# Transgender and Gender-Nonconforming Patients in the Emergency Department: What Physicians Know, Think, and Do



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**Study objective:** We explore self-reported knowledge, attitudes, and behaviors of emergency physicians in regard to the care of transgender and gender-nonconforming patients to identify opportunities to improve care of this population.

**Methods:** From July to August 2016, we electronically surveyed the American College of Emergency Physicians' Emergency Medicine Practice-Based Research Network of 654 active emergency physician participants. We performed frequency tabulations to analyze the closed-ended response items.

**Results:** Of the 399 respondents (61% response rate), 88.0% reported caring for transgender and gendernonconforming patients in the emergency department (ED), although 82.5% had no formal training about this population. The majority of physicians (86.0%) were comfortable asking about personal pronouns. Only 26.1% of respondents knew the most common gender-affirming surgery for female-to-male patients; 9.8% knew the most common nonhormone gender-affirming medication that male-to-female patients use. Almost no respondents (<3%) were aware of emergency medicine practitioners' performing inappropriate examinations on transgender and gendernonconforming patients.

**Conclusion:** Although transgender and gender-nonconforming people represent a minority of ED patients nationwide, the majority of respondents reported personally providing care to members of this population. Most respondents lacked basic clinical knowledge about transgender and gender-nonconforming care. [Ann Emerg Med. 2018;71:183-188.]

Please see page 184 for the Editor's Capsule Summary of this article.

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## SEE EDITORIAL, P. 189.

## INTRODUCTION

#### Background

Research examining health care for transgender and gender-nonconforming people—individuals with gender identities that differ from their assumed gender at birth—is in its early stage. Transgender and gender-nonconforming people have difficulty accessing high-quality health care and many avoid or delay care, including emergency medical care.<sup>1,2</sup> Misgendering (use of incorrect pronouns or gendered terms by others), medical professional maltreatment, and unnecessary, "sensitive" (eg, genitourinary) physical examinations have also been described.<sup>1-3</sup>

#### Importance

Clinicians receive minimal formal education about the health needs and care of sexual (eg, lesbian, gay, bisexual) and gender minority (eg, transgender) patients.<sup>4,5</sup> Much of the relevant training literature centers on "lesbian, gay, bisexual, and transgender" patients, without distinguishing between the needs of sexual minorities and gender minorities. In a 2015 national survey of 27,715 transgender and gender-nonconforming adults, 24% reported educating providers about transgender and gendernonconforming health issues to receive appropriate care.<sup>6</sup>

Emergency care is a major portal into the broader health care system. There are an estimated 1 to 1.3 million transgender and gender-nonconforming people living in the United States,<sup>7-9</sup> and transgender and gendernonconforming individuals commonly use the emergency departments (ED).<sup>1</sup> Most transgender and gendernonconforming–specific literature focuses on transgender and gender-nonconforming patient experiences rather than clinician perspectives. To our knowledge, emergency

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## Editor's Capsule Summary

What is already known on this topic

Transgender and gender-nonconforming people are reported to have difficulty accessing high-quality emergency care. They may experience bias and inappropriate treatment in the emergency department.

## What question this study addressed

This cross-sectional study of a self-selected group of emergency physicians (61% of members in a voluntary American College of Emergency Physicians' survey network) examined participants' self-reported knowledge, attitudes, and experience with care of transgender and gender-nonconforming patients.

## What this study adds to our knowledge

Most respondents had cared for transgender and gender-nonconforming patients and were comfortable asking about personal pronouns. However, few had formal training in care, and less than 10% knew the most common nonhormone medications received by transgender and gendernonconforming patients.

## How this is relevant to clinical practice

Emergency physicians have large knowledge deficits about medical care of transgender and gendernonconforming patients.

physicians are not systematically trained in the care of transgender and gender-nonconforming patients. To broaden understanding about transgender and gendernonconforming health care, we explore emergency physician knowledge and perceptions of transgender and gender-nonconforming-relevant care in EDs.

#### Goals of This Investigation

The goal of this research is to preliminarily assess the knowledge, attitudes, and behaviors of emergency physicians in regard to care of transgender and gendernonconforming patients. Such information is foundational for the development of relevant educational materials that can ultimately contribute to improved emergency care of transgender and gender-nonconforming patients.

## MATERIALS AND METHODS

#### Study Design

A team of 8 researchers (6 emergency physicians and 2 anthropologists) with experience studying health care for

gender minorities developed a Web-based survey for distribution to members of the American College of Emergency Physicians' (ACEP's) Emergency Medicine Practice-Based Research Network (EMPRN). EMPRN is a nationwide network of self-selecting ACEP members who are willing to participate in brief surveys of 12 questions or fewer.

