	Agency for Health Care Administration
	Florida Center for Health Information And Policy Analysis
	February 2009
Title:	Emergency Department Utilization Report 2006
Summary:	The Florida Agency for Health Care Administration (Agency) has prepared a report on emergency department costs and utilization in Florida. The Agency initiated collection of all hospital emergency department (ED) records for visits that do not result in a hospital inpatient admission beginning with visits in January 2005. This report provides patient demographic information and other characteristics of the visits to the ED as well as information on visits to the ED that resulted in an inpatient admission.
	Medicare had the largest proportion of high-acuity visits while Medicaid had the largest proportion of low acuity visits. Injuries, contusions, upper respiratory infection, abdominal pain, and headaches including migraine were among the most frequent principal diagnoses for ambulatory visits.
Future Policy Implications:	The increasing utilization and potential inappropriate utilization of emergency department services pose challenges to Florida's health care delivery system. Analysis of the data in the Agency's ED database identifies opportunities for cost containment in the ED setting.
Relevant Florida Statutes:	Section 408.062(1)(i), F.S., directs the Agency to conduct a study of the use of emergency department services by patient acuity level.
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Executive Summary

A hospital emergency department (ED) has increasingly played a critical role as a safety net provider in the community. It is the one place where a person can seek and receive care and cannot be denied services regardless of ability to pay. The ED serves as the primary health care provider for the uninsured, underinsured and those who have limited access to primary care providers and specialty care. Because the ED serves as the provider of last resort, analysis of ED utilization can provide information about the accessibility to primary care and preventative care in the community.

The Florida Agency for Health Care Administration (Agency) started collecting information about ambulatory visit records to hospital EDs, beginning with visits in January 2005. This data provides information about the acuity level, i.e., the severity of the visit for all patients where the visit did not result in an inpatient admission. This report uses the ED data as well as the Agency's Hospital Inpatient data to provide information on patient demographics and other clinical characteristics of all visits to the ED.

There was a total of 7,194,336 ED visits in calendar year 2006, of which 5,818,215 did not result in an inpatient hospitalization and 1,376,121 did result in an inpatient acute care hospitalization.

Trends in Emergency Department Utilization

This report summarizes information from the second complete year of ED data collection (calendar year 2006) as well as other data sources.

- The total number of ambulatory visits in 2006, 5,818,215 is a slight increase over the total visits in 2005, 5,748,375.
- The total of 1,376,121 or 19 percent of emergency department visits in 2006 resulting in an inpatient acute care hospitalization represents a slight increase over the 2005 number, 1,353,336.
- The total sum of charges for 2006 ambulatory emergency department visits (those not resulting in an inpatient admission) was \$10.9 billion compared to 2005 total charges of \$9.5 billion.

Patient Characteristics

- A combined 27 percent of ambulatory ED visits were self-pay/underinsured (23.9 percent) or charity care (3.1 percent).
- Black, Hispanic, and 'Other' race ED visits tended to be for young patients, ages 34 years and under.

• Regardless of racial group, a visit was more likely to result in an inpatient admission as patient age increased.

Patient Acuity Level

Current Procedural Terminology (CPT) Evaluation & Management codes can be used to categorize ED ambulatory visits. The codes delineate the relative severity, low to high, of the person's condition upon arrival at the ED. This information is only available for ambulatory ED visits and not for patients who were subsequently admitted as an inpatient.

- Over 60 percent of all low acuity ED patient visits was for persons ages 34 and younger.
- The majority, or 51.6%, of children's visits for ages 17 and younger were low acuity.
- For ED patient visits for persons ages 65 and older, 35.1 percent were low acuity.
- For all charity and self-pay/underinsured ED visits, 46.7 percent were classified at the low acuity level.

Conditions Seen in Emergency Departments

Principal diagnoses for emergency department visits not resulting in an inpatient admission:

- Injury and poisoning (26.2 percent of all ambulatory ED visits) was the leading Major Diagnosis Category for all emergency department visits.
- About 10 percent of principal diagnoses for ambulatory visits were classifiable as chronic conditions.
- For those ambulatory ED visits that were classified as involving chronic conditions, the top Major Diagnosis Category was mental disorders (24 percent).
- Asthma was the leading principal diagnosis for chronic conditions (13.4 percent).

Inpatient Hospitalization

Principal Diagnoses for those ED visits that resulted in an inpatient hospitalization:

- Disease of the circulatory system was the leading cause of all inpatient hospitalizations (26 percent) from the ED.
- Nearly 41 percent of principal diagnoses for ED patients who were subsequently admitted as inpatients were classifiable as chronic conditions.
- Congestive heart failure was the leading principal diagnosis for those admitted with a chronic condition (11.2 percent).

Emergency Departments Visits by Emergency Status

The emergency status of a patient visit is determined by using the NYU Classification This algorithm is intended for ambulatory visits, those not resulting in an inpatient admission:

- A higher percentage of ED visits not resulting in an inpatient admission, by blacks (58.9 percent) and Hispanics (56.6 percent) were potentially avoidable or treatable in a primary care setting (ED Avoidable) compared to whites (48.4 percent).
- A higher percentage of ED visits not resulting in an inpatient admission by females (55.8 percent) were ED Avoidable compared to males (47.9 percent).
- Nearly 46.9 percent of ED visits for Medicaid patients and nearly 53.8 percent of charity/uninsured ED visits were potentially avoidable.

Conclusion

This report identifies increases in ED utilization from 2005 to 2006. There was a 1% decrease in the percentage of utilization for Low to Low-Moderate Acuity visits from 2006 compared to 2005. Further information on inappropriate utilization of the ED was identified using the New York University classification algorithm. While 42% of visits are identified as low acuity, a total of 45.2% of visits are identified as non-emergent, emergent but primary care treatable or emergent and preventable or avoidable.

Introduction

The role of the Emergency Department (ED) in the delivery of health care is critical, but there are pressures on EDs that can affect utilization and ultimately compromise care. Both the number of ED visits and the rate per 1,000 persons for ED visits have increased over the past ten years at the national and state level. In Florida, the number of hospital EDs has decreased over that time. In the interest of developing recommendations for alleviating the strain on Florida EDs, the Florida Legislature requests an annual study of ED utilization and costs, grouped by the acuity level of patients using the ED.

Legislative Directions and Mandates

Section 408.062(1), of the Florida Statutes, directs the Agency to "conduct research, analyses, and studies relating to health care costs and access to and quality of health care services as access and quality are affected by changes in health care cost." Subsection (i) states that the studies shall include "the use of emergency department services by patient acuity level and the implication of increasing hospital costs by providing non-urgent care in emergency departments. The Agency shall submit an annual report based on this monitoring and assessment to the Governor, the Speaker of the House of Representatives, the President of the Senate, and the substantive legislative committees."

To achieve this goal, the Florida Center initiated collection of patient records, for all ambulatory visits to a hospital ED, beginning with visits in January 2005. The ED database provides a detailed look at the reasons people seek care at the ED, the charges and the payers for these visits, as well as the diagnoses and procedures performed in that setting.

The preliminary report on ED utilization in 2005 was provided to the legislature in January 2006. The final report on 2005 ED utilization was provided in February 2008.

Factors Affecting Utilization of Emergency Departments

Studies at both the national ² and state ³ levels have sought to isolate factors that may affect utilization and costs of ED services. Some of the findings are summarized below.

Federal Laws Governing Emergency Services

Federal mandates require hospitals and physicians to provide emergency care regardless of the patient's ability to pay. In 1986, the U.S. Congress passed the Emergency Medical Treatment and Labor Act (EMTALA) that requires all hospital emergency departments to perform, within the capabilities of the hospital, an appropriate medical screening examination and, if the individual requires emergency treatment, to treat or stabilize the patient for transfer to another facility. Under EMTALA, emergency care cannot be delayed due to methods of payment or insurance coverage. However, urgent care clinics and other late night clinics have no obligation to provide care to patients who cannot pay.

Population Growth

Florida is one of the fastest growing states in the nation. According to U.S. Census data Florida's population grew by 25.4 percent from 1995 to 2006. Among the fastest growing segments of the population are persons of ages 75 and older and ages 0-24. These groups are more likely to need or access emergency care than middle age populations.

Insurance Status

In many states, overcrowding of emergency departments has been attributed to the increased numbers of uninsured. National surveys have found that the uninsured are more likely to use emergency care than those that are privately insured. ³ According to data from the Current Population Survey, ⁵ the percentage of uninsured in Florida increased by .9 percent between 2005 and 2007. The uninsured now comprise 20.7 percent of Florida's population.

Access to Primary Care and Specialty Care Providers

Florida continues to experience a major shortage of family physicians and, with the changing population, will require significantly more family physicians in coming years. ⁴ The US Department of Health and Human Services designated 33 Florida counties as whole-county Health Professions Shortage Areas in 2006. All but two Florida counties,

Flagler and Monroe, have shortage designations for one or more geographic areas of the county where there are not providers available to serve the low income populations. A more detailed discussion and other documentation of the Health Professions Shortage Areas can be found at <u>http://bhpr.hrsa.gov/shortage/</u>.

Lack of access to primary health care providers may affect emergency department use. If providers are not accessible, patients are more likely to use emergency departments to access needed care. Rural areas tend to have more barriers to health care accessibility.

Today, most health care specialties are available in Florida, although access to specialty care continues to pose problems both through the providers' offices and the ED. There is a growing difficulty in finding specialty physicians willing to take ED coverage for high-risk patients.

Medical liability insurance premiums in Florida increased 83.6 percent from 2001 to 2004⁶. Due to the high cost of professional liability insurance, many Florida licensed physicians have decreased or eliminated the provision of certain health services. One of the services providers most commonly eliminate is ED coverage. Additionally, more physicians are going without malpractice insurance coverage (choosing to self-insure) and may be referring certain high-risk patients to the ED for care in order to reduce their risk.³

Competing Interests

Emergency departments provide hospitals with a source of insured inpatient admissions as well as serving as the provider of last resort to the uninsured. Over half of inpatient admissions to Florida hospitals originate in the emergency department. Overcrowding results from increasing numbers of patients seeking primary care in the ED as well as patients remaining in the ED waiting to be admitted to the hospital. Although the requirements of EMTALA do not mandate the provision of emergency services beyond screening and stabilization and further care or transfer, hospitals are interested in providing a full spectrum of care to attract insured patients as well as to provide needed care to the community. Specialists provide increasingly more services in their offices as well as ambulatory facilities and may relinquish admitting privileges if pressured to be on call in the ED².

Methodology

Emergency Department Data Collection

The emergency department (ED) data used in this report are patient encounter-level discharge records from the Florida Agency for Health Care Administration emergency department database and the inpatient hospital database collected from all licensed hospitals and hospital emergency departments in Florida. The unit of analysis is the discharge record; meaning an individual admitted to a hospital emergency department multiple times during the year will be counted each time as a unique patient discharge. The patient discharge record consists of patient demographic information, medical diagnosis, services received, and charges for the visit. Unless stated otherwise, this report uses all ED discharge records for calendar year 2006 that did not result in a hospital inpatient admission. This report uses data certified as of June 2, 2008.

Data Elements

The emergency department data contain information on patient demographics, facility, payer, charges, procedures, and diagnoses. The data also include three additional external causes of injury codes (E-codes); patient reason for visit; and an hour of arrival code. A complete list of available data elements can be obtained by visiting http://www.floridahealthfinder.gov/Researchers/OrderData/order-data.shtml.

