|                                  | Agency for Health Care Administration  |
|----------------------------------|--|
|                                  | Florida Center for Health Information<br>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<br>the largest proportion of low acuity visits. Injuries, contusions, upper<br>respiratory infection, abdominal pain, and headaches including migraine<br>were among the most frequent principal diagnoses for ambulatory visits.   |
| Future Policy<br>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<br>Florida<br>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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|                                  | To view or print this report, please visit the following website:  |
|                                  | www.FloridaHealthFinder.gov  |
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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 <sup>2</sup> and state <sup>3</sup> 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. <sup>3</sup> According to data from the Current Population Survey, <sup>5</sup> 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. <sup>4</sup> 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 2004<sup>6</sup>. 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.<sup>3</sup>

#### **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 ED<sup>2</sup>.

## 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 <a href="http://www.floridahealthfinder.gov/Researchers/OrderData/order-data.shtml">http://www.floridahealthfinder.gov/Researchers/OrderData/order-data.shtml</a>.

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<br>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<br>(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 <b>self limited</b> or of <b>minor</b> severity. |
|-------|--|
| 99282 | The presenting problem(s) are of <b>low to moderate</b> severity.              |

#### High-Acuity Group:

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

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.

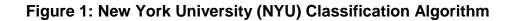
## The NYU ED Classification Algorithm

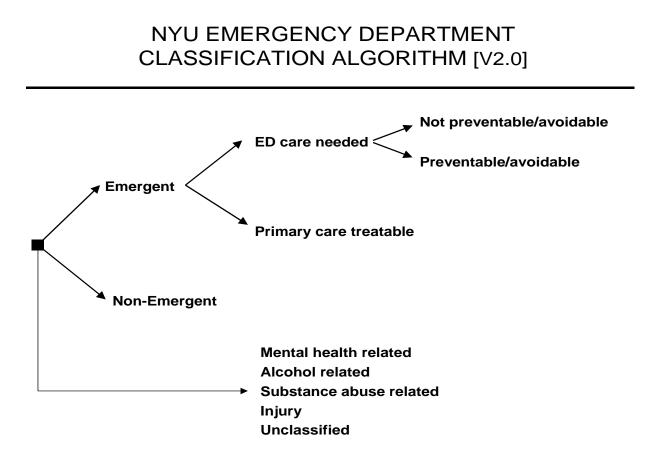
The New York University Center for Health and Public Service Research and the United Hospital Fund of New York developed an algorithm, illustrated in **Figure 1**, to aid in the analysis of administrative data from ED records (Billings, Parikh, & T, 2000). The algorithm classifies ED utilization, based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

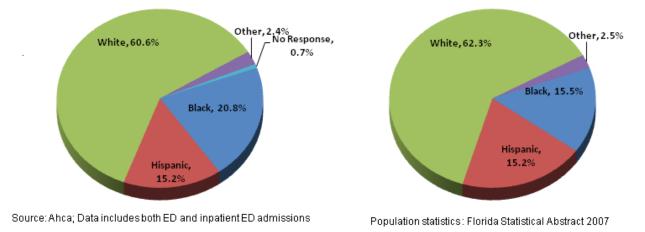


Figure 2: Percentage of Visits to the Emergency Department by Racial Group

**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.

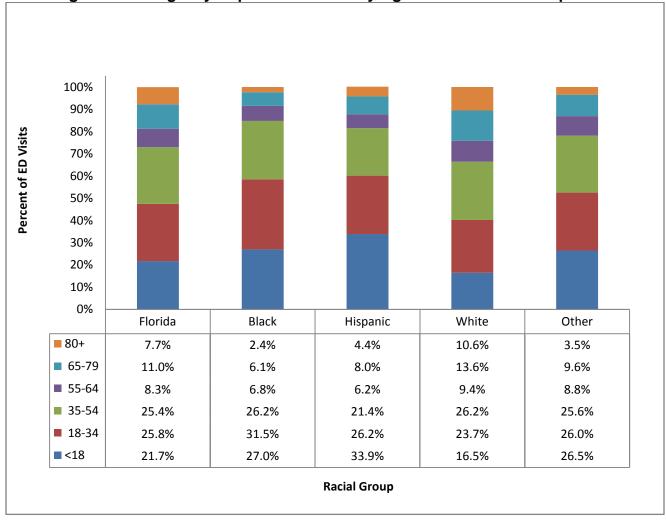


Figure 3: Emergency Department Visits by Age Within Racial Groups

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.

