Title: Improving patient privacy and confidentiality in one regional Emergency Department – a quality project.

Running Title: Patient Privacy and Confidentiality

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Abstract

Background Patient privacy and confidentiality (PPaC) is an important consideration for nurses and other members of the health care team. Can a patient expect to have confidentiality and in particular privacy in the current climate of emergency health care? Do staff who work in the Emergency Department (ED) see confidentiality as an important factor when providing emergency care? These questions are important to consider.

Methods This is a two phased quality improvement project, developed and implemented over a six month period in a busy regional, tertiary referral ED.

Results Issues identified for this department included department design and layout, overcrowding due to patient flow and access block, staff practices and department policies which were also impacted upon by culture of the team, and use of space.

Conclusions Changes successful in improving this issue include increased staff awareness about PPaC, intercom paging prior to nursing handover to remove visitors during handover, one visitor per patient policy, designated places for handover, allocated bed space for patient reviews/assessment and a strategy to temporarily move the patient if procedures would have been undertaken in shared bed space. These are important issues when considering policy, practice and department design in the ED.

Key words: Patient privacy, confidentiality, handover, emergency department, culture
Introduction

The Emergency Department (ED) is a busy, transient health care setting which at times due to its nature, impacts on practice that would normally not be affected in other acute settings, for example protecting patient privacy and confidentiality (PPaC). However, a number of factors specific to the ED, may impact on how PPaC is maintained[1]. These factors may include open plan physical design, space that is crowded and public, ‘fishbowl’ like staff stations, curtains only between most patients, high patient volume and through-put [2, 3], overcrowding, length of stay, and lack of caregiver vigilance [2, 4, 5]. At times due to access block, patients may also be in areas not meant for patient care (e.g. hallways).

Due to the focus in the ED of providing urgent or emergency, and ideally short term care, the environment is designed to facilitate this type of patient management. This is different when compared with in-patient wards where often a comprehensive amount of assistance with activities of daily living and other types of care are provided. As such, the ED layout is different compared to ward areas, and this is usually to provide visibility of patients for as much time as possible[2] during their stay in the ED. The high visibility is based on the principle to allow traffic to pass through, to expand a treatment area if more equipment is needed, and if short staffed – monitor a number of patients simultaneously so changes in patient condition to be recognised, and enable a rapid response[6]. While this assists in providing safe care, upholding patient confidentiality and privacy due to these factors becomes more problematic[1, 3].

A number of ED’s see virtue in open spaces that can be rearranged according to patient acuity and throughput[2] but may enact this without considering the issue of PPaC. In departments that are already established, with little financial means to make changes, the responsibility of innovative practices to improve PPaC falls to staff. A number of studies have measured breaches in PPaC due to the design of the ED and volume of patients [3, 4, 5] but only one[7] considered the effects of changes in an ED on PPaC.
Visitors are an important element in the support of patients who require treatment\([1]\) but are not the only additional people present in the ED. As the ED is the interface between the inpatient care, community and primary health care, others may also be present for a variety of acceptable reasons\([8]\). This includes students from various health disciplines, other observers (for example researchers) and law enforcement officers\([6]\).

Overcrowding in the ED is an international issue and can impact on the patient’s experience and the clinician’s ability to carry out appropriate care in the ED\([9, 10]\). Overcrowding can be made worse by access block when patients wait for long periods in ED corridors until ward beds become available\([11]\).

The aim of this project was to increase awareness and highlight common situations that result in breaches of PPaC in one department. We also wished to discover if staff believed that maintaining PPaC was difficult, examples of these difficulties and opportunities or practices for improvement. Practice changes to address these situations were implemented with recommendations for these changes to become department policy.

