Strategies for Reduction of Inappropriate Emergency Department Use in the Outpatient Setting

By Bryce Elizabeth Holland
Physician Assistant Student, Expected Graduation August 2014, University of Utah
2014 GE-NMF Primary Care Leadership Program Scholar

Abstract

In 2010, there were over 129.8 million Emergency Department (ED) visits in the United States. Many patients who utilize Emergency Departments for non-emergent health problems do so because they believed they had a serious condition or perceived that there were no other viable alternatives in their community. Community Health Centers play a critical role in aiding in the prevention of unnecessary and avoidable ED visits. Increased patient education about proper use of the ED, promotion of services offered and increased access to primary care services will aid in the reduction of non-emergent ED use.

Keywords:

Emergency Department utilization, diversion, reduction of emergency department visits.

Introduction

Too often as providers we hear about our patients accessing care in Emergency Departments (ED) for non-emergent conditions or complaints that could be safely managed in the outpatient setting. It may be apparent to the provider that this was an inappropriate use of an ED, but not necessarily to the patient.

The aim of this project is to identify barriers that may lead to unnecessary ED visits. It has been my experience during my clinical year as a Physician Assistant student that all too often patients choose an ED for their care because they simply do not know the primary care resources available to them in their own community. Frequently, they have never received instructions on what conditions are truly emergent/life threatening and should be evaluated in an ED versus conditions that could be better addressed in the outpatient setting.

This interest generated this scholarly project. Over the course of my 6-week rotation at the Jackson-Hinds Comprehensive Health Center (JHCHC) in Jackson, Mississippi, I conducted patient surveys on ED use and assessed patient attitudes and knowledge of outpatient services available for an urgent medical condition.

Background

In 2010, there were over 129.8 million ED visits in the United States. Medicaid beneficiaries and the uninsured made up 66.5 million of those visits. Of those visits, Medicaid recipients utilized the Emergency Department at an almost two-fold higher rate than compared to the privately insured. (1) Since 2010, with the expansion of the Affordable Care Act and the increased number of Medicaid recipients it is expected this number will continue to trend upward.

The ED plays a critical role in the health of communities across the United States. It continues to serve as the most common venue for access to acute care and is the most frequent source of inpatient admissions. Unfortunately, approximately 66% of those visits are for non-emergent and emergent conditions that could be safely treated in the primary care setting. (2) Although, the expansion of Medicaid and private insurance will decrease financial barriers to healthcare access it is important to funnel patients to the appropriate care settings for their healthcare needs.

Community Health Centers (CHCs) will play a critical role in aiding in the prevention of unnecessary and avoidable ED visits. Since their inception almost 50 years ago, they have provided care for everyone, regardless of their ability to pay. In addition to comprehensive primary care services, the CHC also offers specialty care, dental, mental health and other supportive services. (3) The use of CHCs is associated with lower health care costs, decreased use of acute care services, and leads to fewer hospital admissions. (4) With the addition of the Patient Centered Medical and Health Home, access to services is more readily available than ever before. CHCs typically offer extended hours on evenings and weekends, same day and walk-in appointments, after-hours phone access to clinicians for medical advice, and continuity with one provider. (5)

In Mississippi, The University of Mississippi Medical Center (UMMC) sees 70,000 patients per year in their ED. Of those visits UMMC has deemed 17,000 to be an inappropriate use of the ED. This is a staggering number and has caused an increased financial burden on the institution. (6) Additionally, it is well known that patients that receive primary care services through an ED have poorer health outcomes. In order to address this concern, in July 2010, UMMC and JHCHC collaborated to create an outpatient Jackson-Hinds Clinic at the UMMC

Medical Mall. This clinic has served to divert patients away from the ED and into the appropriate care setting by offering same-day and walk-in appointments. The goal is to not only address the patients acute concern, but also establish primary care services for the patient.

