the EPR such as using clinical notes, patient details, vital signs and progress report. In addition, students found the EPR logical and easy to navigate.

The one area of the EPR that was less engaging for the students was the SBAR tool and fewer than one quarter of students used this part of the EPR during the simulations. Some students were addressing particular scenarios that did not require use of the SBAR to communicate patient information and it may be that changes are needed to the actual simulation activity to ensure students learn to use this component of EPRs. Unlike findings from Baillie et al

(2012) students did not find the EPR complicated and time consuming. Use of the ipads was viewed positively by students which also appears to address the issue raised by students in the study by Baillie et al (2012) where the time needed to travel between patients and one computer was too time consuming. It was hoped that having ipads readily available to access the EPRs would promote a positive attitude to the EPR, as found by Kowitlawaku et al (2015), and this seems to have been the case.

Value and impact of the EPR simulation

The findings support the study by Milano et al (2014) who concluded that medical students found it useful and valuable to have the opportunity to learn about EPR through simulation. The training programme made them feel more comfortable finding and inputting information and updating records and that the training through simulation prepared them for their role as a qualified doctor. The study presented in the article showed similar responses form the nursing students.

A large percentage of the nursing students were able to use the vital signs component of EPR, progress reporting, drug chart and handover notes. Relatively few students had the opportunity in the simulation to use SBAR. Students appeared well able to use the information provided for them in the EPR to complete the simulation activity and were also able to input relevant data into the EPR.

Findings from this study indicated that the section of the EPR app that provided clinical notes about the patient was particularly valued by student nurses in terms of the ease of understanding the notes, logical structure, presentation of relevant data and ease of ability to

enter clinical data. In addition, high scores were recorded by student nurses on the quality of patient information provided and readability of the patient detail page of the EPR. Data related to vital signs was seen by most to be easy to input and interpret, and tracking of data was also easy. This suggests that the EPR training tool promotes student engagement with the technology. The vast majority of students did not find the vital signs page too busy or confusing. Similarly, the function of the EPR related to adding progress notes and signing for these was valued by the majority of students. A prompt is built into the simulation EPR app to remind students to sign or initial any notes but the majority of students did not appear to need/use this prompt.

Those who did use the SBAR tool found it easy to follow and complete, used the SBAR to communicate information about their patient and added their own notes to the SBAR. What is interesting is that even those students who did not use the SBAR tool during the simulation agreed that EPR and SBAR can improve patient safety.

The drug chart within the EPR was also positively evaluated in terms of distinguishing between regular and as required drugs, readily seeing when drugs were last given and finding the full prescription within the EPR for each drug. All students who had administered a drug as part of the simulation were able to document and sign for this. Finally, although students were encouraged to use the EPR handover notes section to frame their reflection/feedback session at the end of the simulation, just over 1/3 of students did so.

The majority of studies currently available in the literature into EPR training in the curriculum have been carried out on medical students (Goveia et al 2013) and are presented as separate EPR training rather than being integrated into the curriculum. This makes the

evaluation study presented here relatively unique in nursing education, adding to the knowledge gained about EPR and simulation in previous studies by Kowitlawaku et al (2013) and Kowitlawaku et al (2015).

Follow up studies are needed to explore the impact of undertaking simulated EPR training on these students as they go into practice and to test the findings of Baillie et al (2012) who found that positive experiences with EPR as students led to them being more positive towards EPR after they qualify.

Conclusion

The aim of this study was to capture students' experiences of the EPR simulation in terms of how they engage with the simulation, and its value and impact. The study showed that the students were very positive about the EPR app and they were able to use the app successfully in simulation. They engaged well with the EPR simulations and were positive about the value and impact of the activity on their learning how to use EPRs. The components of the EPR that were valued most by students were the clinical notes about the patient, the quality of patient information provided, the ease of entering data and the ability to track data. This suggests that the EPR training tool promotes student engagement with the technology. The vast majority of students did not find the vital signs page too busy or confusing. Similarly, the function of the EPR related to adding progress notes and signing for these was valued by the majority of students. The findings suggest that there is a need to incorporate EPRs into nursing education programmes.

