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DELWARE HOSPITAL  
DISCHARGE SUMMARY  
REPORT ■ 2009



*DELAWARE HEALTH AND SOCIAL SERVICES*

Division of Public Health

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## **Acknowledgments**

This report was prepared by Barbara Gladders, Health Statistics Administrator of the Delaware Health Statistics Center, Division of Public Health, Department of Health & Social Services. Ed Ratledge, of the University of Delaware's Center for Applied Demography and Survey Research, created the hospital discharge research file and provided technical advice.

We gratefully acknowledge the Delaware Healthcare Association for gathering the hospital profiles and the hospitals for providing the data that make this report possible.

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## EXECUTIVE SUMMARY

### This report describes:

**Patient Characteristics**  
**Most Frequent Reason for Hospitalizations**  
**Patient Admission Source**  
**Hospital Charges and Billing Patterns**  
**Patient Discharge Status**  
**Patient Distribution**

Data in this report will present 2009 Delaware hospital discharge data, as well as trend data for selected characteristics. Hospitalization or hospital discharge, refers to any discharge from a non-federal, short-stay, acute-care hospital in Delaware. Hospitalizations are expressed as numbers of discharges, not as unduplicated patients; as a result, a single patient with multiple hospitalizations can be counted more than once. Delaware hospital discharge data are based on inpatient hospitalizations and do not include outpatient, clinic, or emergency room data. Unless otherwise specified, the data presented represent discharges from the following hospitals and systems: Alfred I. duPont, St. Francis Hospital, Christiana Care Health System (which consists of Wilmington Hospital and Christiana Care), Bayhealth Medical Center (which consists of Kent General and Milford), Beebe Medical Center, and Nanticoke Memorial Hospital<sup>1</sup>.

More information on how annual files are created, as well as definitions of terms used in this report, can be found in the Technical Notes.

### Key findings:

- After two years of declining numbers, the number of hospital discharges increased slightly from 2008 to 2009. Despite two years with fewer discharges, aggregate hospital charges continued their steady increase.
- Women accounted for 58 percent of all discharges. In the 20 to 34 year age group, four out of every five discharges were women.
- Inpatient hospitalizations in 2009 generated total charges of 2.53 billion; nearly half of that total (1.16 billion) was billed to Medicare.
- In 2009, the average length of stay (ALOS) was 4.7 days and the mean charge for a hospitalization was \$22,410.
- The most frequent reasons for hospitalization fell under the category of diseases of the circulatory system, and included congestive heart failure, coronary artery disease, and cardiac dysrhythmias (irregular heart beat).
- Over half of all hospital stays in 2009 were admitted through the emergency department.
- Thirteen percent of all discharges from Delaware hospitals were non-residents, most of whom came from Pennsylvania, Maryland, and New Jersey.

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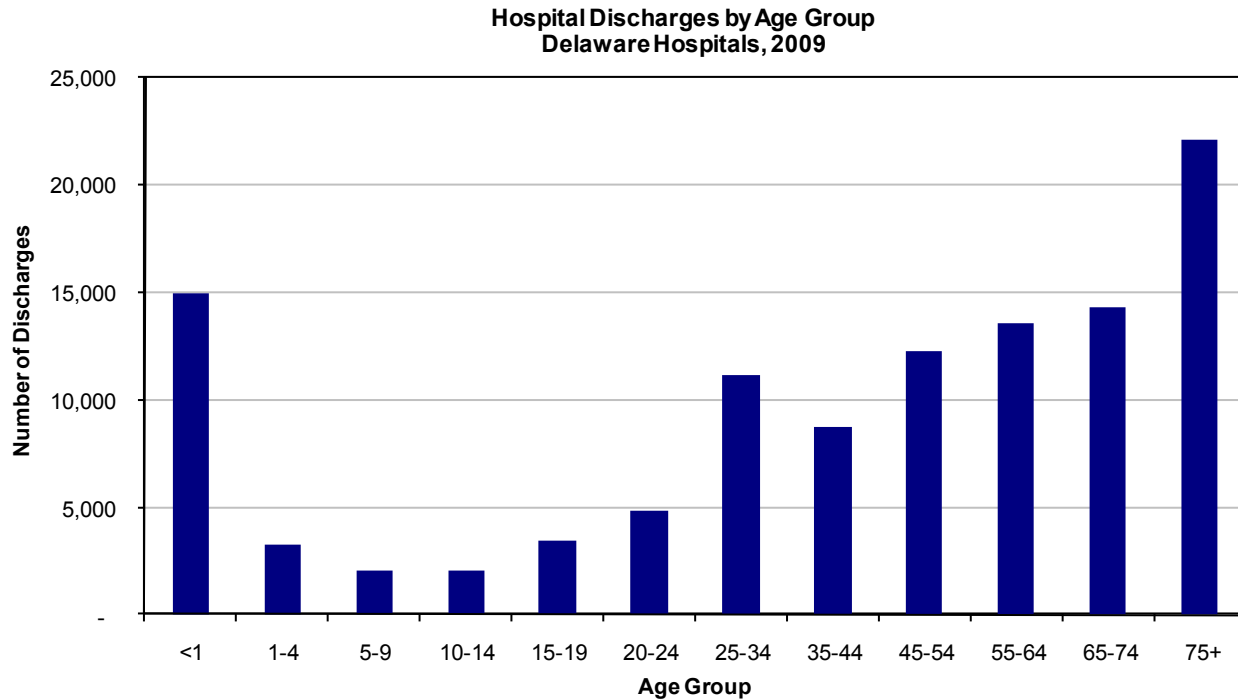
<sup>1</sup>See the Hospital Profiles at the end of this report for details about each of Delaware's acute care hospitals.

## EXECUTIVE SUMMARY

- Hospital stays for liveborn infants varied by type of delivery and plurality.
  - The ALOS for infants delivered by cesarean section was 5.1 days, versus 2.7 days for infants delivered vaginally.
  - The ALOS for infants who were part of a plural birth was more than three times that of singleton births (11 days versus 3.3 days).
- Three-quarters of patients underwent a procedure while hospitalized; 21 percent had only 1 procedure, 18 percent had 2, and 37 percent had 3 or more procedures during their stay.
- Patients who were uninsured and those covered by Medicare were more frequently admitted through the emergency department (ED) than any other route; 74.2 percent of uninsured patients and 71.3 percent of Medicare patients were admitted through the ED in 2009.
- Medicare and private insurers were the primary payers in 38 and 33 percent of all hospital discharges in 2009. Medicaid was the primary payer in 24 percent of all hospital stays, and uninsured hospitalizations accounted for 3 percent of the total stays. The remaining 2 percent of hospitalizations were covered by other specified or unknown programs.

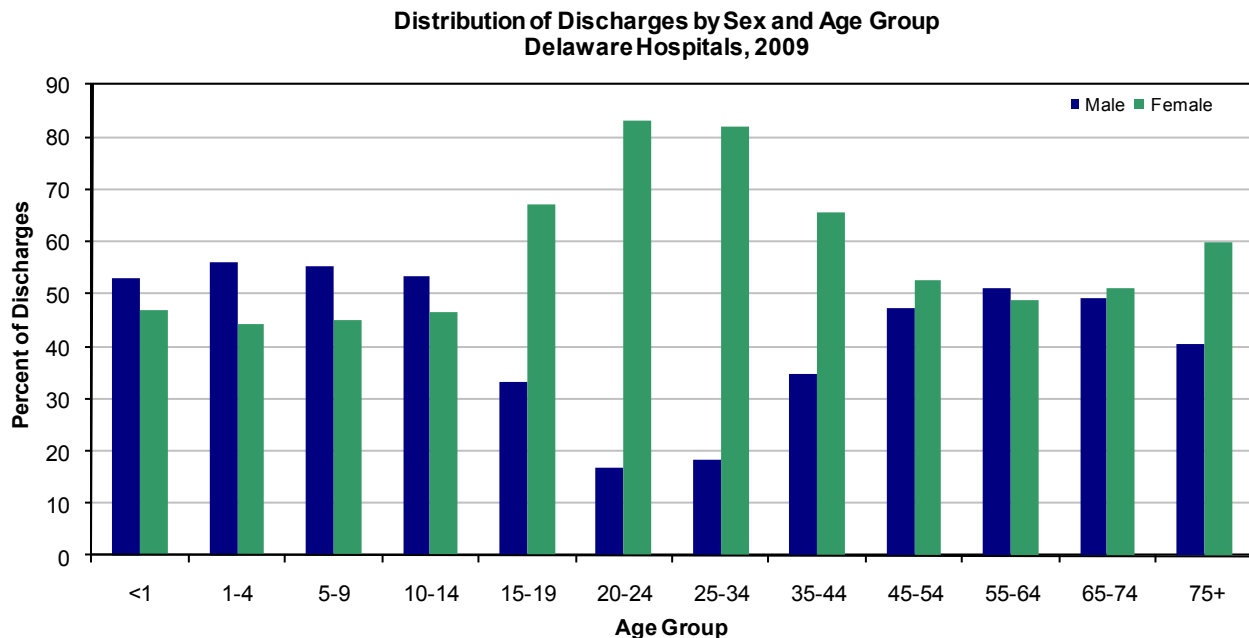
## PATIENT CHARACTERISTICS

Patients under 1 year old accounted for 13 percent of all discharges in 2009; the majority of these discharges were infants hospitalized by virtue of being born in the hospital. Patients 65 and older were responsible for 32 percent of all discharges in 2009.



Source: Delaware Health Statistics Center

Males made up the majority of discharges in the age groups under 15. For nearly all age groups 15 and higher, females made up the majority of discharges, and in the 20 to 34 year age range, four out of every five discharges were women. In 2009, 57.7 percent of all discharges were women.

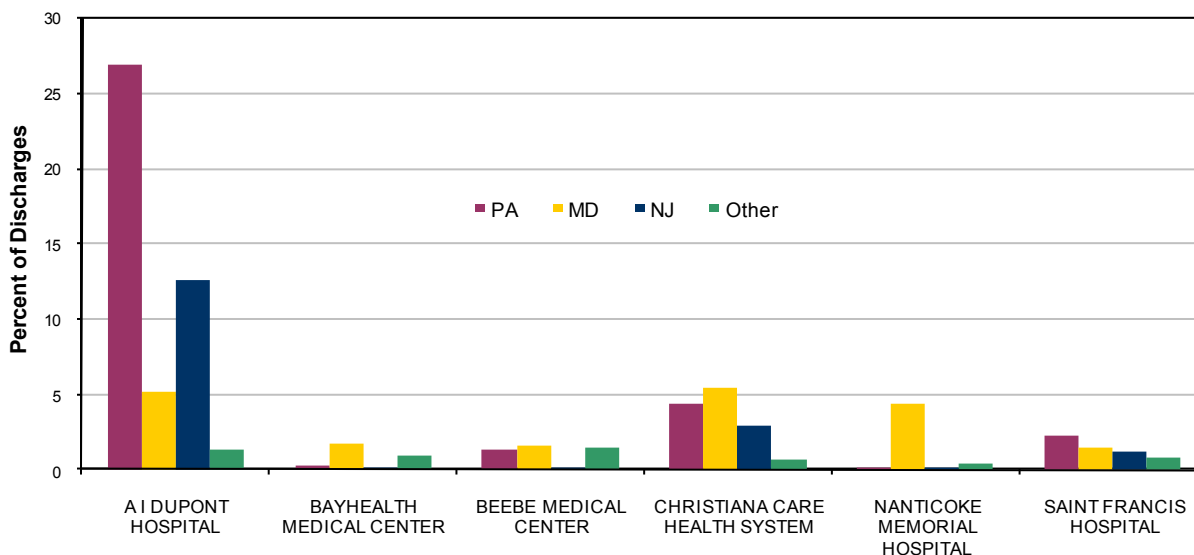


Source: Delaware Health Statistics Center

## PATIENT CHARACTERISTICS

Thirteen percent of all discharges from Delaware hospitals were non-residents, most of whom came from Pennsylvania, Maryland, and New Jersey. With nearly half of their patients coming from out-of-state, A.I. duPont Hospital had the largest proportion of non-resident patients.

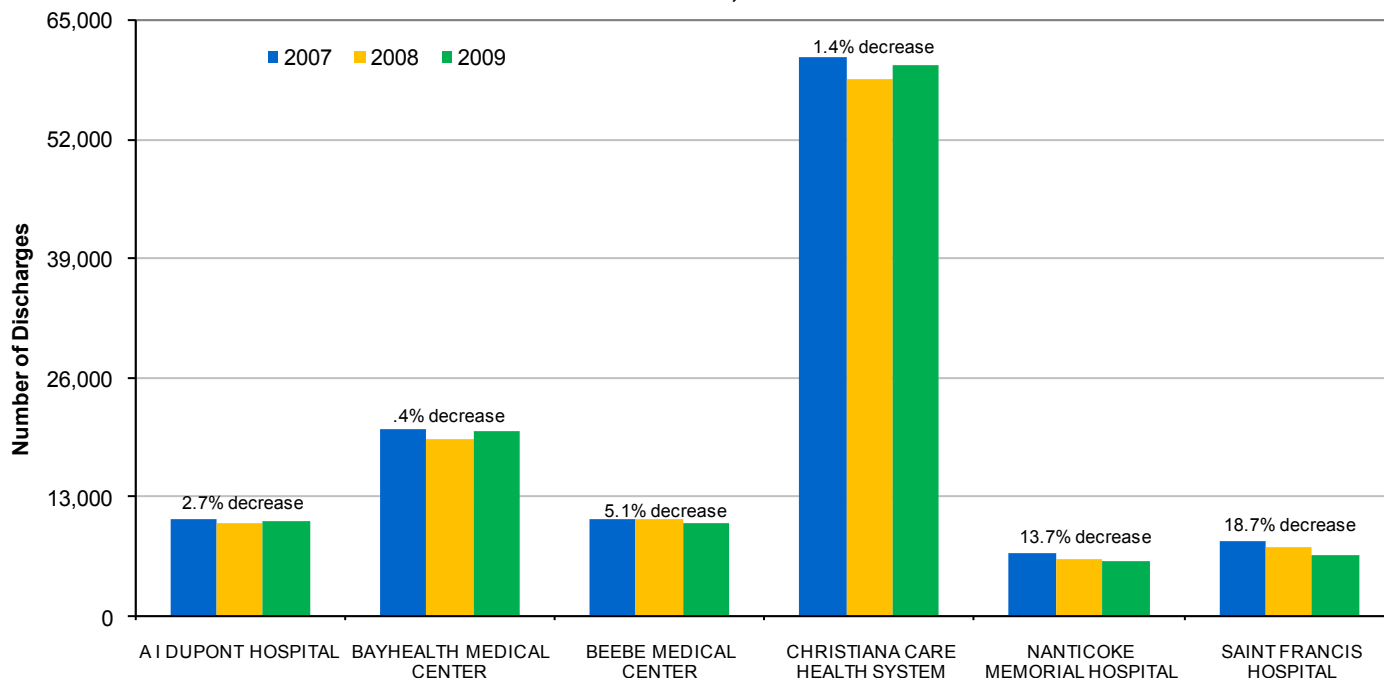
**Distribution of Non-resident Discharges by State of Residence and Hospital  
Delaware Hospitals, 2009**



Source: Delaware Health Statistics Center

Though A.I. duPont, Christiana Care, and Bayhealth experienced small increases in the number of discharges from 2008 to 2009, overall, the number of discharges declined or remained static between 2007 and 2009. St. Francis and Nanticoke experienced the largest percentage decreases.

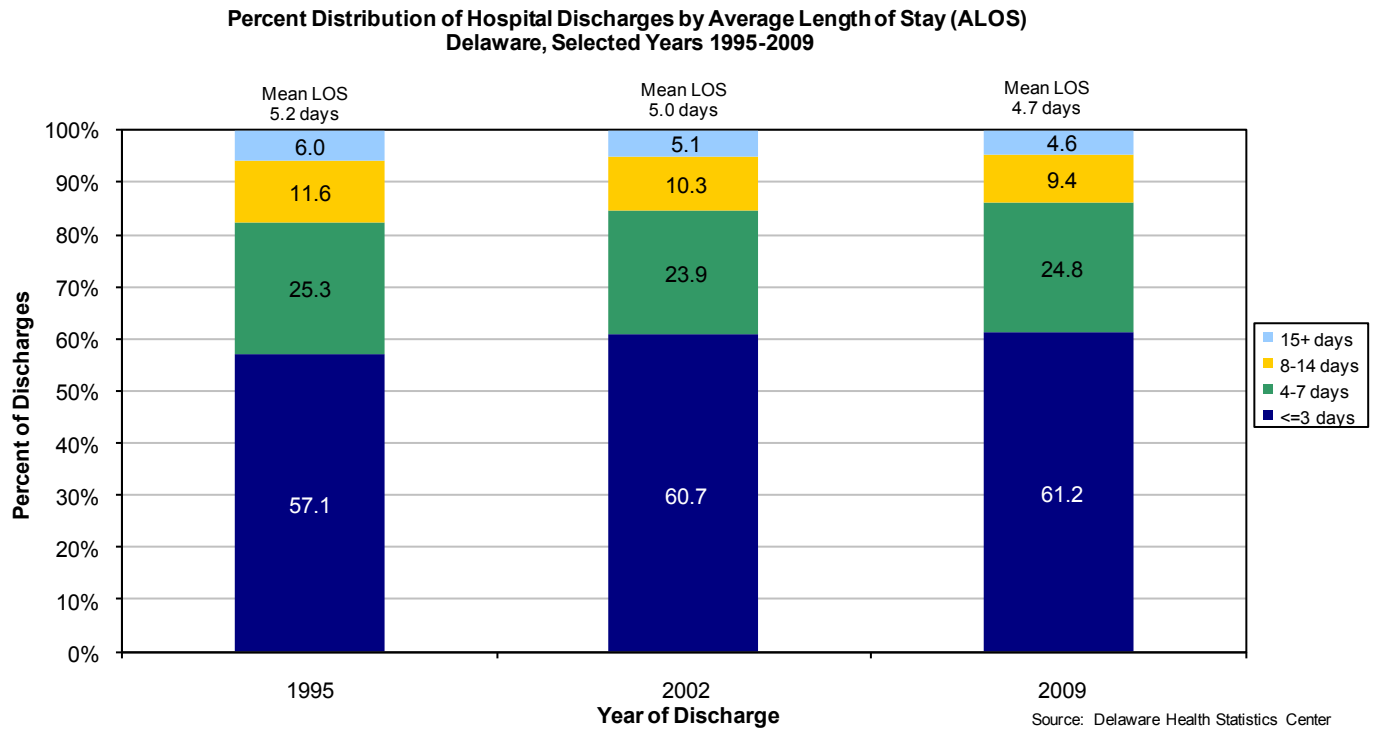
**Number of Discharges by Hospital System and Year of Discharge  
Delaware, 2007-2009**



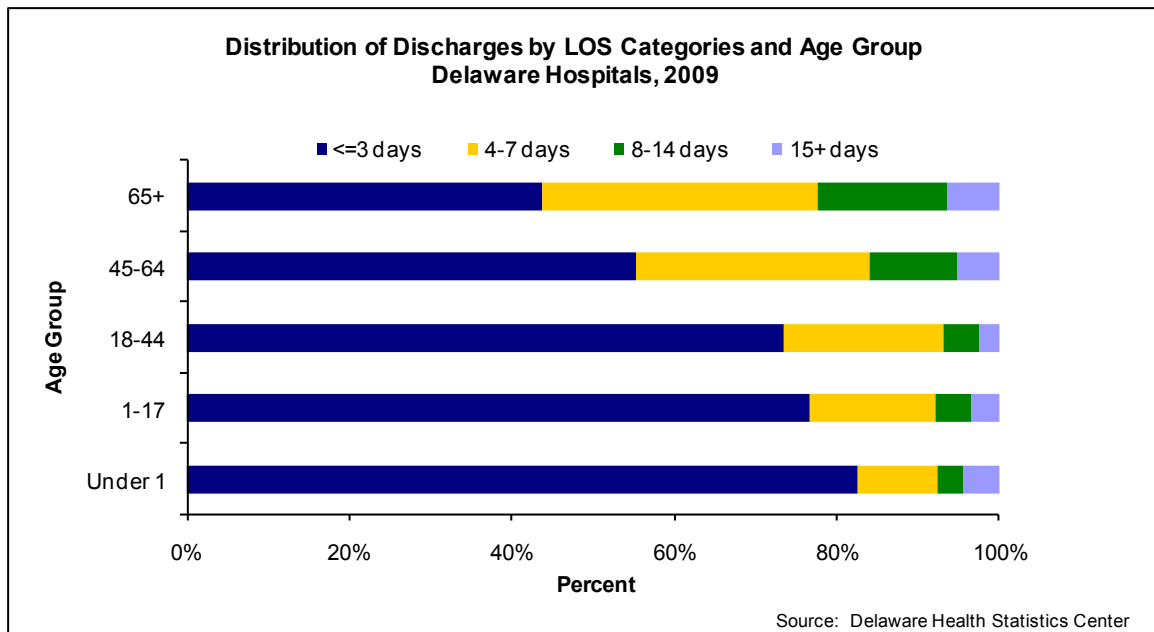
Source: Delaware Health Statistics Center

## PATIENT CHARACTERISTICS

Between 1995 and 2002, distribution in ALOS shifted toward shorter hospital stays; as the ALOS decreased, the percent of patients staying three or fewer days increased. ALOS has decreased slightly since 2002, and in 2009, 61 percent of patients stayed three or fewer days in the hospital.



