Why go to the Emergency Room? A Patient Decision Making Process

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Abstract- The purpose of this case study is to understand what influences patient decisions to go to the emergency room. This case study is discovery oriented, listening to patient perspectives and providing a model for health care providers and policy makers to discuss. The research setting is a regional hospital in the southeast, with a sample of 20 patients meeting pre-set criteria. Using qualitative methods, we code our data using well-tested methods of Strauss and Corbin. Our findings reveal four primary factors that play a significant role in the patients’ decision. Factors include severity of condition or pain, convenience, reputation, and external referrals. Upon conditions creating concern or pain, patients either self-refer to the ER, or report to their primary care physician or a public or urgent care clinic. If they go to their primary care physician or an urgent care clinic, oftentimes the need for special tests or equipment cause medical professionals to direct the patient to the emergency room for those services. From these factors and their corresponding features, we produce a patient decision model for reporting to the emergency room. This model provides a way for hospitals to help identify strategies to help reduce emergency service demand.

Keywords- Emergency Room ;Case Study; Qualitative Research

1. INTRODUCTION

Hospital emergency rooms (ER) in the United States face tremendous pressure to reduce costs in order to have an effective, functioning system. Not only are emergency rooms often overcrowded [1, 2, 3], but at the same time continue to face Federal and State healthcare pressures such as declining reimbursement rates and increasing regulatory oversight. How might costs be reduced in a dynamic system that demands 24-hour service by medical experts in order to save lives? Cost reductions can move beyond slashing budgets, staff reductions, and direct cuts in other resources. Sometimes it is simply changing the behaviors of medical staff/structures or patients [4]. There has been piece-meal progress in this effort, with different initiatives developed for an assortment of issues. For example, follow-up intervention with patients reporting to the ER with alcohol-related issues, were found to have fewer repeat visits. [5]. There are also intervention methods directed at elderly patient well-being to reduce their need for emergency services. In large part, initiatives such as these focus on reducing the causes for emergency service. There also exists some insight into the various kinds of nonurgent care sought by patients. For example, studies show that some patients seek care for non-emergency dental services [6]. There are others. If hospitals understand what influences these patients, strategies might be develop to lessen emergency service demand. The focus of this study is to determine why patients utilize emergency services when other services may be more fitting or even more efficient. The background behind our case study is that the participating hospital must tackle a state mandate to follow usage by patients seeking emergency room care in excess of four times per year. State efforts are directed at encouraging hospitals to develop new strategies to reduce the number of patients using emergency rooms as a primary source of care. This high-use group of patients is known as “high flyers.” High usage by select groups of patients is not limited to the United States, so this work might also offer some insight for international medical care [7]. As part of a larger work, the purpose of this case study is to build a decision making model of the factors patients consider in seeking emergency services, as well as the role and relationships of these factors to each other. The resulting conceptual model will both inform medical professionals...
as well as contribute to dialog for developing patient alternatives when emergency room services are not required. We hope this investigation will give useful information to hospital personnel, other clinics, and for the patients themselves.

2. BACKGROUND

Several hospitals in the United States operate an emergency room with the special purpose of taking care of the people that are either severely injured or in serious pain. An emergency room provides care to patients with urgent medical conditions ranging from heart attacks and strokes to simple but pressing conditions such as serious cuts and broken bones. This care is provided twenty-four hours a day.

2.1 The Rise of Emergency Room Demand

There is no doubt that urgent care demands are increasing. In just ten years from 1997 to 2007, the national average for ER visits increased 23% [8]. While part of the increase is attributed to additional patients truly needing emergency care, there are also demands by non-urgent cases—a significant barrier to timely care [9]. There are many relational factors contributing to overcrowding. One is the declining number of emergency service departments. In the past 20 years, studies show that one in four hospitals have eliminated their emergency room mainly due to financial problems [10]. Because of fewer emergency rooms, this creates a cascade effect, and remaining emergency rooms become increasingly overcrowded [11].

