

Innovations and policies

HIPAA Protection in a Clinical Setting

Denise Baloi, BS¹, Audrey Moffat, BS², Andreea Geamanu, PhD, MS^{2,3}, Melanie Rofoo, BS⁴, Pranav Rajaram, BS⁵, Chaoyang Chen, MD², Chris Ng, MD², Brandon Skavla, MD², Mohammad Hammad, MD⁶, Todd Frush, MD⁷, Brandon Kakos, MD², Henry Goitz, MD²

¹ College of Human Medicine, Michigan State University, ² Orthopaedics and Sports Medicine, Detroit Medical Center, ³ Orthopedic Surgery, Wayne State University, ⁴ School of Medicine, Wayne State University, ⁵ Michigan Medicine, University of Michigan, ⁶ Orthopaedic and Sports Medicine, Detroit Medical Center, ⁷ Orthopedic Surgery, Motor City Orthopedics

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Introduction

The interaction between patients and medical staff in an outpatient clinic waiting room often presents the opportunity for the overexposure of private health information. The Health Insurance Portability and Accountability Act (HIPAA) protects sensitive patient information in a medical setting, but it does not outline how patients should be called from the waiting room.

Methods

In this research study, patients were called from the waiting room by a randomly assigned number rather than their name in an effort to increase protection of patient information. Following their appointment, patient privacy preferences were evaluated with a short questionnaire. Two hundred and thirty-six patients were enrolled in outpatient orthopedic clinic sites throughout southeast Michigan.

Results

While 48.3% of patients preferred to be called by name and 16.9% preferred to be called by a number, 34.7% of patients did not have a preferred calling method. Along with calling method preference, patients were asked to rate their comfort with being called by a number and the importance of privacy in the clinic setting. Overall, participants who had no calling method preference did not express discomfort when being called by a number.

Conclusion

Patients within the orthopedic clinic who valued patient confidentiality felt comfortable with the number calling method, however, the majority of patients preferred to be called by their name.

INTRODUCTION

A patient's first impression in the clinical setting is integral to establishing the perceived quality of the visit and building rapport with the medical staff, as this initial interaction in the waiting room can often set the tone for the rest of the visit.¹ There have been advances to increase patient trust that include the implementation of national standards to protect patients' sensitive health information (PHI) through HIPAA. However, there is no set guideline under HIPAA for how to call patients from the waiting room for their visit during their initial interaction with clinic staff.² Under the HIPAA Privacy Rule, healthcare entities are restricted from using patient health information that can be identified to individuals without the patient's informed consent.³ According to the U.S. Department of Health and Human Services, however, the HIPAA Privacy Rule is not

undermined by calling a patient from the waiting room using their name.⁴ Such instances where patient names are revealed are referred to as "incidental disclosures" and are allowed within reason. As long as the clinic has implemented safeguards to protect PHI from being breached, such disclosures of patient names are generally accepted without explicit patient permission.² However, this may lead to discomfort as a name is an identifying factor for the patient.

Given the nature and significance of preserving patient confidentiality, healthcare facilities have been continuously exploring methods to reconcile the necessary exchange of information with privacy safeguards. In a previous study, pagers were used to call patients from a radiation oncology waiting room in an effort to save time for the radiation therapists. When surveyed, the privacy and convenience of the pagers were rated an average score of very good to excellent by 100 patients.⁵ Self-rooming systems have also

been studied in outpatient clinics to improve patient experience. In a study by Kamnetz et al patients checked in with a receptionist and walked directly to the appropriate exam room, removing all time sitting in the waiting room. Patients noted that this method saved them time, as well as eliminated waiting room discomfort and unnecessary interaction with sick patients. Overall, this system received a 95% satisfaction rate among 154 patients.⁶ These approaches align with the recommendations provided by the Office for Civil Rights (OCR) which enforces HIPAA,⁷ suggesting that healthcare providers should employ reasonable safeguards when communicating with patients. Due to the fact that not all clinics have the resources to apply such technical protections, cost effective safeguards to protect patient privacy may include calling patients by first names only, using more private areas for conversations, or even seeking verbal agreement for preferred methods of address.