As patient age increased, the percent who stayed 3 days or less decreased; while 83 percent of patients under 1 had stays of 3 days or less, only 44 percent of patients 65 and older had stays of 3 days or less.

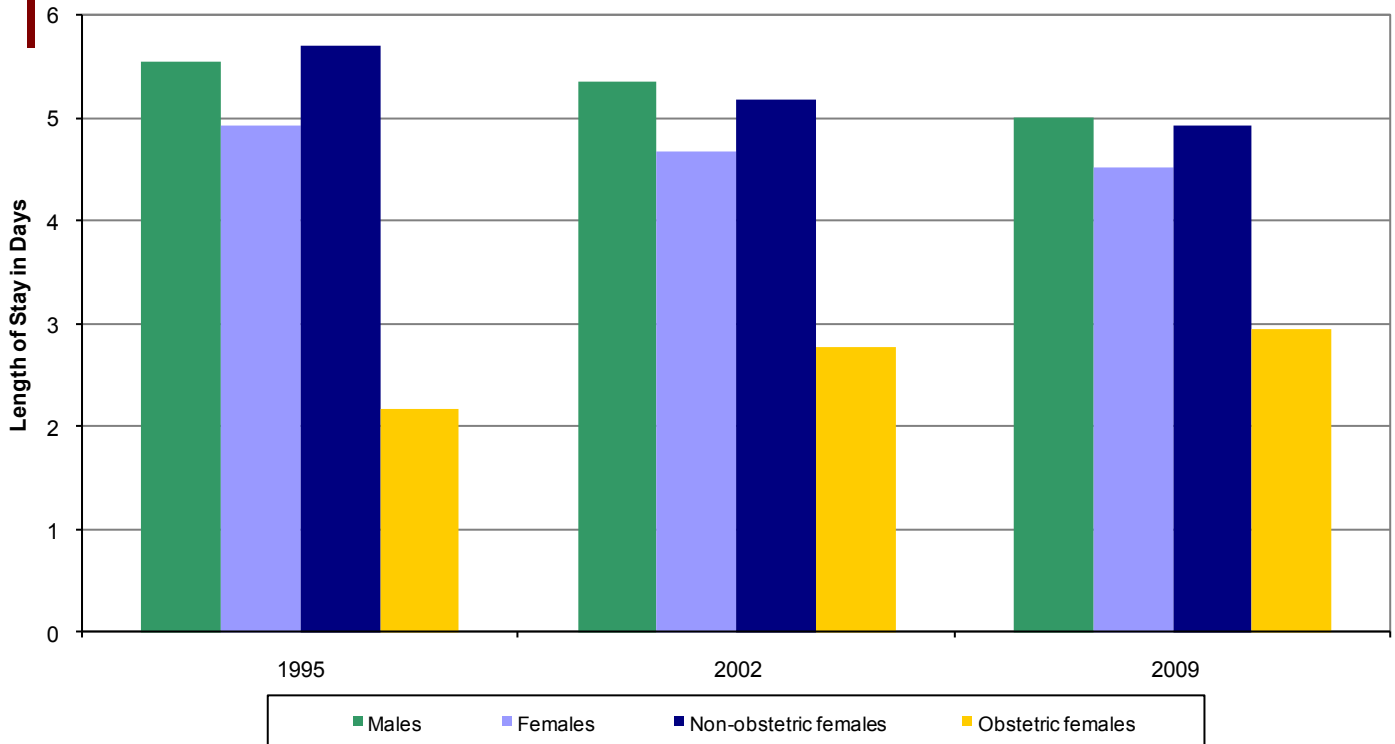




## PATIENT CHARACTERISTICS

Between 1995 and 2009, ALOS for male and female patients declined 10 and 8 percent respectively. When female obstetrical patients were excluded from the calculation of average length of stay, male and female patients had very similar ALOS figures in all time periods. The only increase in ALOS from 1995 to 2009 was seen in female obstetrical patients, whose length of stay increased 35 percent.

**Mean Length of Stay by Patient Type  
Delaware Hospitals, 1995-2009**



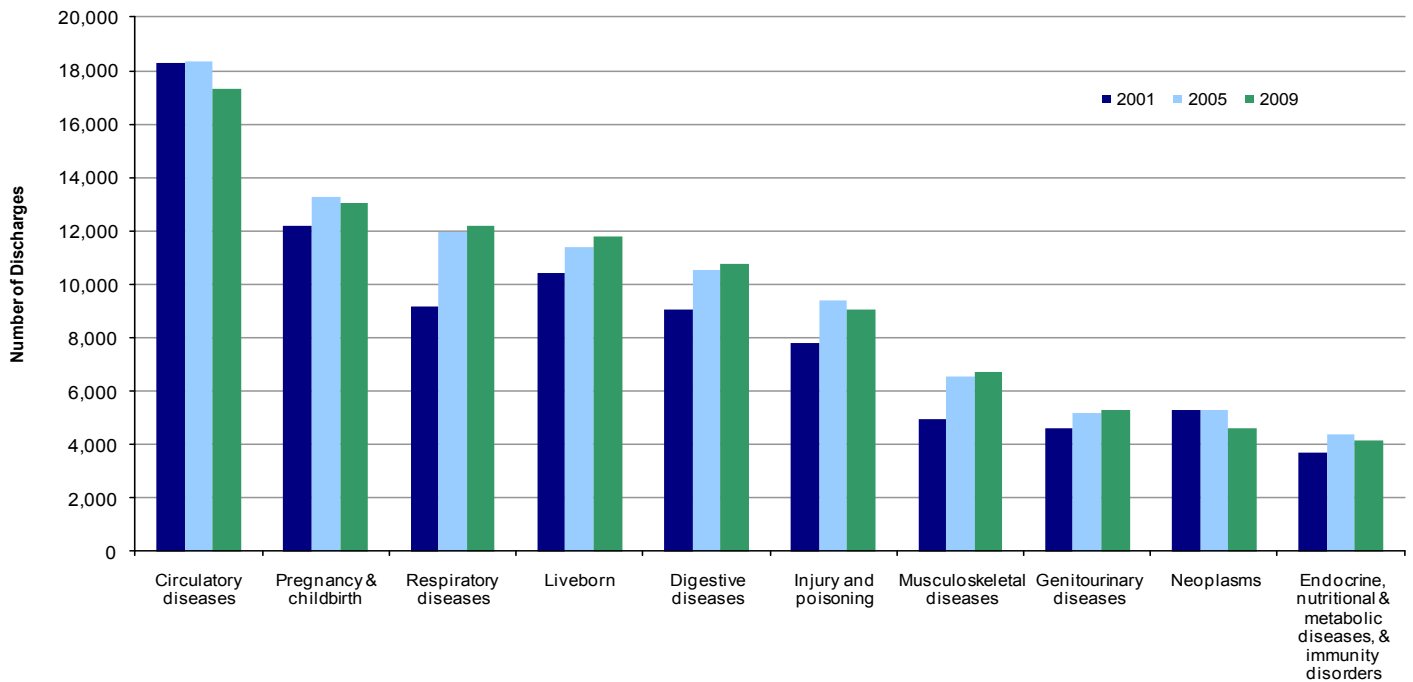
Source: Delaware Health Statistics Center

## WHY PATIENTS WERE HOSPITALIZED

### Most frequent reasons for hospitalization by primary diagnosis and body system<sup>2</sup>:

In 2009, diseases of the circulatory system accounted for 15 percent of the total discharges and represented the most common reasons for hospitalization; some of the most common diagnoses in that category were congestive heart failure, coronary artery disease, irregular heart beat, heart attack, and stroke. Pregnancy and childbirth comprised 12 percent of the total discharges, and 11 percent of all discharges were related to diseases of the respiratory system, which included pneumonia, chronic obstructive pulmonary disease, asthma, and respiratory failure. Together, these three categories accounted for 38 percent of all hospitalizations.

**Number of Discharges by Body System and Discharge Year  
Delaware Hospitals, 2001-2009**



**Diagnoses Grouped by Body System**

Source: Delaware Health Statistics Center

Although hospitalizations due to infections and parasitic diseases did not occur frequently enough for them to appear in the graph above, the largest percent increase (117) in hospitalizations from 2001 to 2009 occurred in that category. The increase was driven primarily by a rise in the number of septicemia hospitalizations, which represented 71.1 percent of all hospitalizations for infections and parasitic diseases in 2009. Diseases of the skin and subcutaneous tissue also demonstrated a large percentage increase (61.8) from 2001 to 2009, and at 53.7 percent, the third largest increase in hospitalizations was due to certain conditions originating in the perinatal period.

<sup>2</sup> See Appendix A for details about the primary diagnoses and body system classifications.

## WHY PATIENTS WERE HOSPITALIZED

### Most frequent reasons for hospitalization by sex (excluding liveborn infants):

Specific diagnoses varied by sex, though much of that was a result of the large number of women hospitalized due to pregnancy and delivery related conditions; 4 out of the top 10 diagnoses for women were related to pregnancy and childbirth. Both men and women experienced high numbers of discharges due to pneumonia, osteoarthritis, and congestive heart failure. The following table shows the most frequent diagnoses for both men and women, by number, percent, and rank of discharges by gender.

**Most Frequent Diagnoses (CCS Defined) for Hospitalizations by Gender, Delaware, 2009**

CCS Principal Diagnosis	MALE			FEMALE		
	#	%	Rank	#	%	Rank
<i>All diagnoses</i>	47677	100		65155	100	
Pregnancy and childbirth	---	---	---	13023	20.0	1
Liveborn	6052	12.7	1	5706	8.8	2
Pneumonia	1645	3.5	2	1859	2.9	3
Osteoarthritis	1285	2.7	5	1754	2.7	4
Congestive heart failure	1332	2.8	4	1311	2.0	5
Coronary atherosclerosis (artery disease)	1576	3.3	3	892	1.4	14
Septicemia	1046	2.2	8	1292	2.0	6
Cardiac dysrhythmias (irregular heart beat)	1085	2.3	7	1017	1.6	10
Skin and subcutaneous tissue infections	1043	2.2	9	948	1.5	11
Chronic obstructive pulmonary disease and bronchiectasis	864	1.8	12	1074	1.6	8
Rehabilitation care; fitting of prostheses; and adjustment of devices	833	1.7	15	1040	1.6	9
Asthma	907	1.9	10	931	1.4	12
Acute myocardial infarction (heart attack)	1089	2.6	6	734	1.1	21
Complication of device; implant or graft	902	1.9	11	878	1.3	17
Acute cerebrovascular disease (stroke)	835	1.8	14	909	1.4	13

Note: Clinical Classifications Software (CCS) is diagnostic classification system developed by the Agency for Healthcare Research and Quality (AHRQ). See Appendix A for more information.  
Source: Delaware Health Statistics Center

### Most frequent reasons for hospitalization by age groups:

- Excluding liveborn infants, patients under 1 were hospitalized most often for bronchitis, other perinatal conditions (including respiratory conditions, infections, and conditions involving temperature regulation), and pneumonia.
- For those ages 1 to 17, asthma, pneumonia, and fluid and electrolyte disorders made up the top three diagnoses.
- For those ages 18 to 44, all of the top 10 diagnoses were associated with pregnancy and childbirth. If pregnancy and childbirth were excluded, skin and subcutaneous tissue infections, diabetes, and mood disorders became the three most common reasons for hospitalization.
- For those ages 45 to 64, osteoarthritis, coronary artery disease, and pneumonia comprised the top three diagnoses.
- For those over 65, congestive heart failure, osteoarthritis, and pneumonia were the top three diagnoses.

Though the most common reasons for hospitalization differed by age, pneumonia appeared in the 10 most frequent diagnoses for all five age groups.

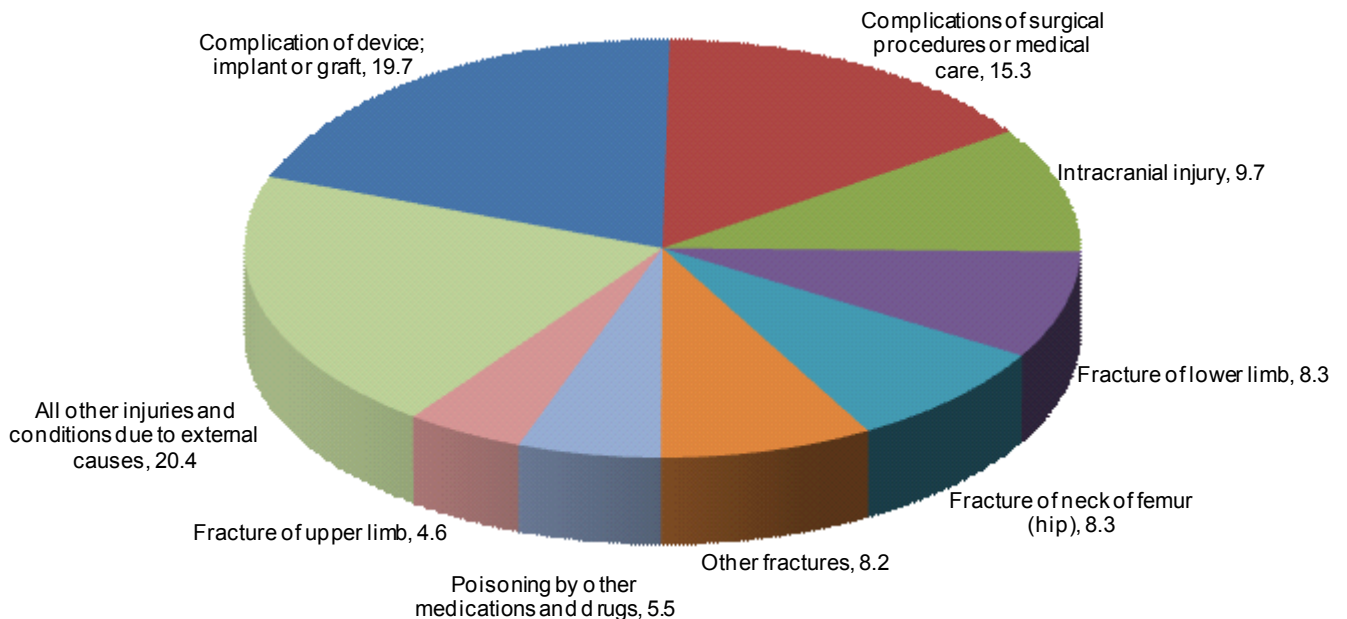
## WHY PATIENTS WERE HOSPITALIZED—INJURIES

### Injury hospitalizations:

Injury hospitalizations accounted for 8 percent of the total number of discharges and \$241 million in aggregate charges in 2009. The majority of patients were admitted through the ED and the average charge for an injury stay ranged from \$12,838 for poisoning by psychotropic agents to \$62,288 for spinal cord injuries, with an overall average charge of \$26,749 (see Appendix A).

The most common primary diagnosis for an injury hospitalization in 2009 was complication of device, implant, or graft, which accounted for 19.7 percent of injury hospitalizations. Complications of surgical procedures or medical care were responsible for another 15.3 percent of injury hospitalizations, followed by intracranial injury, hip fractures, and lower limb fractures.

### Most Frequent Injury Diagnoses, 2009



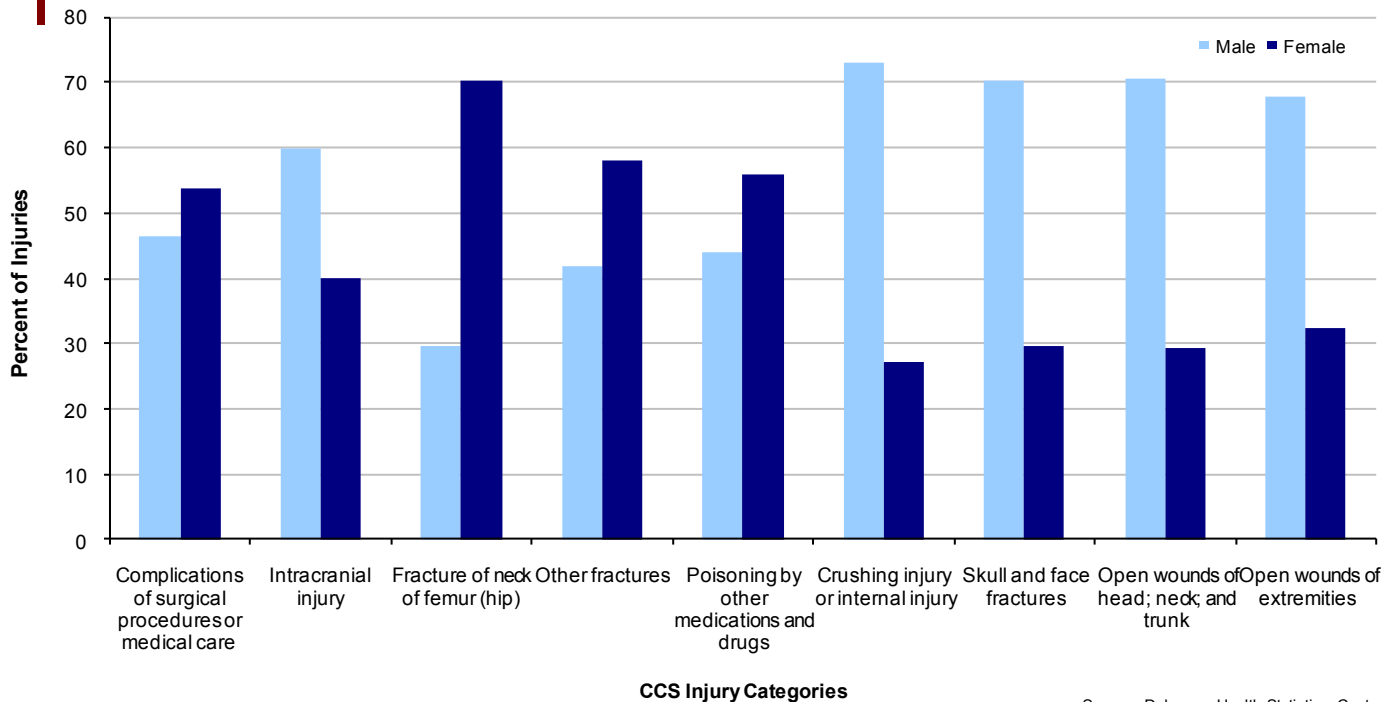
Source: Delaware Health Statistics Center

Falls were the most frequently specified external cause of injury (as defined by the Ecode listed on the discharge record); they accounted for 89 percent of hip fractures, 68 percent of upper limb fractures, 52 percent of intracranial injuries, and 65 percent of spinal cord injuries. Motor vehicle accidents were responsible for 28 percent of intracranial injuries and 24 percent of spinal cord injuries. Unintentional poisonings accounted for 6 percent of all injuries.