In addition to the Agency emergency department data, information on ED visits resulting in inpatient admissions was taken from the Agency Hospital Inpatient data. ED visits resulting in an inpatient hospitalization are submitted in the hospital inpatient data and not included in the ED data. The Hospital Inpatient data contains much of the same demographic information and clinical information that is available in the ED data; however information on the acuity level of the patient at the time of admission to the ED is not reported.

Historical information on ED visits was obtained from the annual facility cost reports available from the Agency's hospital financial database. Unlike the patient visit database, information from the financial database is aggregated annually at the facility level. This limits the ability of Agency staff to use this data for patient or visit-level information. The data from the financial database is internally consistent for trending across time but the figures do not always match the discharge level data collected by the Florida Center.

Quality Assurance

Facilities submit their emergency department (ED) data reports to the Agency electronically. The system initially checks all submitted files for appropriate file format, presence of required element fields, and expected data characters. Files are processed further for accuracy and completeness, including validation of codes and practitioner identification.

Facility Reporting Schedule

The schedule for data reporting for the ED and Hospital Inpatient data is presented in **Table 1**. For more information concerning the collection of Ambulatory/ED and Inpatient data, please visit <u>http://Ahca.myflorida.com/SCHS/apdunit.shtml</u>. Data are not available until the quality assurance process is complete and the data is certified by all the facilities.

Quarter	Time Period	Ambulatory/ED Data Due Date
1st	January 1 - March 31	June 10
2nd	April 1 - June 30	September 10
3rd	July 1 - September 30	December 10
4th	October 1 - December 31	March 10 (Following Year)

Table 1: Facility Data Reporting Schedule

Definition of Patient Acuity Levels

The rule governing ED reporting, Chapter 59B-9, Florida Administrative Code, specifies that all ambulatory emergency department records must have a valid Current Procedural Terminology (CPT) Evaluation and Management code (see **Appendix A**). This code provides an indication of the level of severity of the patient's condition upon arrival at the ED and allows the classification of ED visits by their acuity level. **Table 2** displays a simplified description of these evaluation and management codes.

Table 2: Definition of Patient Acuity Groups by Evaluation and ManagementCodes

Low-Acuity Group:

99281	The presenting problem(s) are self limited or of minor severity.
99282	The presenting problem(s) are of low to moderate severity.

High-Acuity Group:

99283	The presenting problem(s) are of moderate severity.
99284	The presenting problem(s) are of high severity , but do not pose an immediate significant threat to life.
99285	The presenting problems(s) are of high severity and pose an immediate threat to life .

See Appendix A for a complete description of the CPT Evaluation and Management Codes.

These five levels can be divided into two groups. The "Low Acuity" group corresponds with visits described as "non-urgent," while the "High Acuity" group corresponds with visits described as "urgent" or "emergent." The remainder of the report will utilize this grouping scheme.

Charges and Costs of Emergency Department Services

The fiscal information contained in both the Hospital Inpatient and ED data set is charge data that limits the ability to draw conclusions about ED costs. The term *cost* is often used to describe expenses incurred in the delivery of the service to the patient. The financial information collected from hospitals for services provided are *charges*, not costs or revenue. There is no Florida Center data available to report the actual cost incurred in the delivery of emergency department services. All figures for dollars spent on services provided in the ED are in terms of charges and not costs.

Health insurance companies, Health Maintenance Organizations (HMO) and Preferred Provider Organizations (PPO) do not reimburse EDs for the charges rendered, but instead pay a negotiated rate to the facility. The Agency does not have access to this payment data.

Clinical Classifications

The ED data and the inpatient data include a diagnosis code system, ICD-9-CM. There are over 13,600 diagnosis codes that can be used. These codes are aggregated in 17 Chapters or Major Diagnosis Categories (MDCs) that group diagnoses by body system, infectious and parasitic disease, and neoplasms. To further facilitate an understanding of the data, a classification system, Clinical Classifications Software (CCS) for ICD-9-CM, is used to aggregate the diagnosis codes into clinically meaningful classifications that are useful for presenting descriptive statistics.

The Clinical Classifications Software (CCS) is a family of databases and software tools developed as part of the Healthcare Cost and Utilization Project (HCUP), a Federal-State-Industry partnership sponsored by the Agency for Healthcare Research and Quality (AHRQ). The CCS consists of two related classification systems. The first system, called the single-level CCS and the second system called the multi-level CCS. In this report, the single-level CCS system was used to group the diagnoses into 260 mutually exclusive classifications.

Chronic Condition Indicator

The Chronic Condition Indicator is a tool developed as part of the Healthcare Cost and Utilization Project (HCUP). The Chronic Condition Indicator tool was used in this report to categorize all ICD-9-CM diagnosis codes as indicative of a chronic or not chronic condition. A chronic condition is defined as a condition that lasts 12 months or longer and meets one or both of the following tests: (a) it places limitations on self-care, independent living, and social interactions; (b) it results in the need for ongoing intervention with medical products, services, and special equipment. The identification of chronic conditions is based on all five-digit ICD-9-CM diagnosis codes, excluding external cause of injury codes (E codes).

More information regarding the HCUP tools used in this report may be obtained from the <u>http://www.hcup-us.ahrq.gov/tools_software.jsp</u> website.

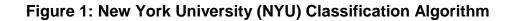
The NYU ED Classification Algorithm

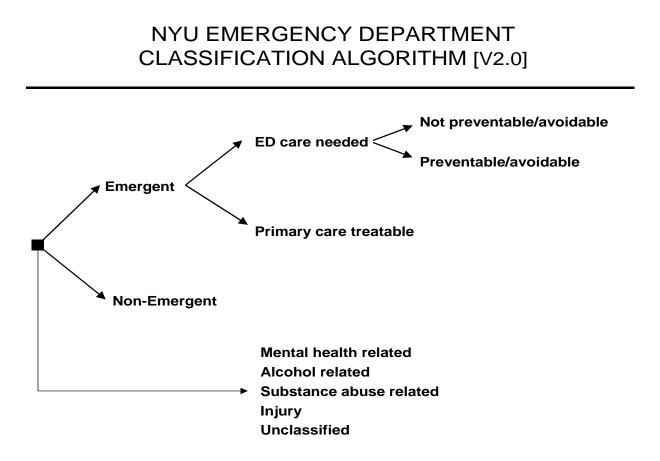
The New York University Center for Health and Public Service Research and the United Hospital Fund of New York developed an algorithm, illustrated in **Figure 1**, to aid in the analysis of administrative data from ED records (Billings, Parikh, & T, 2000). The algorithm classifies ED utilization, based on the principal diagnosis, from the perspective of primary care and preventive care for emergent and non-emergent cases.

The algorithm was developed with the advice of a panel of ED and primary care physicians, and based on an examination of a sample of almost 6,000 full ED records. Data abstracted from these records included the initial complaint, presenting symptoms, vital signs, medical history, age, gender, diagnoses, procedures performed, and resources used in the ED. Based on this information, each case was classified into one or more of the following categories:

- <u>Non-emergent</u> The patient's initial complaint, presenting symptoms, vital signs, medical history, and age indicated that immediate medical care was not required within 12 hours;
- <u>Emergent/Primary Care Treatable</u> Based on information in the record, treatment was required within 12 hours, but care could have been provided effectively and safely in a primary care setting. The complaint did not require continuous observation, and no procedures were performed or resources used that are not available in a primary care setting (e.g., CAT scan or certain lab tests);
- <u>Emergent ED Care Needed Preventable/Avoidable</u> Emergency department care was required based on the complaint or procedures performed and resources used, but the emergent nature of the condition was potentially preventable/avoidable if timely and effective ambulatory care had been received during the episode of illness (e.g., the flare-ups of asthma, diabetes, congestive heart failure, etc.);
- <u>Emergent ED Care Needed Not Preventable/Avoidable</u> Emergency department care was required and ambulatory care treatment could not have prevented the condition (e.g., trauma, appendicitis, myocardial infarction, etc.); and
- <u>Unclassified Conditions</u> Conditions not included in the classification are cases involving a primary diagnosis of injury, mental health problems, alcohol, or substance abuse.

Since few diagnostic categories are clear-cut in all cases, the algorithm assigns cases probabilistically on a percentage basis, reflecting this potential uncertainty and variation.





Results

This section of the report is presented in four subsections. The first, Overall Results, presents demographic information based on the entire dataset, both the ED data for the ambulatory visits and the Hospital Inpatient data. The second section, Emergency Department Ambulatory Visit Results presents data on ED visits that do not result in an inpatient admission. This section uses the acuity level coding to provide additional detail about ED utilization and the acuity level of the patient visit. The third section uses the New York University algorithm of classifying ED patient emergency status, to present data for Florida residents' ED visits in the following categories of emergency status: (1) non-emergent, (2) emergent but primary care treatable, (3) emergent-ED care needed, but preventable/avoidable, (4) emergent-ED care needed, but not preventable/avoidable, (5) injury and (6) other which consist of conditions related to mental health, alcohol and substance abuse, and all other unclassified conditions. The fourth results section presents information on ED visits that resulted in an inpatient admission.

Overall Results: Patient Characteristics

Figure 2 displays the percentage of all emergency department (ED) visits by racial group. (See **Appendix B** for a description of the racial groups included in **Figure 2**).

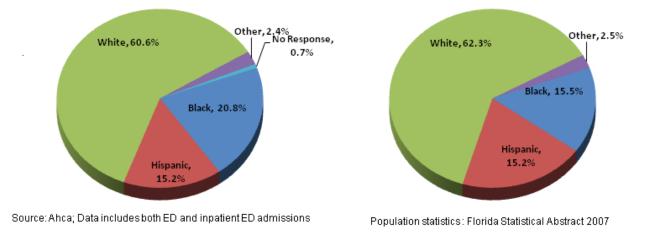


Figure 2: Percentage of Visits to the Emergency Department by Racial Group

Figure 3 displays the distribution of all ED visits, including inpatient hospitalizations, by age group within each racial group for all ED patients visits. There is a higher percentage of visits for White patients over 65 years of age compared to non-White visits. There is a lower percentage of White patient visits under 34 years of age relative to the all non-White visits. Over 52 percent of Black, Hispanic, and Other race visits were for patients ages 34 and younger, while only 40.2 percent of White patient visits were for patient visits age group. In contrast, 24.2 percent of white ED visits were for patients ages 65 and older, compared to 8.5 percent of visits for Blacks, 12.4 percent of Hispanic patient visits, and 13.1 percent of Other race visits.

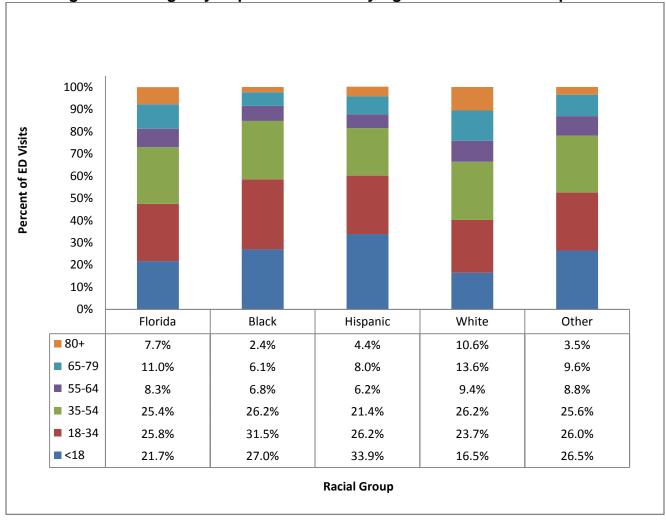


Figure 3: Emergency Department Visits by Age Within Racial Groups

In 2006, there were 7,194,336 emergency department visits with 1,376,121 (19 percent) subsequently resulting in an inpatient hospitalization. **Figure 4** displays the percentage of emergency department (ED) visits resulting in inpatient hospitalization by age group. Regardless of racial group, a patient was more likely to be admitted as an inpatient as age increased.