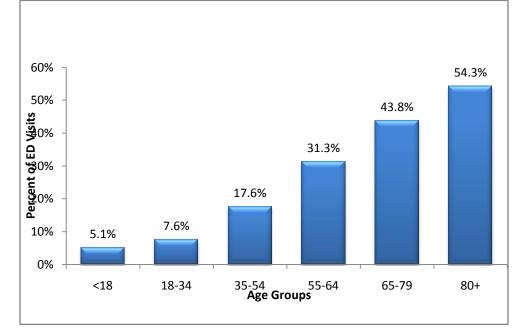


Figure 4: Percent of Visits Resulting in Inpatient Hospitalization by Age Groups

**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<br>\$1,660        | 524,17                       |
|     | MDC 6: Diseases Of The Nervous System And Sense Organs Total<br>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<br>*All Emergency Department Visits   | 31.5%<br><b>100.0%</b> | \$2,250<br><b>\$1,881</b> | 1,832,64<br><b>5,818,2</b> 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, <b>2</b> 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<br>\$2,120 | 11,450         |
| 49<br>54 | Gout and other crystal arthropathies                                  | 1.4%       | \$2,120<br>\$1,040 | 8,046          |
| 54<br>51 | Other endocrine disorders   | 0.5%       | \$1,040<br>\$2,341 | 8,046<br>3,009 |
| 31<br>48 | Thyroid disorders   | 0.5%       | \$2,341<br>\$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/      | <b>@0,00,4</b>     | 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 <sup>-</sup>     |
| 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                                 |                 | <b>400,000</b>              | 10,020                 |
|          | Disorders  |                 |                             |                        |
| 50       | Diabetes mellitus with complications   | 4.5%            | \$27,145                    | 25,594                 |
| 50<br>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<br>\$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%<br>100.0% | \$41,196<br><b>\$32,749</b> | 95,54<br><b>565,43</b> |

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<br>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* 

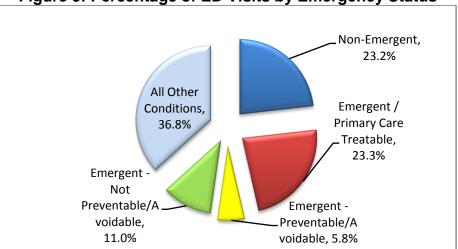
### **Emergency Department Ambulatory Visits by Emergency Status:**

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

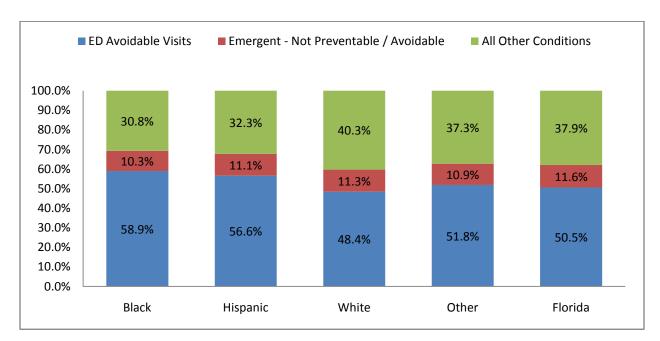
**Table 16** shows the overall ED utilization rate by category for Florida residents in 2006. There was \$10.9 billion in outpatient ED charges incurred in 2006, of which 43.9 percent were associated with non-emergent or primary care treatable conditions that could have been addressed in a more cost 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  |                  | <b>Total Charges</b> |
| 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

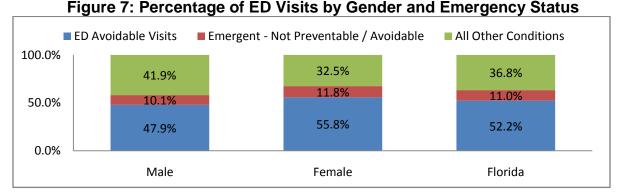
**Table 17** shows ED visits by category for racial groups in 2006. A higher percentage of ED visits by blacks (58.9 percent) and Hispanics (56.6 percent) were ED Avoidable compared to whites (48.4 percent). ED Avoidable visits per 1000 population for blacks (256) were more than 63 percent higher than 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-<br>Emergent                                       | Emergent /<br>Primary Care<br>Treatable | Emergent -<br>Preventable /<br>Avoidable | Emergent - Not<br>Preventable /<br>Avoidable | All Other<br>Conditions | Total ED<br>Visits | ED<br>Avoidable<br>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.

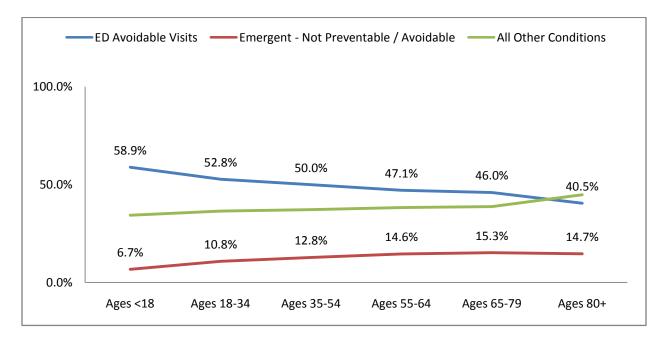


Figure 8: Percentage of ED Visits by Age and Emergency Status

**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.

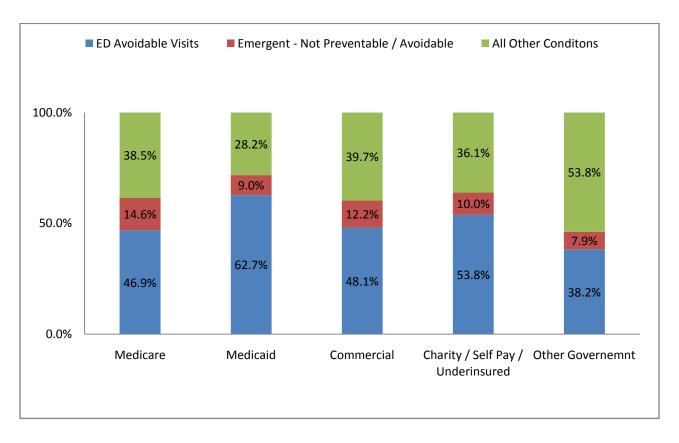


Figure 9: Percentage of ED Visits by Payer and Emergency Status

**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/<br>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/<br>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/<br>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 /<br>Underinsured | Charity<br>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   | <b>Total Charges</b> |
| 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