## WHY PATIENTS WERE HOSPITALIZED—INJURIES

The number of injury hospitalizations was split almost equally between males and females, though the distribution varied by specific injury type. Women were more likely to have been hospitalized for hip fractures and other unspecified fractures, poisoning by other medications and drugs, and complications of surgical procedures or medical care. Men were more likely to have been hospitalized for crushing or internal injuries, open wounds of head, neck, and trunk, skull and face fractures, open wounds of extremities, and intracranial injuries.

**Selected Primary Injury Diagnoses by Gender  
Delaware Hospitals, 2009**



Source: Delaware Health Statistics Center

## WHY PATIENTS WERE HOSPITALIZED -PROCEDURES

### Most frequent reasons for hospitalization by procedure:

In 2009, 75 percent of discharges had at least one associated procedure. Of the 84,928 hospital stays with an accompanying procedure, 28 percent had only a principal procedure performed; the remaining 72 percent had 2 or more procedures. Each discharge can have up to 6 procedures; it is this total number of procedures, or the all-listed procedures, that will be examined in this report.

The most common types of all-listed procedures were miscellaneous diagnostic and therapeutic, cardiovascular, obstetric, and musculoskeletal. Miscellaneous diagnostic and therapeutic procedures accounted for nearly half of the total procedures and included injections, vaccinations and prophylactic inoculations, CT scans, diagnostic ultrasounds, respiratory intubation and mechanical ventilation, and blood transfusions.

Overall, the most frequently performed all-listed procedures were diagnostic cardiac catheterization; coronary arteriography, other procedures to assist delivery, and computerized axial tomography (CT) scans of the head.

### Most Frequent All-listed Inpatient Procedures, 2009

<b>CCS Procedure</b>	<b># of All-listed Procedures</b>	<b>% of Discharges with a Procedure</b>
Diagnostic cardiac catheterization; coronary arteriography	12,100	14.2
Other procedures to assist delivery	9,737	11.5
Computerized axial tomography (CT) scan head	8,374	9.9
Respiratory intubation and mechanical ventilation	7,753	9.1
Blood transfusion	7,511	8.8
Diagnostic ultrasound of heart (echocardiogram)	7,283	8.6
Prophylactic vaccinations and inoculations	6,761	8.0
Other vascular catheterization; not heart	6,650	7.8
Other diagnostic ultrasound	6,414	7.6
Fetal monitoring	6,310	7.4

Note: All-listed procedures refer to all procedures performed during a hospital stay; excludes other therapeutic procedures.

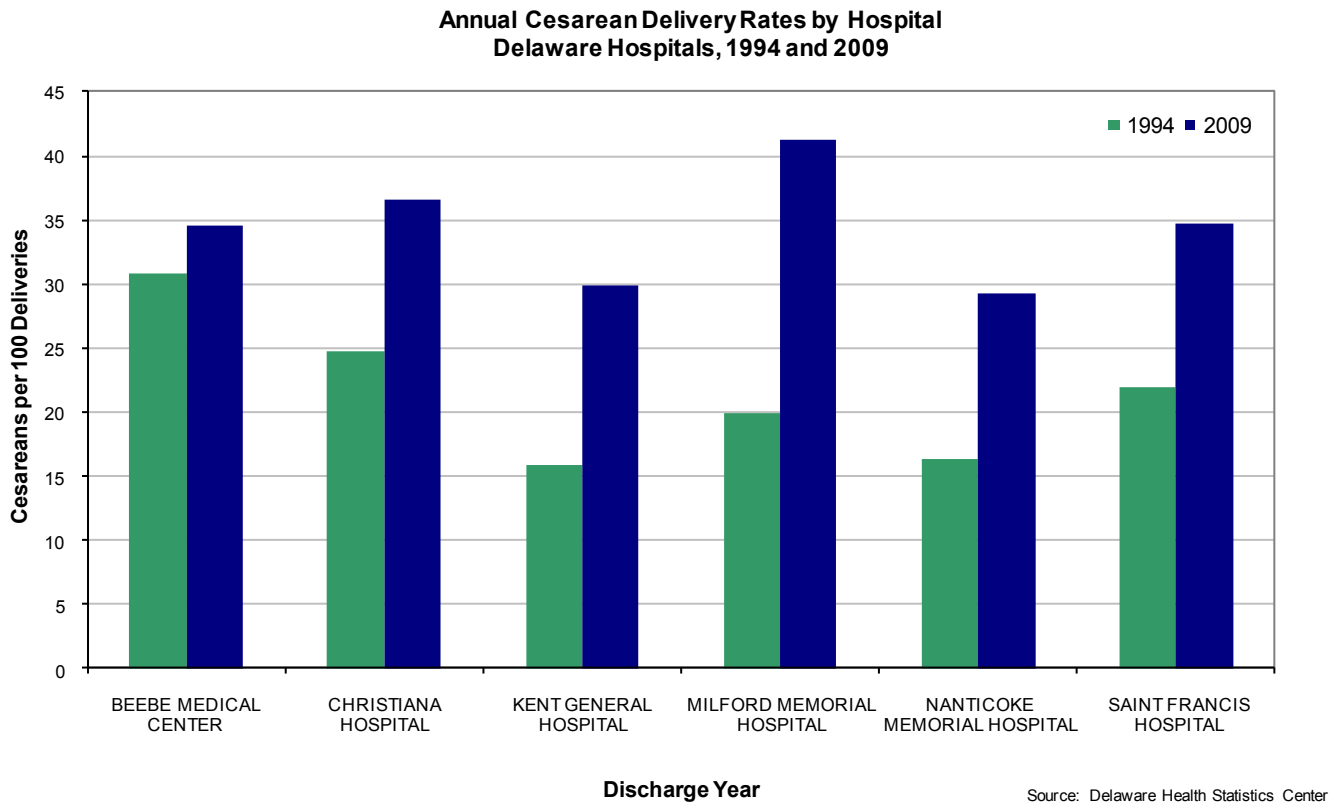
Source: Delaware Health Statistics Center

Males most frequently underwent diagnostic cardiac catheterization, circumcision, and respiratory intubation and mechanical ventilation, while females most frequently underwent other procedures to assist delivery, fetal monitoring, and diagnostic cardiac catheterization. Four of the 10 most commonly performed procedures on females were related to pregnancy and childbirth; together they accounted for 17 percent of the total procedures performed on females.

<sup>3</sup> See the definition of Procedure Classes in the Definitions section of the Technical Notes.

## WHY PATIENTS WERE HOSPITALIZED—PROCEDURES

A major component of obstetrical procedures are related to cesarean delivery of newborn infants. Since 1994, annual cesarean delivery rates increased for every hospital in Delaware; by 2009, 34.8 of every 100 deliveries were cesarean. Milford, Kent, and Nanticoke hospitals showed the greatest increases, rising 108, 89, and 79 percent respectively. In 2009, Milford and Christiana Care had the highest rates, at 41.3 and 36.6 cesareans per 100 deliveries.



### *Gender*

In 2009, obstetrical procedures accounted for one in five all-listed procedures performed on females, and included other procedures to assist delivery, fetal monitoring, cesarean sections, repair of current obstetrical laceration, and artificial rupture of membranes.

Operations on the cardiovascular system accounted for 21 percent of the total procedures performed on males, and included diagnostic cardiac catheterization, other vascular catheterization, not heart, and percutaneous transluminal coronary angioplasty (PTCA).

The following procedures were present in the 10 most commonly performed procedures for both males and females (excluding unspecified miscellaneous diagnostic and therapeutic procedures):

- diagnostic cardiac catheterization,
- CT scans,
- blood transfusion,
- diagnostic ultrasound of heart, and
- respiratory intubation and mechanical ventilation.

## WHY PATIENTS WERE HOSPITALIZED—PROCEDURES

### *Age*

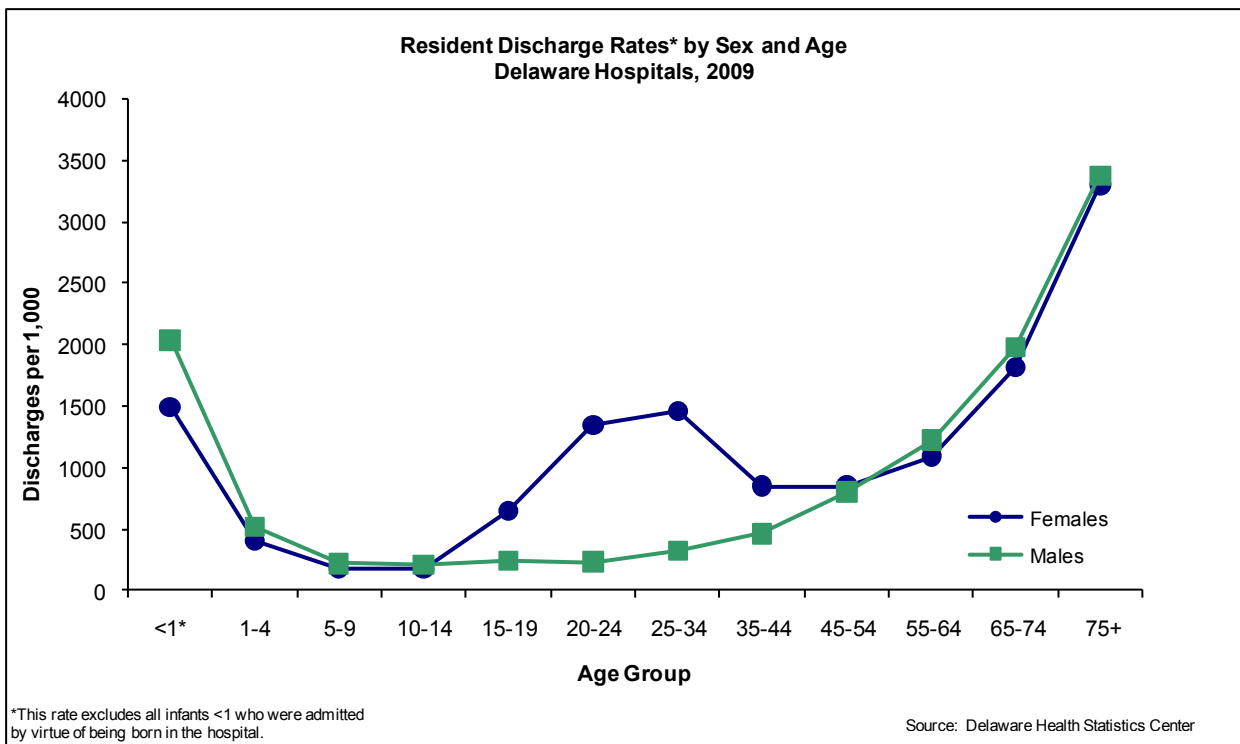
- For patients under 1, prophylactic vaccinations and inoculations, ophthalmologic and otologic diagnosis and treatment, and circumcision were the most common procedures.
- For patients ages 1 to 17, other therapeutic procedures on muscles and tendons, other OR therapeutic procedures on bone, and other vascular catheterization; not heart were the most frequently performed procedures.
- Obstetric procedures, specifically other procedures to assist delivery, fetal monitoring, and cesarean section, were the most common procedures for those ages 18-44.
- Diagnostic cardiac catheterization, CT scans, and other OR procedures on vessels other than head and neck were the most frequently performed procedures for those 45-64.
- The most commonly performed principal procedures on patients 65 and older were diagnostic cardiac catheterization, CT scans, and echocardiograms.



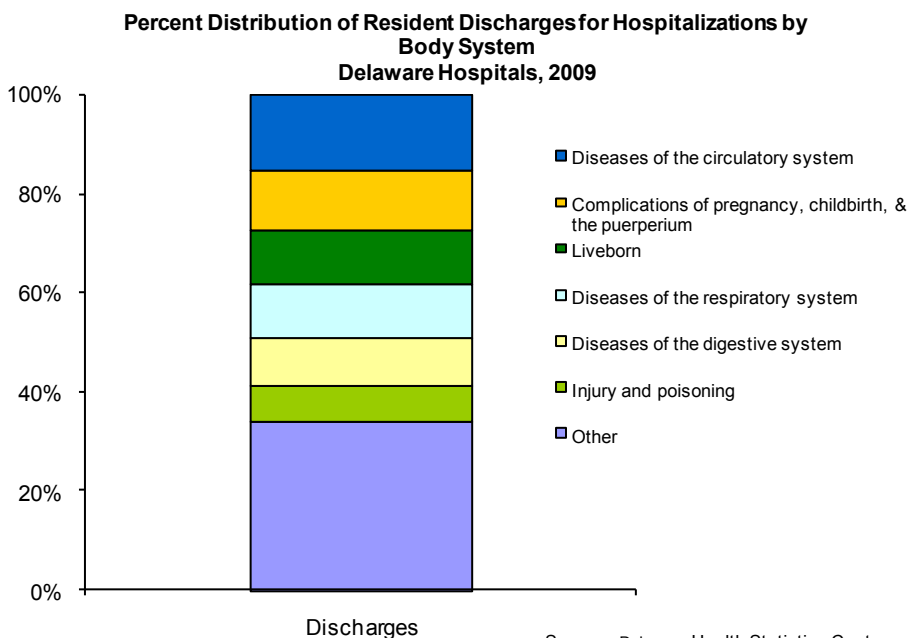
## HOSPITALIZATIONS OF DELAWARE RESIDENTS

Hospital stays for Delaware residents were based on inpatient discharges from Delaware hospitals only; as such, information about residents who went out of state for hospital care are not represented in the following statistics.

Discharge rates of Delaware residents under the age of 1 were higher than the rates of all other age groups except those 65 and older. Discharge rates decreased with each increase in age group between those patients under 1 and those ages 10-14; the trend reversed at the 15-19 age group and other than a slight dip in the rates for those 35-54, rates rose steadily with each older age group. Male and female discharge rates were similar for age groups under 15 and over 44; females in 15-44 age groups had discharge rates 1.8 to 5.8 times that of males.

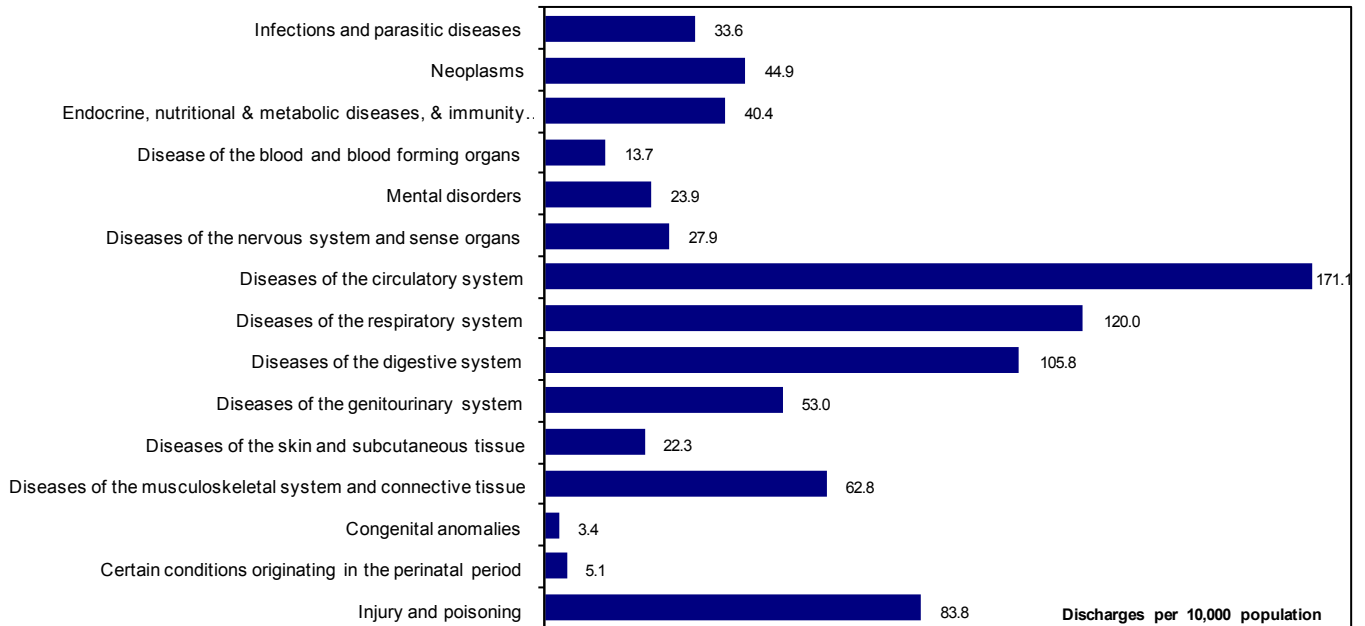


In 2009, Delawareans were discharged most frequently for diseases of the circulatory system, which accounted for 15.4 percent of all resident hospital stays. The most common diagnoses for diseases of the circulatory system included heart failure, coronary artery disease, and irregular heart beat. Pregnancy and childbirth, and newborn infants were the second and third most common reasons for resident hospital stays, followed by diseases of the respiratory system, which included pneumonia, COPD (chronic obstructive pulmonary disease), and asthma, and diseases of the digestive systems, which included biliary tract disease, gastrointestinal hemorrhage, and intestinal obstruction.