Further, many emergency rooms are overcrowded because instead of shutting down their ER, hospitals sometimes make personnel or equipment reductions to save money, thus slowing service. The national average patient wait-time is approximately 28 minutes and with the Affordable Care Act it is expected to increase [8]. Predictions with the new legislation surmise that many patients who have never had insurance will begin visiting the ER. As the senior population of the United States continues to increase, the estimated number of eligible Medicaid patients nationwide is about 15 million; so hospitals are preparing accordingly for that added increase as well [8]. Closures, resource reductions and increased crowding have a direct impact on quality of service. In a related study at the same research site, quality of service plays a significant role in patient selection for the hospital minor care clinic—part of the hospital’s attempt to triage nonurgent patients, thus diverting them away from the ER. To effectively triage patients, John Shufeldt believes the key is to have a physician present at the emergency room door to quickly assess incoming patient needs and direct them accordingly [12]. He believes that “Once they are horizontal, friction and gravity take over” [12]. In other words, once patients become integrated into the emergency department, they then go through formal treatment avenues.

2.2 Emergency Service Survival Efforts

While there is a measurable drop in emergency services offered, there are some hospitals still building emergency rooms. One example of this is in East Meadow, New York, where a hospital is building a $36 million emergency department with additional rooms for patients [10]. Hospital strategy is to attract patients from nearby communities with state-of-the-art technologies and procedures [10]. The lead author has also conducted hospital research where hospitals partner with out-laying clinics or build new special service hospitals in affluent communities for the purpose of fiscal solvency.

2.3 Use of Emergency Service When Not Needed

Emergency departments often have clear-cut guidelines for ER use on their websites. For example, the website of the hospital under study offers the patient specific reasons to use the emergency services such as: chest pain, seizures, or confusion. Yet, despite guidelines, patients continue to report to the ER when urgent care is not needed. Many studies reveal the type of people that often use emergency services when not needed. One study shows high usage rates occur by patients living alone with limited social networks, who might be better served by nonurgent services [7]. Still other studies make the determination more complex—such as high visit groups related to alcohol use [5], or psychiatric needs [13, 14], as well as conditions such as PTSD, mood disorders, and anxiety [15]. One suspected belief often mentioned as a major motivation for patients to use emergency care when not needed, is the belief that patients seek to obtain care without making payment. For example, a number of medical personnel in this case describe patients seeking care for non-emergency issues as being discharged the same day, then not making payment. Yet, some research suggests that lack of payment for many of these patients is not a problem [6]. Indeed, medical professionals at the institution under study admitted that additional factors might influence nonurgent patients to seek care at the ER. Yet they did not offer a clear set of conditions. Also few, if any, studies offer a comprehensive model of pertinent factors.

2.4 Research Questions

The primary research question guiding this study is: How are patients influenced to come to a hospital emergency room? Supporting questions include:

1) What factors play a role (contribute to or distract from) in patient decisions to seek ER over clinic services?
2) How do these factors play a role in the patient’s decision making process?

The goal of this research is to decrease non-essential emergency room traffic by understanding how to influence people with non-life threatening issues to go to other medical facilities rather than hospital emergency departments.
3. METHODS

This qualitative research is discovery oriented in order to explore patient beliefs and how they are influenced to seek medical care at a hospital emergency room. Framed within an epistemology of constructionism, meaning is created collectively and shaped by culture and language. Our theoretic framework relies on symbolic interactionism, which places our assumptions within a collective context of language, culture and relationships between patients, the institution and its agents [16]. Through our interviews and observations we adopt the views and feelings of the patient, and then add the perspectives of medical professionals to clarify ambiguous findings and seek a more comprehensive understanding of what occurs. The resulting patient decision-making process model represents the collective perspectives of participants using these services. This case is bounded by the decision making process itself—this is, those influences contributing to their decision to go to the emergency room [17, 18]. Our sample is large enough to obtain data saturation—that is the collection of data until no new findings emerged. Data collection and analysis are guided by methods provided by Strauss and Corbin [19].