The UMMC/JHCHC collaboration creating the Medical Mall Clinic is an innovative and creative solution to decreasing unnecessary ED visits. These types of collaborations decrease barriers to timely medical care in the appropriate setting. Although the ED at UMMC has the ability to triage and redirect patients, ultimately the goal should be for patients to independently seek out and access the right type of care for their condition. Patient education and knowledge of available services will play a critical role in accomplishing this goal.

I hypothesize patients who utilize EDs for non-emergent health problems do so because they believe they have a serious condition or perceive that there are no other viable alternatives in their community. I propose that patient education about proper use of the ED and increased access to primary care services will reduce inappropriate ED use.

Methodology

This project was carried out through the administration of patient surveys at the Jackson-Hinds Medical Mall, Utica, and James Anderson clinics over a 3-week period. Surveys were randomly passed out to participants after they had checked in for their appointment. All patients asked to participate in the survey were given the option to refuse. It should also be noted that adult medicine patients and caregiver of pediatric patients completed this survey. There was slightly different wording on the pediatric survey that changed "you" to "your child".

Survey questions were derived from a similar survey administered by the RAND Corporation in 2013. (7) Survey questions were intended to illicit responses about Jackson-Hinds patient usage of Emergency Rooms in the past 12 months. Survey participants were asked

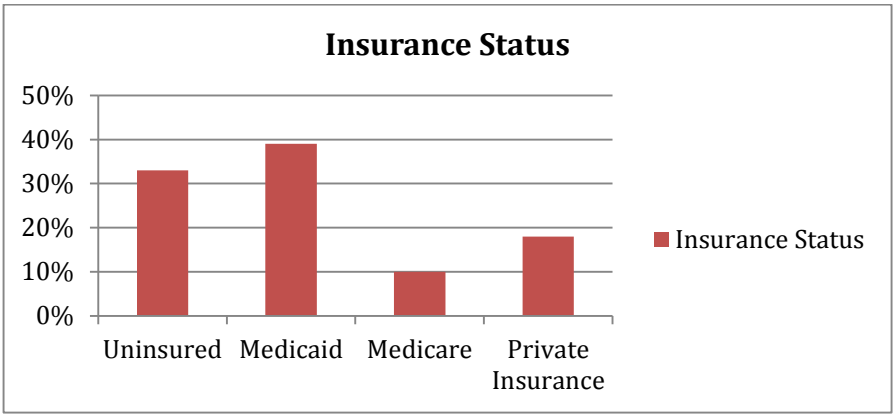
if they had gone to an Emergency Room in the past 12 months, reason for their ED visit(s), if they had attempted to contact a doctor prior to their ED visit, and if they thought there were other places they could have gone for their medical issue. Participants were also asked if the had a usual source of healthcare, their ability to access afterhours care, and if they have tried to contact a healthcare provider after regular business hours in the past 12 months. Additionally, participants were asked about their perception on how difficult it is to contact a healthcare professional after regular office hours in the event they have an urgent medical need. A total of 101 surveys were completed.

Results

A total of 101 surveys were administered and collected over a three-week period. 86 surveys were completed in their entirety. Of the 15 surveys partially completed only one question was left blank or answered with a personal statement. Of questions unanswered, (1) did not answer if their healthcare provider offered evening or weekend appointments, (2) did not indicate if they had insurance, (3) did not state if they have a usual source of healthcare, (9) did not indicate how difficult they believed it was to contact a healthcare provider after regular business hours for urgent medical care. All survey participants were able to read and speak English. Individual questions were analyzed and all data was recorded.

All participants were questioned whether or not they currently have insurance and what type: 33% did not have insurance, 39% Medicaid, 10% Medicare, 18% private insurance (Figure 1).

Figure 1. Insurance Status of Survey Participants



Of those who answered yes they have been to an Emergency Room in the past 12 months 37% of those individuals were uninsured, 50% had Medicaid, 5% had Medicare and 8% private insurance.