**Methods**

**Project Design**

This quality improvement project had two phases. In Phase 1 information was gathered and strategies for change developed and implemented. In Phase 2 the strategies were evaluated and recommendations made to management. The rationale for choosing this design was based on pragmatic reasons to include a combination of qualitative and quantitative approaches chosen to best suit the clinical problem\([12]\). While technically mixed methods, this design was predominantly qualitative due to the approach the team felt was necessary considering staff culture in the unit at the time which was resistive to changes being imposed in the department without collective buy-in of staff.
Qualitative data was collected to identify themes and sub-themes, and quantitative data was collected for descriptive purposes. Phase 1 data was collected informally as many staff were resistant to the issues initially identified, and the research team felt that informal data collection would allow staff to represent their opinions in a safe, comfortable atmosphere as we wished to avoid polarising staff opinion at the beginning of the project.

Setting

This project was conducted at one regional level 5/6 Queensland Emergency Department in 2006-2007. During the project period (August 2006 - February 2007) there were an average of 4,534 monthly presentations, 992 admissions per month, a 49% of admitted patients waiting in the ED in excess of 8 hours for their ward bed, and 34% of patients waiting more than 12 hours. Collectively, 83% of patients each month experienced significant access/bed block times.

Sample

Phase one: The working group included two project facilitators and three self selected nurses within the department. Staff were asked to self select based on interest generated in response to a staff presentation which was repeated to allow staff on different shifts to attend. The working group consisted of the Acting Nurse Educator, a university lecturer as participant observer who worked casually in the department, two Registered Nurses and one Enrolled Nurse. The staff sample included all staff that had contact with patients, including doctors, nurses, operational support staff and administration staff who worked the same shifts as the working group over a period of one week.

Phase two: The working group was made up as described above. The survey was given to 60 staff (of various disciplines as mentioned previously) which was 100% of the staff number at the time.
Data collection

Phase one included information gathering and strategy development. This included informal unstructured interviewing of staff about the issue of how PPaC is provided or breached in the ED. Informal questioning occurred during one or more shifts (participants were) selected as a convenience sample. Questions were both open and closed ended to initiate conversation about the topic of PPaC in the department’s context. Unstructured observation of practices in the department was conducted to identify issues, and inform possible strategies for implementation. Data was collected simultaneously in phase one (observation and questioning) and reported back to the working group. After this, strategies to improve identified issues were developed and implemented over a six month period.

Phase two commenced after the six month period of strategy implementation. Staff were formally surveyed to discover if practices had changed and what staff opinions were. The survey was designed by the working party and was based on the informal questions asked in phase one. Recommendations derived from this survey about which strategies implemented were important in improving PPaC in the ED were presented to the management team along with identified ongoing challenges. In both phases strategies and recommendations were derived from reflection on practices observed and on contextual knowledge of the department.

Data analysis

Qualitative data was analysed for themes. Results were discussed within the working group until consensus of meaning was reached of no less than 90% among group members. Perspectives of all working group members held equal weight and value in the group discussions. Group members reflected individually on their observations and interactions with staff during informal interviews and discussed these in the group setting to uncover themes and sub-themes.
Quantitative data was collected for descriptive analysis to identify percentages of staff opinion about emerging issues.

**Project approval**

This project was exempt from HREC approval. Department approval for this project was obtained from the Medical Director, Nursing Director and Nurse Unit Manager of the Emergency Department.

**Results**

The two overarching themes identified in this project were factors that led to breaches of PPaC and factors that protected or promoted PPaC. Sub-themes can be seen in Figure 1. Add Figure 1 here

**Phase 1**

Each working group member spoke with a number of nurses, and at least one doctor, one administration staff and one operational support officer over a period of 10 days. Questions asked if staff thought maintaining PPaC in the ED was difficult. The results showed that many staff of all disciplines thought this was a problem. Common areas for breaches identified by staff occurred at handover times, at triage, when patients were ‘double bunked’ (two patients in a cubicle usually meant for one bed), and the availability of patient data in charts and open computer screens in public areas.