# HOSPITALIZATIONS OF DELAWARE RESIDENTS

**Hospitalization Rates by Body System  
Delaware Residents, 2009**

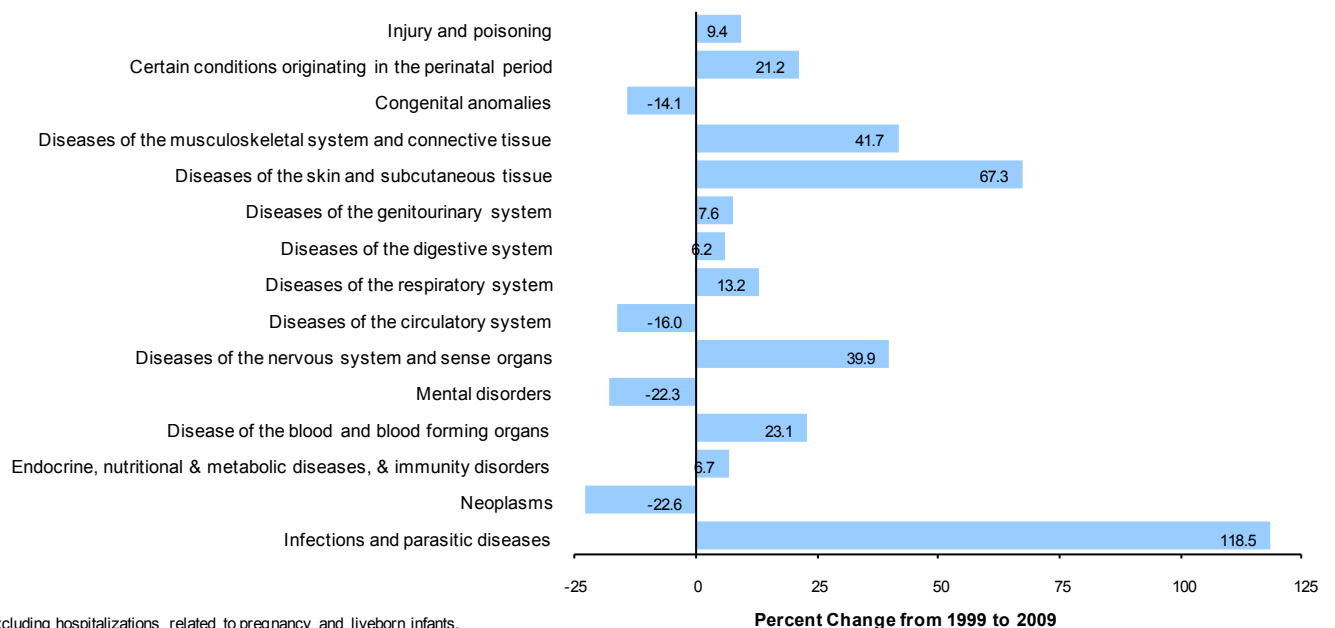


\*Excluding hospitalizations related to pregnancy and liveborn infants.

Source: Delaware Health Statistics Center

High hospital discharge rates in 2009 were not necessarily indicative of large rate increases over the previous 10 years. In some categories, like diseases of the circulatory system, high 2009 rates were maintained in spite of declines over the prior 10 year period. In others, such as diseases of the skin, and infectious and parasitic diseases, 2009 rates were comparatively low, though both had exhibited significant rate increases over the prior ten year period.

**Percent Change in Hospitalization Rates by Body System\*  
Delaware Residents, 1999 versus 2009**



\*Excluding hospitalizations related to pregnancy and liveborn infants.  
Source: Delaware Health Statistics Center

## HOSPITALIZATIONS OF DELAWARE RESIDENTS

When the specific diagnoses that comprise each body system were examined, the following twenty principal diagnoses had the highest discharge rates of Delaware residents in 2009.

### Top 20 CCS Diagnoses with the Highest Hospital Discharge Rates\* for Delaware Residents

CCS Diagnosis	1999		2004		2009		% Difference from 1999 to 2009
	Number	Rate	Number	Rate	Number	Rate	
Pneumonia	2871	37.0	2949	35.5	3091	34.9	-5.7
Osteoarthritis	954	12.3	1978	23.8	2686	30.3	146.5
Congestive heart failure	2566	33.1	2933	35.3	2433	27.5	-17.0
Septicemia	568	7.3	1210	14.6	2179	24.6	235.9
Coronary atherosclerosis and other heart disease	2524	32.6	2741	33.0	2062	23.3	-28.5
Cardiac dysrhythmias	1537	19.8	1578	19.0	1876	21.2	6.9
Chronic obstructive pulmonary disease and bronchiectasis	1397	18.0	1536	18.5	1838	20.8	15.2
Skin and subcutaneous tissue infections	827	10.7	1368	16.5	1709	19.3	80.9
Rehabilitation care; fitting of prostheses; and adjustment of devices	2099	27.1	2272	27.4	1696	19.2	-29.3
Asthma	1311	16.9	1310	15.8	1562	17.6	4.3
Acute cerebrovascular disease	1425	18.4	1365	16.4	1551	17.5	-4.7
Urinary tract infections	1058	13.7	1349	16.3	1551	17.5	28.4
Acute myocardial infarction	1748	22.6	1636	19.7	1491	16.8	-25.3
Complication of device; implant or graft	1031	13.3	1323	15.9	1485	16.8	26.1
Spondylosis; intervertebral disc disorders; other back problems	1395	18.0	1580	19.0	1453	16.4	-8.8
Respiratory failure; insufficiency; arrest (adult)	595	7.7	987	11.9	1441	16.3	112.0
Diabetes mellitus with complications	1076	13.9	1387	16.7	1410	15.9	14.7
Fluid and electrolyte disorders	1452	18.7	1345	16.2	1311	14.8	-20.9
Acute and unspecified renal failure	268	3.5	798	9.6	1236	14.0	303.8
Complications of surgical procedures or medical care	818	10.6	1315	15.8	1166	13.2	24.8

\*Hospitalization rate per 10,000, ranked by 2009 figures. Excluding pregnancy-related discharges and liveborn infants.  
Source: Delaware Health Statistics Center

Diseases of the circulatory system accounted for 5 of the 20 conditions with the highest hospitalization rates; these included:

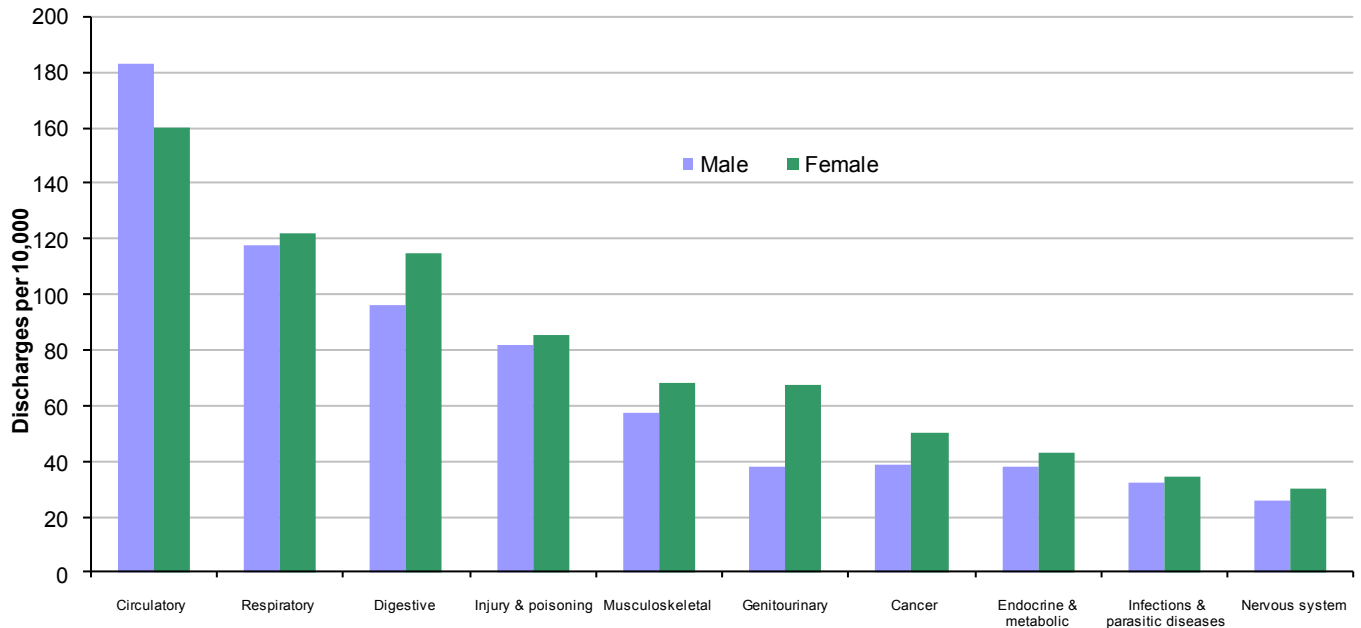
- congestive heart failure,
- coronary atherosclerosis and other heart disease (coronary artery disease),
- cardiac dysrhythmias (irregular heartbeat),
- acute cerebrovascular disease (stroke), and
- acute myocardial infarction (heart attack).

Three of the circulatory conditions listed above showed significant decreases in their rates since 1999, heart failure, coronary artery disease, and heart attack.

Hospitalization rates for renal failure, septicemia, and osteoarthritis demonstrated the greatest increases between 1999 and 2009.

# HOSPITALIZATIONS OF DELAWARE RESIDENTS

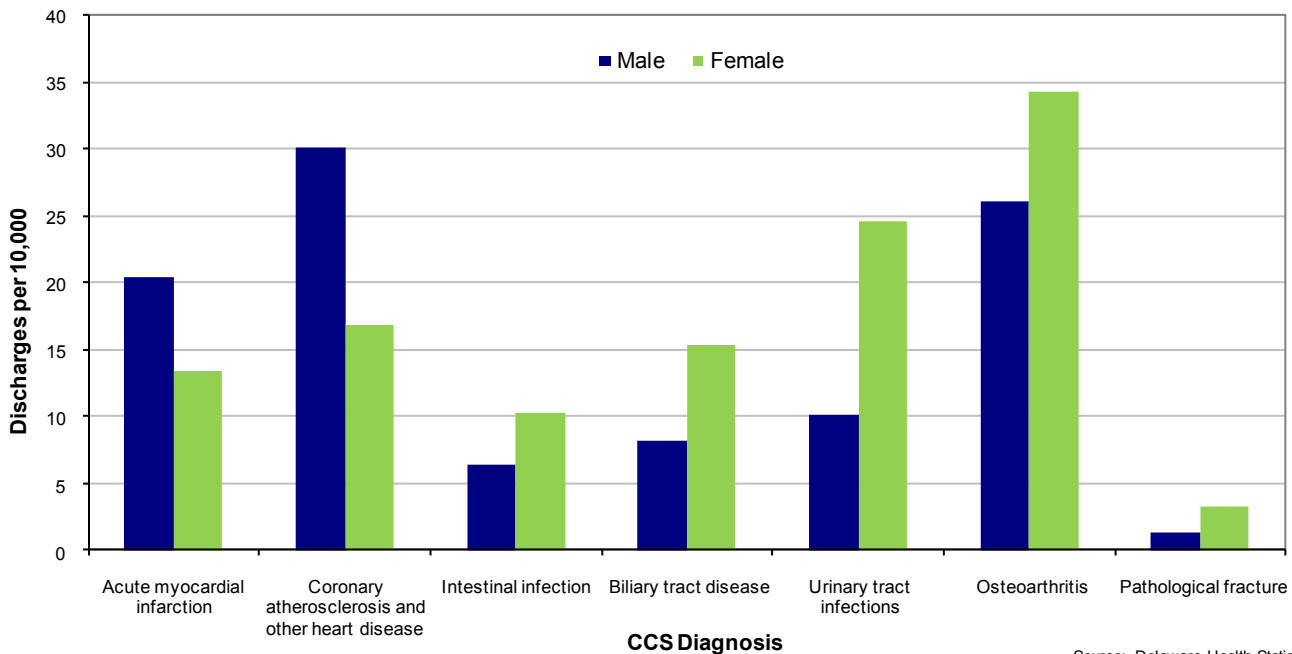
**DE Resident Discharge Rates by Body System and Gender  
Delaware Hospitals, 2009**



Source: Delaware Health Statistics Center

Women's higher discharge rate for diseases of the digestive system was due in large part to their higher discharge rates of biliary tract disease and intestinal infection. Likewise, osteoarthritis and pathological fractures contributed to the female to male disparity in hospitalization rates for diseases of the musculoskeletal system. The largest difference between men and women occurred in the diseases of genitourinary system and was driven primarily by women's higher rate of stays for urinary tract infections. Males had higher discharge rates for heart attack and coronary artery disease, which resulted in their higher overall hospitalization rates for circulatory diseases.

**Annual Discharge Rates of Delaware Residents by Gender and Selected Primary Diagnoses  
Delaware Hospitals, 2009**

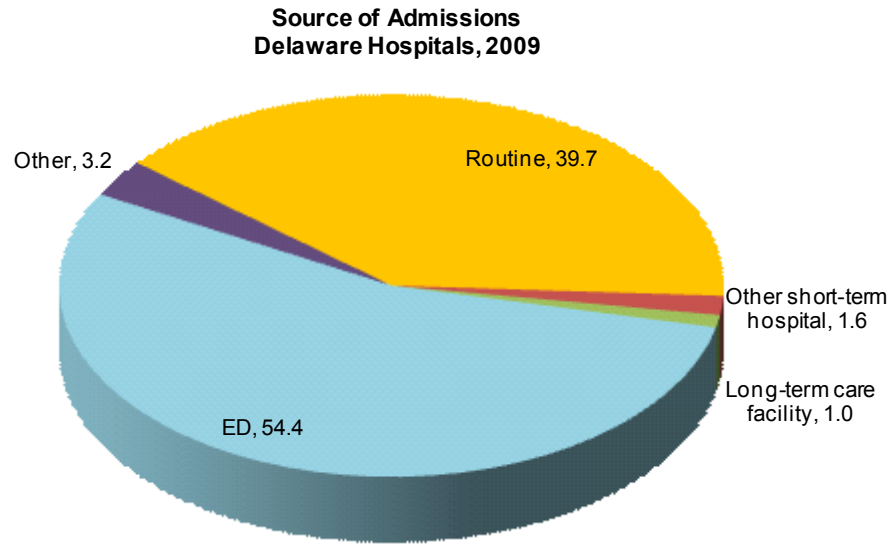


Source: Delaware Health Statistics Center

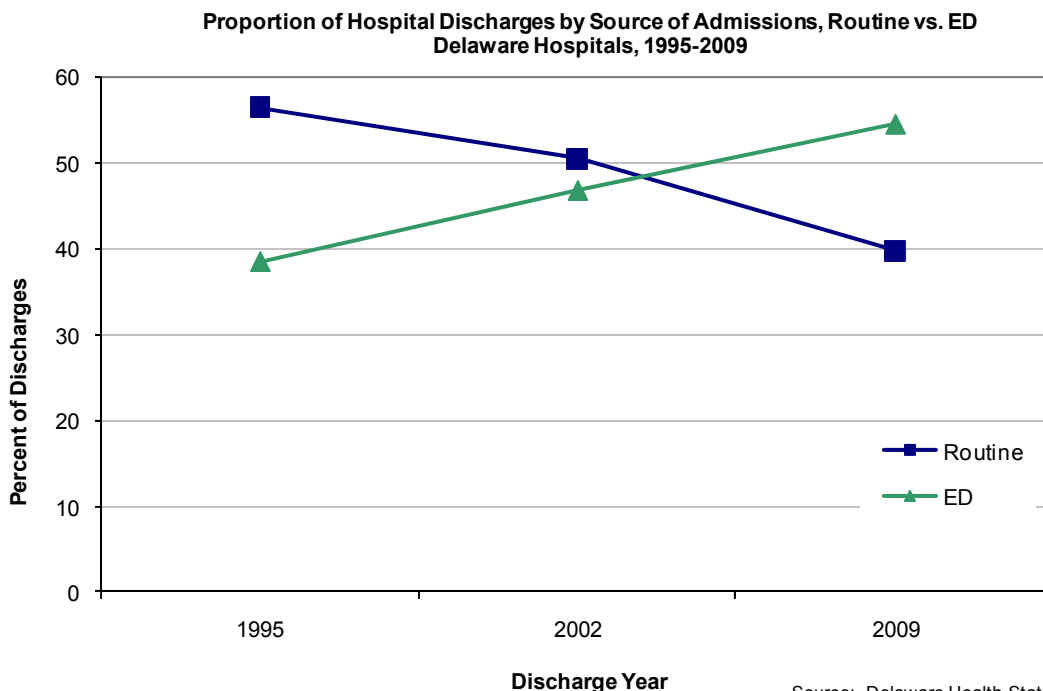
## HOW PATIENTS WERE ADMITTED

### Source of admissions:

Routine admissions and admissions from the ED accounted for 94 percent of all hospital discharges in 2009. The remaining hospital admissions came from other short-term hospitals, long-term care facilities, and other sources.



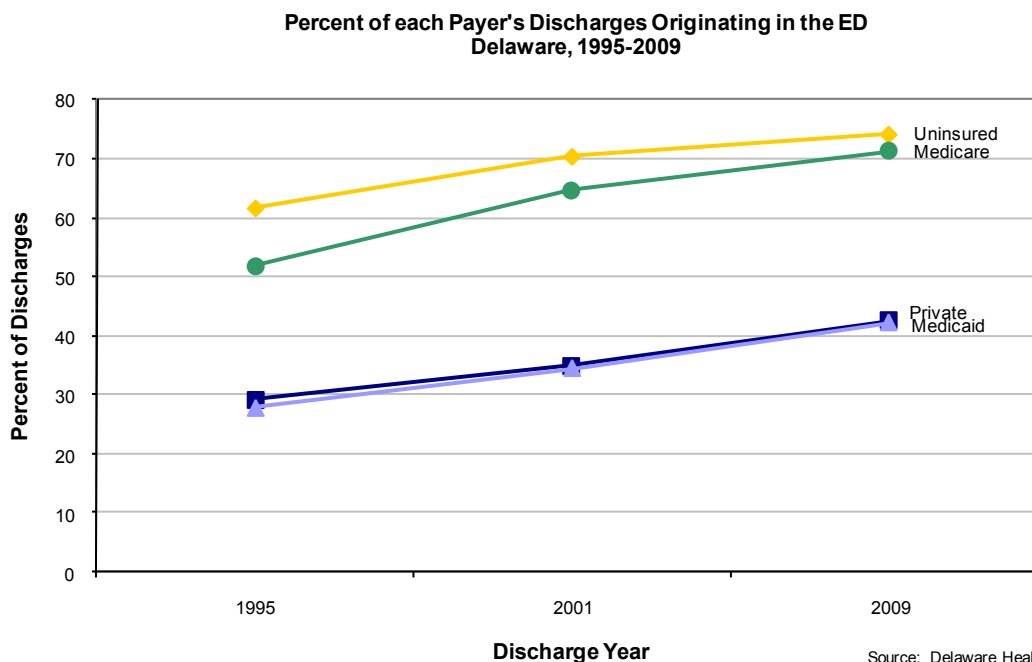
Between 1995 and 2009, the distribution of admission source shifted from the majority of patients being routinely admitted to the majority coming from the ED. In 1995, routine and ED admissions accounted for 57 and 39 percent of all admissions. By 2009, the proportion of routine admissions had decreased 30 percent and the proportion of ED admissions had risen by 41 percent.



Source: Delaware Health Statistics Center

## HOW PATIENTS WERE ADMITTED

Though all primary payers experienced an increase in the percent of discharges coming from the ED, uninsured patients had the largest proportion of their stays originating in the ED. In 2009, 74 percent of uninsured admissions, 71 percent of Medicare admissions, 43 percent of private admissions, and 42 percent of Medicaid admissions were admitted through the ED.