Participants were asked if they had been seen in an ED in the past 12 months for a complaint other than an accident or injury. They were then asked if they had called a doctor or other health professional about their problem prior to going to the Emergency Room. The majority, 75% indicated they did not try calling a healthcare professional prior to going to the ER. Of the participants that responded yes they did call a healthcare professional, over ¾ of those patients were instructed to seek care at an Emergency Room. Patients who did utilize an ER without first consulting a doctor were almost evenly split when it came to identifying if they had a usual source of healthcare. Interestingly, 69% felt at the time there was nowhere else they could have gone for their care, but a very small percentage (13%) had an illness that was serious enough to warrant an overnight hospital stay (Figure 2).

This study also looked at whether participants identified having a usual source where they received their healthcare. It should be noted that these surveys were done in a Jackson-

Hinds healthcare clinic after a patient had been checked in for an appointment. Of those polled only 46% identified that they did in fact have a usual source of healthcare. The majority indicated that they had not tried to reach a healthcare provider after hours in the past 12 months. When asked about their knowledge of whether their healthcare provider offered extended evening or weekend hours, the answer was overwhelmingly no, regardless if they had tried to call after regular business hours (Figure 3).

Figure 2. Patient effort to contact healthcare professional before accessing ED care

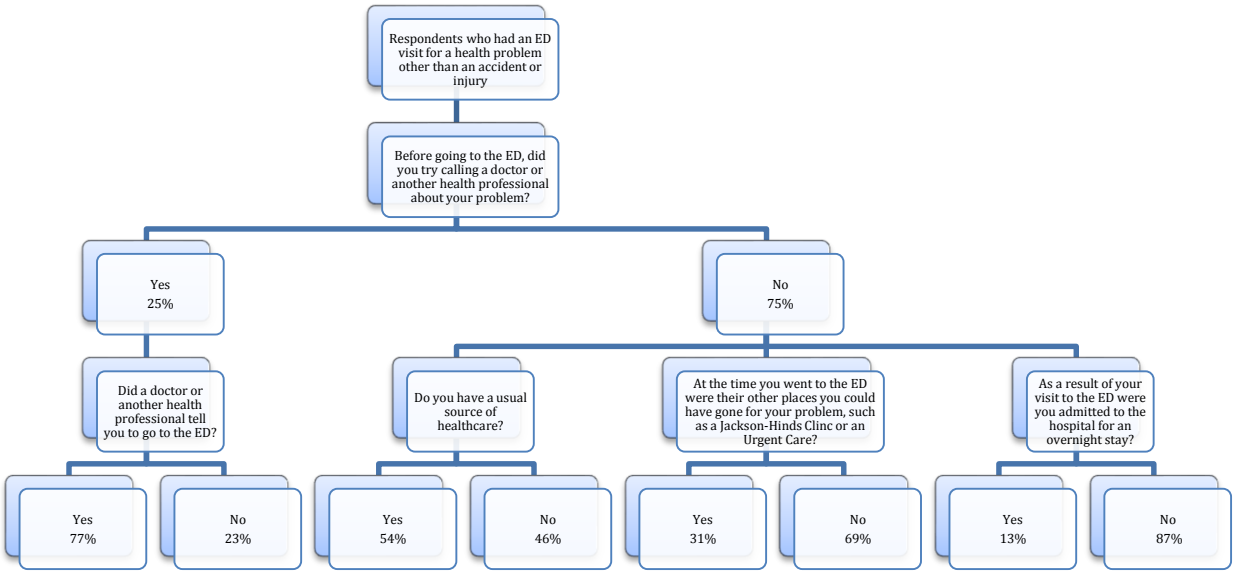
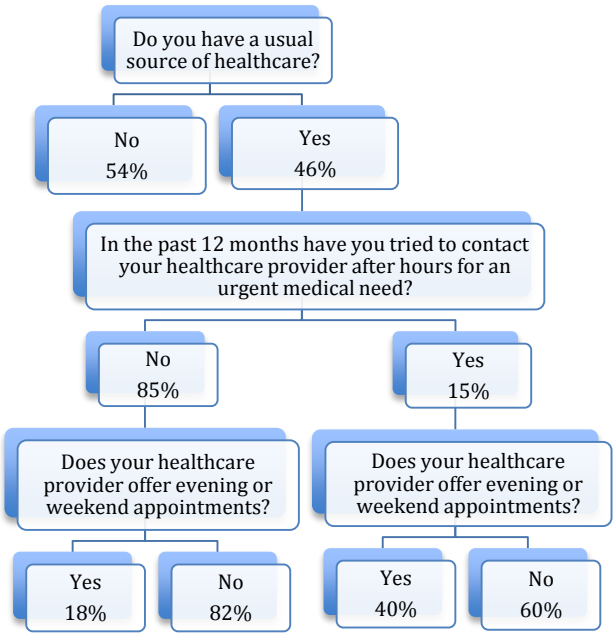
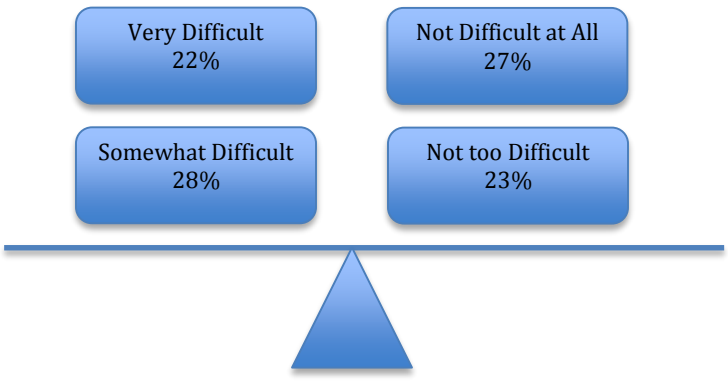


