

## Privacy Concerns in a Surgical Environment

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### Abstract

With the advent of electronic communication and use of technology in healthcare, patient privacy has become a greater concern as we weigh the utility of efficient processes against patient rights. At the root of all bioethical dilemmas lie patient autonomy, beneficence, non-maleficence, and justice. Surgical patients must weave through a more complex and intimate healthcare system where they are particularly vulnerable given the physical exposure, anaesthesia, and open concept design of the perioperative environments. As a result, all domains of privacy require protection – physical, psychological, social, and information. Here we present a case scenario illustrating the potential privacy concerns facing a surgical patient through various points of contact within this unique system and discuss the literature surrounding what is known regarding privacy in these contexts.

**Keywords:** Privacy; Surgical patient; Ethics; Information technology

### Case

John Bump goes to the hospital for his elective hernia surgery. In the OR “Holding Area” he sees an old girlfriend, Janet Lump waiting for her surgery. He looks up at the computer “white board” which is clearly visible to all the patients waiting and sees Janet is having a mastectomy. He also sees another patient named Jack Slack, who he does not know, is having a penile prosthesis inserted.

A few days later Janet’s surgeon sends an e-mail to an oncologist referring Janet for treatment of her breast cancer. Copied on the e-mail is a series of people including a booking clerk who happens to know Janet’s father well.

A few weeks later Janet’s surgeon gets an e-mail from Janet’s mother asking for information on her daughter reporting that “Janet is not telling us anything”.

### Discussion

Medical training has historically addressed bioethics through discussion on topics such as religious beliefs and blood transfusion, organ transplant issues, and end-of-life decisions. With hospitals overloaded beyond capacity and emergent use of technology/social media in our healthcare systems, however, there is an increasing need to discuss the topic of privacy. While the names are fictional, the scenario above is real and raises ethical concerns at various points of contact a surgical patient experiences within our healthcare system.

First, whiteboards have become a standard communication tool for clinical service to coordinate efforts between staff and ensure efficient patient flow [1]. Limited data are available, however, on the issue of privacy in the setting of surgical environments. Akyuz and Erdemir recently discuss the concept of physical, social, psychological and informational privacy in healthcare settings [2]. The more studied domains include the physical, social and psychological, which have described and begun to address patient privacy concerns (e.g.: emergency department design and “personal information being overheard” [3]. Similarly, privacy concerns for surgical patients and nurses indicate the physical environment in the hospital is often inadequate and highlight the role for surgical nurses to help protect patient privacy [2]. Interestingly, a systematic review of patients’ subjective experience and satisfaction during the perioperative period in day surgery determined privacy to be a key synthesized finding across nine trials studied [4].

Specifically, concerns were in the categories of maintaining patient privacy during procedures and preserving privacy and self-respect during the perioperative period, as opposed to information privacy. While our scenario demonstrates compromised information privacy for John, Janet, and Jack, it is possible protection of physical, social, and psychological privacy is a more immediate concern for surgical patients.

Second, e-mail is a primary form of daily communication in many countries. The use of e-mail in healthcare is less common, although it can facilitate timely transfer of information and has the potential for ensuring clear lines of communication between multiple parties. An ethical dilemma arises, however, when one must determine whom to include/exclude, on what basis, and the content to be shared, given the risk of misdirected communications and unintended recipients. In the scenario above, information was not intentionally misdirected and it appears appropriate people were included, but it gave rise to the potential for a confidentiality breach by a healthcare employee (i.e. if the booking clerk chooses to speak with Janet’s father). Here, the importance of privacy contracts between hospitals and personnel must be emphasized, along with the need to govern these contracts through internal audits and legal action if necessary (e.g. former hospital clerks facing charges after accessing patient files inappropriately) [5]. E-mail as a form of communication between patient and physician is on the rise, however, and there is evidence of patient and physician concern about privacy, confidentiality, and potential misuse of information [6-8]. A Cochrane review recently studied several clinical trials comparing e-mail vs. standard communication but was unable to adequately assess the effect of e-mail for clinical communication between patients/caregivers and healthcare professionals [9]. Finally, given the obvious privacy risks associated with the use of mobile technology in surgery

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[10] and social media, information privacy will need rigorous evaluation and protection from strategic policy initiatives (e.g. the Privacy and Security Rules contained within Title II of the United States Health Insurance Portability and Accountability Act of 1996) [11].

The third and final aspect of the above scenario highlights the bioethics of privacy in the setting of respecting patients' rights to self-determination during the course of medical decision-making and the need to protect privacy and confidentiality throughout this process. While families typically have the best interests of a loved one at heart, the surgeon must respect their fiduciary duty to the capable patient. As a result, Janet has the right to keep her health information private, even from nuclear family members. In this situation, information shared within her "circle of care" need only be those providers with whom she must interact as part of her experience as a surgical patient (e.g. perioperative services, surgeon, anaesthesia, and hospital clerks). But what if Janet is suffering from mental illness where her judgement is compromised or alternatively, if there is a significant language barrier whereby she does not understand the health issue and/or surgical intervention for which she has given consent? These are significant dimensions of surgical care in many countries where in the past, family members might have assisted with communication and decision-making, but ethical concerns have now led to use of translational services and capacity assessments. As society evolves, we must continue to serve as advocates for patient rights, particularly the vulnerable – elderly, children, mentally ill, and victims of trauma/abuse.

## Conclusion

Surgery poses overlapping, but unique ethical challenges within the practice of medicine [12]. Here we discuss a case scenario aimed at the more contemporary ethical challenge of privacy throughout the various points of contact for surgical patients within the healthcare system. While the discussion is not exhaustive, we hope it initiates critical discussion between surgical practitioners, healthcare administrators, and patients to consider the physical, psychological,

social, and information privacy domains in the organization of any surgical environment.

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