Our research took place at a regional hospital in the southeastern United States. The hospital employs 400 physicians and over 3000 other staff. Housing 578 beds in their system, the hospital has been the location for acute, inpatient services since 1906. The hospital’s emergency room examines an average of between 170-180 patients each day, and another 80 in its adjacent minor care clinic. A free minor care clinic is less than one mile away and handles approximately 18 patients each day. At the outset, our data collection strategies included the assistance of the medical staff to help formulate the best approach to surveying participants. Before conducting research we were given a working tour of the hospital facility, a brief presentation on requisite national, state, and hospital standards, procedural guidelines for employees and visitors, and other advice on the best ways to communicate with our prospective interviewees. We also decided not to conduct interviews on weekends, knowing that most patients would have no other choice to select alternate facilities other than a hospital ER.

3.2 Data Collection

Our primary methods of data collection included interviews, observations, and artifacts. Interviews were conducted on site at the hospital emergency room by five researchers. Two, two-person teams administered the surveys while the remaining researcher conducted formal observations discreetly sitting in one location or meandering through the emergency room and lobby area. Artifact collection was conducted by all researchers—noting those items which seemed to influence patients in some way or in pursuit of additional information to clarify context—policies for example. Observations and artifact information was captured in detailed field notes. Immediately after each interview, the team would compare interview and observation data, and ensure as full a description of events as possible.

3.2.1 Interviews

Our sample size was 20 patients of differing backgrounds and ailments. For interviews, we used semi-structured, open-ended questions to obtain the maximum amount to data within the time provided [19, 20]. Time available was dictated by patient wait time for service between screening and doctor availability for treatment. Patient criteria for interviews included any patient that the medical staff had preapproved for questioning who were of 18 years of age, did not fall into any “special categories” (i.e. prisoners), and who did not seem agitated due to condition. Each patient was given full confidence of anonymity and the assurance that they could refrain from answering any questions that made them uncomfortable. They were also given the option to end the interview at any time. Our questionnaire included asking why patients chose to come to the ER that day, what influenced them to come to the case study site, any persons involved in influencing them, and inquiring what might be some barriers to using other medical clinics rather than the emergency room?

3.2.2 Observations and Artifacts

Observations included description of the setting, informal interaction with medical personnel. Observations noted the layout and feeling of the environment, the interaction between staff and patients, as well as the interaction between staff members. We conducted informal conversations with medical personnel to clarify procedures, patient issues, and general background information. We spoke daily with nurses in the emergency department throughout our stay. Overall, the waiting room was very calm and not too crowded, and the process for moving patients from initial screening into treatment flowed smoothly. From observations taken within the treatment area, we discovered that the facility was divided into zones, some identified as those for treating specific patient issues. We discovered the busiest day during the work week is Monday. Few artifacts were mentioned by the patients, although we reviewed public material near the ER area, and the website providing public guidance on use of the ER. Finally, we also researched nearby clinics and medical centers to locate alternative options for nonurgent patients. We discovered a free medical clinic less than one mile from the hospital. Several other urgent-care clinics were within a twenty-mile radius of the hospital.

3.3 Analysis

Analysis uses three phases of coding: open coding, axial coding, and selective coding. This process involved breaking data into meaning units, sorting data into similar
categories based on properties and dimensions, then determining a central category and the relationships among categories. These methods provide analytic generalizations conducive to theory building [18]. Our analysis uses an iterative process of data collection and overlapping coding phases [19]. Initial analysis was followed by additional data collection to pursue emerging themes and seek clarification of ambiguous meaning. Research trustworthiness is gained through standard qualitative techniques: rigorous collection and coding methods, and corresponding coding notes and field notes. Our work was audited by an academic peer. After we had collected our initial data, we began to go back and study our interview transcripts. By having multiple researchers involved in analysis, we sought to exclude bias, and let meaning emerge from the data [21] (Marcellus, 2005). After conducting twenty interviews and achieving data saturation we were able to discover major themes dominating our data which eventually developed into our model factors.