The institutional review boards of the Icahn School of Medicine at Mount Sinai, Emory University School of Medicine, and University of New Mexico determined the study exempt from review. Participants received no remuneration.

## Selection of Participants

EMPRN extended an e-mail invitation to its 654 members to complete the anonymous self-administered survey between July and August 2016.

## Methods of Measurement

We collectively generated and prioritized survey items according to literature addressing the health needs and experiences of transgender and gender-nonconforming patients.<sup>1-3</sup> We constructed questions de novo to assess emergency physician knowledge and self-reported attitudes, behaviors, and experiences. We piloted the questions for clarity with 14 emergency physicians resembling the intended study population and with an electronic delivery method, as planned for the survey's wider distribution. A survey development expert provided additional guidance on content, structure, and language. The final survey included a brief purpose statement and 9 closed-ended items with response categories presented as multiple choice or 4-point Likert scales (Appendix E1, available online at http://www. annemergmed.com; Table 1).

## Primary Data Analysis

EMPRN returned the raw deidentified survey responses and basic demographic characteristics from ACEP membership profiles in September 2016. We calculated frequencies for the questions with SPSS (version 23; SPSS, Inc., Chicago, IL).<sup>10</sup>

## RESULTS

#### **Characteristics of Study Subjects**

We received responses from 399 (61%) of the 654 eligible EMPRN members. Mirroring the general population of emergency medicine attending physicians,<sup>11</sup> 73.2% identified as male and 26.8% as female.\* Table 1 summarizes respondent characteristics.

\*EMPRN allows respondents to select only a binary gender response (female or male).

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Table 1.	Participant	demographics.
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Demographics	No.	%
Total	399	100.0
Gender		
Female	107	26.8
Male	292	73.2
Age, y		
27-35	50	12.5
36-45	137	34.3
46-55	84	21.1
56-65	91	22.8
$\geq$ 66	37	9.3
Region		
Midwest	91	22.8
Northeast	83	20.8
South	121	30.3
West	103	25.8
Puerto Rico	1	0.3

#### Main Results

Approximately a third of respondents (32.8%) answered all questions; 86.7% answered at least 7 of the 9 questions. The majority (82.5%) reported not receiving formal training on the health care of transgender and gender-nonconforming patients, although 88.0% reported caring for this population (Table 2). The majority (86.0%) reported comfort in asking patients about personal pronouns ("he," "she," "they," etc). More than half of respondents (53.8%) said they asked transgender and gender-nonconforming patients about genderaffirming surgeries, regardless of chief complaint. Most respondents lacked medical knowledge about common medications and surgeries in this population, with only 9.8% and 26.1% correctly responding to these items, respectively. Nearly all respondents (97.7%) reported being unaware of other clinicians' performing unnecessary "sensitive" examinations. Many (59.9%) did not support the use of "physician champions," or physicians serving in a leadership capacity to promote beneficial practice changes, to improve transgender and gendernonconforming patient care. The majority (79.2%) affirmed the importance of obtaining the current gender identity and sex at birth as part of electronic health records.

#### LIMITATIONS

ACEP's EMPRN is a convenience sample of emergency physicians who volunteer for short surveys, and limited demographics are available to researchers (eg, length of practice and practice setting are unknown), so it is unclear whether our respondents were representative of emergency physicians across the United States. Although the survey response rate was adequate,<sup>12</sup> selection bias may have affected our findings if there was a disproportionate response rate from respondents who were different from the general emergency physician population.

This investigation used a novel, yet-to-be-validated survey tool. Survey items relied on self-report of emergency physician attitudes and behaviors; bias toward providing desirable responses, rather than answers that reflected actual attitudes and behaviors, may have influenced results. Given the survey's brief length, it did not comprehensively assess emergency physician knowledge about transgender and gender-nonconforming-specific health care. The survey did not pose mandatory questions, allowing respondents to decline answering. Because this survey was preliminary, conclusions based on its results are limited.

#### DISCUSSION

This exploratory survey indicates that emergency physicians may not have adequate knowledge to appropriately care for transgender and gendernonconforming patients, although most have served this patient population. Our data also suggest that there is a mismatch of emergency physician and transgender and gender-nonconforming patient perceptions of clinical encounters in the ED. Consistent with transgender and gender-nonconforming-patient reports,<sup>1-3,6</sup> responses indicated a lack of transgender and gendernonconforming-specific training, with survey respondents saying that they frequently ask patients about genderaffirming surgeries regardless of medical relevance, and showing limited knowledge of the most common transgender and gender-nonconforming surgeries and medications. Contrary to transgender and gendernonconforming patient reports,<sup>1-3,6</sup> almost no respondents reported awareness of emergency physicians' conducting inappropriate examinations, and most expressed comfort asking patients about personal pronouns.