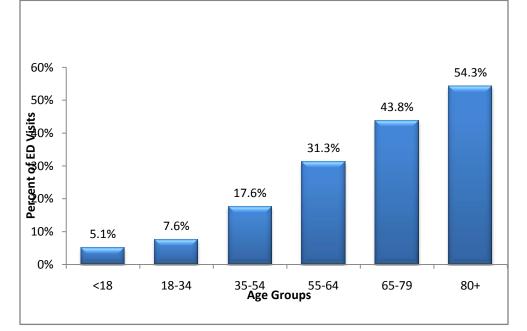


Figure 4: Percent of Visits Resulting in Inpatient Hospitalization by Age Groups

Table 3 details the percent of emergency department (ED) visits resulting in an inpatient hospitalization by race and age. Overall, emergency department visits resulting in inpatient hospitalizations were as follows: 15.3 percent for Black patient visits, 16.7 percent for Hispanic patient visits, 21.3 percent for White patient visits, and 16.2 percent for Other race patient visits. (The total excludes unknown race.)

Age Group	Florida	Black	Hispanic	White	Other
Ages 0-17	5.1%	5.4%	5.3%	4.8%	5.6%
Ages 18-34	7.6%	8.1%	9.1%	6.9%	8.0%
Ages 35-54	17.6%	19.2%	18.4%	16.9%	15.5%
Ages 55-64	31.3%	32.4%	32.3%	31.0%	27.7%
Ages 65-79	43.8%	44.6%	47.7%	43.2%	43.2%
Ages 80+	54.3%	55.7%	63.7%	53.2%	58.2%
All Ages	19.5%	15.3%	16.7%	21.3%	16.2%

Table 4 and **Table 5** show the number and percentage of ED visits and inpatient hospitalizations aggregated by payer group. (See **Appendix C** for a description of the payer categories.) The principal payer for highest number of ED visits was commercial insurance (including commercial HMOs), followed by self pay and Medicaid. Medicare was the principal payer for 52 percent of the inpatient hospitalizations. Combined, self-pay/underinsured and charity comprised 27 percent of ambulatory ED visits but only 10.6 percent of visits resulting in an inpatient admission. See **Appendix D** for a frequency breakdown on each of the 15 payer categories collected by Agency that comprise the 7 groups shown in **Tables 4** and **5** below.

Payer Group	Number	Percent
Commercial Insurance	1,848,827	31.8%
Self Pay/Underinsured	1,390,084	23.9%
Medicaid	1,252,636	21.5%
Medicare	836,497	14.4%
Other Government	310,189	5.3%
Charity	179,977	3.1%
Unknown Payer	5	0.0%
Total	5,818,215	100.0%

Table 4: Emergency Department Visits by Payer Group

Source: AHCA 2006 ED Data

Table 5: Inpatient Hospitalization by Payer Group

Payer Group	Number	Percent
Medicare	715,955	52.0%
Commercial Insurance	300,590	21.8%
Medicaid	169,424	12.3%
Self Pay/Underinsured	104,209	7.6%
Other Government	44,157	3.2%
Charity	41,786	3.0%
Total	1,376,121	100.0%

Source: AHCA 2006 Hospital Inpatient Data

See Appendix D for a detailed breakdown of charges by payer.

Table 6 shows the discharge status for all ED visits. The vast majority of those who visited the ED were discharged to home.

Patient Discharge Status	Number	Percent
Home	5,483,697	76.2%
Inpatient Hospitalization	1,376,121	19.1%
Left Against Medical Advice	204,717	2.8%
Other Facility	43,549	0.6%
Other Hospital	40,425	0.6%
Skilled Nursing Facility	16,609	0.2%
Intermediate Care Facility	13,017	0.2%
Expired	12,048	0.2%
Home Healthcare	3,233	0.0%
Hospice-Medical Facility	440	0.0%
Hospice-Home	412	0.0%
Home on IV Medications	68	0.0%
Total	7,194,336	100.0%

Table 6: Emergency Department Visits Patient Discharge Status

Source: AHCA 2006 ED Data and Hospital Inpatient Data

Emergency Department Ambulatory Visit Results: Reasons for Visit

All visits to the emergency department (ED) can be classified according to the principal diagnosis for the patient's reason for visit. The patient's reason for visit is an ICD-9-CM diagnosis code that best describes the reason why a person came to the ED. (See **Appendix H** for a description of the ICD-9-CM Major Diagnosis Categories [MDC]).

The top five Major Diagnostic Categories, representing 75.7 percent of all patient reasons for ambulatory ED visits, those not resulting in an inpatient admission, were symptoms, signs and ill defined conditions affecting health (21.9 percent), injury and poisoning (19.6 percent), diseases of the musculoskeletal system and connective tissue (13 percent), diseases of the respiratory system (11.5 percent), and diseases of the nervous system and sense organs (9.7 percent) [**Table 7**]. The most common reasons patients provided for emergency department visits included injuries due to external causes, abdominal pain, fever, back pain, headache and lower respiratory disease.

Over 300,000 (5.3 percent) emergency department visits were classifiable as chronic conditions based on the patient reasons for the visit. These are conditions that are usually best treated and managed in a primary care setting. For the ED visits classifiable as chronic conditions, the most common Major Diagnostic Categories were mental disorders (34.2 percent), circulatory symptoms (17.5 percent), respiratory symptoms (13.7 percent), and nervous system symptoms (9.4 percent) [**Table 8**]. For chronic conditions, the most common reasons for visit included anxiety, alcohol and substance abuse related mental illnesses, asthma, hypertension, headache and diabetes.

Table 7: Emergency Department Visits: Patient Reason for Visit by MajorDiagnostic Category and Clinical Classification

		Percent of	Average	Total ED
ccs	Medical Condition	ED Visits	Charge	Visits
	MDC 17: Symptoms; Signs; And III-Defined Conditions And Factors			
	Influencing Health Status			
251	Abdominal pain	7.8%	\$4,015	450,863
246	Fever of unknow n origin	4.6%	\$1,156	268,756
250	Nausea and vomiting	3.1%	\$2,043	182,654
-	Other aftercare	2.2%	\$359	128,864
259	Residual codes; unclassified	1.4%	\$1,772	84,309
	All Other MDC 17 codes	2.7%	\$2,293	156,632
	MDC 17: Symptoms; Signs; And III-Defined Conditions And Factors			
	Influencing Health Status Total	21.9%	\$2,397	1,272,078
	MDC 16: Injury And Poisoning			
244	Other injuries and conditions due to external causes	8.4%	\$1,752	487,239
	Open wounds of extremities	2.8%	\$1,085	162,272
239	Superficial injury; contusion	2.5%	\$1,489	148,297
235	Open wounds of head; neck; and trunk	1.9%	\$1,658	107,668
232	Sprains and strains	1.5%	\$1,322	88,400
	All Other MDC 16 codes	2.5%	\$1,950	146,384
	MDC 16: Injury And Poisoning Total	19.6%	\$1,606	1,140,260
	MDC 13: Diseases Of The Musculoskeletal System And			
	Connective Tissue			
205	Spondylosis; intervertebral disc disorders; other back problems	5.3%	\$1,633	307,95
211	Other connective tissue disease	4.1%	\$1,351	239,95
204	Other non-traumatic joint disorders	3.4%	\$1,338	200,17
212	Other bone disease and musculoskeletal deformities	0.0%	\$1,760	2,456
203	Osteoarthritis	0.0%	\$1,274	1,46
	All Other MDC 13 codes	0.0%	\$1,684	1,54
	MDC 13: Diseases Of The Musculoskeletal System And			
	Connective Tissue Total	13.0%	\$1,465	753,54
	MDC 8: Diseases Of The Respiratory System			
	Other low er respiratory disease	6.0%	\$1,496	351,534
126	Other upper respiratory infections	2.8%	\$775	162,140
134	Other upper respiratory disease	1.3%	\$784	77,11
	Asthma	0.4%	\$1,375	25,29
127	Chronic obstructive pulmonary disease and bronchiectasis	0.3%	\$1,709	18,492
	All Other MDC 8 codes	0.6%	\$1,674	36,871
	MDC 8: Diseases Of The Respiratory System Total	11.5%	\$1,251	671,439
	MDC 6: Diseases Of The Nervous System And Sense Organs			
84	Headache; including migraine	3.1%	\$2,361	182,22
94	Other ear and sense organ disorders	1.7%	\$479	100,26
91	Other eye disorders	1.2%	\$649	70,413
93	Conditions associated with dizziness or vertigo	1.2%	\$3,117	69,08
83	Epilepsy; convulsions	0.8%	\$3,066	44,452
	All Other MDC 6 codes	1.7%	\$1,684	100,243
	MDC 6: Diseases Of The Nervous System And Sense Organs Total	9.7%	\$1,843	566,684
	All Other Reason for Visit	24.3%	\$2,177	1,412,03
	*All Emergency Department Visits	100.0%	\$1,881	5,816,03

Source: AHCA 2006 ED Data

* Total excludes ED patients discharged to inpatient acute care hospitals

Table 8: Emergency Department Visits: Patient Reason for Visit by Major Diagnostic Category and Clinical Classification for Chronic Conditions

		Percent of	Average	Total ED
ccs	Medical Condition	ED Visits	Charge	Visits
	MDC 5: Mental Disorders			
651	Anxiety disorders	8.6%	\$1,430	26,182
660	Alcohol-related disorders	7.6%	\$2,629	23,275
657	Mood disorders	7.5%	\$1,873	22,978
659	Schizophrenia and other psychotic disorders	3.9%	\$2,446	11,820
661	Substance-related disorders	3.6%	\$1,864	10,878
	All Other MDC 5 codes	3.1%	\$2,107	9,590
	MDC 5: Mental Disorders Total	34.2%	\$2,016	104,723
	MDC 7: Diseases Of The Circulatory System			
98	Essential hypertension	8.9%	\$2,010	27,195
107	Cardiac arrest and ventricular fibrillation	2.6%	\$3,237	8,006
106	Cardiac dysrhythmias	2.3%	\$3,408	7,098
112	Transient cerebral ischemia	0.7%	\$9,048	2,262
108	Congestive heart failure; nonhypertensive	0.7%	\$4,250	2,046
	All Other MDC 7 codes	2.2%	\$6,722	6,818
	MDC 7: Diseases Of The Circulatory System Total	17.5%	\$3,365	53,425
	MDC 8: Diseases Of The Respiratory System			
128	Asthma	8.3%	\$1,375	25,291
126	Other upper respiratory infections	2.2%	\$1,221	6,755
127	Chronic obstructive pulmonary disease and bronchiectasis	1.5%	\$2,965	4,510
133	Other lower respiratory disease	1.1%	\$966	3,348
134	Other upper respiratory disease	0.6%	\$615	1,723
	All Other MDC 8 codes	0.1%	\$1,212	196
	MDC 8: Diseases Of The Respiratory System Total	13.7%	\$1,457	41,823
	MDC 6: Diseases Of The Nervous System And Sense Organs			
84	Headache; including migraine	5.6%	\$1,465	17,275
95	Other nervous system disorders	0.9%	\$1,973	2,680
89	Blindness and vision defects	0.6%	\$1,272	1,942
91	Other eye disorders	0.5%	\$864	1,664
83	Epilepsy; convulsions	0.5%	\$3,140	1,469
	All Other MDC 6 codes	1.2%	\$1,403	3,702
	MDC 6: Diseases Of The Nervous System And Sense Organs Total	9.4%	\$1,542	28,732
	MDC 3: Endocrine; Nutritional; And Metabolic Diseases And Immunity			
	Disorders			
	Diabetes mellitus with complications	2.6%	\$2,373	7,910
	Diabetes mellitus without complication	2.3%	\$1,984	7,088
-	Other endocrine disorders	1.3%	\$2,113	4,024
	Gout and other crystal arthropathies	0.8%	\$947	2,542
53	Disorders of lipid metabolism	0.2%	\$426	695
	All Other MDC 3 codes	0.4%	\$1,796	1,103
	MDC 3: Endocrine; Nutritional; And Metabolic Diseases And Immunity			
	Disorders Total	7.6%	\$1,970	23,362
	All Other Reason for Visitfor for chronic conditions	17.6%	\$1,927	53,765
	*All Emergency Department Visits for chronic conditions	100.0%	\$2,111	305,830