4. FINDINGS

Our findings reveal four main themes or factors that play a primary role in the patients’ decision to report to the emergency room. Factors include severity of condition, convenience, reputation, and external referrals. Our model can be found in Figure 1. Upon conditions creating concern or significant pain, patients would either self-refer to the ER or report to their primary care physician or a public or urgent care clinic. If the patient went to their primary care physician or to an urgent care clinic, often times the need for special tests or equipment would cause the patient to be directed to the emergency room for those services. If patients did not have a doctor, or alternative choices were not open for business, or because of their previous experiences of being sent to the ER by alternative care, patients would report to the ER on their own initiative. In the case of self-referral, patients would consider a variety of defining features that provided influence to report to the emergency room, and in some cases what emergency room they would select.

One of the main reason’s patients come to the emergency department is due to the seriousness of their condition. Seriousness is often determined by the amount or severity of pain the patient experiences. Sometimes this was combined with their medical history prompting a concern that they might have a serious condition—a history of stroke or blood clot for example. During our interviews almost every patient said they diagnosed their own pain and made their own decision to come to the emergency room. Table 1 provides a brief set of descriptions of this feature. The amount or severity of pain coincides with convenience of the hospital as well. If the hospital is the closest form of assistance and the person thinks their condition is urgent or severe, they will immediately go to the hospital.

Table 1. Seriousness of condition prompts drive to seek assistance

<table>
<thead>
<tr>
<th>Patient</th>
<th>Patient Description Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Patient</td>
<td>“I had to do something about my head pain.”</td>
</tr>
<tr>
<td>Female Patient</td>
<td>“…woke up with severe headache and nausea.”</td>
</tr>
<tr>
<td>Male Patient</td>
<td>“The severity of pain from my sprained ankle.”</td>
</tr>
<tr>
<td>Female Patient</td>
<td>History of stroke and blood clot.</td>
</tr>
<tr>
<td>Male Patient</td>
<td>History of colon problem; came to the same place before for the same reason.</td>
</tr>
</tbody>
</table>

4.3 Convenience

A major factor of influence for patients reporting to the ER in general, or in specific cases to by-pass a local facility, was convenience. Convenience by definition means the act of doing something with little effort. Features important to convenience included travel distance and time or operating hours. The weightier feature of convenience in going to the emergency room is the amount of time it takes to arrive at the ER from where the participant resides; this is dominate in the sense that it is either the sole factor driving patient decisions, or it is combined with a sense of urgency in patient condition. Most of the patients grew up around the hospital of study, so dropping in for care was considered easier and “more comfortable” than going somewhere else. For convenience, patients frequently made a choice to come to the ER over a doctor’s office or a clinic. On inquiry, the patients revealed that the average travel distance was five to ten miles. Table 2 provides a sense of travel time for the patient from home to the ER.

Table 2. Convenience of time from home

<table>
<thead>
<tr>
<th>Patient</th>
<th>Patient Description Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Patient</td>
<td>She lived less than 10 minutes away</td>
</tr>
<tr>
<td>Male Patient</td>
<td>He lived less than 5 minutes away</td>
</tr>
</tbody>
</table>

Figure 1. Patient ER decision-making process.