The most common diagnoses of patients admitted through the emergency department were pneumonia, heart failure, and septicemia.

<b>2009 ED Admissions - Most Common Diagnoses</b>	<b>Frequency</b>	<b>Percent<sup>1</sup></b>
Pneumonia	3035	4.9
Congestive heart failure; nonhypertensive	2309	3.8
Septicemia	2134	3.5
Chronic obstructive pulmonary disease and bronchiectasis (COPD)	1767	2.9
Acute cerebrovascular disease (Stroke)	1627	2.6
Skin and subcutaneous tissue infections	1606	2.6
Urinary tract infections	1604	2.6
Cardiac dysrhythmias (Irregular heart beat)	1600	2.6
Asthma	1599	2.6
Acute myocardial infarction (Heart attack)	1527	2.5

1. Refers to the percent of discharges that originated in the ED.

- The 10 most common diagnoses originating in the emergency department changed little from 2008 to 2009; the most notable difference was that asthma moved into the top 10 and respiratory failure was no longer listed.
- Four of the 10 most common ED diagnoses were related to circulatory conditions: heart failure, stroke, heart attack, and irregular heart beat.
- Another four of the most common ED diagnoses were primarily due to infections: pneumonia, skin infections, septicemia, and urinary tract infections.

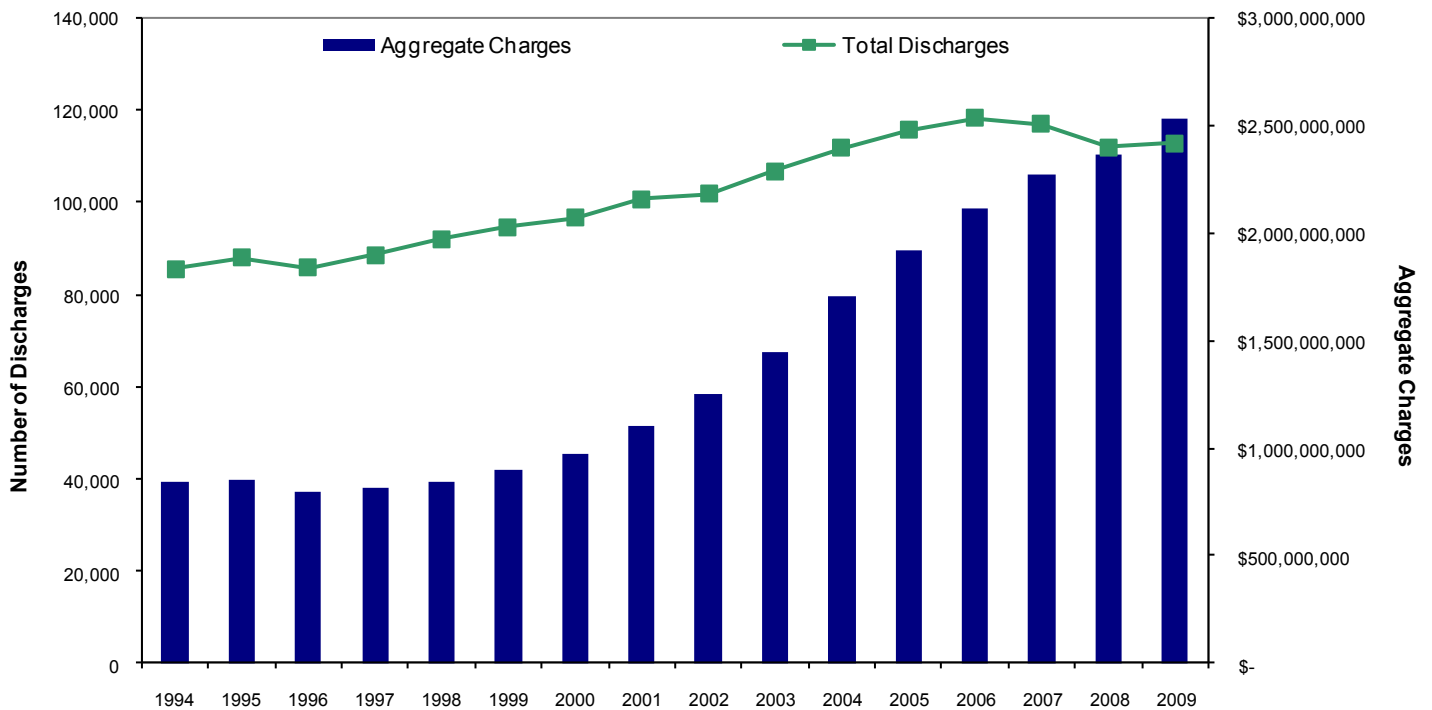
## HOSPITAL CHARGES AND BILLING

### Inpatient charges:

The total charges for a hospitalization represent the total amount billed for that particular stay. These charges include accommodations, ancillary services (e.g. pharmacy, lab, radiology and anesthesiology), and services of resident physicians. In this report, hospital charges for care are reported, not the actual costs of providing the care or what the hospitals were reimbursed.

In 2009, total aggregate charges for all hospitalizations in Delaware equaled \$2.53 billion, more than double the aggregate charges in 2001. During the same time period, the number of discharges rose from 100,681 to 112,832, a 12.1 percent increase.

**Number of Discharges and Total Aggregate Charges by Year  
Delaware Hospitals, 1994-2009**



Source: Delaware Health Statistics Center

The average charge for a hospital stay rose again in 2009, to \$22,410; the median charge per stay was \$12,661.

The diagnostic groups with the highest average charges per hospital stay were congenital anomalies, perinatal conditions, and infections and parasitic diseases, with average charges ranging from \$36,619 to \$108,056. These three diagnostic groups also had the longest average stays, ranging from 8.3 to 11.4 days.

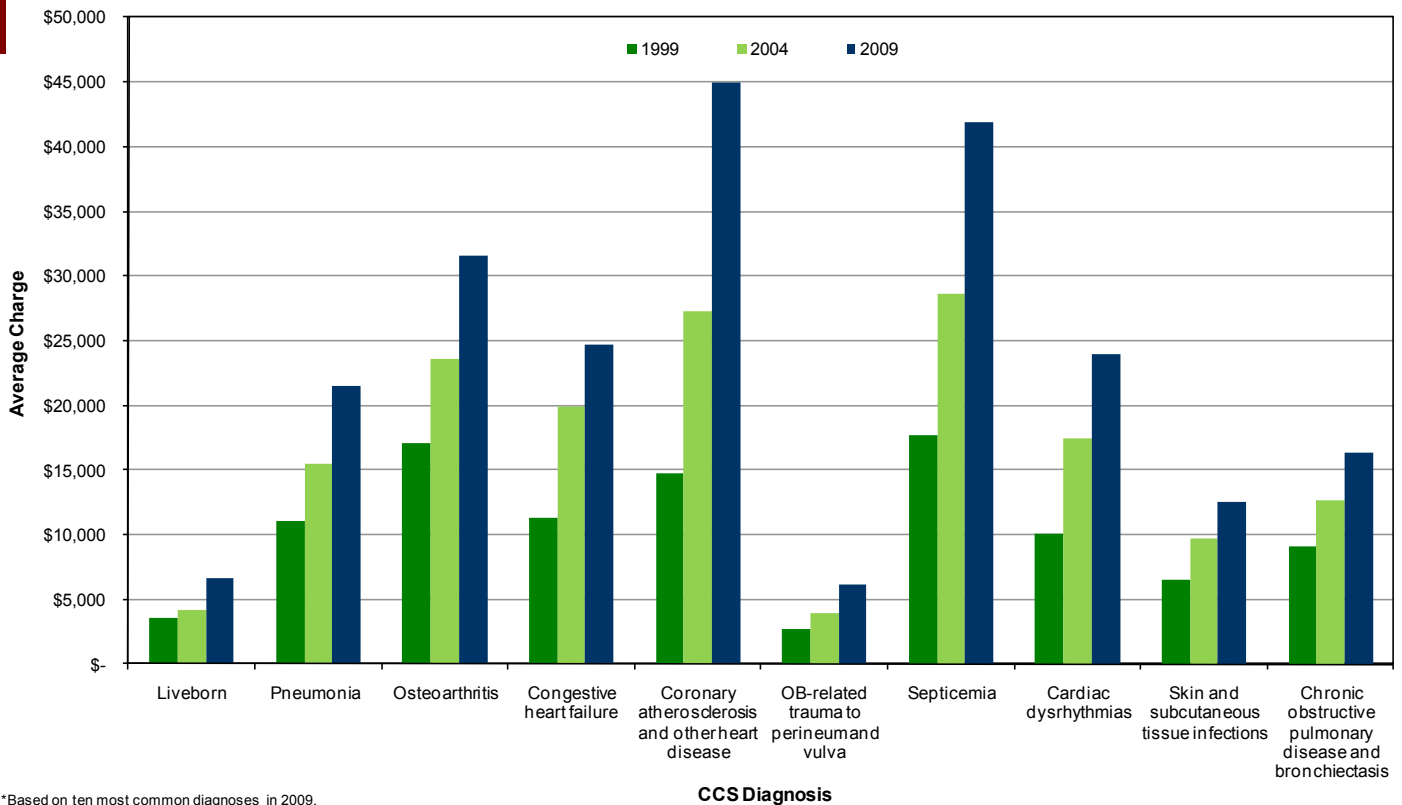
Looking at specific diagnoses within groups showed that the most expensive diagnoses were cardiac and circulatory birth defects, leukemias, other CNS infections, and other birth defects. However, the 10 most expensive diagnoses occurred relatively rarely and accounted for just under two percent of all discharges in 2009. In comparison, the 10 diagnoses that occurred most frequently accounted for 30 percent of the total discharges in 2009 (see Appendix E for more information).

## HOSPITAL CHARGES AND BILLING

From 1999 to 2009, the average charges rose for each of the 10 highest volume diagnoses. The highest volume diagnoses whose average charges increased the most were:

- coronary atherosclerosis and other heart disease (205%),
- cardiac dysrhythmias (138%).
- septicemia (137%).

**Average Hospital Charges for Highest\* Volume CCS Diagnoses  
Delaware Hospitals, 1999-2009**



\*Based on ten most common diagnoses in 2009.  
Source: Delaware Health Statistics Center

Though the average charges of the high volume diagnoses increased over time, the proportion of total aggregate charges represented by them experienced very little growth.

- In 1999, the aggregate charges for 2009's highest volume diagnoses totaled \$215.6 million and accounted for 24 percent of the total aggregate charges for all diagnoses.
- By 2009, the aggregate charges for those same diagnoses had more than tripled, to \$645.7 million, which accounted for 25.5 percent of the total aggregate charges.

In 2009, the 10 conditions with the highest total billed charges accounted for 32 percent of the total aggregate charges. Coronary atherosclerosis incurred the largest aggregate charges of any diagnosis, resulting in a total hospital bill of \$111.1 million. Although hospital stays for newborns had relatively low average charges, their high frequency resulted in liveborn infants having the 5th highest aggregate charges (see Appendix E for more information).



## HOSPITAL CHARGES AND BILLING

### Insurance status:

The following payer sources are listed in this report:

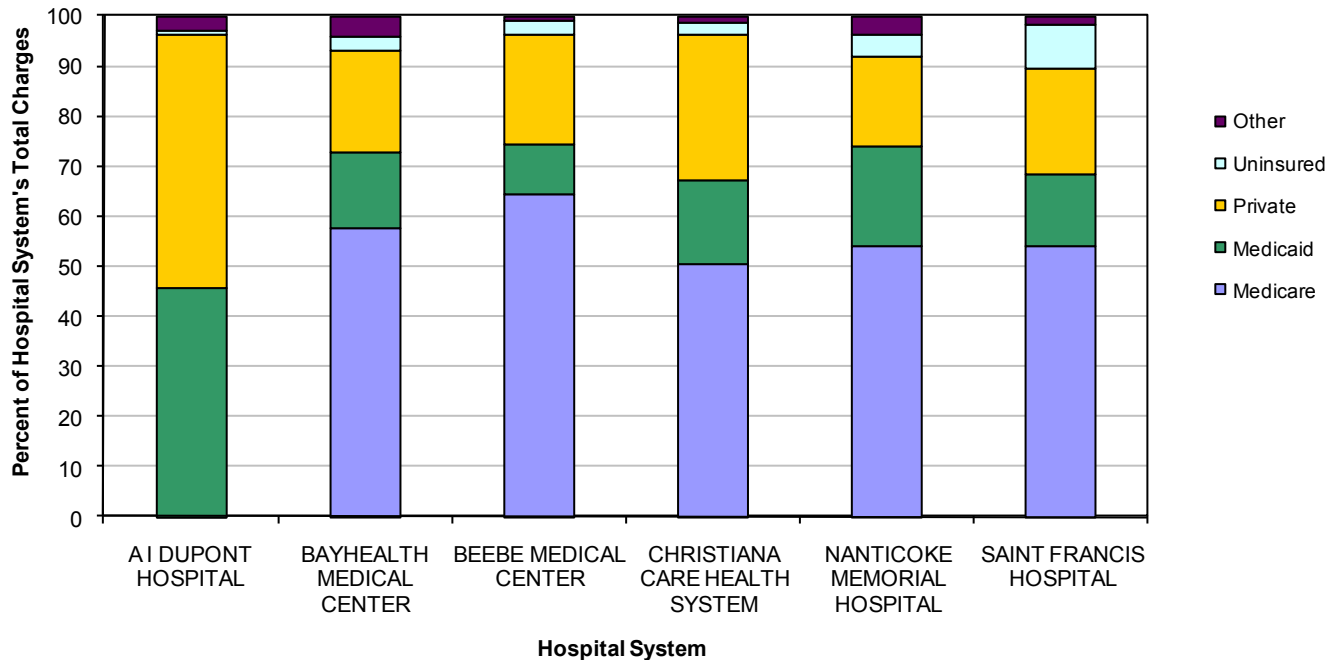
- Medicare
- Medicaid
- Private insurance carriers, such as:
  - Blue Cross Blue Shield
  - HMOs
  - Commercial Insurance
- Uninsured
  - Patients who have no insurance and self pay
- Other types of insurance, such as:
  - Workman's compensation
  - CHAMPUS (Civilian Health and Medical Program of the Uniformed Services)
  - Other government sponsored programs

In 2009, 62 percent of hospitalizations were billed to Medicare (38) and Medicaid (24), 33 percent were billed to private insurance, and the remaining 5 percent were billed to other types of coverage or to the patient.

Patients whose care was primarily billed to Medicare had both the highest average charges and the greatest aggregate charges.

In 2009, Beebe had the highest percent of charges billed to Medicare. A.I. DuPont had the highest percentage billed to both privately insured and Medicaid covered patients, and St. Francis had the highest percent of charges with no coverage. Though 11.5 percent of St. Francis' discharges were uninsured, they accounted for 8.5 percent of its total hospital bill.

**Distribution of Total Charges by Primary Payer Type and Hospital System  
Delaware, 2009**



Source: Delaware Health Statistics Center

## HOSPITAL CHARGES AND BILLING

### Medicare:

From 1995 to 2009, the percent of hospital stays whose primary payer was Medicare increased from 34 to 38 percent. Over the same time period, the proportion of aggregate charges billed to Medicare remained at 46 percent.

Four of the 10 most frequent diagnoses for Medicare patients were related to diseases of the circulatory system; together they accounted for 14.6 percent of Medicare hospitalizations. The three most frequent diagnoses for Medicare patients in 2009 were<sup>7</sup>:

- congestive heart failure; nonhypertensive,
- osteoarthritis, and
- pneumonia (except that caused by TB or STD).

### Medicaid:

From 1995 to 2009, Medicaid covered hospitalizations increased from 16.4 to 24 percent. Over the same time period, the proportion of aggregate charges billed to Medicaid rose from 13.8 to 19.9 percent.

Six of the 10 most frequent diagnoses for Medicaid patients were related to pregnancy and childbirth, and accounted for 35.6 percent of Medicaid stays. The three most frequent diagnoses for Medicaid patients in 2009 were<sup>7</sup>:

- liveborn infants,
- OB-related trauma to perineum and vulva, and
- other complications of pregnancy.

### Private Insurers:

From 1995 to 2009, privately insured stays decreased from 42.3 to 32.7 percent. Over the same time period, the proportion of aggregate charges billed to private insurance decreased from 34.1 to 29.4 percent.

Four of the 10 most frequent diagnoses for patients whose primary payer was private insurance were related to pregnancy and childbirth, and accounted for 22.3 percent of all stays covered by private insurers. The three most frequent diagnoses for privately insured patients in 2009 were<sup>7</sup>:

- liveborn infants,
- OB-related trauma to perineum and vulva, and
- osteoarthritis.

### Uninsured:

From 1995 to 2009, uninsured hospitalizations decreased from 5.7 to 3.1 percent. Over the same time period, the proportion of aggregate charges billed to uninsured patients decreased from 4.2 to 2.6 percent.

The three most frequent diagnoses for uninsured patients in 2009 were<sup>7</sup>:

- liveborn infants,
- skin and subcutaneous tissue infections, and
- diabetes mellitus with complications.

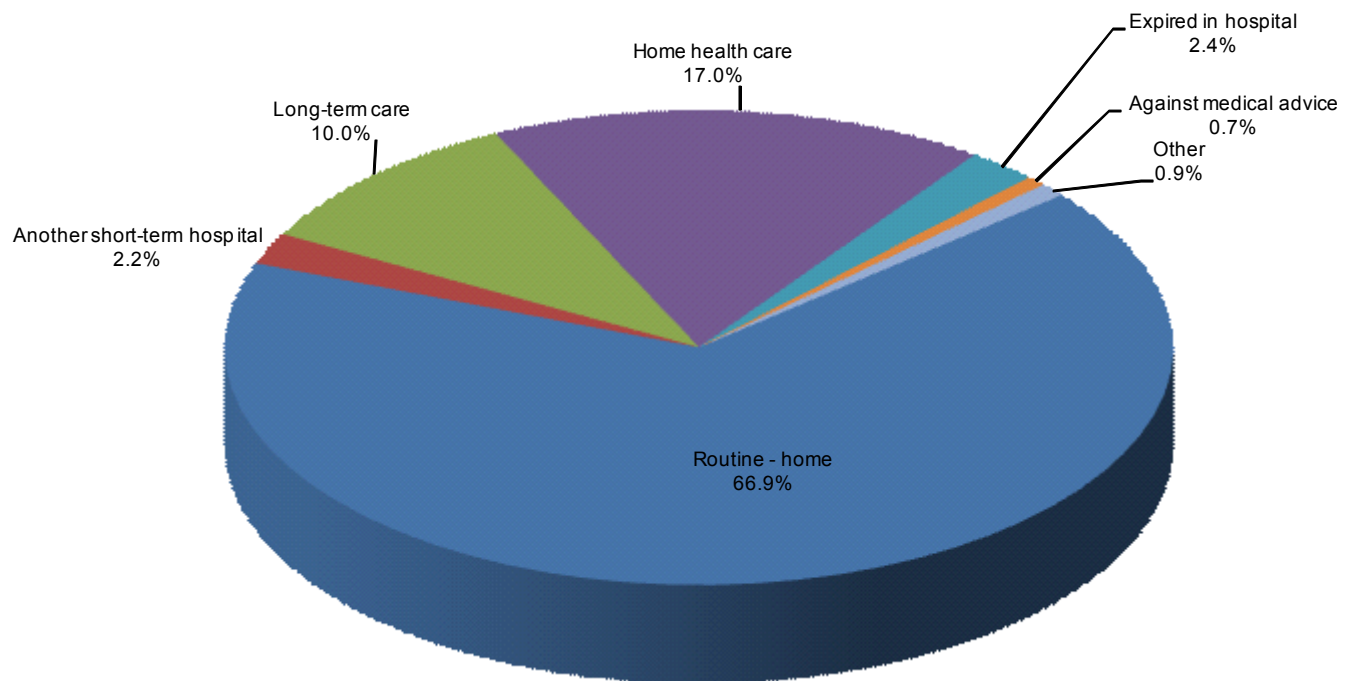
<sup>7</sup> See Appendix F for the top 10 principal diagnoses by payer type.