As medical specialists, emergency physicians must know what information is relevant to the clinical encounter. Traditionally, ED patients are satisfied with or trust their emergency physicians' clinical knowledge.<sup>13</sup> Yet transgender and gender-nonconforming patients must often educate their clinicians, including emergency physicians, about transgender and gender-nonconforming–specific medicine.<sup>2,3,6</sup> In this investigation, even emergency physician respondents reporting receipt of transgender and gender-nonconforming–specific medical training mostly answered the survey's knowledge questions incorrectly or said they did not know the answer (70.9% for the medication intervention question and 51.6% for the surgery intervention question). It is possible respondents

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#### Table 2. Emergency physician participant survey responses (n=399).

		Yes		No	Do Not Know	
Statements	No.	%	No.	%	No.	%
have cared for a transgender or gender-nonconforming patient in the ED	351	88.0	22	5.5	22	5.5
ave received formal training on how to best care for transgender and gender-nonconforming patients in the ED.	62	15.5	329	82.5	8	2.0
now of clinicians' performing sensitive physical examinations (eg, genitourinary examinations) on transgender and gender-	5	1.3	390	97.7	NA	NA

nonconforming patients when it was not relevant to their ED care.

	Strongly Agree		Somewhat Agree		Somewhat Disagree		Strongly Disagree	
	No.	%	No.	%	No.	%	No.	%
I always specifically ask about surgical history (eg, gender-affirming surgery) for all transgender and gender-nonconforming patients in	74	18.5	141	35.3	130	32.6	46	11.5

the ED.

		Correct*		Incorrect*	
Knowledge	No.	%	No.	%	
Of the medications listed, which is most commonly used among transgender patients with a male-to-female experience?	39	9.8	307	76.9	
Of the surgeries listed, which is most commonly used among transgender patients with a female-to-male experience?	104	26.1	238	59.6	

		Strongly Agree		what Agree	Somewhat Disagree		Strongly Disagree	
Attitudes	No.	%	No.	%	No.	%	No.	%
I am comfortable asking about which personal pronouns (eg, his, her, and their) a transgender or gender-nonconforming patient uses.	167	41.9	176	44.1	12.3	6	1.5	167
It is important to obtain both current gender identity and sex at birth as part of electronic health records.	153	38.3	163	40.9 64	16.0	16	4.0	153
It is important to have a physician champion within the ED who has special expertise or experience in providing sensitive care to	30	7.5	128	32.1	160	40.1	79	19.8

transgender patients.

\*Medication question: correct answer is spironolactone; incorrect answers are leuprolide acetate, finasteride, flutamide, and ketoconazole. Surgical question: correct answer is mastectomy with thoracoplasty; incorrect answers are hysterectomy with oophorectomy, phalloplasty, scrotoplasty, and urethroplasty.

thought they had received transgender and gendernonconforming-specific training because they participated in educational sessions centered on lesbian, gay, bisexual, and transgender health care. More information is needed on the content of such trainings, but more effective education for emergency physicians on transgender and gender-nonconforming care in the ED is clearly needed.

Very few emergency physicians (<3%) in this study reported being aware of colleagues' performing unnecessary sensitive examinations of transgender and gendernonconforming patients. This finding contradicts those of other studies of transgender and gender-nonconforming patient experiences.<sup>2,3,6</sup> The reasons for this discrepancy between transgender and gender-nonconforming patient experience and our findings require further investigation. Perhaps clinicians perform relevant examinations but fail to explain the medical reasoning, so patients misinterpret their care. More research is needed to illuminate what actually occurs when emergency physicians care for transgender and gender-nonconforming patients.

More than half of respondents (53.8%) reported always asking transgender and gender-nonconforming patients about gender-affirming surgeries. Although this item's phrasing may have caused some desirability bias toward agreeing with the statement, if this percentage reflects true practice, emergency physicians may be gathering unnecessarily invasive histories. For example, whether a transgender and gender-nonconforming patient has had a genital surgery is unlikely to affect care for their upper respiratory infection. This survey does not explain why emergency physicians are asking potentially nonrelevant histories. Transgender and gender-nonconforming patients report that questions about their gender-affirming surgeries, when not obviously relevant, erode their sense of safety and discourage care-seeking behavior.<sup>1-3,6</sup>

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Downloaded for Anonymous User (n/a) at Regions Hospital from ClinicalKey.com by Elsevier on April 03, 2023. For personal use only. No other uses without permission. Copyright ©2023. Elsevier Inc. All rights reserved. The majority of respondents (86%) reported being at least somewhat comfortable asking about personal pronouns; however, patient-perspective literature indicates frequent misgendering of transgender and gendernonconforming patients.<sup>1-3,6</sup> Perhaps emergency physicians ask about pronouns but do not use them when addressing patients, or emergency physicians may not accurately perceive when a discussion about pronouns is necessary. This gap in perceptions between transgender and gendernonconforming patients and emergency physicians warrants further exploration.