Figure 3. Patient access to care and knowledge of after-hours care



Lastly, this study looked at patient perception about how difficult it is to contact a doctor or other healthcare professional afterhours for an urgent medical need: 22% said it is Very Difficult, 28% Somewhat Difficult, 23% Not too Difficult, and 27% Not Difficult at all (figure 4).

Figure 4. Patient perception about how difficult it is to contact a doctor or healthcare provider afterhours for urgent medical care



Discussion

When I began this project I understood the data on unnecessary ED use in the United States and at the UMMC ED. My intention was not necessarily how to solve this problem, but instead to identifying gaps and areas for improvement. I think this project was successful in accomplishing this goal.

The first aim of this project was to look at the rates of ED use and to eliminate anyone that had gone to the ED for an accident or injury. Of those who answered yes they had been seen for a complaint other than accident or injury, the average number of visits in the past 12 months was 1.9 visits. Some of the reasons given for those visits include: COPD, chest pain, Crohn's, pink eye, cellulitis, URI, stomach upset, chronic pain, retaining fluid, cold sores, hypertension, pneumonia, diabetes, pancreatitis, asthma, stroke, dehydration, eczema, and ear infection. Of this sample of complaints only 13% of them resulted in the need for an overnight hospital stay. It is very difficult to judge whether the ED visit was truly unnecessary, but given the very low number of hospital admissions it can be assumed that many of these visits could have been handled in the outpatient setting. A question to be raised is why did the patient choose to use an ED over an Urgent Care or Primary Care Clinic? In some informal discussions with patient and other providers it is apparent that many patients simply do not know what medical conditions are serious or life threatening and when it is safe to wait and see their Primary Care Provider (PCP).

Another finding was patient knowledge of healthcare services available to them. Jackson-Hinds Comprehensive Health Centers offers extended hours at all of their clinics and has an on-call clinician to handle after hours medical questions from their patients. Only 40% of patients who identified having a source of healthcare answered yes when asked if their healthcare provider offered extended or weekend hours. While 82% of participants, who indicated they do

not have a regular source of healthcare, did not believe there was afterhours care available. It appears that a large problem with inappropriate ED usage can be attributed by lack of information in the community about health care options that are available should they have an urgent medical need. Creating awareness of primary care hours of operation and the services offered could reduce a significant percentage of ED visits.