## HOW PATIENTS WERE DISCHARGED

### Patient discharge status:

A patient's discharge status refers to how a person is discharged from the hospital, and includes discharges to home, long-term care and other non-acute care facilities, other short-term hospitals, patients who left against medical advice, and patients who died while in the hospital. The majority of patients (67 percent) in 2009 were discharged to their homes, less than 3 percent of patients died in the hospital, and fewer than 1 percent left against medical advice.

**Percent of Discharges by Discharge Status  
Delaware Hospitals, 2009**



Source: Delaware Health Statistics Center

### Expired patients:

Patients who died during their hospital stay contributed to the "in-hospital mortality" figures. Data about in-hospital mortality are expressed as either numbers of deaths, or percentages of deaths. Both the frequencies and percentages are presented, as each statistic provides a different perspective for reviewing the data.

### Frequencies

Patients with the following diagnoses experienced the highest numbers of in-hospital mortality:

- septicemia,
- respiratory failure, and
- acute cerebrovascular disease (stroke).

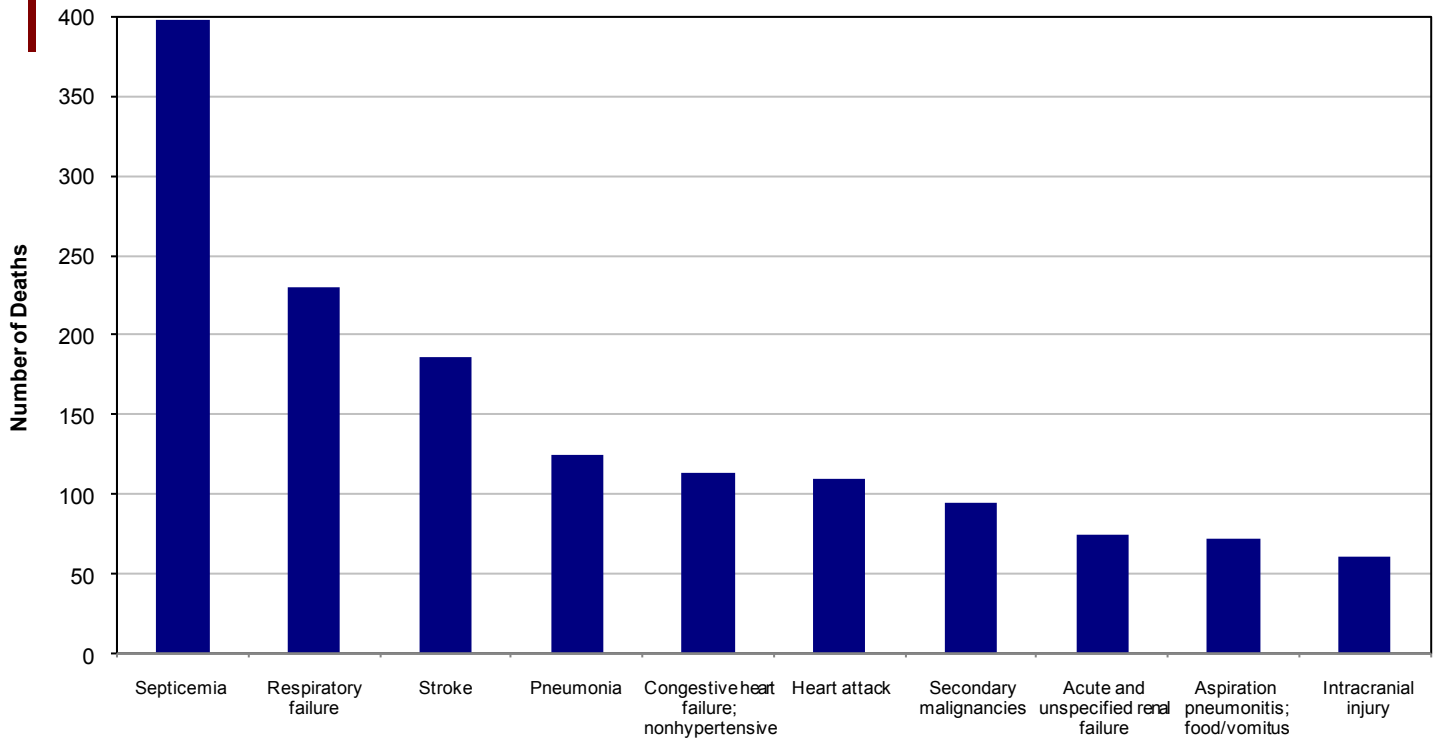
## HOW PATIENTS WERE DISCHARGED

### *Frequencies*

Patients with the following diagnoses experienced the highest numbers of in-hospital mortality:

- septicemia,
- respiratory failure, and
- acute cerebrovascular disease (stroke).

**Diagnoses with the Greatest Numbers of In-Hospital Deaths  
Delaware Hospitals, 2009**



Source: Delaware Health Statistics Center

The most frequent causes of in-hospital mortality varied by age group. Low birthweight and prematurity accounted for the largest number of deaths to those under one, while respiratory failure caused the highest number of deaths to those ages 1-17. For patients 18 and older, septicemia accounted for the greatest number of deaths.

Patients ages 65 and older accounted for two-thirds of all in-hospital mortality (for more information see Appendices G and H).

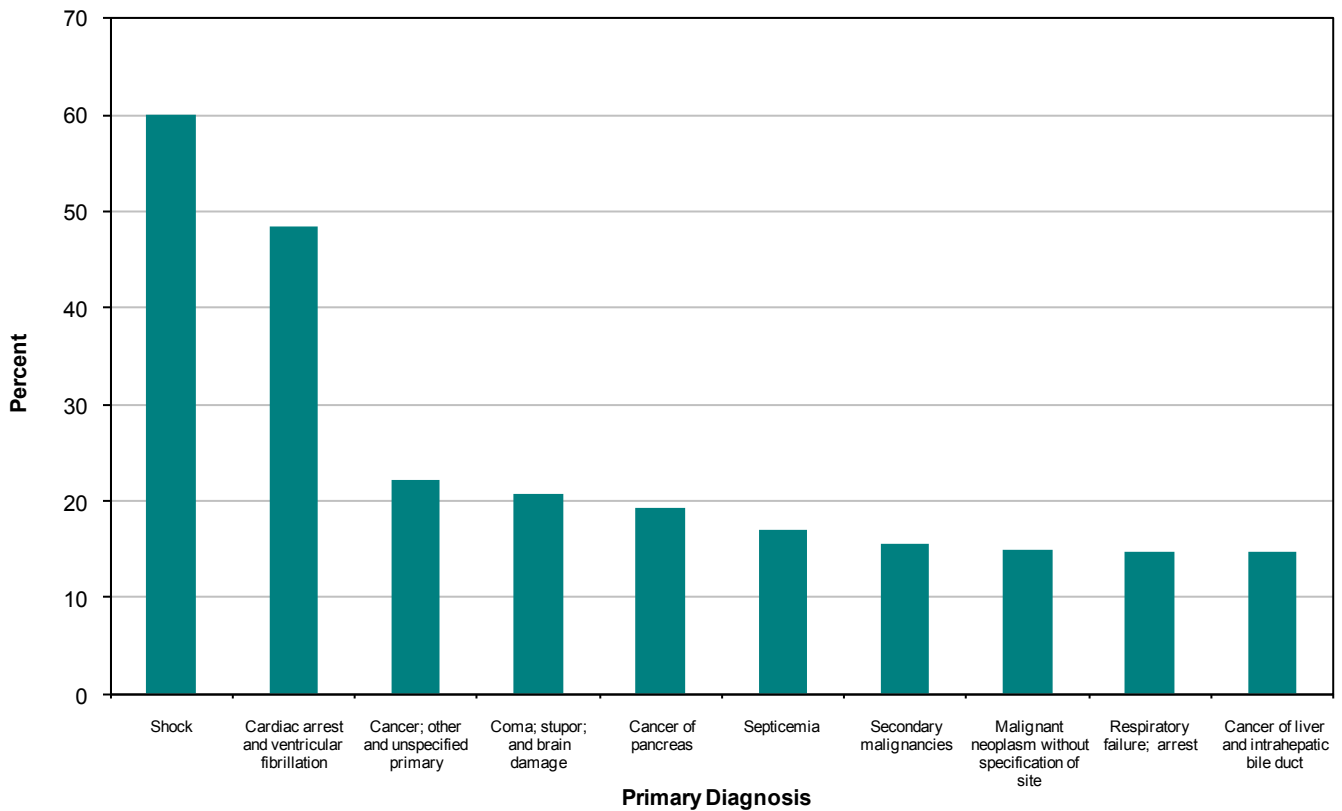
## HOW PATIENTS WERE DISCHARGED

### Percentages

Those diagnoses with the greatest percentages of in-hospital mortality were:

- shock,
- cardiac arrest and ventricular fibrillation,
- malignant neoplasm without specification of site, and
- coma; stupor; and brain damage.

**CCS Diagnoses with the Greatest Percent of In-Hospital Mortality  
Delaware Hospital, 2009**



Source: Delaware Health Statistics Center

Six of the ten diagnoses with the greatest percentages of in-hospital mortality were cancer-related, and included pancreatic and liver cancer.

### *Patients who left against medical advice:*

- Less than one percent of patients left the hospital against medical advice. Males were twice as likely than females to leave the hospital against medical advice; uninsured patients were more than 4 times as likely to do so.

The three most frequent diagnoses of patients who left the hospital against medical advice were diabetes, pancreatic disorders, and pneumonia.

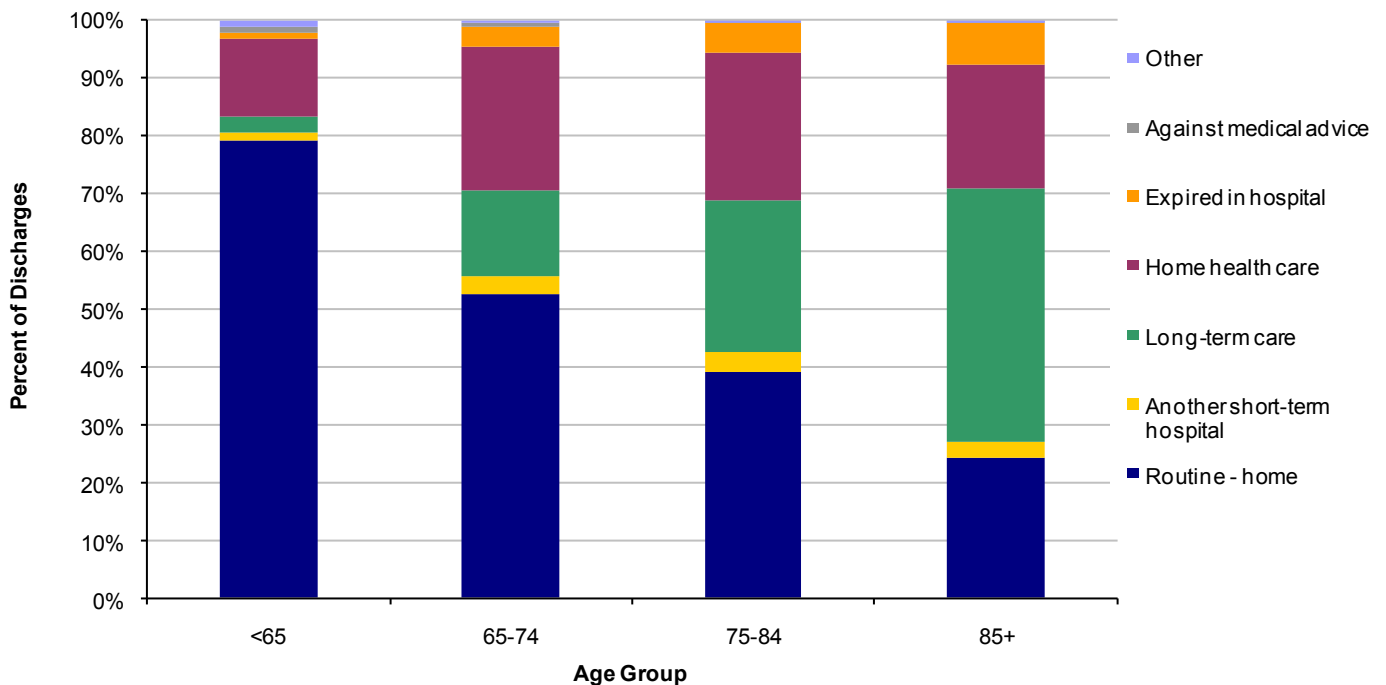
- For women, skin and subcutaneous tissue infections, diabetes, and COPD made up the top three.
- For men, diabetes, pancreatic disorders, and pneumonia made up the top three.

## HOW PATIENTS WERE DISCHARGED

### *Patients transferred to another facility:*

The majority of patients discharged to another facility were transferred to a long-term care (LTC) facility. For those 65 and older, each 10 year increase in patient age nearly doubled the percent of those transferred to LTC facilities. In 2009, less than 3 percent of those under 65 were discharged to long-term care facilities, compared to 15 percent of those 65-74, 27 percent of those 75-84, and 44 percent of those 85 and older.

**Distribution of Discharge Status by Age Group  
Delaware Hospitals, 2009**



Source: Delaware Health Statistics Center

In 2009, the most common diagnoses for patients discharged to LTC facilities were septicemia, osteoarthritis, and hip fracture.

- For patients under 65 (excluding liveborn infants), septicemia, complication of device, implant or graft, and osteoarthritis were the three most common diagnoses.
- For patients 65-74, osteoarthritis, septicemia, and respiratory failure were the three most common diagnoses.
- For patients 75-84, septicemia, osteoarthritis, and hip fracture were the three most common diagnoses.
- For patients 85 and older, hip fracture, septicemia, and congestive heart failure were the three most common diagnoses.

## HOSPITAL SPECIFIC DATA

### A.I. duPont Hospital for Children

#### 2009 Discharge Distribution

Zip / State	Number	%
PA	2,762	26.9
NJ	1,301	12.7
19805	605	5.9
19720	547	5.3
MD	535	5.2
19702	419	4.1
19802	327	3.2
19701	279	2.7
19808	256	2.5
19801	250	2.4
19709	244	2.4
19711	214	2.1
19713	211	2.1
19703	166	1.6
19901	163	1.6
19804	145	1.4
19803	139	1.4
Other state	135	1.3
19977	127	1.2
19810	127	1.2
19809	114	1.1
19904	112	1.1
19956	80	0.8
19947	77	0.8
19707	77	0.8
19963	75	0.7
19734	64	0.6
19973	63	0.6
19966	58	0.6
19952	54	0.5
19962	52	0.5
19934	45	0.4
19938	41	0.4
19807	39	0.4
19968	37	0.4
19806	37	0.4
19933	31	0.3
19943	29	0.3
19950	27	0.3
19958	23	0.2
19960	21	0.2
19953	14	0.1
19946	14	0.1
19945	14	0.1
19940	13	0.1
19706	13	0.1
19939	10	0.1
19971	9	0.1
19975	8	0.1
19970	8	0.1
19941	6	0.1
19964	5	0.0
19954	5	0.0
19899	5	0.0
Other DE	22	0.2
Invalid	2	0.0
<b>Total</b>	<b>10,256</b>	<b>100</b>

#### Utilization Characteristics

	2007	2008	2009
<b>Aggregate charges</b>	\$311,156,093	\$341,657,933	\$372,061,971
<b>Average charges</b>	\$29,527	\$34,108	\$36,277
<b>Average charge per day</b>	\$7,648	\$7,795	\$7,811
<b>Number of Discharges</b>	10,538	10,017	10,256
<b>Total All-listed Procedures<sup>1</sup></b>	12,527	11,361	10,423
<i>Non-operating room procedures<sup>2</sup></i>	6,044	5,642	5,368
<i>Valid operating room procedures<sup>2</sup></i>	6,483	5,719	5,055
<b>Average Length of Stay</b>	4.2	4.6	4.6
<b>Primary Payer Distribution</b>			
<i>Medicare</i>	0.1	0.2	0.2
<i>Medicaid</i>	39.5	38.8	41.1
<i>Private Insurance</i>	58.0	57.8	55.4
<i>Uninsured</i>	0.8	0.8	1.5
<i>Other</i>	1.6	2.4	1.9
<b>Admission Source Distribution</b>			
<i>Routine</i>	31.8	29.4	25.4
<i>Other short-term hospital</i>	6.7	7.2	10.1
<i>Long-term care facility</i>	4.2	2.9	0.7
<i>ER</i>	56.2	59.7	62.9
<i>Other</i>	1.1	0.7	0.9
<b>Discharge Status Distribution</b>			
<i>Routine</i>	93.4	92.7	93.0
<i>Another short-term hospital</i>	0.7	0.6	0.6
<i>Long-term care</i>	0.9	1.1	0.5
<i>Home health care</i>	4.3	4.9	4.6
<i>Expired</i>	0.3	0.4	0.4
<i>Against medical advice</i>	0.0	0.1	0.1
<i>Other/Unknown</i>	0.4	0.3	0.7
<b>Sex</b>			
<i>Male</i>	54.9	55.4	55.5
<i>Female</i>	45.1	44.6	44.5
<b>Age</b>			
<i>&lt;1</i>	24.2	23.2	23.6
<i>1-4</i>	27.0	27.8	27.6
<i>5-9</i>	17.5	17.3	17.6
<i>10-14</i>	18.3	17.2	17.8
<i>15-19</i>	12.5	14.0	12.8
<i>20-24</i>	0.4	0.4	0.5
<i>25-34</i>	0.0	0.0	0.0
<i>35-44</i>	0.0	0.0	0.0
<i>45-54</i>	0.0	0.0	0.0
<i>55-64</i>	0.0	0.0	0.0
<i>65-74</i>	0.0	0.0	0.0
<i>75+</i>	0.0	0.0	0.0

#### Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to 6 procedures may be recorded per discharge, as a result the total number of all-listed procedures can exceed the total number of discharges.
2. Procedures were classified using AHRQ's HCUP procedure class software. See AHRQ's website for more information: <http://www.hcup-us.ahrq.gov/toolssoftware/procedure/procedure.jsp>.
3. Percentages may not sum to 100 due to rounding.