Despite this, breaches of patient confidentiality within reception and waiting areas of outpatient clinic settings have the potential to negatively impact an individual's patient-doctor relationship regarding trust and confidence. When a name is used out loud, other individuals may hear and be able to identify the person whose name is called, which could be uncomfortable for some patients.⁸ In the current literature, there have not been many studies evaluating whether a patient prefers to be identified in a clinic waiting room by name or in a non-identifying manner such as a number. In a study by Dabis et al. that looked at patient preferences for identification in a sexual health and HIV clinic, patients who were surveyed preferred to be identified by number in sexual and reproductive health clinics and preferred to be identified by first name in HIV clinics.⁹ Varying patient demographics, including race, gender, or cultural background, may influence identification preferences. Additionally, the psychological impact of the identification process should not be underestimated.¹⁰ Being called by name can be seen as a form of recognition and a personal touchpoint that helps to alleviate the anxiety of a clinical visit. However, for conditions that carry a stigma, such as in mental health, disability, or sexual health contexts, the preference for anonymity might be stronger.¹¹⁻¹³ An additional study by Scott et al. evaluated minimizing breaches in confidentiality in general practice waiting rooms by observing different systems-based practices used in reception areas, such as allocating a colored number card to a patient upon arrival to the office.¹⁴ Still, some patients may see the use of a name as mitigating their privacy while others may think that using a different calling system deindividualizes the healthcare interaction,¹⁵ so it is important to consider the influence of alternatives to using the name to maintain trust and comfort. In terms of practicality, clinics should also weigh the cost of implementing new systems, both in terms of finances and time.¹⁶ Small practices, in particular, might find such overheads prohibitive. A balance needs to be struck between the ethical imperative to protect patient privacy and the feasibility of such measures, particularly in resource-constrained settings.^{17,18}

Therefore, this present study aims to assess patient preferences for identification in orthopedic and sports medicine

clinics and how calling method preferences relate to patient privacy preferences. This study was designed to have patients state their comfort level with being called by a number rather than by name in a clinical setting.

METHODOLOGY

This study was approved by the Wayne State University (WSU) Internal Review Board and carried out across multiple outpatient orthopedic clinic sites in southeast Michigan. The study spanned over a period of 3 months. In-person survey data was collected from new and returning patients (N = 236) aged 18 or older.

When patients arrived at their respective clinic site for an appointment, they checked in at the reception desk and were informed they could be called back to their waiting room by name or number. During this time, eligible patients were given a Research Information Sheet which explained the scope of the study. After giving verbal consent, participants received a card with a number between 1 and 20. This same number was also attached to their patient chart and used to call the patient into the examination room. At the end of the visit, patients were asked to complete a questionnaire regarding privacy preferences. Questions regarding demographic information, socioeconomic status and education level were included, as well as three questions concerning preferred calling methods: preference in calling method, significance of patient privacy when being called from the waiting room area, and feeling about being called by a number in the clinic. For calling method preference, patients had the choice of name, number, or no preference. Participants were then asked to rate the importance of privacy in the waiting room as very important, somewhat important, neutral, or not important at all. Lastly, patients rated their experience being called by a number as very uncomfortable, uncomfortable, neutral, comfortable or very comfortable.

Data analysis was completed using statistical software SPSS v. 28 (IBM, NY) and a p-value of 0.05 was used to determine statistical significance. The Chi-Square Pearson test was used for demographic and descriptive analysis.

RESULTS

The participant demographic consisted of a majority of female patients (59.7%), white (58.1%), employed (54.7%), and attending a follow-up appointment (73.8%). The most prevalent education level of subjects was high school (28.6%). Additionally, over 40% of the patients were within the 45-64 year age range. Patients who reported their employment status as "retired" were included in the "unemployed" subgroup, which made up 31.2% of participants. Results showed that the majority prefer to be called by name (48.3%), while only 16.9% prefer to be called by a number. The remaining 34.7% had no preference of calling method. There was no statistical difference between any demographic factors ([Table 1](#)).