Source: AHCA 2006 ED Data

* Total excludes ED patients discharged to inpatient acute care hospitals

Emergency Department Ambulatory Visit Results: Principal Diagnosis

The principal diagnosis is an ICD-9-CM diagnosis code that is arrived at by a physician after all tests and other clinical information have been assessed. The most frequently reported Major Diagnostic Categories (MDC) rendered by physicians for ambulatory ED visits not resulting in an inpatient admission, were injury and poisoning (26.2 percent), diseases of the respiratory system (13.4 percent), symptoms and ill-defined conditions affecting health (13.3 percent), diseases of the nervous system and sense organs (9 percent), and diseases of the Digestive System (6.5 percent) [**Table 9**]. The top five MDCs represented 69.5 percent of all ambulatory emergency department (ED) visits. The most frequently reported principal diagnoses for emergency department visits were sprains and strains, contusion, upper respiratory infections, abdominal pain, headache and back problems.

Over 10 percent (583,312) of the principal diagnoses were classifiable as chronic conditions [**Table 10**]. For emergency department visits classifiable as chronic conditions, the top Major Diagnostic Categories were mental disorders (24 percent); respiratory symptoms (21.8 percent); circulatory symptoms (16.1 percent); nervous system and sense organs symptoms (10.7 percent); endocrine, nutritional, and metabolic diseases and immunity disorders (7.3 percent). For chronic conditions, the leading principal diagnoses included anxiety, alcohol and substance abuse related mental illnesses, asthma, hypertension, headache and diabetes.

Table 9: Emergency Department Visits Principal Diagnosis by Major Diagnostic Category and Clinical Classification

		Percent of	Average	Total ED
CCS	Medical Condition	ED Visits	Charge	Visits
	MDC 16: Injury And Poisoning			
232	Sprains and strains	6.1%	\$1,428	354,37
239	Superficial injury; contusion	6.0%	\$1,602	349,44
236	Open wounds of extremities	3.6%	\$1,117	210,15
235	Open wounds of head; neck; and trunk	2.6%	\$1,779	149,10
244	Other injuries and conditions due to external causes	2.2%	\$1,872	127,43
	All Other MDC 16 codes	5.8%	\$2,054	336,33
	MDC 16: Injury And Poisoning Total	26.2%	\$1,634	1,526,84
	MDC 8: Diseases Of The Respiratory System			
126	Other upper respiratory infections	5.5%	\$792	320,86
133	Other low er respiratory disease	1.6%	\$2,151	93,40
125	Acute bronchitis	1.4%	\$1,275	82,27
128	Asthma	1.3%	\$1,398	77,98
127	Chronic obstructive pulmonary disease and bronchiectasis	1.3%	\$1,647	76,49
	All Other MDC 8 codes	2.2%	\$1,584	126,79
	MDC 8: Diseases Of The Respiratory System Total	13.4%	\$1,280	777,81
	MDC 17: Symptoms; Signs; And III-Defined Conditions And Factors			
	Influencing Health Status			
251	Abdominal pain	4.1%	\$3,904	240,26
	Other aftercare	2.1%	\$333	122,34
-	Fever of unknow n origin	1.6%	\$1,271	90,73
	Nausea and vomiting	1.5%	\$1,915	85,56
	Allergic reactions	1.4%	\$680	82,46
	All Other MDC 17 codes	2.7%	\$2,261	154,63
	MDC 17: Symptoms; Signs; And III-Defined Conditions And Factors	2.170	Ψ_,_0	101,00
	Influencing Health Status Total	13.3%	\$2,144	776,00
	MDC 6: Diseases Of The Nervous System And Sense Organs	101070	φ=,	110,00
84	Headache; including migraine	2.4%	\$2,298	137,19
	Otitis media and related conditions	2.2%	\$563	126,21
	Conditions associated with dizziness or vertigo	0.9%	\$3,202	53,56
00	Inflammation; infection of eye (except that caused by tuberculosis or sexually	0.070	ψ0,202	00,00
90	transmitteddisease)	0.9%	\$511	50,89
	Other ear and sense organ disorders	0.9%	\$494	45,64
94	All Other MDC 6 codes	1.9%	\$2,385	110,65
			\$2,385 \$1,660	524,17
	MDC 6: Diseases Of The Nervous System And Sense Organs Total MDC 9: Diseases Of The Digestive System	9.0%	φ1,000	524,17
136	Disorders of teeth and jaw	1.6%	\$468	94,20
154	Noninfectious gastroenteritis	1.6%	\$2,215	90,22
155	Other gastrointestinal disorders	1.0%	\$1,980	58,93
140	Gastritis and duodenitis	0.6%	\$2,980	33,56
153	Gastrointestinal hemorrhage	0.3%	\$2,529	14,69
	All Other MDC 9 codes	1.5%	\$3,367	89,11
	MDC 9: Diseases Of The Digestive System Total	6.5%	\$2,095	380,73
	All Other Diagnosis *All Emergency Department Visits	31.5% 100.0%	\$2,250 \$1,881	1,832,64 5,818,2 1

Table 10: Emergency Department Visits Principal Diagnosis by Major DiagnosticCategory and Clinical Classification for Chronic Conditions

		Percent of	0	Total ED
CCS	Medical Condition	ED Visits	Charge	Visits
	MDC 5: Mental Disorders			
	Anxiety disorders	5.8%	\$1,594	33,911
	Alcohol-related disorders	5.5%	\$2,831	32,320
657	Mood disorders	4.5%	\$1,908	26,457
	Substance-related disorders		\$2,163	17,189
659	Schizophrenia and other psychotic disorders	2.5%	\$2,249	14,590
	All Other MDC 5 codes	2.7%	\$2,271	15,782
	MDC 5: Mental Disorders Total	24.0%	\$2,152	140,249
	MDC 8: Diseases Of The Respiratory System			
128	Asthma	13.4%	\$1,398	77,981
126	Other upper respiratory infections	4.2%	\$1,345	24,314
127	Chronic obstructive pulmonary disease and bronchiectasis	3.1%	\$2,809	17,960
134	Other upper respiratory disease	0.9%	\$562	5,494
133	Other lower respiratory disease	0.2%	\$1,912	943
	All Other MDC 8 codes	0.1%	\$1,412	364
	MDC 8: Diseases Of The Respiratory System Total	21.8%	\$1,555	127,056
	MDC 7: Diseases Of The Circulatory System			
98	Essential hypertension	6.5%	\$2,212	38,039
	Cardiac dysrhythmias	2.6%	\$3,517	14,915
	Cardiac arrest and ventricular fibrillation	1.6%	\$3,478	9,576
	Congestive heart failure; nonhypertensive	1.1%	\$3,768	6,548
	Coronary atherosclerosis and other heart disease	1.0%	\$9,610	5,567
	All Other MDC 7 codes	3.3%	\$5,912	19,121
	MDC 7: Diseases Of The Circulatory System Total	16.1%	\$3,851	93,766
	MDC 6: Diseases Of The Nervous System And Sense Organs		<i>+•,••</i>	
84	Headache; including migraine	6.5%	\$1,691	38,166
95	Other nervous system disorders	1.4%	\$1,819	8,323
83	Epilepsy; convulsions	0.8%	\$3,215	4,685
00	Inflammation; infection of eye (except that caused by tuberculosis or	0.070	φ0, 2 10	1,000
90	sexually transmitteddisease)	0.5%	\$619	2,902
91	Other eye disorders	0.4%	\$936	2,002
51	All Other MDC 6 codes	1.1%	\$1,848	6,256
		1.170	ψ1,040	0,230
	MDC 6: Diseases Of The Nervous System And Sense Organs Total	10.7%	\$1,761	62,554
	MDC 3: Endocrine; Nutritional; And Metabolic Diseases And Immunity	10.776	ψ1,701	02,004
	Disorders			
50	Diabetes mellitus with complications	2.9%	\$2,418	16,885
49	Diabetes mellitus without complications	2.9%	\$2,418 \$2,120	11,450
49 54	Gout and other crystal arthropathies	1.4%	\$2,120 \$1,040	8,046
54 51	Other endocrine disorders	0.5%	\$1,040 \$2,341	8,046 3,009
31 48	Thyroid disorders	0.5%	\$2,341 \$2,184	
40	All Other MDC 3 codes			1,369
		0.3%	\$1,718	1,839
	MDC 3: Endocrine; Nutritional; And Metabolic Diseases And Immunity	7.00/	@0,00,4	10 500
	Disorders Total	7.3%	\$2,034	42,598
	All Other Diagnosis for Chronic Conditions	20.1%	\$2,385	117,089
	*All Emergency Department Visits for Chronic Conditions	100.0%	\$2,292	583,312

Source: AHCA 2006 Hospital Inpatient Data

Emergency Department Inpatient Admission Results

A total of 1,376,121 or 19 percent of ED visits resulted in an inpatient hospitalization. In 2006, 53.9 percent of the 2,551,244 acute care inpatients served in Florida hospitals were admitted from an emergency department.

The Major Diagnostic Categories (MDC) most frequently reported for those ED visits that resulted in an inpatient hospitalization were diseases of the circulatory system (26 percent), diseases of the digestive system (14.1 percent), diseases of the respiratory system (12.9 percent), injury and poisoning (10.6 percent), and mental disorders (6 percent) [**Table 11**]. These top five MDCs represent nearly 70 percent of all emergency department (ED) visits resulting in inpatient admission. The most frequently reported principal diagnoses for inpatient hospitalizations were chest pain, congestive heart failure, pneumonia, COPD and bronchiectasis, and hip fractures [**Table 11**].

Over 41 percent (565,436) of the inpatient principal diagnoses were classifiable as chronic conditions [**Table 12**]. For those inpatient hospitalizations classifiable as chronic conditions, the top Major Diagnostic Categories were diseases of the circulatory system (45.6 percent), mental disorders (13.8 percent), diseases of the respiratory system (10.8 percent), diseases of the digestive system (7.2 percent), and endocrine; nutritional; and, metabolic diseases and immunity disorders (5.7 percent). For chronic condition visits, the leading inpatient principal diagnoses included congestive heart failure, mood disorders, COPD and bronchiectasis, asthma, and diabetes mellitus with complications.