## HOSPITAL SPECIFIC DATA

### BayHealth Medical Center

#### 2009 Discharge Distribution

Zip / State	Number	%
19901	3,794	18.8
19904	2,895	14.4
19963	2,101	10.4
19977	1,599	7.9
19934	1,125	5.6
19943	1,117	5.5
19952	1,084	5.4
19962	798	4.0
19960	516	2.6
19938	488	2.4
19946	422	2.1
19950	407	2.0
19953	388	1.9
19947	371	1.8
MD	354	1.8
19968	263	1.3
19941	226	1.1
19966	216	1.1
19709	175	0.9
19933	174	0.9
Other state	169	0.8
19973	149	0.7
19734	143	0.7
19958	142	0.7
19954	139	0.7
19964	116	0.6
19971	82	0.4
19903	75	0.4
19979	70	0.3
19956	63	0.3
19936	59	0.3
19945	48	0.2
PA	45	0.2
19939	43	0.2
19980	42	0.2
19955	30	0.1
NJ	28	0.1
19720	22	0.1
19970	20	0.1
19951	19	0.1
19975	18	0.1
19902	16	0.1
19701	14	0.1
19702	13	0.1
19713	9	0.0
19961	8	0.0
19711	8	0.0
19940	7	0.0
19801	7	0.0
19930	6	0.0
19805	6	0.0
19808	4	0.0
19706	4	0.0
Other DE	24	0.1
Invalid	3	0.0
<b>Total</b>	<b>20,164</b>	<b>100</b>

#### Utilization Characteristics

	2007	2008	2009
<b>Aggregate charges</b>	\$355,152,301	\$364,818,809	\$398,952,631
<b>Average charges</b>	\$17,545	\$18,914	\$19,785
<b>Average charge per day</b>	\$4,424	\$4,900	\$5,230
<b>Number of Discharges</b>	20,242	19,288	20,164
<b>Total All-listed Procedures<sup>1</sup></b>	22,725	22,221	21,504
<i>Non-operating room procedures<sup>2</sup></i>	14,530	14,465	14,284
<i>Valid operating room procedures<sup>2</sup></i>	8,195	7,756	7,220
<b>Average Length of Stay</b>	5.1	5.0	4.9
<b>Primary Payer Distribution<sup>3</sup></b>			
<i>Medicare</i>	41.3	43.2	42.4
<i>Medicaid</i>	22.3	22.9	24.0
<i>Private Insurance</i>	26.4	24.8	24.5
<i>Uninsured</i>	3.9	3.3	3.1
<i>Other</i>	6.1	5.8	6.0
<b>Admission Source Distribution</b>			
<i>Routine</i>	53.8	55.2	37.5
<i>Other short-term hospital</i>	0.7	0.6	0.6
<i>Long-term care facility</i>	0.1	0.2	0.0
<i>ER</i>	45.1	43.7	50.3
<i>Other</i>	0.3	0.4	11.5
<b>Discharge Status Distribution</b>			
<i>Routine</i>	66.9	65.5	67.7
<i>Another short-term hospital</i>	2.4	2.1	2.5
<i>Long-term care</i>	11.0	12.6	9.5
<i>Home health care</i>	16.0	15.7	13.4
<i>Expired</i>	2.3	2.4	1.9
<i>Against medical advice</i>	0.8	0.8	1.0
<i>Other/Unknown</i>	0.7	0.8	4.0
<b>Sex</b>			
<i>Male</i>	40.0	40.5	40.5
<i>Female</i>	60.0	59.5	59.5
<b>Age</b>			
<i>&lt;1</i>	13.1	13.5	13.3
<i>1-4</i>	1.4	1.1	1.2
<i>5-9</i>	0.7	0.6	0.6
<i>10-14</i>	0.5	0.4	0.4
<i>15-19</i>	2.6	2.6	2.4
<i>20-24</i>	5.5	5.7	5.6
<i>25-34</i>	9.1	8.7	9.5
<i>35-44</i>	8.0	6.8	6.7
<i>45-54</i>	10.6	10.6	11.0
<i>55-64</i>	12.7	12.1	12.4
<i>65-74</i>	13.9	15.0	14.6
<i>75+</i>	21.8	23.1	22.2

#### Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to 6 procedures may be recorded per discharge, as a result the total number of all-listed procedures can exceed the total number of discharges.

2. Procedures were classified using AHRQ's HCUP procedure class software. See AHRQ's website for more information: <http://www.hcup-us.ahrq.gov/toolssoftware/procedure/procedure.jsp>.

3. Percentages may not sum to 100 due to rounding.



## HOSPITAL SPECIFIC DATA

### Beebe Medical Center

#### 2009 Discharge Distribution

Zip / State	Number	%
19966	2,221	22.3
19958	1,851	18.6
19971	944	9.5
19947	912	9.2
19968	717	7.2
19970	425	4.3
19945	376	3.8
19939	329	3.3
19975	236	2.4
19963	229	2.3
19973	170	1.7
MD	153	1.5
19956	143	1.4
Other state	138	1.4
19951	137	1.4
PA	131	1.3
19930	117	1.2
19960	115	1.2
19933	111	1.1
19950	68	0.7
19941	64	0.6
19943	43	0.4
19952	41	0.4
19901	33	0.3
19967	32	0.3
19904	27	0.3
19969	25	0.3
NJ	19	0.2
19944	17	0.2
19962	14	0.1
19934	10	0.1
19808	10	0.1
19804	10	0.1
19940	8	0.1
19977	7	0.1
19805	7	0.1
19701	7	0.1
19946	6	0.1
19711	6	0.1
19810	5	0.1
19720	5	0.1
19954	4	0.0
19734	4	0.0
19713	4	0.0
19709	4	0.0
19980	3	0.0
19964	3	0.0
19938	3	0.0
19809	3	0.0
19807	3	0.0
19803	3	0.0
19703	3	0.0
19706	2	0.0
Invalid	1	0.0
Other DE	5	0.1
<b>Total</b>	<b>9,964</b>	<b>100</b>

#### Utilization Characteristics

	2007	2008	2009
<b>Aggregate charges</b>	\$228,428,793	\$252,061,080	\$269,338,839
<b>Average charges</b>	\$21,765	\$24,269	\$27,031
<b>Average charge per day</b>	\$6,603	\$7,383	\$8,466
<b>Number of Discharges</b>	10,495	10,386	9,964
<b>Total All-listed Procedures<sup>1</sup></b>	13,855	15,247	15,457
<i>Non-operating room procedures<sup>2</sup></i>	8,313	9,495	9,916
<i>Valid operating room procedures<sup>2</sup></i>	5,542	5,752	5,541
<b>Average Length of Stay</b>	3.7	3.8	3.8
<b>Primary Payer Distribution</b>			
<i>Medicare</i>	50.3	50.5	51.4
<i>Medicaid</i>	18.0	18.1	18.4
<i>Private Insurance</i>	27.7	27.8	26.2
<i>Uninsured</i>	2.9	2.6	2.9
<i>Other</i>	1.0	5.8	6.0
<b>Admission Source Distribution</b>			
<i>Routine</i>	40.3	34.4	33.1
<i>Other short-term hospital</i>	0.1	0.0	0.0
<i>Long-term care facility</i>	2.3	9.9	9.5
<i>ER</i>	57.2	55.6	57.4
<i>Other</i>	0.1	0.0	0.0
<b>Discharge Status Distribution</b>			
<i>Routine</i>	61.8	59.6	61.3
<i>Another short-term hospital</i>	2.6	1.8	1.5
<i>Long-term care</i>	12.5	14.9	13.5
<i>Home health care</i>	19.8	20.3	18.5
<i>Expired</i>	2.0	2.3	1.9
<i>Against medical advice</i>	0.7	0.6	0.6
<i>Other/Unknown</i>	0.6	0.5	2.7
<b>Sex</b>			
<i>Male</i>	44.0	43.1	44.1
<i>Female</i>	56.0	56.9	55.9
<b>Age</b>			
<i>&lt;1</i>	10.0	10.7	10.0
<i>1-4</i>	0.6	0.4	0.5
<i>5-9</i>	0.2	0.2	0.2
<i>10-14</i>	0.2	0.2	0.1
<i>15-19</i>	1.9	1.6	1.5
<i>20-24</i>	4.2	3.8	3.4
<i>25-34</i>	7.0	7.5	7.0
<i>35-44</i>	6.3	6.2	5.0
<i>45-54</i>	9.4	9.5	9.9
<i>55-64</i>	13.4	13.6	13.7
<i>65-74</i>	19.8	19.4	20.7
<i>75+</i>	27.0	26.9	28.0

#### Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to 6 procedures may be recorded per discharge, as a result the total number of all-listed procedures can exceed the total number of discharges.

2. Procedures were classified using AHRQ's HCUP procedure class software. See AHRQ's website for more information: <http://www.hcup-us.ahrq.gov/toolssoftware/procedure/procedure.jsp>.

3. Percentages may not sum to 100 due to rounding.

## HOSPITAL SPECIFIC DATA

### Christiana Care Health System

#### 2009 Discharge Distribution

Zip / State	Number	%
19720	6,668	11.1
19702	4,351	7.2
19808	3,912	6.5
19805	3,864	6.4
19711	3,503	5.8
19713	3,384	5.6
MD	3,240	5.4
19701	3,188	5.3
19802	2,962	4.9
PA	2,611	4.3
19709	2,435	4.1
19804	2,082	3.5
19801	1,989	3.3
NJ	1,790	3.0
19810	1,725	2.9
19803	1,678	2.8
19707	1,264	2.1
19809	1,160	1.9
19703	1,145	1.9
19806	935	1.6
19977	732	1.2
19734	724	1.2
19807	604	1.0
Other state	405	0.7
19904	355	0.6
19901	351	0.6
19706	285	0.5
19938	250	0.4
19966	177	0.3
19958	160	0.3
19963	157	0.3
19973	137	0.2
19947	131	0.2
19934	129	0.2
19899	115	0.2
19943	110	0.2
19971	96	0.2
19956	93	0.2
19968	89	0.1
19962	86	0.1
19952	84	0.1
19953	79	0.1
19730	66	0.1
19933	57	0.1
19950	52	0.1
19960	50	0.1
19970	47	0.1
19946	43	0.1
19733	39	0.1
19731	36	0.1
19939	31	0.1
19964	30	0.0
19736	30	0.0
19945	27	0.0
19850	27	0.0
Other DE	252	0.4
Invalid	8	0.0
<b>Total</b>	<b>60,030</b>	<b>100</b>

#### Utilization Characteristics

	2007	2008	2009
<b>Aggregate charges</b>	\$1,094,875,751	\$1,139,808,746	\$1,248,182,694
<b>Average charges</b>	\$17,977	\$19,455	\$20,793
<b>Average charge per day</b>	\$4,382	\$4,659	\$5,308
<b>Number of Discharges</b>	60,904	58,587	60,030
<b>Total All-listed Procedures<sup>1</sup></b>	165,861	173,067	177,496
<i>Non-operating room procedures<sup>2</sup></i>	134,969	143,652	147,368
<i>Valid operating room procedures<sup>2</sup></i>	30,892	29,415	30,128
<b>Average Length of Stay</b>	5.1	5.2	5.0
<b>Primary Payer Distribution</b>			
<i>Medicare</i>	38.9	38.7	40.3
<i>Medicaid</i>	20.4	20.8	21.2
<i>Private Insurance</i>	37.1	36.6	34.8
<i>Uninsured</i>	2.4	2.7	2.4
<i>Other</i>	1.3	5.8	6.0
<b>Admission Source Distribution</b>			
<i>Routine</i>	43.3	44.4	44.0
<i>Other short-term hospital</i>	0.8	1.0	0.9
<i>Long-term care facility</i>	0.2	0.2	0.2
<i>ER</i>	53.5	52.3	53.0
<i>Other</i>	2.2	2.1	1.9
<b>Discharge Status Distribution</b>			
<i>Routine</i>	65.3	64.3	63.3
<i>Another short-term hospital</i>	2.3	2.3	2.3
<i>Long-term care</i>	8.6	8.8	10.4
<i>Home health care</i>	19.4	20.0	20.4
<i>Expired</i>	2.7	3.0	3.1
<i>Against medical advice</i>	0.7	0.6	0.6
<i>Other/Unknown</i>	1.1	1.0	0.0
<b>Sex</b>			
<i>Male</i>	40.2	40.5	41.1
<i>Female</i>	59.8	59.5	58.9
<b>Age</b>			
<1	12.1	12.7	11.9
1-4	0.3	0.2	0.2
5-9	0.2	0.1	0.1
10-14	0.3	0.2	0.2
15-19	2.3	2.3	2.1
20-24	4.9	4.8	4.4
25-34	11.9	12.2	12.0
35-44	10.5	10.1	9.8
45-54	12.5	12.4	12.7
55-64	12.7	12.6	13.5
65-74	12.3	12.2	12.8
75+	20.0	20.1	20.3

#### Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to 6 procedures may be recorded per discharge, as a result the total number of all-listed procedures can exceed the total number of discharges.
2. Procedures were classified using AHRQ's HCUP procedure class software. See AHRQ's website for more information: <http://www.hcup-us.ahrq.gov/toolsoftware/procedure/procedure.jsp>.
3. Percentages may not sum to 100 due to rounding.

## HOSPITAL SPECIFIC DATA

### Nanticoke Memorial Hospital

#### 2009 Discharge Distribution

Zip / State	Number	%
19973	2,158	37.2
19956	1,124	19.4
19947	616	10.6
19933	574	9.9
19966	271	4.7
MD	256	4.4
19940	212	3.7
19950	197	3.4
19945	58	1.0
19975	52	0.9
19963	52	0.9
19939	41	0.7
19952	29	0.5
Other state	24	0.4
19968	24	0.4
19960	23	0.4
19931	16	0.3
19970	14	0.2
19941	12	0.2
19958	9	0.2
PA	5	0.1
NJ	4	0.1
19971	4	0.1
19954	4	0.1
19951	3	0.1
19946	3	0.1
19709	3	0.1
19977	2	0.0
19962	2	0.0
19943	2	0.0
19938	2	0.0
19934	2	0.0
19901	2	0.0
19967	1	0.0
19953	1	0.0
19808	1	0.0
19805	1	0.0
19801	1	0.0
19720	1	0.0
19703	1	0.0
19702	1	0.0
<b>Total</b>	<b>5,808</b>	<b>100</b>

#### Utilization Characteristics

	2007	2008	2009
<b>Aggregate charges</b>	\$95,103,262	\$90,103,024	\$90,783,660
<b>Average charges</b>	\$14,135	\$14,752	\$15,631
<b>Average charge per day</b>	\$3,626	\$4,025	\$4,522
<b>Number of Discharges</b>	6,728	6,108	5,808
<b>Total All-listed Procedures<sup>1</sup></b>	13,936	12,066	10,791
<i>Non-operating room procedures<sup>2</sup></i>	11,850	10,248	9,049
<i>Valid operating room procedures<sup>2</sup></i>	2,086	1,818	1,742
<b>Average Length of Stay</b>	4.1	3.8	3.7
<b>Primary Payer Distribution</b>			
<i>Medicare</i>	39.6	40.0	38.5
<i>Medicaid</i>	33.4	35.7	35.9
<i>Private Insurance</i>	21.9	19.0	18.2
<i>Uninsured</i>	5.1	4.2	3.7
<i>Other</i>	0.0	5.8	6.0
<b>Admission Source Distribution</b>			
<i>Routine</i>	42.9	43.6	41.2
<i>Other short-term hospital</i>	0.0	0.0	0.0
<i>Long-term care facility</i>	0.0	0.0	0.0
<i>ER</i>	57.0	56.4	58.8
<i>Other</i>	0.0	0.0	0.0
<b>Discharge Status Distribution</b>			
<i>Routine</i>	71.8	67.9	67.6
<i>Another short-term hospital</i>	2.8	3.6	4.1
<i>Long-term care</i>	11.7	12.4	12.7
<i>Home health care</i>	10.0	13.1	12.4
<i>Expired</i>	1.7	1.4	1.8
<i>Against medical advice</i>	0.5	0.5	0.5
<i>Other/Unknown</i>	1.5	1.1	0.9
<b>Sex</b>			
<i>Male</i>	38.9	39.0	39.6
<i>Female</i>	61.1	61.0	60.4
<b>Age</b>			
<i>&lt;1</i>	15.3	15.3	15.7
<i>1-4</i>	0.4	0.1	0.5
<i>5-9</i>	0.3	0.0	0.2
<i>10-14</i>	0.3	0.1	0.4
<i>15-19</i>	3.2	3.3	2.6
<i>20-24</i>	7.4	7.3	7.2
<i>25-34</i>	9.3	10.1	10.4
<i>35-44</i>	7.8	7.6	6.9
<i>45-54</i>	10.6	10.1	10.1
<i>55-64</i>	12.0	12.9	13.0
<i>65-74</i>	12.0	11.5	13.0
<i>75+</i>	21.4	21.6	20.0

#### Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to 6 procedures may be recorded per discharge, as a result the total number of all-listed procedures can exceed the total number of discharges.

2. Procedures were classified using AHRQ's HCUP procedure class software. See AHRQ's website for more information: <http://www.hcup-us.ahrq.gov/toolssoftware/procedure/procedure.jsp>.

3. Percentages may not sum to 100 due to rounding.

## HOSPITAL SPECIFIC DATA

### St. Francis Hospital

#### 2009 Discharge Distribution

Zip / State	Number	%
19805	1,594	24.1
19802	666	10.1
19801	538	8.1
19720	515	7.8
19806	417	6.3
19803	287	4.3
19810	285	4.3
19808	261	3.9
19703	239	3.6
19809	231	3.5
19804	207	3.1
19702	183	2.8
PA	147	2.2
19711	131	2.0
19701	123	1.9
19707	100	1.5
MD	96	1.5
19713	89	1.3
NJ	81	1.2
19709	72	1.1
Other state	54	0.8
19807	53	0.8
19977	44	0.7
19734	27	0.4
19899	22	0.3
19901	21	0.3
19904	19	0.3
19966	13	0.2
19958	10	0.2
19971	8	0.1
19962	7	0.1
19953	7	0.1
19934	6	0.1
19706	6	0.1
19943	5	0.1
19973	4	0.1
19963	4	0.1
19952	4	0.1
19938	4	0.1
19968	3	0.0
19947	3	0.0
19945	3	0.0
19850	3	0.0
19956	2	0.0
19946	2	0.0
19941	2	0.0
19940	2	0.0
19933	2	0.0
19736	2	0.0
19710	2	0.0
19979	1	0.0
19970	1	0.0
19961	1	0.0
19960	1	0.0
<b>Total</b>	<b>6,610</b>	<b>100</b>

#### Utilization Characteristics

	2007	2008	2009
<b>Aggregate charges</b>	\$182,792,252	\$174,287,257	\$149,236,157
<b>Average charges</b>	\$22,492	\$23,313	\$22,577
<b>Average charge per day</b>	\$7,150	\$6,533	\$6,632
<b>Number of Discharges</b>	8,127	7,476	6,610
<b>Total All-listed Procedures<sup>1</sup></b>	9,535	8,613	7,550
<i>Non-operating room procedures<sup>2</sup></i>	5,976	5,326	4,880
<i>Valid operating room procedures<sup>2</sup></i>	3,559	3,287	2,670
<b>Average Length of Stay</b>	4.3	4.5	4.3
<b>Primary Payer Distribution</b>			
<i>Medicare</i>	42.2	41.9	41.8
<i>Medicaid</i>	22.9	23.9	20.2
<i>Private Insurance</i>	28.3	27.9	25.0
<i>Uninsured</i>	5.5	4.8	11.5
<i>Other</i>	1.0	5.8	6.0
<b>Admission Source Distribution</b>			
<i>Routine</i>	41.9	38.5	39.3
<i>Other short-term hospital</i>	2.5	2.1	1.5
<i>Long-term care facility</i>	0.7	0.1	0.5
<i>ER</i>	54.5	59.1	58.7
<i>Other</i>	0.3	0.2	0.1
<b>Discharge Status Distribution</b>			
<i>Routine</i>	63.2	61.7	64.5
<i>Another short-term hospital</i>	1.4	1.3	1.6
<i>Long-term care</i>	14.7	13.2	10.8
<i>Home health care</i>	17.5	20.3	17.6
<i>Expired</i>	1.8	1.7	1.7
<i>Against medical advice</i>	1.3	1.5	1.4
<i>Other/Unknown</i>	0.1	0.3	2.4
<b>Sex</b>			
<i>Male</i>	37.3	37.6	37.6
<i>Female</i>	62.7	62.4	62.4
<b>Age</b>			
<i>&lt;1</i>	11.6	11.0	12.0
<i>1-4</i>	0.0	0.0	0.0
<i>5-9</i>	0.0	0.0	0.0
<i>10-14</i>	0.0	0.1	0.0
<i>15-19</i>	2.2	1.7	1.9
<i>20-24</i>	4.6	4.3	4.1
<i>25-34</i>	10.5	10.1	10.7
<i>35-44</i>	9.6	10.3	9.4
<i>45-54</i>	12.3	13.6	13.0
<i>55-64</i>	12.4	12.9	13.2
<i>65-74</i>	12.5	12.3	13.4
<i>75+</i>	24.3	23.7	22.4

#### Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to 6 procedures may be recorded per discharge, as a result the total number of all-listed procedures can exceed the total number of discharges.

