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# Emergency Department Versus Primary Care Use: A Patient Perspective

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## Abstract

**Introduction:** When faced with an acute illness, patients routinely make the decision of whether to present to their primary care physician (PCP) or the emergency department (ED). While the ED is known to be a high-cost component of the health care system, many ED visits include nonurgent ailments that could easily be treated within the medical home/primary care office. Particularly for patients who have an established PCP, the factors driving a preference for ED use remain poorly understood. The purpose of this study was to better understand patient motivation for visiting the ED rather than the PCP office.

**Methods:** This observational study aimed to take a qualitative look at the patient population using a health system ED in the city of Wilkes Barre, PA, from December 2021 to March 2022. We conducted 30 interviews of patients who recently visited the ED and analyzed the responses for recurring themes.

**Results:** Major themes included the benefit of the PCP-patient relationship, patients' preference for multiple sources of medical guidance, patients' subjectively justifying their symptoms as emergent, seeking emergent care despite perception of higher cost, and factoring in time spent at a health care facility waiting for answers.

**Conclusions:** This study contributes to further understanding of the values that drive ED use by using patient voice as a powerful tool to understand communities and local trends, which will allow health care systems to adapt and personalize protocols to their specific population.

## Introduction

Decreasing emergency department (ED) use has been at the forefront of various programs to curb the rising costs of health care and address timely access to care. US EDs see an estimated 144 million visits a year totaling $76 billion dollars,[1] and one in five adults visit the ED at least once per year.[2] Many of these visits include nonurgent ailments that could easily be treated at the primary care office. These burdens were highlighted by the COVID-19 pandemic when many hospitals were working over capacity to care for the sick, thus limiting access at a time of need.[3,4] Particularly for patients who have an established primary care physician (PCP), the factors driving ED use remain poorly understood. While studies have examined patient demographics associated with increased ED use,[5-10] qualitative data that includes the patient perspective is sparse. This study was conducted to highlight patient voice to better understand driving factors for ED use.

## Methods

A list of patients who were seen within the last 24 hours at the local ED and had a PCP at the study's clinic was generated daily for review. After excluding those younger than 18 and those presenting for COVID-19 testing only, the list was randomized, and calls were conducted within the same week of presentation between December 2021 and March 2022. We conducted 30 interviews from the cumulative list of 118 patients, consistent with previous studies that achieved data saturation with a similar sample size.[11,12] We implemented a qualitative assessment to examine responses to open-ended interview questions, using a guided interview by the lead investigator who completed all the interviews. Descriptive statistics provided for patient characteristics, and Likert scale responses also were included in the analysis. Patients received $20 gift cards via email as compensation. Analyses were conducted in SAS Enterprise Guide version 8.2 (SAS Institute Inc). For the qualitative analysis, interview responses were independently reviewed by three individuals to establish five common themes. The reviewers then came together to review their themes and reach a consensus on a final five overall themes. The project received approval from our institutional review board.

## Results

The key investigator (N.W.) conducted a total of 30 interviews, with the mean participant age of 37.6 years (age range was 19 to 67 years). Survey questions and results are shown in Table 1. A majority of patients (83.3%) did not see the ED as a place to get their usual care. Regarding who to turn to for health care advice, the answers were a mix of family/friend (26.7%), physician (40%), and Internet/social media (33.3%). A majority of patients cited the ED as being more expensive (90% stated "more expensive in the ED") but did not necessarily have a copay (53.3% stated $0 copay, and 20% stated "I don't know" to their copay cost). Most respondents stated that choosing between the ED and PCP office was an easy decision (73.3% "I can easily make that decision" vs 6.7% "I always have trouble making that decision"); but if they were to have the same symptoms they would choose to go to the ED again (53.3% very likely to return and 16.7% likely to return) despite not needing an inpatient stay (70% "I know I did not require a hospital stay" or "I don't think I required a hospital stay"). Chief complaints ranged from hemorrhoids to seizure and are listed in Table 2.

Using qualitative data from interview transcripts, three reviewers extracted themes and agreed on five. Themes and their supporting quotes are listed in Table 3. Theme 1: Patients found the relationship with their PCP valuable. Theme 2: When investigating health concerns, patients went to a variety of sources including the Internet, family/friend, or physician. Theme 3: Most patients subjectively justified their symptoms as emergent. Theme 4: Cost was not a major hindrance for seeking emergent care. Theme 5: Patients valued time spent with their physician as well as overall time spent in the facility.

## Conclusions

Theme 1 highlights the importance of the personalized physician-patient relationship. The PCP office was described as more familiar, required less wait time, and perceived to be less costly. Patients valued that they had a relationship with their PCP and that their physician already knew their medical history.