Table 11: Inpatient Hospitalization: Principal Diagnosis by Major DiagnosticCategory and Clinical Classification

		Percent of	Average	Total ED
ccs	Medical Condition	ED Visits	Charge	Visits
	MDC 7: Diseases Of The Circulatory System			
102	Nonspecific chest pain	5.0%	\$16,625	68,53
108	Congestive heart failure; nonhypertensive	4.6%	\$32,166	63,60
	Cardiac dysrhythmias	2.8%	\$27,539	38,93
	Acute myocardial infarction	2.6%	\$59,323	36,23
101		2.5%	\$41,766	34,57
	All Other MDC 7 codes	8.4%	\$35,185	116,02
	MDC 7: Diseases Of The Circulatory System Total	26.0%	\$33,342	357,91
	MDC 9: Diseases Of The Digestive System			
149		1.7%	\$40,126	23,07
153	Gastrointestinal hemorrhage	1.5%	\$27,545	20,76
	Diverticulosis and diverticulitis	1.4%	\$31,307	18,90
145	Intestinal obstruction without hernia	1.3%	\$36,374	18,45
152	Pancreatic disorders (not diabetes)	1.3%	\$34,974	17,20
	All Other MDC 9 codes	6.9%	\$28,026	95,09
	MDC 9: Diseases Of The Digestive System Total	14.1%	\$31,151	193,49
	MDC 8: Diseases Of The Respiratory System			
122	Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	4.3%	\$30,046	58,72
127	Chronic obstructive pulmonary disease and bronchiectasis	2.5%	\$23,919	34,92
131	Respiratory failure; insufficiency; arrest (adult)	1.7%	\$67,820	23,36
128	Asthma	1.6%	\$18,174	22,09
	Aspiration pneumonitis; food/vomitus	0.7%	\$45,115	9,36
	All Other MDC 8 codes	2.1%	\$22,522	29,05
	MDC 8: Diseases Of The Respiratory System Total	12.9%	\$31,898	177,52
	MDC 16: Injury And Poisoning		+- /	······
226	Fracture of neck of femur (hip)	1.5%	\$47,679	20,70
237		1.4%	\$50,904	19,06
238	Complications of surgical procedures or medical care	1.3%	\$34,658	17,46
230	Fracture of low er limb	1.0%	\$46,896	13,63
231	Other fractures	0.9%	\$36,734	11,93
-	All Other MDC 16 codes	4.6%	\$39,122	62,93
	MDC 16: Injury And Poisoning Total	10.6%	\$41,876	145,73
•••••	MDC 5: Mental Disorders		<i>,</i>	,.
657	Mood disorders	2.1%	\$12,033	28,48
	Schizophrenia and other psychotic disorders	1.5%	\$17,176	20,97
	Alcohol-related disorders	0.6%	\$15,579	8,84
	Substance-related disorders	0.5%	\$16,586	6,50
	Delirium dementia and amnestic and other cognitive disorders	0.4%	\$19,456	5,30
500	All Other MDC 5 codes	0.9%	\$21,232	11,81
	MDC 5: Mental Disorders Total	6.0%	\$15,901	81,93
	All Other Diagnosis	30.5%	\$29,337	419,52
	*All Emergency Department Visits	100.0%	\$31,492	1,376,12

Table 12: Inpatient Hospitalization Principal Diagnosis by Major DiagnosticCategory and Clinical Classification for Chronic Conditions

		Percent of	Average	Total ED
ccs	Medical Condition	ED Visits	Charge	Visits
	MDC 7: Diseases Of The Circulatory System		-	
108	Congestive heart failure; nonhypertensive	11.2%	\$32,166	63,60 ⁻
106	Cardiac dysrhythmias	6.7%	\$27,983	37,749
100	Acute myocardial infarction	6.4%	\$59,323	36,238
101	Coronary atherosclerosis and other heart disease	6.1%	\$41,766	34,573
109	Acute cerebrovascular disease	5.8%	\$41,259	32,615
	All Other MDC 7 codes	9.4%	\$33,125	52,925
	MDC 7: Diseases Of The Circulatory System Total	45.6%	\$38,008	257,701
	MDC 5: Mental Disorders			
657	Mood disorders	5.0%	\$12,024	28,389
659	Schizophrenia and other psychotic disorders	3.7%	\$17,174	20,946
	Alcohol-related disorders	1.5%	\$15,385	8,606
653	Delirium dementia and amnestic and other cognitive disorders	0.9%	\$19,589	5,082
	Screening and history of mental health and substance abuse codes	0.9%	\$35,377	5,066
	All Other MDC 5 codes	1.8%	\$10,910	10,003
	MDC 5: Mental Disorders Total	13.8%	\$15,641	78,092
	MDC 8: Diseases Of The Respiratory System		+ -/-	- /
127	Chronic obstructive pulmonary disease and bronchiectasis	5.9%	\$24,240	33,405
	Asthma	3.9%	\$18,174	22,097
	Respiratory failure; insufficiency; arrest (adult)	0.5%	\$66,809	2,776
	Other lower respiratory disease	0.3%	\$36,818	1,735
	Other upper respiratory infections	0.1%	\$18,639	566
	All Other MDC 8 codes	0.0%	\$42,182	229
	MDC 8: Diseases Of The Respiratory System Total	10.8%	\$24,353	60,808
	MDC 9: Diseases Of The Digestive System	101070	φ2 1,000	
146	Diverticulosis and diverticulitis	3.3%	\$31,307	18,904
	Esophageal disorders	1.2%	\$19,460	6,535
	Regional enteritis and ulcerative colitis	0.8%	\$31,945	4,460
	Other liver diseases	0.5%	\$36,956	2,937
	Gastroduodenal ulcer (except hemorrhage)	0.4%	\$41,436	2,476
100	All Other MDC 9 codes	1.0%	\$28,331	5,608
	MDC 9: Diseases Of The Digestive System Total	7.2%	\$30,095	40,920
	MDC 3: Endocrine; Nutritional; And Metabolic Diseases And Immunity		400,000	10,020
	Disorders			
50	Diabetes mellitus with complications	4.5%	\$27,145	25,594
50 51	Other endocrine disorders	0.4%	\$26,444	2,387
49	Diabetes mellitus without complication	0.4%	\$11,208	1,316
	Other nutritional; endocrine; and metabolic disorders	0.2%	\$28,463	998
	Thyroid disorders	0.2%	\$20,403 \$22,834	948
40	All Other MDC 3 codes			
		0.2%	\$26,899	1,12
	MDC 3: Endocrine; Nutritional; And Metabolic Diseases And Immunity		¢06.054	20.07
	Disorders Total	5.7%	\$26,351	32,37
	All Other Diagnosis for chronic conditions *All Emergency Department Visits for chronic conditions	16.9% 100.0%	\$41,196 \$32,749	95,54 565,43

Source: AHCA 2006 Hospital Inpatient Data

Emergency Department Ambulatory Visit Results: Patient Acuity Level

On June 2, 2008, all available records from the Agency's Emergency Department (ED) database collected during the 2006 calendar year were selected for analysis. All ambulatory emergency department visits can be defined by one of five CPT Evaluation & Management codes. The codes delineate the relative severity of the person's condition upon arrival at the ED. See **Appendix A** for a complete description of each of the five Evaluation and Management codes.

Table 13 shows the number, percentage, and average charge for ED visits as aggregated by acuity level. Note that although the ED data collection rule allows for the submission of nine secondary CPT codes for each ED record, the CPT Evaluation and Management (E/M) codes are to be entered in the primary procedure code field. However, because these CPT E/M codes were sometimes incorrectly recorded in the nine secondary procedure code fields, or multiple CPT E/M codes were included on an individual record, this analysis used the highest acuity level coded for each ED visit. About 5.4 percent of all visit records were missing an acuity code altogether.

Table 13: Emergency Department Visits Average and Sum of Charges by Patient Acuity Level

Acuity Level	ED Visits	Percent	Mean Charges	Total Charges
Minor	799,405	13.7%	\$588	\$470,102,174
Low-Moderate	1,644,678	28.3%	\$1,131	\$1,860,733,917
Moderate	1,764,902	30.3%	\$1,752	\$3,092,968,815
High-No Sig Threat	972,265	16.7%	\$3,112	\$3,025,548,525
High-Sig Threat	325,652	5.6%	\$4,485	\$1,460,552,312
Missing Codes	311,313	5.4%	\$3,330	\$1,036,527,382
Total	5,818,215	100.0%	\$1,881	\$10,946,433,125

Source: AHCA 2006 ED Data

Of the five acuity levels listed, the vast majority of ambulatory ED visits (72.3 percent) were in the low to moderate severity category. Further, the average total charge increases with severity level.

The five Evaluation and Management codes were aggregated into two groups, labeled "Low Acuity" and "High Acuity." (See **Table 2** for the definition of these groups.) A breakdown of emergency department (ED) visits by age group and acuity level is presented in **Table 14**. The data shows that for the youngest age group about 52 percent of ambulatory ED visits are low acuity. However, as the ages increase the proportion of high-acuity visits increases. For ages 65 years and older, the majority of visits, 64.9 percent, were coded as high acuity. Additionally, figures for the average charge and sum of charges by age group and acuity group are presented in **Appendix F**.

	Low Acuity Visits High Acuity Visits		Total			
Age Group	Number	Percent	Number	Percent	Number	Percent
Ages 0-17 years	735,585	51.6%	690,250	48.4%	1,425,835	100.0%
Ages 18-34 years	734,558	45.0%	896,457	55.0%	1,631,015	100.0%
Ages 35-54 years	597,281	42.1%	822,434	57.9%	1,419,715	100.0%
Ages 55-64 years	149,398	38.9%	234,392	61.1%	383,790	100.0%
Ages 65-79 years	150,598	36.6%	260,605	63.4%	411,203	100.0%
Ages 80 years and older	76,663	32.6%	158,681	67.4%	235,344	100.0%
Total	2,444,083	44.4%	3,062,819	55.6%	5,506,902	100.0%

Table 14: Emergency Department Visits by Age Group and Patient Acuity Level

Note: Total excludes visits that cannot be classified by acuity level and unknown age *Source: AHCA 2006 ED data*

Table 15 shows a breakdown of emergency department (ED) visits by payer group and acuity group. The payer with the highest proportion of high-acuity visits was Medicare, while the lowest was Medicaid. For more details on acuity level by payer group, see **Appendix E** which lists frequencies for each of the five acuity levels for each payer group. Additionally, figures for the average charge and sum of charges aggregated by payer group and acuity group are presented in **Appendix G**.

Table 15: Emergency Department Visits by Payer Group and Patient Acuity Level

	Low Acuity Visits		High Acuity Visits		Total	
Payer Group	ED Visits	Percent	ED Visits	Percent	ED Visits	Percent
Commercial Insurance	750,919	43.2%	987,691	56.8%	1,738,610	100.0%
Self Pay/Underinsured	622,307	47.3%	694,120	52.7%	1,316,427	100.0%
Medicaid	577,103	48.0%	625,309	52.0%	1,202,412	100.0%
Medicare	281,061	36.0%	499,441	64.0%	780,502	100.0%
Other Government	139,112	47.0%	156,815	53.0%	295,927	100.0%
Charity	73,578	42.5%	99,442	57.5%	173,020	100.0%
Total	2,444,080	44.4%	3,062,818	55.6%	5,506,898	100.0%

Note: Total excludes visits that cannot be classified by acuity level and visits with unknown payer. *Source: AHCA 2006 ED Data*

Emergency Department Ambulatory Visits by Emergency Status:

This section of the report analyzes emergency department (ED) utilization from the perspective of primary and preventative care. The New York University (NYU) algorithm of classifying ED visits was used to assign calendar year 2006 ED visits to the following categories: (1) non-emergent, (2) emergent but primary care treatable, (3) emergent - ED needed but preventable/avoidable, (4) emergent - ED needed - not preventable/ avoidable and (5) all Other Conditions which consist of conditions related to injury, mental health, alcohol, and substance abuse, and all other unclassified conditions.