After being called to the exam room by a number, participants were asked to select their comfortability with the

Table 1. Patient Demographics

	N (%)
Gender	
Female	141 (59.7)
Male	95 (40.3)
Age (years)	
18-24	19 (8.1)
25-34	27 (11.4)
35-44	31 (13.1)
45-54	51 (21.6)
55-64	53 (22.5)
65-74	36 (15.2)
75+	19 (8.1)
Race	
White	137 (58.1)
Black	48 (20.3)
Asian	16 (6.8)
Hispanic	7 (3.0)
Other	28 (11.8)
Employment Status	
Employed	128 (54.7)
Unemployed	73 (31.2)
Disabled	33 (14.1)
Highest Completed Degree	
No High School Diploma	19 (8.1)
High School Diploma	67 (28.6)
Associate Degree	46 (19.7)
Bachelor Degree	58 (24.8)
Graduate Degree	44 (18.8)
Visit Status	
First Visit	62 (26.2)
Follow-Up Visit	174 (73.8)
Call Method Preference	
By Name	114 (48.3)
By Number	40 (16.9)
No Preference	82 (34.7)

number calling method. This scale ranged from very comfortable, comfortable, neutral, uncomfortable, to very uncomfortable. There was a significant mean difference between patients who preferred being called by name in the clinic and were neutral towards the experience of being addressed by a number and those who preferred being called by a number and were very comfortable with it [$p<0.001$]. Patients who had no preference did not express discomfort towards the number calling method and were overall either very comfortable, comfortable or neutral to their experience in the waiting room with only one participant reporting being very uncomfortable. This indicates that even patients who preferred to be called by name or had no pref-

erence were on average comfortable or neutral towards the use of a number, although less comfortable than the patients who preferred the number (Figure 1).

The questionnaire also asked patients about the importance of privacy, ranging from privacy not important, neutral, privacy somewhat important, to privacy very important. Data analysis demonstrated that there was a significant mean difference between the amount of patients who placed a great importance on privacy in the clinic and preferred being called by a number and patients with different view of privacy in the clinic setting who preferred being called by a number [$p=0.009$]. Additionally, patients who expressed that the importance of privacy was neutral were also neutral towards being called by a number (15.3%, p -value=0.057). Subjects who indicated that privacy was very important, also expressed the greatest amount of comfort with the number calling method (14.8%, p -value<0.001).

DISCUSSION

This study demonstrated that patients preferred being called by their names in this orthopedic clinic setting. However, participants were still generally comfortable with being called by a number, and even patients who preferred being called by name or indicated no preference were comfortable with its use. Given that the study results show that calling patients by number is comfortable to individuals who prefer name, number, or have no preference, it would be advantageous to consider implementing a number-calling method to ensure clinic privacy. As patients who prefer being called by name indicated comfortability towards the number approach, there seems to be generally no detriment in implementing this safeguard. Such a number-calling method would be an easily adoptable, low-cost practice to enhance privacy within a clinical waiting room.

During the course of the study, the clinic staff would occasionally use the patient's name to call them to the desk and ask follow-up questions after the initial check-in. Thus, while the call-by-number method appears to be beneficial in upholding privacy, implementing this throughout all aspects of the clinic, not merely when calling the patient to the room, would ensure that privacy is conscientiously maintained.

Due to the fact that this study was restricted to patients ages 18 plus, it may be beneficial to expand the inclusion criteria to include younger patients as a part of a future study, as many parents and guardians may have a strong desire to protect their child's private health information in a clinic setting. As with the current study, such a study would not present patients with more risk than that which is associated with standard clinic encounters. Thus, implementing this study in a pediatric clinic setting would allow the number calling method to be tested among a portion of a more vulnerable population.