Themes 2 and 3 showcase the wide availability of medical information and how patients may have consulted multiple sources before deciding the ED was appropriate. In an age of technology where people are used to instant gratification, patients are also seeking quick answers to their individual health questions. As noted in themes 4 and 5, while patients did not equate "faster and more expensive" care in the ED with better "quality" of care, understanding that the PCP's office requires appointments and turnover time for labs and imaging also provided "quality" and value. The ED was described by patients as busy and less personal but more accessible

than waiting for a PCP appointment and waiting for test results.

This study had limitations. The sample was based on patients who already had an ED visit and therefore did not capture patients who had an urgent concern and chose to see their PCP. For simplicity, this study did not include urgent care as a third option. At this institution, urgent care and the ED refer patients to one another based on triage. While patient responses began to show similarity after 30 interviews, assessing and defining saturation was challenging because the themes had not yet been agreed upon. The sample size was largely limited by unanswered phone calls and exclusion of those presenting for COVID-19 testing during the winter months.

While patients valued the relationship with their PCP, most patients presented to the ER to seek quick answers to symptoms they felt were emergent after consulting a variety of sources, not necessarily because they were concerned that they required an inpatient stay and were not hindered by perceived cost. By including patient voice, policymakers and health care systems may better understand the patient perspective and preferences for PCP and ED use.

## Tables and Figures

**Table 1. Survey Questions and Results, N=30**

| Age | |
|---|---|
| Mean (SD) | 37.6 (14.06) |
| Median (IQR) | 34.0 (27.0, 48.0) |
| Range | 19.0, 67.0 |
| **Sex** | **n (%)** |
| Male | 4 (13.3) |
| Female | 26 (86.7) |
| **Race** | **n (%)** |
| White | 19 (63.3) |
| Black or African American | 9 (30.0) |
| Asian | 2 (6.7) |
| **Education level** | **n (%)** |
| Less than high school diploma | 2 (6.7) |
| High school diploma or GED | 17 (56.7) |
| Undergraduate | 10 (33.3) |
| Graduate | 1 (3.3) |
| **Primary language** | **n (%)** |
| English | 29 (96.7) |
| Spanish | 1 (3.3) |
| **Tell me the story of why you went to the emergency department.** | |
| **Where is your preferred place to get your health care? (and why?)** | **n (%)** |
| Primary care office | 22 (73.3) |
| ED | 5 (16.7) |
| Other | 3 (10.0) |
| **Do you see the emergency department as a place to get your usual care? (and why?)** | **n (%)** |
| Yes | 8 (28.6) |
| No | 20 (71.4) |
| Missing | 2 (6.7) |
| **Who do you usually go to for health care advice? (and why?)** | **n (%)** |
| Family/friend | 8 (26.7) |
| Physician | 12 (40.0) |
| Internet/social media | 10 (33.3) |
| **In a typical year, how many times do you visit your primary care office?** | **n (%)** |
| 0-1 | 7 (23.3) |
| 2 | 9 (30.0) |
| 3 | 3 (10.0) |
| 4 | 3 (10.0) |
| 6 | 5 (16.7) |
| Greater than 6 | 3 (10.0) |

| In a typical year, how many times a year do you go to the ED? | n (%) |
|---|---|
| 1 | 14 (46.7) |
| 2 | 6 (20.0) |
| 3 | 2 (6.7) |
| 4 | 1 (3.3) |
| 6 | 2 (6.7) |
| Greater than 6 | 5 (16.7) |
| **How do you feel the quality of care compares between the ED and your primary care office? (and why?)** | **n (%)** |
| Better quality of care in the ED | 5 (16.7) |
| Better quality of care in primary care office | 13 (43.3) |
| Same | 12 (40.0) |
| **How expensive do you think the ED visit will be compared to your primary care office visit?** | **n (%)** |
| More expensive in the ED | 27 (90.0) |
| More expensive in the primary care office | 2 (6.7) |
| I don't know | 1 (3.3) |
| **What is your copay for an ED visit?** | **n (%)** |
| $0 | 16 (53.3) |
| $26–$50 | 2 (6.7) |
| Over $50 | 6 (20.0) |
| I don't know | 6 (20.0) |
| **What is your copay for an office visit?** | **n (%)** |
| $0 | 20 (66.7) |
| $11–$25 | 4 (13.3) |
| $26–$50 | 4 (13.3) |
| I don't know | 2 (6.7) |
| **Is it ever difficult to get transportation to go to your appointments?** | **n (%)** |
| No | 23 (76.7) |
| Yes | 7 (23.3) |
| **How satisfied do you feel with your ED visit?** | **n (%)** |
| 1 = Very dissatisfied | 4 (13.3) |
| 2 = Somewhat dissatisfied | 1 (3.3) |
| 3 = Neutral | 4 (13.3) |
| 4 = Somewhat satisfied | 9 (30.0) |
| 5 = Very satisfied | 12 (40.0) |
| **Did you feel the ED addressed your problem?** | **n (%)** |
| 1 = Did not address at all | 6 (20.0) |
| 2 = Addressed somewhat | 1 (3.3) |
| 3 = Not sure | 3 (10.0) |
| 4 = Addressed some of my problems | 3 (10.0) |
| 5 = Addressed all my problems | 17 (56.7) |