The methodology used in this section is as follows:

- (1) The unit of analysis is the Florida resident ED visit that did not result in a hospital inpatient admission. ED visits for an individual whose place of residence was not a Florida county or was unknown were excluded from analysis.
- (2) The term "**ED Avoidable**," defined by NYU algorithm classifications 1-3 above, is used to represent ED visits that were potentially avoidable or treatable in a primary care setting.
- (3) The term "Emergency Status," defined by NYU algorithm classifications 1-4 above, is used to represent the cases identified as non-emergent or emergent by the NYU algorithm. The NYU algorithm assigned an emergency status to 3,477,933 ED visits (67 percent) of all 2006 Florida resident ED visits.

Figure 5 shows the category distribution of ED visits for Florida residents in 2006. More than 52 percent of ED visits were ED Avoidable in 2006.

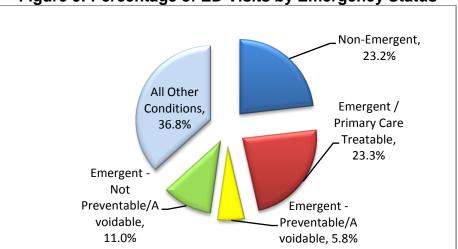


Figure 5: Percentage of ED Visits by Emergency Status

Table 16 shows the overall ED utilization rate by category for Florida residents in 2006. There was \$10.9 billion in outpatient ED charges incurred in 2006, of which 43.9 percent were associated with non-emergent or primary care treatable conditions that could have been addressed in a more cost effective setting. Including conditions that were emergent but preventable or avoidable through adequate primary care, a total of 49.3%, nearly half the ED visits for 2006, could potentially have been avoided through greater utilization of primary care services.

ED Visit Category	Average	Number ED	Percent of	Total Charges	Percent of
	Charge	Visits	ED Visits		Total Charges
Non-Emergent	\$1,421	1,276,024	21.9%	\$1,813,346,100	16.6%
Emergent / Primary Care Treatable	\$2,004	1,279,051	22.0%	\$2,563,648,841	23.4%
Emergent - Preventable/Avoidable	\$1,807	316,761	5.4%	\$572,335,331	5.2%
Emergent - Not Preventable/Avoidable	\$3,345	606,097	10.4%	\$2,027,395,291	18.5%
All Other Conditions	\$1,696	2,340,282	40.2%	\$3,969,707,561	36.3%
Total	\$1,881	5,818,215	100.0%	\$10,946,433,125	100.0%

Table 16: Emergency Department Visits by ED Visit Category

Source: AHCA 2006 ED Data

Figure 6 shows the percentage of ED visits by emergency status for racial groups in 2006. The overwhelming majority of classified ED visits were ED Avoidable. Whites have the lowest utilization rate (81.1 percent).

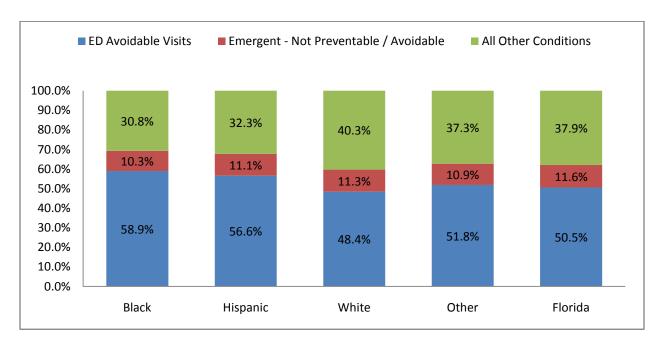


Figure 6: Percentage of ED Visits by Race and Emergency Status

Table 17 shows ED visits by category for racial groups in 2006. A higher percentage of ED visits by blacks (58.9 percent) and Hispanics (56.6 percent) were ED Avoidable compared to whites (48.4 percent). ED Avoidable visits per 1000 population for blacks (256) were more than 63 percent higher than the rate for the state of Florida (157). However, the average ED Avoidable charge for blacks was the lowest for all racial groups.

Race	Non-	Emergent /	Emergent -	Emergent - Not	All Other	Total ED	ED
	Emergent	Primary Care	Preventable /	Preventable /	Conditions	Visits	Avoidable
		Treatable	Avoidable	Avoidable			Visits
ED Visits by E	mergency Stat	tus and Race					
Black	326,651	316,699	86,844	127,380	381,182	1,238,756	
Hispanic	222,977	231,175	53,053	99,822	289,618	896,645	507,205
White	685,170	689,885	167,939	359,245	1,284,541	3,186,780	1,542,994
Other	32,223	32,617	7,291	15,220	51,870	139,221	72,131
Unknown	9,002	8,675	1,635	4,430	14,504	38,246	19,312
All ED Visits	1,276,024	1,279,051	316,761	606,097	2,021,715	5,499,648	2,871,836
Percentage of	f ED Visits by B	Emergency Stat	us and Race				
Black	26.4%	25.6%	7.0%	10.3%	30.8%	100.0%	58.9%
Hispanic	24.9%	25.8%	5.9%	11.1%	32.3%	100.0%	56.6%
White	21.5%	21.6%	5.3%	11.3%	40.3%	100.0%	48.4%
Other	23.1%	23.4%	5.2%	10.9%	37.3%	100.0%	51.8%
Unknown	23.5%	22.7%	4.3%	11.6%	37.9%	100.0%	50.5%
All ED Visits	23.2%	23.3%	5.8%	11.0%	36.8%	100.0%	52.2%
ED Visits by E	mergency Stat	tus and Race p	er 1000 popula	tions			
Black	115	111	30	45	134	434	256
Hispanic	62	64	15	28	80	248	140
White	60	60	15	31	112	279	135
Other	71	71	16	33	114	305	158
All ED Visits	70	70	17	33	110	300	157
Average Char	ge for ED Visit	s by Emergency	/ Status and Ra	се			
Black	\$1,318	\$1,723	\$1,674	\$2,779	\$1,556	\$1,670	\$1,536
Hispanic	\$1,533	\$2,046	\$1,776	\$3,538	\$1,829	\$1,999	\$1,792
White	\$1,439	\$2,127	\$1,888	\$3,502	\$1,708	\$1,953	\$1,795
Other	\$1,416	\$1,965	\$1,788	\$3,334	\$1,689	\$1,875	\$1,702
Unknown	\$1,063	\$1,526	\$1,586	\$2,576	\$1,637	\$1,583	\$1,315
All ED Visits	\$1,421	\$2,004	\$1,807	\$3,345	\$1,696	\$1,892	\$1,723

Table 17: Emergency Department Visits by Race and ED Visit Category

Source: AHCA 2006 ED Data. Population statistics : Florida Statistical Abstract 2007

Figure 7 shows the percentage of ED visits by emergency status and gender in 2006. ED Avoidable utilization rates are the same for males and females.

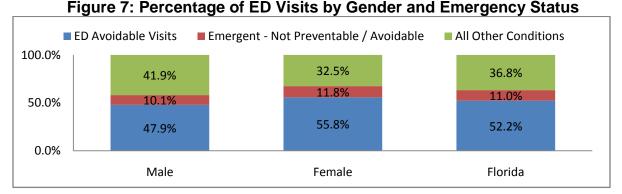


Table 18 shows ED visits by category and gender in 2006. A higher percentage of ED visits by females (55.8 percent) were ED Avoidable compared to males (47.9 percent). ED Avoidable visits per 1,000 population for females (179) were nearly 35 percent higher than the rate for males (133).

Gender	Non- Emergent	Emergent / Primary Care Treatable	Emergent - Preventable / Avoidable	Emergent - Not Preventable / Avoidable	All Other Conditions	Total ED Visits	ED Avoidable Visits				
ED Visits by	Emeraency S	tatus and Gend		Avoluable			VISIUS				
Male	502,957	538,927	149,353	251,539	1,042,489	2,485,266	1,191,238				
Female	773,064	740,121	167,407	354,557	979,217	3,014,366	1,680,592				
Unknown	3	3	0	1	9	16	6				
All ED Visits	1,276,024	1,279,051	316,761	606,097	2,021,715	5,499,648	2,871,836				
Percentage c	Percentage of ED Visits by Emergency Status and Gender										
Male	20.2%	21.7%	6.0%	10.1%	41.9%	100.0%	47.9%				
Female	25.6%	24.6%	5.6%	11.8%	32.5%	100.0%	55.8%				
Unknown	18.9%	15.8%	1.5%	7.6%	56.3%	100.0%	36.2%				
All ED Visits	23.2%	23.3%	5.8%	11.0%	36.8%	100.0%	52.2%				
ED Visits by B	Emergency S	tatus and Gend	er per 1000 popu	llations							
Male	56	60	17	28	116	277	133				
Female	83	79	18	38	105	322	179				
All ED Visits	70	70	17	33	110	300	157				
Average Cha	rge for ED Vis	sits by Emergen	cy Status and Ge	nder							
Male	\$1,228	\$1,824	\$1,708	\$3,453	\$1,684	\$1,803	\$1,558				
Female	\$1,547	\$2,135	\$1,895	\$3,269	\$1,709	\$1,966	\$1,841				
All ED Visits	\$1,421	\$2,004	\$1,807	\$3,345	\$664	\$953	\$1,436				

Table 18: Emergency Department Visits by Gender and ED Visit Category

Source: AHCA 2006 ED Data. Population statistics : Florida Statistical Abstract 2007

Figure 8 shows the percentage of ED visits by emergency status for age groups in 2006. The graph shows that ED Avoidable visits decrease with age. The ED utilization rate for ages 17 and younger was 22 percent higher than utilization rate for ages 80 and over.

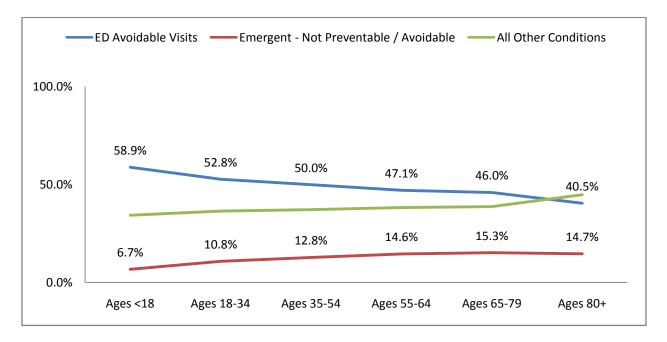


Figure 8: Percentage of ED Visits by Age and Emergency Status

Table 19 shows ED visits by category and age in 2006. ED utilization rates for emergent – not preventable/avoidable conditions increased with age, whereas, there is a decreasing ED utilization trend across age groups for the conditions constituting ED Avoidable visits. Contrary to the trend in ED Avoidable utilization rates, charges for ED Avoidable visits increase significantly with age. ED Avoidable visits for ages 17 years and younger (58.9 percent) are 12.8 percent greater than the state rate (52.2 percent) and 45.4 percent greater than the rate for ages 80 and older (40.5 percent). However, the average charge for the state for ages 17 and younger respectively. Furthermore, the average charge for an ED Avoidable visit increases with age.