More than 79% of respondents affirmed the importance of including in the electronic health record gender identity and sex at birth. In 2016, the Veterans Health Administration, one of the nation's largest health care systems, recognized the relevance of this information by announcing 2 new demographic fields in its electronic health record: "birth sex" and "self-identified gender identity." Veterans can also choose to not select a gender identity. <sup>14</sup> These changes respect veterans' individuality while retaining sex-at-birth data that may be relevant for health screenings and interventions. Other electronic health records should follow suit.

Most respondents (59.9%) did not support the use of physician champions to improve ED care for transgender and gender-nonconforming patients. More information is needed about why. Given the deficit in emergency physician training on this topic, it may not yet be feasible to use physician champions to improve transgender and gender-nonconforming patient care. For each ED to have such a champion, best practices and clinical knowledge particular to transgender and gender-nonconforming patients would need to be more widespread among emergency physicians.

In conclusion, this preliminary survey shows that the majority of emergency physicians responding to the survey have treated transgender and gender-nonconforming patients, but few have been trained on caring for this population and most have inaccurate knowledge about important aspects of transgender and gendernonconforming care. This study is an important, initial investigation into emergency physicians' knowledge, attitudes, and behaviors in delivering emergency care to transgender and gender-nonconforming patients. Data from this study invite more research into ED care for transgender and gender-nonconforming patients and indicate a need to improve training of emergency physicians on the components of high-quality emergency medical care specific to this population. Educational resources are available.<sup>15-17</sup>

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#### IMAGES IN EMERGENCY MEDICINE (continued from p. 169)

#### **DIAGNOSIS:**

*Fractured sternal wire*. Chest radiograph revealed fracture and displacement of the uppermost sternal closure cerclage wire (Figure 2). Computed tomography (CT) showed incomplete union of the median sternotomy, as well as migration of fragments of the cerclage wire into the anterior mediastinum (Figure 3) and the base of the neck (Figure 4). The patient was taken to the operating room for removal of the displaced sternal wire.

Sternal wire disruption (whether by fracture or unraveling of wire suture) is usually clinically silent; hence, its incidence is unknown. It appears to occur in 20% of cases of sternal dehiscence, which itself occurs after 2% of median sternotomies.<sup>1-3</sup> Wire fracture and migration has been known to cause devastating injury from damage to the mediastinal contents.<sup>1,4-6</sup> Radiographs are typically sufficient to diagnose disruption and risk for potential complications, but CT can be helpful if the location of the wire is unclear.<sup>2,4</sup> Indications for surgical consultation include wires that are displaced or potentially migratory, those appearing to threaten viscera, and those causing symptoms not tolerated by the patient.

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### APPENDIX E1

# Emergency physicians and transgender patients: a national survey

- 1. I have cared for a transgender or gender-nonconforming patient in the ED.
- Yes No I don't know
- 2. I have received formal training on how to best care for transgender and gender-nonconforming patients in the ED.
- Yes No I don't know
- 3. I am comfortable asking about which personal pronouns (eg, his, her, they) a transgender or gender-nonconforming patient uses.
- Strongly Agree Somewhat Agree Somewhat Disagree Strongly Disagree
- 4. I always specifically ask about surgical history (eg, gender-affirming surgery) for all transgender and gender-nonconforming patients in the ED.
- Strongly Agree Somewhat Agree Somewhat Disagree Strongly Disagree
- 5. It is important to obtain both current gender identity and sex at birth as part of electronic health records.

Strongly Agree Somewhat Agree Somewhat Disagree Strongly Disagree

- 6. It is important to have a physician champion within the ED who has special expertise or experience in providing sensitive care to transgender patients.
- Strongly Agree Somewhat Agree Somewhat Disagree Strongly Disagree

7. I know of clinicians' performing sensitive physical examinations (eg, genitourinary examinations) on transgender and gender-nonconforming patients when it was not relevant to their ED care.

## Yes No

- 8. Of the medications listed, which is most commonly used among transgender patients with a male-to-female experience?
  - a. Leuprolide acetate
  - b. Finasteride
  - c. Spironolactone
  - d. Flutamide
  - e. Ketoconazole
- 9. Of the surgeries listed, which is most commonly used among transgender patients with a female-to-male experience?
  - a. Hysterectomy with oophorectomy
  - b. Phalloplasty
  - c. Scrotoplasty
  - d. Mastectomy with thoracoplasty
  - e. Urethroplasty
- 10. What are the biggest challenges to delivering highquality care for transgender and gendernonconforming patients in the ED?

(free text)

11. What are strategies that could be implemented within EDs to help you deliver high-quality care for transgender and gender-nonconforming patients? (free text)