Breaches observed by working group members also included voice volume, staff entering closed curtains for reasons other than patient’s care (e.g. looking for other staff) and sometimes without warning or permission to enter, high numbers of people in small areas, a high number of visitors within the department for each patient, and corridor assessments/care undertaken by visiting staff and nurses. A common view held by many staff at this time was, that due to the nature of the emergency environment that breaches in PPaC, whilst problematic, were to be expected.
Strategies were developed based on the issues identified. Agreement of the themes and development of the strategies was refined until at least 90% agreement of working group members was reached. Strategies implemented were:

1. Reduce patient visitors during handover.
2. Change handover practices and location of handover.
3. Remind staff about voice levels.
4. Limit information gathered at triage.
5. Implement policy about patient assessment/procedures when patient is double bunked in a cubicle or in the corridor.
6. Restrict access to computer screens.

Phase 2

In February 2007, after the strategies had been implemented, a formal survey of multidisciplinary staff was conducted in the department. This aimed to measure staff awareness and attitudes about PPaC within the ED context, and to uncover opinions of the existence of breaches of confidentiality and further possible measures that could be taken to minimise PPaC breaches. Sixty surveys were circulated and 40 staff responded to the survey (66% response rate- see Table 1 for results). This consisted of nurses, doctors, administration staff and operational support staff who had access to patient information. Reflective of a usual shift attendance however, there were more nursing responses than other disciplines. Since some staff did not indicate their discipline this was 85% nurses 10% other staff and 5% unidentified staff discipline. Surveys were distributed by the Acting Nurse Educator over seven days and were returned anonymously, through placement in a secure box in the staff lunchroom.

Add Table 1 here
Results from the survey were discussed by the working group and reflection on practices, context and changes seen within the department led to six recommendations refined by the working group and made to ED management.

Discussion

Recurring sub-themes identified from the data were department design and layout, staff practices and department policies which were also impacted upon by culture of the team and overcrowding due to patient flow, access block and use of space. By the end of the project 97% of staff stated they felt that while difficult, it was an important part of their duties to protect PPaC. This had changed quite significantly since the beginning of the project and now was in line with competency standards and codes of conduct (for example see conduct statement 9 in ANMC Code of Professional Conduct for Nurses in Australia[13], and competency standard 1.1 in the ANMC National Competency Standards for the Registered Nurse[14]).

Department design and layout

As discussed in the literature[2, 6, 15-17] department design and layout are central issues to PPaC potential breaches. This department had all the classic issues associated with this (e.g. central “fishbowl” workstation; triage and waiting area small and close to each other, mostly curtained instead of walls). One study measured differences in conversations overheard in the ED before and after department redevelopment[7]. Findings noted reduction in breaches of PPaC post redevelopment that was conducted with principles of PPaC in mind. In future expansions and design of the ED, the recommendation to take into account the principles of PPaC is supported by Australian Guidelines on Emergency Department design[18].
**Staff practices and department policies**

In most EDs the responsibility of providing PPaC falls to staff being aware and innovative in managing this issue\(^2\). In this ED this was failing due to ingrained practices and the culture of expecting breaches to occur due to the nature of the environment. In this ED questioning these practices and beliefs had not occurred.

Handover practices were common opportunities for PPaC breaches to occur and were also impacted upon by access block, overcrowding and department design. Voices during handover carry easily and the proximity of patients led to private information being overheard by patients around them. Breaches due to overheard conversations has been identified in another ED\(^{19}\) and in other specialist areas as a problem during handover\(^{19, 20}\). The changes to where handover is conducted and asking visitors to leave were vital to decreasing breaches in PPaC, even though some staff found it difficult asking visitors to leave during this period. Some of the staff reported that they needed to visualise the person they are handing over, therefore locations for handover had to allow visibility of the patients, which fits with the idea that handover has other latent functions, one of committing to care for patients and nurses supporting each other\(^{21}\).