Age	Non-	Emergent /	Emergent -	Emergent - Not	All Other	Total ED	ED
	Emergent	Primary Care	Preventable	Preventable /	Conditions	Visits	Avoidable
		Treatable	/ Avoidable	Avoidable			Visits
		tatus and Age					
Ages <18	342,536	389,868	106,997	96,052	•	1,424,808	839,401
Ages 18-34	412,141	372,424	78,331	176,592		1,635,319	862,895
Ages 35-54	323,378	309,332	76,414	181,615		1,418,935	709,124
Ages 55-64	76,656	79,644	21,264	55,053	144,091	376,708	177,564
Ages 65-79	78,748	84,302	22,205	61,470	156,280	403,005	185,255
Ages 80+	42,565	43,481	11,551	35,316	107,961	240,873	97,596
All ED Visits	1,276,024	1,279,051	316,761	606,097	2,021,715	5,499,648	2,871,836
Percentage of	f ED Visits b	y Emergency St	atus and Age				
Ages <18	24.0%	27.4%	7.5%	6.7%	34.3%	100.0%	58.9%
Ages 18-34	25.2%	22.8%	4.8%	10.8%	36.4%	100.0%	52.8%
Ages 35-54	22.8%	21.8%	5.4%	12.8%	37.2%	100.0%	50.0%
Ages 55-64	20.3%	21.1%	5.6%	14.6%	38.3%	100.0%	47.1%
Ages 65-79	19.5%	20.9%	5.5%	15.3%	38.8%	100.0%	46.0%
Ages 80+	17.7%	18.1%	4.8%	14.7%	44.8%	100.0%	40.5%
All ED Visits	23.2%	23.3%	5.8%	11.0%	36.8%	100.0%	52.2%
ED Visits by E	imergency S	tatus and Age p	er 1000 popula	ations			
Ages <18	83	95	26	23	119	346	204
Ages 18-34	107	96	20	46	154	423	223
Ages 35-54	63	60	15	35	103	276	138
Ages 55-64	37	38	10	26	69	181	85
Ages 65-79	36	38	10	28	71	183	84
Ages 80+	45	46	12	37	114	253	103
All ED Visits	70	70	17	33	110	300	157
Average Char	ge for ED Vis	sits by Emergen	cy Status and	Age			
Ages <18	\$868	\$955	\$1,182	\$1,604	\$1,168	\$1,068	\$948
Ages 18-34	\$1,392	\$1,941	\$1,730	\$2,953	\$1,665	\$1,801	\$1,660
Ages 35-54	\$1,617	\$2,626	\$2,104	\$3,916	\$1,822	\$2,234	\$2,110
Ages 55-64	\$1,890	\$3,106	\$2,515	\$4,340	\$1,976	\$2,574	\$2,510
Ages 65-79	\$2,166	\$3,204	\$2,756	\$4,245	\$2,191	\$2,742	\$2,709
Ages 80+	\$2,440	\$3,188	\$3,029	\$3,987	\$2,556	\$2,882	\$2,843
All ED Visits	\$1,421	\$2,004	\$1,807	\$3,345	\$1,696	\$1,892	\$1,723

Table 19: Emergency Department Visits by Age and ED Visit Category

Source: AHCA 2006 ED Data. Population statistics : Florida Statistical Abstract 2007

Figure 9 shows the percentage of ED visits by emergency status for payer groups in 2006. The graph shows that ED Avoidable utilization rates were highest for Medicaid and charity/underinsured cases.

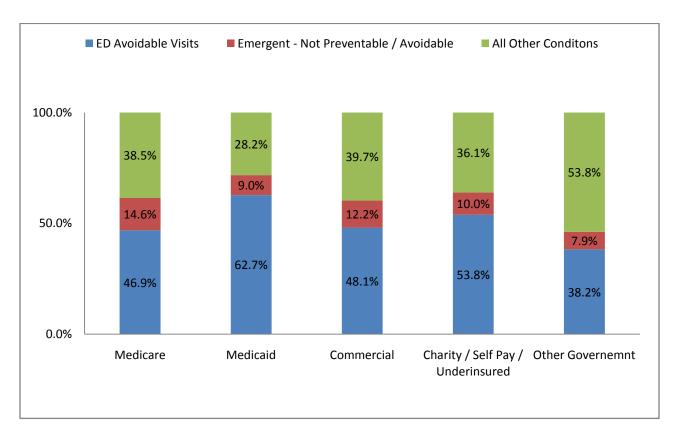


Figure 9: Percentage of ED Visits by Payer and Emergency Status

Table 20 shows ED visits by category and payer in 2006. ED Avoidable utilization is highest for Medicaid patients (62.7 percent) and charity/uninsured patients (53.8 percent). Nearly 73 percent of the charges associated with ED visits for Medicaid patients and nearly 58 percent of charity/uninsured ED visits are potentially avoidable.

Payer	Non-			Total ED	ED		
	Emergent	Primary Care	Preventable /	Preventable /	Conditions	Visits	Avoidable
		Treatable	Avoidable	Avoidable			Visits
ED Visits by Emergend			10.000				
Medicare	157,714	163,823	46,232	114,642	302,362	784,773	367,769
Medicaid	334,668	349,572	91,592	111,484	349,164	1,236,480	775,832
Commercial	370,710	370,501	80,371	208,502	678,253	1,708,337	821,582
Charity/Self Pay/ Underinsured	357,912	347,554	87,229	147,860	531,521	1,472,077	792,696
Other Governemnt	55,019	47,599	11,336	23,608	160,414	297,976	113,954
All ED Visits	1,276,024	1,279,049	316,760	606,096	2,021,714	5,499,643	2,871,833
Percentage of ED Visi	ts by Emerge	ency Status and					
Medicare	20.1%	20.9%	5.9%	14.6%	38.5%	100.0%	46.9%
Medicaid	27.1%	28.3%	7.4%	9.0%	28.2%	100.0%	62.7%
Commercial	21.7%	21.7%	4.7%	12.2%	39.7%	100.0%	48.1%
Charity/Self Pay/ Underinsured	24.3%	23.6%	5.9%	10.0%	36.1%	100.0%	53.8%
Other Governemnt	18.5%	16.0%	3.8%	7.9%	53.8%	100.0%	38.2%
All ED Visits	23.2%	23.3%	5.8%	11.0%	36.8%	100.0%	52.2%
Total ED Charges by E	Emergency St	tatus and Payer	(in millions)				
Medicare	\$324.80	\$494.44	\$122.66	\$459.04	\$668.23	\$2,069.16	\$941.89
Medicaid	\$372.02	\$470.70	\$129.67	\$264.22	\$473.80	\$1,710.40	\$972.39
Commercial	\$604.54	\$887.88	\$153.69	\$780.79	\$1,170.45	\$3,597.34	\$1,646.10
Charity / Self Pay /							
Underinsured	\$442.22	\$614.46	\$145.68	\$446.93	\$876.76	\$2,526.06	\$1,202.36
Other Governemnt	\$69.77	\$96.17	\$20.64	\$76.41	\$239.69	\$502.67	\$186.58
All ED Visits	\$1,813.35	\$2,563.64	\$572.33	\$2,027.39	\$3,428.93	\$10,405.64	\$4,949.32
Percentage of ED Cha							
Medicare	15.7%	23.9%	5.9%	22.2%	32.3%	100.0%	45.5%
Medicaid	21.8%	27.5%	7.6%	15.4%	27.7%	100.0%	56.9%
Commercial	16.8%	24.7%	4.3%	21.7%	32.5%	100.0%	45.8%
Charity/SelfPay/ Underinsured	17.5%	24.3%	5.8%	17.7%	34.7%	100.0%	47.6%
Other Governemnt	13.9%	19.1%	4.1%	15.2%	47.7%	100.0%	37.1%
All ED Visits	17.4%	24.6%	5.5%	19.5%	33.0%	100.0%	47.6%

Table 20: Emergency Department Visits by Payer and ED Visit Category, 2006

Source: AHCA 2006 ED Data. ED admissions with unknow n payer are excluded.

Summary and Conclusions

The use of emergency departments (EDs) in Florida has been increasing over the past ten years. The number of visits increased by 37.7 percent from 1995 to 2006, while the visit rate per population increased by 10.8 percent over the same period. The total charges for ED visits increased by over 1,200 percent, from \$791 million in 1994 to \$10.9 billion in 2006.

The analysis of the data reveals that the majority of ED visits were from people who are non-Hispanic white, and under 35 years of age. The top two payer groups were commercial insurance and self pay/underinsured. The likelihood of an inpatient admission increased with age.

The majority of ambulatory visits, visits not resulting in an inpatient admission, were for an acuity level of low to moderate. Medicare was the payer for the largest proportion of high-acuity visits. The most frequently reported principal diagnoses were injury and poisoning and diseases of the respiratory system.

Patients with chronic conditions that should be better managed in a physician's office make up a significant proportion of ED visits, 10 percent of the ambulatory visits and 41 percent of the visits that result in an inpatient hospitalization. This finding raises concern about access to appropriate primary care for patients with chronic conditions.

Nearly half of all 2006 ED visits not resulting in an inpatient hospitalization were potentially avoidable through greater utilization of primary care services.

Recommendations

Hospital emergency departments are traditionally the provider of urgent and lifesaving care to the community; however, EDs have increasingly become the safety net provider of the United States health care system. Federal law requires hospital EDs to accept, evaluate, and stabilize all those who present for care, regardless of their ability to pay. Consequently, hospital EDs are providing increasing levels of primary care services to millions of Americans who are uninsured, underinsured or otherwise have limited or no access to other community primary care services. The following recommendations may help to alleviate the problem of inappropriate utilization of the emergency department:

- Health care access initiatives that emphasize early intervention and early access to appropriate care on behalf of uninsured persons can significantly improve the health status of Floridians and greatly reduce the financial burden on the health care system. This concept is embodied in the Department of Health's Low Income Pool (LIP) Primary Care/Emergency Room Diversion projects. These projects emphasize aggressive outreach to identify high risk uninsured residents, linking these persons to primary care medical homes and disease management services, assisting in obtaining third party coverage, and working to provide people with the medications they need to avoid hospitalization. A portion of the Low Income Pool should be devoted to community based primary care outpatient clinics and facilitating functions such as hospital based navigators who assist patients in accessing needed acute, chronic and preventive healthcare.
- The expansion of health information technology will allow treating providers to access a continuity of care record for their patient providing health information on pharmacy use, hospitalizations, diagnoses, procedures and lab tests ordered across the full range of health care providers. This information will be especially valuable for patients accessing primary care services in clinic settings where they may not see the same provider for each service rendered.
- Urgent care centers provide an alternative to the emergency department for urgent but non- life threatening emergencies such as lacerations, fractures, sore throats, ear aches, sciatic pain, sports injuries. Urgent care centers are not currently reimbursed under the Florida Medicaid program. The Agency may want to consider conducting a pilot program adding urgent care centers as a

reimbursable facility type to see if this results in cost savings and appropriate utilization.