In conclusion, in an orthopedic and sports medicine setting participants did not prefer to be called by a number, however, patients who valued the importance of privacy preferred this method. Patients with less concern for the privacy of their personal health information remained com-

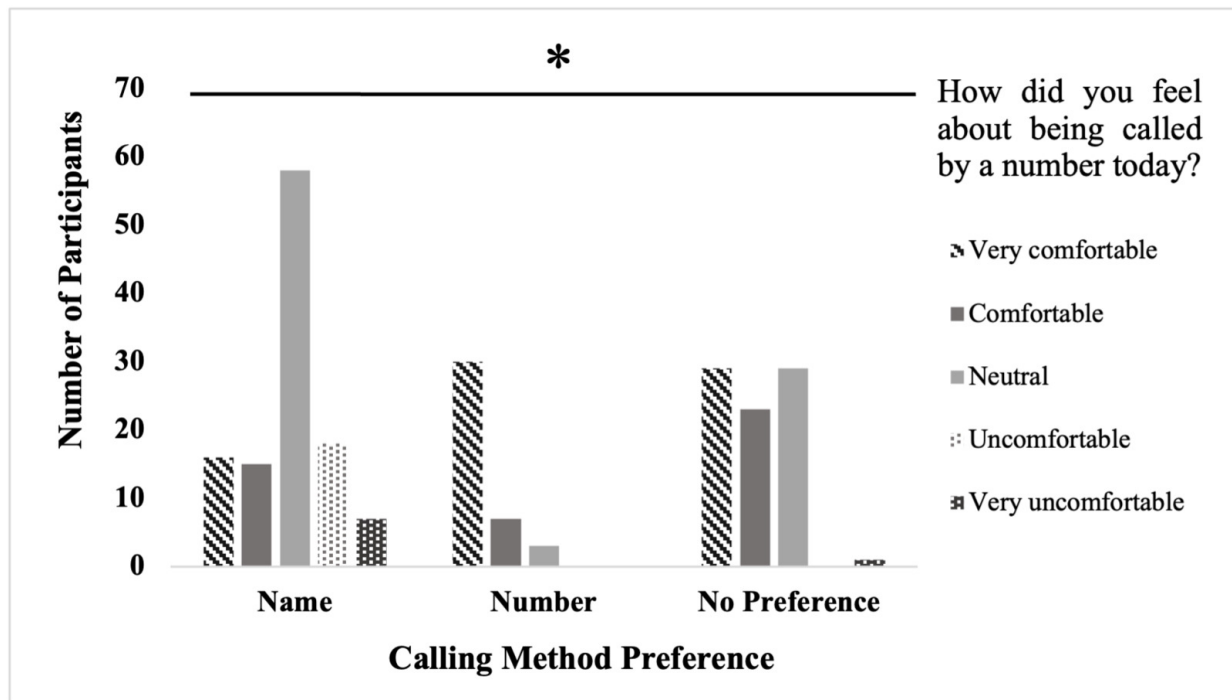


Fig. 1. Relating the comfort level that participants expressed towards the number calling method to their personal preference of calling method (name, number, or no preference). Statistical significance levels are denoted as $*p < 0.001$

comfortable with the standard name calling method. Although this was observed of the participants in this study, privacy preferences may vary by the location and specialization of the clinic. In clinics where more sensitive topics are being discussed, additional patient privacy can be achieved with the proposed number calling method. Therefore, future studies are recommended to evaluate patients' privacy preferences in various clinic settings.

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AUTHOR CONTRIBUTIONS

Data curation: Denise Baloi (Supporting), Audrey Moffat (Lead), Melanie Rofoo (Supporting), Pranav Rajaram (Supporting), Mohammad Hammad (Supporting). Writing – original draft: Denise Baloi (Lead). Writing – review & editing: Audrey Moffat (Lead), Andreea Geamanu (Supporting). Methodology: Andreea Geamanu (Lead). Formal Analysis: Chaoyang Chen (Lead), Chris Ng (Supporting), Brandon Skavla (Supporting). Conceptualization: Todd Frush (Supporting), Brandon Kakos (Supporting), Henry Goitz (Lead).

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