It is also interesting that approximately half of all persons surveyed thought it is very or somewhat difficult to contact a doctor or healthcare professional afterhours in the event they have an urgent medical need. This question should have also included a secondary question that asked about perceived difficulty during regular business hours. Multiple studies have been conducted that have looked at barriers to accessing timely primary care services that in turn leads to higher ED utilization. In one study not being able to get through to their PCP by phone, not getting an appointment soon enough, long wait times in the physicians office, appointment times that did not work for the patients schedule and not having access to transportation all contributed to ED visits. (8)

There are some limitations to this study. The relatively small sample size is a major limiting factor. This study is intended to be a pilot study that could be easily reproducible so these topics can be more thoroughly investigated. Regardless, there are some interesting findings that can lead to a number of recommendations to better serve the Jackson-Hinds consumer and the greater community.

Recommendations

My first recommendation would be to increase consumer engagement and education about all available services Jackson-Hinds Comprehensive Health Center offers. Some ideas for accomplishing this goal would include patient brochures in all patient waiting rooms providing

education about what conditions can be safely treated in the outpatient setting and when to go to the Emergency Room. Wall posters in high traffic patient areas such as waiting rooms and on bathroom stalls could also provide another means of promoting this educational material. Often patients forget that after regular business hours there may be care available or phone advice. Another tool for patients would be providing wallet size cards promoting services, important phone numbers, and hours of operation.

Often in the hectic clinic, clinicians forget to ask about recent ED visits. Asking about all ED visits since they were last seen provides opportunity to further educate patients on appropriate use of an ED and reinforce health literacy on this important topic. In addition, all ED visits should be documented in the electronic health record and tracked. Frequent utilizers can be tracked and redirected to social workers or case managers that may be able to provide them with additional services that could prevent future ER visits.

Another recommendation would be to expand afterhours care at all of the JHCHC clinics. At the moment, extended hours are only available on Thursday at the majority of the clinics. One option may be to have each clinic offer a different day when they have extended patient hours. If a patient needs afterhours care they may not be able to go to their usual clinic, but another option would be available to them other than the ED. The addition of a Saturday weekend clinic would also be of benefit to those patients who find it difficult to make appointments during the workweek.

Lastly, I would recommend JHCHC continue to strengthen relationships with and collaborate with all Jackson area Emergency Departments. The Jackson-Hinds Medical Mall Clinic is a great example of how patients can be safely diverted away from the ED and into an outpatient clinic for their healthcare needs. In my experience at the Medical Mall, I was able to

see patients receive prompt evaluation and treatment. The benefit of being treated in this environment was the automatic engagement of the patient in services. The benefit of being able to schedule follow-ups before they even leave the building has shown dramatic reductions in ER use.

Conclusion

With the expansion of Medicaid and the Affordable Care Act the potential for increased utilization of EDs is real. Through patient education, promotion of outpatient healthcare services and strengthening collaborations with EDs in the community, many of these visits may be prevented. Jackson-Hinds has been a model of innovation with the addition of their Medical Mall Clinic and their flexibility to see same-day and walk-in appointments at all of their locations. Further promotion of those services to their consumer base may lead to further reductions in inappropriate use. The benefits to the patient are numerous and ultimately will lead to better health outcomes for the patient.

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APPENDIX 1: Patient Brochure Created for Project

At Jackson-Hinds where you go for your health care matters!

This guide will help you choose the best place to go for your health care.

Your Doctors Office

For most medical problems, you should go to your regular health care provider **first**. You will get the best care because they know you and your medical history. Your doctor can also help you manage your health over time.

Hospital Emergency Rooms

You should use a hospital emergency room for very serious or life threatening problems. Hospital emergency rooms are not the place to go for common illnesses, chronic pain, or minor injuries.

We have Same Day appointments available at all of our Clinics. Below is a list of our locations and hours of operation.