Key Phrases:

- Advances in technology need to be incorporated into the undergraduate nursing curriculum
- EPRs are now a feature of healthcare provision in the UK
- A purpose-built EPR administration system and EPR app was developed for students to use as part of a simulation activity in nursing care
- An evaluation study undertaken showed that students were positive about undertaking the EPR simulation activity and the skills they developed through the simulation
- Further studies are needed to examine the extent to which the EPR simulation activity prepares nursing students for using EPRs in practice

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Tables

Table 1: Evaluation results, January 2015 – January 2016 (1)

	1-3	4-6
The EPR app was easy to negotiate	26	260
The EPR app was logical to use	11	276
I felt comfortable using the iPad	37	251

(1 = strongly disagree – 6 = strongly agree)

Table 2: Evaluation results, January 2015 – January 2016 (2)

	Yes	**No**
Was the EPR app useful?	287	6
Have you used electronic patient records in clinical placements?	159	131
If YES, Does this EPR app relate t the basic principles of EPR that you used?	136	13
Have you had any training/teaching about EPR in clinical placements	92	175
Do you feel that using the iPad hindered your patient care?	89	181
Have you enjoyed using the iPad and EPR app?	243	29

Table 3: Evaluation results: clinical notes; patient details; vital signs and progress report (January 2015-January 2016)

	1-3	4-6
Clinical notes:		
This page of information was easy to read	6	216 (73%
These notes were logically structured	6	166 (58.1%)
I was able to enter clinical data easily	20	151 (51%)
The clinical information presented was relevant	0	173 (58.5%)
Patient's details:		
The information shown was what I needed to know	4	167 (56.4%)
This page was clearly presented and readable	6	168 (56.8%)
Entering patient's details was straightforward	9	158 (53.4%)
Vital signs:		
I was able to input a set of vital signs easily and efficiently	21	153 (51.7%)
I could track the automatic NEWS score and referred to it	29	143 (48.3%)
I was able to interpret the VSM data easily	14	149 (50.3%)
This page was busy and confusing	132	35
Progress report:		
I was able to add progress notes during the simulation	18	155 (52.4%)
It was straightforward and logical to add progress notes	12	166 (56.1%)
I added my signature/initials to all my added patient notes	14	152 (51.4%)
I used the prompt to remember to add my signature/initials to any notes I added	39	123 (41.6%)

(1 = strongly disagree – 5 = strongly agree)

Table 4: Evaluation results: Drug chart and handover note component of the EPR

	1-3	4-6
Drug chart		
I was able to distinguish between regular and as required drugs	13	157 (53%)
I could identify easily when drugs were last administered from the drug chart home screen	24	146 (49.3%)
I was able to find and read the full prescription for required Drugs	18	153 (51.7%)
I administered a drug to my patient during the simulation	Yes=110 No=68	
I was able to document and sign for the drug administered	27	110 (100% of those who administered a drug)
Handover note		
I completed the handover notes at the end of the simulation	28	151 (51%)
Appropriate information was automatically pulled through to the handover note ready for me to use	26	119 (40.2%)
I used this handover note/page in my feedback/reflection after the simulation	27	110 (37.2%)
Referring to this handover note/page in my feedback/reflection session improved my handover skills	24	104 (35.1%

(1 = strongly disagree – 5 = strongly agree)

Figure 1: Sample scenarios used in the EPR simulation activity

Patient 1: Presenting in A& E with recurrence of chest pain. This is usually well managed with medication but has been getting significantly worse, query stress related. Today out shopping, sudden onset of chest pain not relieved by sitting/resting. GTN spray used with no effect. Some improvement/relief after 2nd dose of GTN. First aider in shop called ambulance

Patient 2: Patient arrived in A & E with head injury following a fall. Tripped and fell down 3 steps and hit head on concrete paving. Reports no loss of consciousness but finds it hard to recall what happened

Patient 3: Presented in A & E with dense left sided weakness. Was in their kitchen when they had a sudden onset of severe headache causing collapse on the floor. Found by neighbour on the kitchen floor, unsure how long they had been there, neighbour assumes at least 2 hours. ? loss of consciousness. When found able to talk but not able to move left side, very distressed and frightened. Ambulance called.

Patient 4: Seen in outpatients for haemorrhoids. Fourth degree haemorrhoids (grade IV). Permanently prolapsed, unable to reduce.

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