4.2 Seriousness of Condition
However there were outliers to the distance patients traveled, mitigated by hospital reputation. For example, one woman we interviewed traveled from a different county to receive care at the hospital under study. This was at least 30 minutes more than if she had sought a local ER. She claimed this was due to the strong reputation of the case hospital, as well as the perceived lack of quality from the hospital near where she lived. So, in some cases, reputation (another factor) superseded the influence of convenience. The other important convenience-feature in the decision to go to the ER can be attributed to the operating hours of the facility. As one man stated simply, “Nothing else was open.” The 24-hour operating schedule dominates much of patient decision making—even when non-urgent care is needed. The hospital emergency department played a critical role when patient primary care physician offices or urgent care clinics were closed. The emergency room at the hospital of study is open 24/7 to all patients, which in most of our morning interviews was the leading reason why participants came to the hospital instead of a doctor’s office. Typically, health clinics are open during normal business hours—some with slight variations. Most of our interviewees felt the need or desire to be seen immediately so they chose to go to the emergency room instead of waiting for a clinic to open. Table 3 provides some of the patient descriptions of this aspect of convenience.

Table 3. Convenience of operating hours

<table>
<thead>
<tr>
<th>Patient</th>
<th>Patient Description Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Patient</td>
<td>“Nothing else was open.”</td>
</tr>
<tr>
<td>Female Patient</td>
<td>“ER open 24/7”</td>
</tr>
<tr>
<td>Female Patient</td>
<td>Primary physician was not in.</td>
</tr>
</tbody>
</table>

4.4 Reputation

Reputation was another important factor for many of the patients due to a variety of reasons, ranging from service quality, proper or more modern equipment to meet patient needs, or because of friends or family recommendations. Reputation exceeded simply a competitive aurora among ERs, although this was not excluded. Reputation included patient comparisons between their own primary care physician and other health care clinics. Earlier, we saw how one patient, decided to drive a long distance to the case study hospital, rather than one that was much closer. It was her perception of the quality of service and care that brought her there. Reputation was so strong, that many patients came to the case study hospital rather than to their primary care physician or to another clinic—even when the others were open. Many patients interviewed made it obvious that they would rather deal with a hospital than a clinic. Patients held very strong beliefs in ERs providing a better service attributed in part, to unlimited operating hours. A second important feature within reputation was the patient’s description of how the need for a specialized test or equipment influenced their decision making process. The quality of the equipment and the wide-range of resources possessed by the hospital instilled a sense of confidence in the patients that the emergency services they were going to receive would be good. One of the patients claimed that whenever she had visited a health clinic concerning an ailment of hers, the health clinic did not possess the proper equipment needed to treat her. She was told to go across the street to the ER to have her tests done. This was a common issue in several of our interviews. It appears many people decide to go to the ER as opposed to a health clinic in order to bypass any kind of referral process, in order to go straight to treatment. The need for equipment did not always result in a good or bad reputation of service, simply a known attribute about the ER. For example, in one case a man revealed that if it were not for the equipment he needed for a test, he would go somewhere else. Finally, a third feature of reputation, are the recommendations of friends and family, or a favorable feeling about the place. For example, one man explained how his father insisted he should go to the case study ER despite the fact that another one was closer. In another case, a 40 year old male came to the case study ER “because his mother told him to.” Finally, many patients simply stated the treatment was “good.” For instance, one woman said she came to the case study ER, because she felt good about it; she had previously worked there, stating it was “A good place to work.”

4.5 External Referrals

There are a number of examples where patients went to their local physician or an urgent care clinic, yet specialized needs and services could not be done on location. In these cases, the patient was sent directly to the ER. This experience seems to have altered the behavior of some patients over time—where they were familiar with what the doctor or clinic could and could not do. Once learning those tests or needs could only be met at the ER, they would report directly next time. Table 4 provides a brief example of patient descriptions on how or why they were directed to the ER by either their primary care physician or an urgent care clinic.