- **Dr. James K. Anderson (Main Clinic)** Monday 8 am to 8 pm
  Tuesday—Friday 8 am to 6 pm
- **Jackson Medical Mall**
  Monday—Wednesday 8 am.to 5 pm
  Thursday 8am to 8pm
  Friday 8am to 1pm
- **South Jackson**
  Monday—Wednesday 8 am.to 5 pm
  Thursday 8am to 8pm
  Friday 8am to 1pm
- **Homeless Clinic**
  Monday—Friday 8 a.m. to 5 p.m.
- **Woodrow Wilson**
  Monday—Friday 8 a.m. to 5 p.m.
- **Vicksburg Warren**
  Monday—Wednesday 8 am.to 5 pm
  Thursday 8am to 8pm
  Friday 8am to 1pm
- **Utica Clinic**
  Monday—Wednesday 8 am.to 5 pm
  Thursday 8am to 8pm
  Friday 8am to 1pm
- **Copiah Clinic**
  Monday—Wednesday 8 am.to 5 pm
  Thursday 8am to 8pm
  Friday 8am to 1pm
- **Edwards**
  Wednesdays only—8 a.m. to 5 p.m.

JACKSON-HINDS COMPREHENSIVE HEALTH CENTER

3502 W. Northside Drive

Phone: 601.362.5321

JACKSON-HINDS COMPREHENSIVE HEALTH CENTER

Where to go for care?

When illness, accidents, and injuries happen, where should you go for care?

Look inside for details!

Your Doctors Office

You should make an appointment with your doctor's office for:

- Colds, coughs, sore throat, earaches, migraines, rashes, urinary tract symptoms, or flu symptoms
- Chronic conditions (i.e. back pain, knee pain, abdominal pain) which has occurred continuously for several weeks or months
- Fever (if in a newborn less than 90 days old or if remains high for a prolonged period of time, call your doctor or go to the ER)
- Minor cuts in which bleeding has been stopped
- Minor injuries such as sprains, back pain, minor cuts and burns, minor broken bones, or minor eye injuries
- Insect sting (unless experiencing difficulty breathing, which requires immediate medical attention)
- Animal bite (call your doctor in the event a rabies shot is needed)
- Regular physicals, prescription refills, vaccinations, and screening examinations
- Any health problem where you need advice, such as problems with your medications

Same Day Appointments, After Hours Advice &

When your regular doctor or health care provider is not available for an appointment, you should **call (601) 362-5321** for a Same Day Appointment. We also offer Walk-In Appointments at all of our clinics, but you will receive faster service if you call first.

If it is after business hours and you need medical advice please call (601) 362-5321 and follow the prompts to reach a provider for advice.

Hospital Emergency Room

If you are experiencing any of the following symptoms, don't wait! Call 911 or get to your nearest hospital emergency room.

- Loss of consciousness or seizures
- Signs of a heart attack lasting longer than two minutes (may include pressure, squeezing or pain in the center of the chest, and/or chest pain with lightheadedness. In women, the symptoms could also include pain between the shoulder blades, pain radiating down the arm and nausea)
- Signs of a stroke (may include weakness or numbness in the face, arm, or leg on one side of the body; sudden dimness or loss of vision, particularly in one eye; loss of speech or trouble talking or understanding speech)
- Bleeding, that in spite of direct pressure for ten minutes, does not stop
- Instantaneous and severe pain
- Significant shortness of breath or difficulty breathing
- Allergic reaction to a food, medication, or insect sting, especially if breathing becomes difficult
- Poisoning (Note: If at all possible, first contact the local poison control center at 800-222-1222 and request immediate applicable advice, since some poisons must be vomited immediately while other poisons must be diluted with water. Acting quickly in this manner can save a life.)
- Serious traumatic injury (i.e., to the head)
- Unexplained prolonged stupor, drowsiness, confusion, or disorientation
- Vomiting or coughing up blood, severe and persistent rectal bleeding
- Fever in an infant less than 3 months old of 100.4 or greater call your doctor first. It is safe to watch a fever in a child greater than 3 months for 24 hours until you can get in and see your regular doctor.
- Severe or persistent vomiting
- Suicidal or homicidal feelings
- Neck stiffness or rash with fever
- Severe burns
- Sudden, severe headache (not a migraine)
- Any other condition you believe is life threatening

Emergency Rooms are Open 24 hours a day, 7 days a week, 365 days a year.