| How likely are you to return to the ED if you experience similar symptoms again? | n (%) |
|---|---|
| 1 = Will not return | 3 (10.0) |
| 3 = Not sure | 6 (20.0) |
| 4 = Likely to return | 5 (16.7) |
| 5 = Very likely to return | 16 (53.3) |
| **How likely are you to call your primary care office if you experience the same symptoms again?** | **n (%)** |
| 1 = Will not call | 1 (3.3) |
| 3 = Not sure | 7 (23.3) |
| 4 = Likely to call | 2 (6.7) |
| 5 = Very likely to call | 20 (66.7) |
| **How easy is it to decide whether to go to the ED or call your PCP?** | **n (%)** |
| 1 = I always have trouble making that decision. | 2 (6.7) |
| 2 = Most of the time I have trouble making that decision. | 1 (3.3) |
| 3 = About 50% of the time I have trouble making that decision. | 2 (6.7) |
| 4 = I can usually make that decision. | 3 (10.0) |
| 5 = I can easily make that decision. | 22 (73.3) |
| **How important is it to you to follow up with your PCP after an ED visit?** | **n (%)** |
| 1 = Not important | 1 (3.3) |
| 2 = Somewhat not important | 2 (6.7) |
| 3 = I don't know | 6 (20.0) |
| 4 = somewhat important | 4 (13.3) |
| 5 = Very important | 17 (56.7) |
| **How much did you feel you required an inpatient hospital stay?** | **n (%)** |
| 1 = I know I did not require a hospital stay. | 15 (50.0) |
| 2= I don't think I required a hospital stay. | 6 (20.0) |
| 3 = I'm not sure. | 4 (13.3) |
| 4 = I thought I likely required a hospital stay. | 4 (13.3) |
| 5 = I really thought I required a hospital stay. | 1 (3.3) |
| **Number of children** | **n (%)** |
| 0 | 10 (33.3) |
| 1 | 7 (25.9) |
| 2 | 8 (29.6) |
| 3 | 1 (3.7) |
| 4 | 3 (11.1) |
| More than 4 | 1 (3.7) |
| **Additional adults in the home** | **n (%)** |
| Yes | 16 (53.3) |
| No | 14 (46.7) |

Abbreviations: SD, standard deviation; IQR, interquartile range; GED, graduate educational development; ED, emergency department; PCP, primary care physician

**Table 2. Chief Complaints of Participants**

| | | |
|---|---|---|
| Abdominal pain | Hemorrhoids | Toothache |
| Syncope | Arm pain | Vomiting |
| Fall | Seizure | Pregnancy |
| DVT concern | Rash | Foot injury |
| Chest pain | Fall | Back pain |
| Headache | Cramping in pregnancy | Swollen finger |
| Allergic reaction | Hypertension | Leg infection |
| Panic attack | Shoulder pain | Flank pain |
| Hip pain | Tinnitus | |

Abbreviation: DVT, deep vein thrombosis

**Table 3. Themes and Supporting Quotes**

| Themes | Supporting Quotes |
|---|---|
| Theme 1: Patients found the relationship with their PCP valuable. | • "I would rather get my regular care with somebody that sees me all the time, not just whoever's on call."<br>• "I'm used to my PCP. I don't like going to any other doctor [and] I like staying in the same system." |
| Theme 2: When investigating health concerns, patients went to a variety of sources including the Internet, family/friend, or physician. | • "I check the Internet because my phone is right there and it's quicker. Sometimes they reassure me that it's not a problem."<br>• "I listen to my daughter because she took care of her disabled mother-in-law for years so she knows a thing or two."<br>• "I always message my PCP and ask them what I should do and even send them pictures." |
| Theme 3: Most patients subjectively justified their symptoms as emergent. | • "[At the PCP] I usually have to wait for results or get a referral to another specialist so my ongoing problem lingers versus when I go to the emergency room I can at least get a temporary stop of what's bothering me until I can get to the PCP."<br>• "I was feeling dizzy so I definitely couldn't wait."<br>• "The ED has access to immediate imaging, which is what I needed." |
| Theme 4: Cost was not a major hindrance for seeking emergent care. | • "The ED definitely costs more but I don't have a copay."<br>• "I know that the ED costs much more but I'm not sure by how much." |
| Theme 5: Patients valued time spent with their physician as well as overall time spent in the facility. | • "The ED took too long so I left before being seen."<br>• "Honestly I think the ED is like, just a quick *let's see what's wrong* and try to get you in and out, but you know it is not very in-depth, it's just kind of like, *okay I think this is what's wrong.*"<br>• "You know the ED is basically rushing you out because they have so many people coming in and out, and with the PCP you make a schedule and you get seen." |

Abbreviations: ED, emergency department; PCP, primary care physician

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