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Appendices

- A. CPT Evaluation and Management Codes Used to Classify Acuity Level
- B. Definition of Racial Categories
- C. Definition of Principal Payer Categories
- D. Emergency Department Visits by Payer
- E. Emergency Department Visits by Payer and Patient Acuity Level
- F. ED Visits, Average and Sum of Charges by Age Group and Patient Acuity Level
- G. ED Visits, Average and Sum of Charges by Payer Group and Patient Acuity Level
- H. ICD-9-CM Major Diagnosis Category

Appendix A: CPT Evaluation and Management Codes Used to Classify Acuity Level

The following codes are used to report evaluation and management services provided in the emergency department. No distinction is made between new and established patients in the emergency department.

An emergency department is defined as an organized hospital-based facility for the provision of unscheduled episodic services to patients who present for immediate medical attention. The facility must be available 24 hours a day.

Low Acuity:

99281 - Emergency department visit for the evaluation and management of a patient, which requires these three key components:

- a problem focused history;
- a problem focused examination;
- a straightforward medical decision making.

Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually the presenting problems(s) are self limited or minor.

99282 - Emergency department visit for the evaluation and management of a patient, which requires these three key components:

an expanded problem focused history;

an expanded problem focused examination;

medical decision making of low complexity.

Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low to moderate severity.

Appendix A (continued)

CPT Evaluation and Management Codes Used to Classify Acuity Level

High Acuity:

99283 - Emergency department visit for the evaluation and management of a patient, which requires these three key components:

an expanded problem focused history;

an expanded problem focused examination;

medical decision making of moderate complexity.

Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually the presenting problem(s) are of moderate severity.

99284 - Emergency department visit for the evaluation and management of a patient, which requires these three key components:

a detailed history;

a detailed examination;

medical decision making of moderate complexity.

Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problems are of high severity, and require urgent evaluation by the physician but do not pose an immediate significant threat to life or physiologic function.

99285 - Emergency department visit for the evaluation and management of a patient, which requires these three key components within the constraints imposed by the urgency of the patient's clinical condition and/or mental status:

a comprehensive history;

a comprehensive examination;

medical decision-making of high complexity.

Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problems(s) are of high severity and pose an immediate threat to life or physiologic function.

Racial Group	Race/Ethnic Description
Hispanic	Black Hispanic
	White Hispanic
Black	Black / African-American only
White	White only- non Hispanic
Other	Asian/Pacific
	American Indian
	Other
Non-white	Hispanic
	Black
	Other
No Response	No Response

Appendix B: Definition of Racial Categories

Appendix C: Definition of Principal Payer Categories

Payer Category	Payer Description
Medicare	Medicare
	Medicare HMO
Medicaid	Medicaid
	Medicaid HMO
Commercial Insurance	Commercial Insurance
	Commercial HMO
	Commercial PPO
Other Government	CHAMPUS/TRICARE
	Veteran Administration
	Workers' Compensation
	Other Government
	Other
	KidCare
Charity/Self-Pay / Underinsured	Charity Self Pay / Under-insured

Source: AHCA

Appendix D: Emergency Department Visits by Payer

			Mean	
Payer	ED Visits	Percent	Charge	Total Charges
Medicare	697,368	12.0%	\$2,489	\$1,735,603,562
Medicare HMO	139,129	2.4%	\$3,165	\$440,291,999
Medicaid	711,125	12.2%	\$1,434	\$1,020,095,715
Medicaid HMO	541,511	9.3%	\$1,316	\$712,733,428
Commercial HMO	439,094	7.5%	\$2,004	\$880,027,966
Commercial Insurance	697,726	12.0%	\$2,127	\$1,483,786,852
Commercial PPO	712,007	12.2%	\$2,052	\$1,460,846,612
Workers Compensation	1,390,084	23.9%	\$1,670	\$2,321,397,288
CHAMPUS/TRICARE	179,977	3.1%	\$2,049	\$368,861,134
Veteran Administration	127,203	2.2%	\$1,316	\$167,393,221
Other Government	90,893	1.6%	\$1,892	\$171,996,504
Self Pay/Underinsured	7,957	0.1%	\$2,693	\$21,429,190
Other	50,954	0.9%	\$2,237	\$114,002,133
Charity	8,080	0.1%	\$2,255	\$18,223,345
KidCare	25,102	0.4%	\$1,185	\$29,734,678
Unknown Payer	5	0.0%	\$1,900	\$9,498
Total ED Visits	5,818,215	100.0%	\$1,881	\$10,946,433,125

	Inpatient		Mean	
Payer	Hospitalization	Percent	Charge	Total Charges
Medicare	577,864	42.0%	\$33,440	\$19,323,825,069
Medicare HMO	138,091	10.0%	\$34,589	\$4,776,389,274
Medicaid	118,468	8.6%	\$30,889	\$3,659,386,248
Medicaid HMO	50,956	3.7%	\$25,692	\$1,309,151,430
Commercial HMO	57,250	4.2%	\$34,514	\$1,975,939,601
Commercial Insurance	124,141	9.0%	\$28,244	\$3,506,179,588
Commercial PPO	119,199	8.7%	\$29,140	\$3,473,421,017
Workers Compensation	5,968	0.4%	\$40,822	\$243,623,651
CHAMPUS/TRICARE	9,554	0.7%	\$26,716	\$255,248,023
Veteran Administration	5,748	0.4%	\$32,463	\$186,595,224
Other Government	17,576	1.3%	\$31,647	\$556,228,953
Self Pay/Underinsured	104,209	7.6%	\$26,427	\$2,753,915,017
Other	3,794	0.3%	\$29,744	\$112,849,791
Charity	41,786	3.0%	\$27,849	\$1,163,678,374
KidCare	1,517	0.1%	\$26,564	\$40,298,015
Total	1,376,121	100.0%	\$31,492	\$43,336,729,275

Source: AHCA 2006 ED data and Hospital inpatient Data

Appendix E: Emergency Department Visits by Payer and Patient Acuity Level

		Low	Acuity		High Acuity							
	9928	1	99282	2	99283	3	9928	4	9928	5	Total	
Payer	ED Visits	Pct	ED Visits	Pct	ED Visits	Pct	ED Visits	Pct	ED Visits	Pct	ED Visits	Pct
Medicare	84,252	10.5%	196,809	12.0%	248,225	14.1%	176,814	18.2%	74,402	22.8%	780,502	14.2%
Medicaid	189,881	23.8%	387,222	23.5%	393,865	22.3%	174,973	18.0%	56,471	17.3%	1,202,412	21.8%
Commerciall Ins.	231,294	28.9%	519,625	31.6%	566,438	32.1%	321,954	33.1%	99,299	30.5%	1,738,610	31.6%
Other												
Government	43,710	5.5%	95,402	5.8%	98,081	5.6%	45,065	4.6%	13,669	4.2%	295,927	5.4%
Self-Pay												
/Underinsured	224,578	28.1%	397,729	24.2%	406,164	23.0%	219,443	22.6%	68,513	21.0%	1,316,427	23.9%
Charity	25,688	3.2%	47,890	2.9%	52,128	3.0%	34,016	3.5%	13,298	4.1%	173,020	3.1%
Unknown	2	0.0%	1	0.0%	1	0.0%					4	0.0%
Total	799,405	100.0%	1,644,678	100.0%	1,764,902	100.0%	972,265	100.0%	325,652	100.0%	5,506,902	100.0%

Patient Acuity Level

Note: Total excludes visits that cannot be grouped by acuity level. Source: AHCA 2006 ED Data

Appendix F: Emergency Department Visits Average and Sum of Charges by Age Group and Patient Acuity Level

	Low Acuity Visits			High Acuity Visits			Total		
Age Group	Number	Mean	Sum	Number	Mean	Sum	Number	Mean	Sum
Ages 0-17 years	735,585	\$591	\$435,005,962	690,250	\$1,479	\$1,021,152,106	1,425,835	\$1,021	\$1,456,158,068
Ages 18-34 years	734,558	\$965	\$709,205,567	896,457	\$2,343	\$2,100,233,889	1,631,015	\$1,723	\$2,809,439,456
Ages 35-54 years	597,281	\$1,119	\$668,597,084	822,434	\$2,837	\$2,333,638,388	1,419,715	\$2,115	\$3,002,235,472
Ages 55-64 years	149,398	\$1,252	\$187,098,061	234,392	\$3,152	\$738,884,490	383,790	\$2,413	\$925,982,551
Ages 65-79 years	150,598	\$1,384	\$208,493,617	260,605	\$3,291	\$857,547,539	411,203	\$2,592	\$1,066,041,156
Ages 80 years and older	76,663	\$1,597	\$122,435,800	158,681	\$3,325	\$527,613,240	235,344	\$2,762	\$650,049,040
Total	2,444,083	\$954	\$2,330,836,091	3,062,819	\$2,475	\$7,579,069,652	5,506,902	\$1,800	\$9,909,905,743

Notes: Total excludes visits that cannot be classified by acuity level and patient records with invalid or unknown ages.

Value of Sum is in millions.

Source: AHCA 2006 ED Data

Appendix G: Emergency Department Visits Average and Sum of Charges by Payer Group and Patient Acuity Level

	Low	Acuity Vis	sits	High	Acuity Vis	sits		Total	
Payer Group	Visits	Mean	Sum	Visits	Mean	Sum	Visits	Mean	Sum
Medicare	281,061	\$1,354	\$380.6	499,441	\$3,171	\$1,583.7	780,502	\$2,517	\$1,964.2
Medicaid	577,103	\$707	\$408.0	625,309	\$1,899	\$1,187.3	1,202,412	\$1,327	\$1,595.3
Commercial Insurance	750,919	\$1,081	\$811.6	987,691	\$2,644	\$2,611.6	1,738,610	\$1,969	\$3,423.1
Other Government	622,307	\$854	\$531.6	694,120	\$2,251	\$1,562.6	1,316,427	\$1,591	\$2,094.1
Self Pay/Underinsured	139,112	\$932	\$129.6	156,815	\$2,270	\$356.0	295,927	\$1,641	\$485.6
Charity	73,578	\$944	\$69.5	99,442	\$2,795	\$278.0	173,020	\$2,008	\$347.4
Unknown Payer	3	\$861	\$0.0	1	\$2,891	\$0.0	4	\$1,368	\$0.0
Total	2,444,080	\$954	\$2,330.8	3,062,818	\$2,475	\$7,579.1	5,506,898	\$1,800	\$9,909.9

Notes: Total includes visits that cannot be classified by acuity level.

Value of Sum is in millions.

Source: AHCA 2006 ED Data

Appendix H: Major Diagnosis Categories

Table 1 - ICD-9-CM Major Diagnosis Category	
Category	ICD-9-CM Major Diagnosis Category Description
1	Infectious and parasitic diseases
2	Neoplasms
3	Endocrine; nutritional; and metabolic diseases and immunity disorders
4	Diseases of the blood and blood-forming organs
5	Mental disorders
6	Diseases of the nervous system and sense organs
7	Diseases of the circulatory system
8	Diseases of the respiratory system
9	Diseases of the digestive system
10	Diseases of the genitourinary system
11	Complications of pregnancy; childbirth; and the puerperium
12	Diseases of the skin and subcutaneous tissue
13	Diseases of the musculoskeletal system and connective tissue
14	Congenital anomalies
15	Certain conditions originating in the perinatal period
16	Injury and poisoning
17	Symptoms; signs; and ill-defined conditions and factors influencing health status

Symptoms; signs; and ill-defined conditions and factors influencing health status 17