**Use of space and Overcrowding**

Patient assessment/procedures being conducted in inappropriate places was a common breach of privacy in the ED. This issue was discussed at length in the literature in relation to effects on patients due to overcrowding\(^{4, 9, 16}\) and include patients that are ‘double bunked’, and those waiting in the corridor for a ward bed. Access block is a major contributing factor to breaches in patient privacy. This issue cannot be readily rectified, but should be a consideration when making possible expansions/rebuilding of the department in the future\(^2, 7\).
Culture and staff awareness

The project design aimed to raise awareness initially by informal means. The culture of the staff was to oppose changes that were imposed upon them, but were more accepting when developed within the department. This was a large factor in how the project design evolved. We felt that for culture change to occur, we needed to avoid polarising staff opinions and role model new practices while involving others in the changes developed. This use of a socialisation process in introducing new practices to improve quality of care is described in one study that considered the tension of efficiency and quality in ED care provision\[^{22}\]. By the end of the project, this process had succeeded in raising awareness by identifying breaches to PPaC and trialling strategies that involved all staff.

The use of identifying breaches as a tool to raise awareness of the issue is reported on in another ED study\[^{3}\], which identified breaches to PPaC through a survey of patients after their ED stay. They found that up to 45% of presentations had experienced a PPaC breach. Breaches were also found to occur more readily with curtained walls and an increased length of stay, both factors in this ED.

At the beginning of the project, many staff believed that due to being an ED it was ‘different’- and due to these differences (few walls and double patient numbers in the space available), meant that certain issues (such as PPaC breaches) were to be expected. This view is not an isolated one\[^{8}\] but is not in alignment with current practice standards (see performance criteria 8.1a of Practice Standards for the Emergency Nursing Specialist)\[^{23}\]. With the multiple factors involved (such as department design, overcrowding, number of staff involved in care, visitors, physical proximity of patients), many staff did not question that practices could or should be different. After awareness was raised though, most considered these problems and felt that protecting PPaC was important. Whilst many of the recommendations were a refinement of the initial strategies implemented, the notable change emanated from the amount of champions for PPaC this project produced.
Limitations

The results may not necessarily be transferrable to other departments due to differences in design, culture and issues such as access block and policies within each department. Small numbers of staff were involved in this project, and therefore it cannot be predicted how changes to the number of staff may impact on this issue. Despite these limitations, this project evolved in response to a clinical problem using a quality improvement process and these problems may be representative of many regional EDs, who must also deal with factors such as access block, design and layout that cannot be altered without incurring large costs. This project could have been formalised into a research project that also involved patient views on PPaC breaches to take a more holistic view of this issue in the department’s context.

Conclusion

Recommendations can be grouped under the theme of factors that protected or promoted PPaC. Recommendations closely mirrored the implemented strategies but were refined to:

1. Handover process: Page intercom message to ask visitors to leave during handover. Ask visitors to leave individually as well if required. Strict policy of one visitor to one patient at any time in the department. Location of handover to be away from patients, in grouped numbers of patients, so staff can stand together, yet still visualise the patient being handed over.

2. Decrease voice volume, refrain from using patient’s names when discussing in other patients vicinity.

3. Limit amount of information gathered through triage window, do more in-depth assessments within the triage office as required.
4. Communicate requirement that patients must be assessed in a cubicle rather than in the corridor or in front of another patient. Nursing team leader to keep space free in department for this.

5. Make reminder signs to close down the EDIS screen when not in use.

6. These to be key considerations when making possible expansions to the department in the future. Make any adjustments where able (e.g. Perspex barrier erected between two triage windows).

These recommendations were made to executive management of the department and were adapted as policy for the department. While PPaC was seen to be important for care provision in the ED setting, actually succeeding in providing this was difficult. This was due to ingrained practices and low staff awareness (e.g. handover, voice volume, looking for staff behind curtains etc) that developed out of tradition and in response to crisis. In other departments, like this one these factors may also impact on this basic patient right. In this department, handover by both nursing and medical staff was the most identified area of importance to maximise the degree of PPaC maintained for our patients. The initial changes made during nursing handover did offer an improvement, but maintaining practices and the rationale behind them in the forefront of staff awareness is vital to the long term success of improving PPaC. The challenge remains in ensuring that practices do not ‘slip’ back to old habits. For new staff, education and enculturation of positive practices to protect PPaC in the ED will be implemented to continue the positive momentum for improving PPaC for patients who use ED services.
References