Table 4. Patients frequently referred to ER for special tests or equipment

<table>
<thead>
<tr>
<th>Patient</th>
<th>Patient Description Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Patient</td>
<td>“Every time I have been to Urgent Care, they have sent me here.”</td>
</tr>
<tr>
<td>Female Patient</td>
<td>She went to family doctor first and was sent to the ER.</td>
</tr>
</tbody>
</table>
| Female Patient| “Medical clinics do not have all
5. DISCUSSION

Our research reveals four major factors, each with a set of features that influence the patient decision to report to the ER. In some cases they influence patients to seek an ER further away than their own local facility. Various factors also influence patients to by-pass their doctors or clinics and instead, opt for the ER. Interestingly enough, one strong influence we suspected would be a major factor in patient decision making to go to the emergency room was cost. Even though patients did not have to pay for service up-front, this was not the case. By law, the emergency department is required to care for the patient and the patient can pay for the service at a later date. This is not true for a primary care physician or urgent care clinic—patients must pay up-front. But out of the 20 interviews, not one patient mentioned anything to do with money. We recognize that part of the reason a patient might not speak about money influencing their decision is discomfort in discussing their financial position. Yet, patients seem comfortable answering questions and seemed to provide detail we would assume to be more sensitive. Also, in a sister study at the minor care clinic next to the hospital (as part of the hospital’s emergency service), patients did not seem to have a problem mentioning this issue. Interview questions were basically the same in both cases, and the teams in both calibrated in the interview process. Another interesting aspect emerged from conducting interviews at different times of day. During the morning interviews at 9 A.M., a major reason for patients coming to the ER was because their doctor’s office was not open early in the morning. On the other hand, during the afternoon interviews at 3 P.M., the main reason for going to the ER was due to the severity of the patient’s pain. However, pain was a leading cause at both times of the day, and the amount of pain influenced every patient we interviewed to come to the emergency department. Once initial analysis was complete, we decided to revisit the emergency department to validate our findings with nurses. The nurses agreed with our model, and provided further detail for more complete understanding. An interesting fact that the nurses brought to our attention was that homeless men and women come to the emergency room more frequently in the winter to find shelter and warmth. While important, this was not an issue encountered during our study. Overall, going back to the hospital confirmed our findings.

6. CONCLUSION AND IMPLICATION

Patients have varied reasons for using emergency care for non-life threatening injuries. Many of these drivers lay outside the control of the hospital—such as the work-hours that alternative clinics or primary care providers maintain—or possessing the equipment or kinds of tests other providers are unable to purchase. Shufeldt’s recommendation for effective triage at the ER door is important [12]. But if non-urgent patients cannot be referred to a doctor or urgent care clinic in the community, where would the ER doctor direct them? As shown by our findings, we wonder if hospitals might also reduce over-use by setting up alternative clinics in-house—areas that run routine tests or expedite use of certain equipment to encourage non-urgent care patients to report elsewhere rather than the high-cost emergency room. Related to this is one initiative being implemented by this hospital—the creation of an in-house urgent care clinic. If patients know the right equipment and test can be conducted on sight if needed, and become comfortable with the reputation and comfort of the facility, this might bring patients here on their own accord, or they could be screened at the ER and directed there. Another thought is that many patients, while suffering important conditions such as a sprained ankle or simply coming to the ER because they are “comfortable” is seeking the ER environment to provide quick care, might be educated on alternative options or clinics. Our findings, in conjunction with hospital staff, found few patients had life-threatening issues and might have been attended elsewhere. None of the patients mentioned using the hospital website or seemed concerned about using a clinic. On the hospital website, there are very clear specifics about use of emergency services. These specifics might be a starting point to create an information pamphlet to be handed to patients once they have been treated. Another means to notify patients on the use of urgent care is by having “mini commercials” on the TV monitors in the waiting room, explaining to patients the reasons for utilizing the emergency services. In conjunction with educational measures such as those mentioned, perhaps supplemented with home mailers and other possibilities, perhaps patients might receive a “debrief” on future options before they leave. Finally, there might be possibilities for other care providers using this information. One is to address any concern about quality or capability with their patients. Another might be to proactively manage their reputation. If non-urgent patients seek care at hospital emergency departments for reasons outside of work hours, other providers may not be meeting patient expectations in other areas.

7. REFERENCES