2. Procedures were classified using AHRQ's HCUP procedure class software. See AHRQ's website for more information: <http://www.hcup-us.ahrq.gov/toolssoftware/procedure/procedure.jsp>.

3. Percentages may not sum to 100 due to rounding.

## APPENDIX A

### Clinical classification system:

Diagnoses and procedures were reported using the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM). These codes were then aggregated into broader diagnostic categories according to the Clinical Classification System (CCS) developed by the Agency of Healthcare Research and Quality (AHRQ). The CCS diagnoses are used to categorize clinically similar diagnoses for ease in presentation and interpretation of hospital discharge data. A complete listing of CCS diagnostic codes and selected corresponding measures are presented below.

### Number and Percent of Discharges, Mean Length of Stay, Mean Charges, Percent Expired, and Percent Admitted from the ED by Principal Diagnosis Delaware Hospitals, 2009

<i>Clinical Classifications Software Categories and Chapter Headings</i>	Number of Discharges	Percent of Discharges	Mean LOS	Mean Total Charges	Percent Expired	Percent Admitted from ED
<b>Infections and parasitic diseases</b>	<b>3287</b>	<b>100.0</b>	<b>8.3</b>	<b>\$36,629</b>	<b>13.4</b>	<b>88.6</b>
Tuberculosis	10	0.3	7.6	\$ 24,150	0.0	40.0
Septicemia (except in labor)	2338	71.1	9.2	\$ 41,878	17.0	91.3
Bacterial infection; unspecified site	23	0.7	5.0	\$ 22,597	0.0	65.2
Mycoses	90	2.7	7.8	\$ 33,826	8.9	86.7
HIV infection	242	7.4	9.9	\$ 36,730	10.3	89.7
Hepatitis	92	2.8	4.5	\$ 17,188	5.4	79.3
Viral infection	360	11.0	3.5	\$ 14,657	0.6	79.2
Other infections; including parasitic	119	3.6	5.1	\$ 21,656	0.8	83.2
Sexually transmitted infections (not HIV or hepatitis)	12	0.4	12.6	\$ 27,321	0.0	66.7
Immunizations and screening for infectious disease	2	0.1	1.0	\$ 17,208	0.0	0.0
<b>Neoplasms</b>	<b>4610</b>	<b>100.0</b>	<b>6.5</b>	<b>\$34,575</b>	<b>6.6</b>	<b>28.9</b>
Cancer of head and neck	82	1.8	8.9	\$ 38,306	3.7	22.0
Cancer of esophagus	41	0.9	8.4	\$ 35,237	14.6	29.3
Cancer of stomach	51	1.1	8.4	\$ 40,646	9.8	51.0
Cancer of colon	257	5.6	7.9	\$ 36,405	5.1	29.6
Cancer of rectum and anus	113	2.5	8.3	\$ 37,542	0.9	31.0
Cancer of liver and intrahepatic bile duct	34	0.7	7.9	\$ 44,883	14.7	47.1
Cancer of pancreas	99	2.1	8.0	\$ 31,468	19.2	52.5
Cancer of other GI organs; peritoneum	53	1.1	11.3	\$ 51,895	7.5	37.7
Cancer of bronchus; lung	407	8.8	7.5	\$ 33,775	12.5	51.4
Cancer; other respiratory and intrathoracic	8	0.2	6.5	\$ 27,673	12.5	62.5
Cancer of bone and connective tissue	34	0.7	10.9	\$ 65,296	5.9	17.6
Melanomas of skin	19	0.4	3.3	\$ 18,293	5.3	0.0
Other non-epithelial cancer of skin	17	0.4	6.8	\$ 36,630	5.9	17.6
Cancer of breast	132	2.9	3.4	\$ 22,787	3.8	12.1
Cancer of uterus	124	2.7	4.6	\$ 26,126	1.6	14.5
Cancer of cervix	63	1.4	3.8	\$ 18,756	3.2	17.5
Cancer of ovary	80	1.7	7.9	\$ 40,123	6.3	22.5
Cancer of other female genital organs	23	0.5	3.6	\$ 17,471	4.3	17.4
Cancer of prostate	146	3.2	3.1	\$ 23,208	1.4	7.5
Cancer of testis	2	0.0	1.5	\$ 13,360	0.0	0.0
Cancer of other male genital organs	1	0.0	1.0	\$ 10,514	0.0	0.0
Cancer of bladder	93	2.0	7.9	\$ 38,915	8.6	36.6
Cancer of kidney and renal pelvis	135	2.9	5.3	\$ 33,202	3.0	17.8
Cancer of other urinary organs	9	0.2	4.6	\$ 19,748	0.0	22.2
Cancer of brain and nervous system	108	2.3	7.3	\$ 44,772	4.6	55.6
Cancer of thyroid	16	0.3	2.7	\$ 23,093	0.0	6.3
Hodgkin's disease	15	0.3	7.9	\$ 44,992	6.7	60.0

## APPENDIX A

<i>Clinical Classifications Software Categories and Chapter Headings</i>	Number of Discharges	Percent of Discharges	Mean LOS	Mean Total Charges	Percent Expired	Percent Admitted from ED
Non-Hodgkin's lymphoma	130	2.8	10.5	\$ 55,120	13.8	45.4
Leukemias	117	2.5	16.8	\$ 101,495	12.8	42.7
Multiple myeloma	60	1.3	9.8	\$ 57,768	11.7	45.0
Cancer; other and unspecified primary	18	0.4	7.6	\$ 52,437	22.2	50.0
Secondary malignancies	604	13.1	7.2	\$ 30,837	15.6	55.0
Malignant neoplasm without specification of site	20	0.4	7.7	\$ 34,090	15.0	60.0
Neoplasms of unspecified nature or uncertain behavior	117	2.5	7.3	\$ 45,177	2.6	44.4
Maintenance chemotherapy; radiotherapy	443	9.6	5.9	\$ 42,427	1.8	0.5
Benign neoplasm of uterus	514	11.1	2.5	\$ 15,819	0.0	3.3
Other and unspecified benign neoplasm	425	9.2	5.0	\$ 25,858	0.7	20.2
<b>Endocrine, nutritional &amp; metabolic diseases, &amp; immunity disorders</b>	<b>4154</b>	<b>100.0</b>	<b>4.5</b>	<b>\$19,061</b>	<b>1.4</b>	<b>73.2</b>
Thyroid disorders	99	2.4	5.6	\$ 22,280	2.0	53.5
Diabetes mellitus without complication	105	2.5	2.6	\$ 10,707	0.0	90.5
Diabetes mellitus with complications	1578	38.0	5.2	\$ 19,383	0.7	84.9
Other endocrine disorders	116	2.8	5.4	\$ 20,168	1.7	84.5
Nutritional deficiencies	32	0.8	9.8	\$ 32,755	3.1	62.5
Disorders of lipid metabolism	1	0.0	6.0	\$ 35,077	0.0	100.0
Gout and other crystal arthropathies	62	1.5	5.1	\$ 14,675	0.0	90.3
Fluid and electrolyte disorders	1488	35.8	3.8	\$ 13,569	2.1	82.6
Cystic fibrosis	49	1.2	8.7	\$ 65,559	0.0	18.4
Immunity disorders	2	0.0	3.5	\$ 17,197	0.0	50.0
Other nutritional; endocrine; and metabolic disorders	622	15.0	3.6	\$ 28,121	1.8	22.0
<b>Disease of the blood and blood forming organs</b>	<b>1388</b>	<b>100.0</b>	<b>4.6</b>	<b>\$20,604</b>	<b>1.6</b>	<b>71.0</b>
Deficiency and other anemia	545	39.3	3.9	\$ 18,073	2.4	72.1
Acute posthemorrhagic anemia	59	4.3	4.2	\$ 18,698	0.0	88.1
Sickle cell anemia	377	27.2	5.7	\$ 17,910	0.3	84.6
Coagulation and hemorrhagic disorders	161	11.6	3.7	\$ 29,055	1.9	53.4
Diseases of white blood cells	232	16.7	5.1	\$ 24,755	1.7	55.2
Other hematologic conditions	14	1.0	5.4	\$ 33,760	7.1	57.1
<b>Mental disorders</b>	<b>2303</b>	<b>100.0</b>	<b>6.0</b>	<b>\$13,672</b>	<b>2.3</b>	<b>76.3</b>
Adjustment disorders	5	0.2	1.4	\$ 2,713	0.0	60.0
Anxiety disorders	44	1.9	3.4	\$ 11,229	0.0	90.9
Attention-deficit	3	0.1	2.7	\$ 6,591	0.0	100.0
Delirium	206	8.9	8.0	\$ 16,194	3.4	93.7
Developmental disorders	5	0.2	2.6	\$ 15,082	0.0	100.0
Disorders usually diagnosed in infancy	2	0.1	22.5	\$ 46,338	0.0	100.0
Impulse control disorders	1	0.0	1.0	\$ 2,209	0.0	0.0
Mood disorders	913	39.6	6.4	\$ 9,514	1.9	61.9
Personality disorders	3	0.1	6.7	\$ 20,060	0.0	100.0
Schizophrenia and other psychotic disorders	184	8.0	9.3	\$ 14,014	0.0	81.5
Alcohol-related disorders	366	15.9	4.9	\$ 15,953	2.2	97.3
Substance-related disorders	260	11.3	4.3	\$ 18,038	2.7	84.6
Screening and history of mental health and substance abuse codes	158	6.9	6.9	\$ 26,793	8.2	92.4
Miscellaneous disorders	153	6.6	2.8	\$ 8,922	0.0	46.4
<b>Diseases of the nervous system and sense organs</b>	<b>3050</b>	<b>100.0</b>	<b>4.2</b>	<b>\$19,035</b>	<b>1.6</b>	<b>78.9</b>
Meningitis (except that caused by tuberculosis or STD)	134	4.4	4.4	\$ 20,656	0.0	87.3
Encephalitis (except that caused by tuberculosis or STD)	25	0.8	10.8	\$ 49,049	8.0	80.0
Other CNS infection and poliomyelitis	18	0.6	16.4	\$ 91,183	0.0	66.7
Parkinson's disease	34	1.1	5.9	\$ 14,173	2.9	82.4
Multiple sclerosis	90	3.0	5.3	\$ 20,768	2.2	71.1
Other hereditary and degenerative nervous system conditions	132	4.3	6.2	\$ 27,297	3.0	56.1
Paralysis	64	2.1	4.5	\$ 36,189	1.6	29.7
Epilepsy; convulsions	893	29.3	3.4	\$ 14,984	1.1	82.2
Headache; including migraine	269	8.8	2.7	\$ 11,552	0.0	88.5
Coma; stupor; and brain damage	29	1.0	7.0	\$ 33,776	20.7	72.4

## APPENDIX A

<i>Clinical Classifications Software Categories and Chapter Headings</i>	Number of Discharges	Percent of Discharges	Mean LOS	Mean Total Charges	Percent Expired	Percent Admitted from ED
Retinal detachments; defects; vascular occlusion; and retinopathy	10	0.3	3.5	\$ 14,757	0.0	60.0
Glaucoma	1	0.0	5.0	\$ 11,580	0.0	0.0
Blindness and vision defects	24	0.8	3.1	\$ 10,672	0.0	87.5
Inflammation; infection of eye (except that caused by tuberculosis or sexually transmitted disease)	79	2.6	5.3	\$ 19,979	1.3	74.7
Other eye disorders	20	0.7	2.9	\$ 14,211	0.0	85.0
Otitis media and related conditions	69	2.3	2.3	\$ 14,556	0.0	58.0
Conditions associated with dizziness or vertigo	178	5.8	2.5	\$ 10,506	0.6	93.8
Other ear and sense organ disorders	49	1.6	2.6	\$ 14,286	2.0	65.3
Other nervous system disorders	932	30.6	4.9	\$ 22,350	2.3	79.1
<b>Diseases of the circulatory system</b>	<b>17305</b>	<b>100.0</b>	<b>4.7</b>	<b>\$32,390</b>	<b>3.7</b>	<b>72.9</b>
Heart valve disorders	327	1.9	7.5	\$ 76,516	0.9	22.9
Peri-; endo-; and myocarditis; cardiomyopathy (except that caused by tuberculosis or STD)	300	1.7	6.8	\$ 56,862	2.7	61.7
Essential hypertension	137	0.8	2.8	\$ 13,174	0.7	89.1
Hypertension with complications and secondary hypertension	693	4.0	5.4	\$ 23,775	1.4	88.0
Acute myocardial infarction	1823	10.5	4.8	\$ 47,207	6.0	83.8
Coronary atherosclerosis and other heart disease	2468	14.3	3.5	\$ 45,018	0.8	41.5
Nonspecific chest pain	998	5.8	2.0	\$ 13,147	0.1	92.4
Pulmonary heart disease	518	3.0	5.7	\$ 25,760	6.8	87.1
Other and ill-defined heart disease	27	0.2	5.4	\$ 43,665	7.4	66.7
Conduction disorders	193	1.1	4.7	\$ 46,636	2.6	73.1
Cardiac dysrhythmias	2102	12.1	3.9	\$ 23,977	1.5	76.1
Cardiac arrest and ventricular fibrillation	62	0.4	8.5	\$ 64,624	48.4	88.7
Congestive heart failure; nonhypertensive	2643	15.3	5.7	\$ 24,639	4.3	87.4
Acute cerebrovascular disease	1744	10.1	6.8	\$ 29,369	10.7	93.3
Occlusion or stenosis of precerebral arteries	437	2.5	2.6	\$ 22,369	0.5	19.0
Other and ill-defined cerebrovascular disease	51	0.3	3.5	\$ 26,159	0.0	72.5
Transient cerebral ischemia	526	3.0	2.7	\$ 13,625	1.0	98.5
Late effects of cerebrovascular disease	55	0.3	5.0	\$ 15,529	1.8	94.5
Peripheral and visceral atherosclerosis	656	3.8	5.1	\$ 37,103	4.1	34.6
Aortic; peripheral; and visceral artery aneurysms	301	1.7	6.8	\$ 73,792	9.6	35.5
Aortic and peripheral arterial embolism or thrombosis	140	0.8	7.0	\$ 45,215	2.1	50.0
Other circulatory disease	458	2.6	3.9	\$ 20,789	2.2	85.6
Phlebitis; thrombophlebitis and thromboembolism	493	2.8	5.1	\$ 20,417	0.6	73.4
Varicose veins of lower extremity	11	0.1	5.5	\$ 14,079	0.0	36.4
Hemorrhoids	77	0.4	3.6	\$ 13,249	0.0	84.4
Other diseases of veins and lymphatics	65	0.4	8.2	\$ 43,526	0.0	60.0
<b>Diseases of the respiratory system</b>	<b>12208</b>	<b>100.0</b>	<b>5.0</b>	<b>\$22,236</b>	<b>4.1</b>	<b>86.3</b>
Pneumonia (except that caused by tuberculosis or STD)	3504	28.7	5.3	\$ 21,533	3.6	86.6
Influenza	275	2.3	3.1	\$ 17,078	0.4	81.5
Acute and chronic tonsillitis	165	1.4	2.1	\$ 11,814	0.0	58.2
Acute bronchitis	974	8.0	3.3	\$ 16,257	0.2	80.9
Other upper respiratory infections	376	3.1	2.3	\$ 11,233	0.0	83.5
Chronic obstructive pulmonary disease and bronchiectasis	1938	15.9	4.7	\$ 16,389	2.0	91.2
Asthma	1838	15.1	2.6	\$ 12,042	0.1	87.0
Aspiration pneumonitis; food/vomitus	605	5.0	8.0	\$ 31,711	11.9	93.4
Pleurisy; pneumothorax; pulmonary collapse	391	3.2	7.2	\$ 28,111	3.8	76.2
Respiratory failure; insufficiency; arrest (adult)	1563	12.8	8.1	\$ 44,976	14.7	90.7
Lung disease due to external agents	17	0.1	5.5	\$ 22,405	0.0	64.7
Other lower respiratory disease	375	3.1	4.2	\$ 23,655	4.8	75.2
Other upper respiratory disease	187	1.5	5.2	\$ 30,411	1.1	73.8

## APPENDIX A

<i>Clinical Classifications Software Categories and Chapter Headings</i>	Number of Discharges	Percent of Discharges	Mean LOS	Mean Total Charges	Percent Expired	Percent Admitted from ED
<b>Diseases of the digestive system</b>	<b>10776</b>	<b>100.0</b>	<b>4.9</b>	<b>\$22,488</b>	<b>1.7</b>	<b>79.4</b>
Intestinal infection	863	8.0	5.1	\$ 17,471	2.2	88.4
Disorders of teeth and jaw	73	0.7	2.4	\$ 12,685	1.4	60.3
Diseases of mouth; excluding dental	71	0.7	4.0	\$ 13,773	1.4	78.9
Esophageal disorders	433	4.0	4.2	\$ 21,222	0.9	71.4
Gastroduodenal ulcer (except hemorrhage)	130	1.2	5.0	\$ 23,756	3.1	81.5
Gastritis and duodenitis	309	2.9	4.2	\$ 16,068	0.6	88.0
Other disorders of stomach and duodenum	241	2.2	5.8	\$ 20,298	0.8	78.4
Appendicitis and other appendiceal conditions	947	8.8	2.7	\$ 18,982	0.0	92.8
Abdominal hernia	672	6.2	5.0	\$ 30,700	0.9	36.8
Regional enteritis and ulcerative colitis	274	2.5	5.5	\$ 20,824	0.7	70.1
Intestinal obstruction without hernia	1010	9.4	6.2	\$ 25,326	3.0	89.1
Diverticulosis and diverticulitis	917	8.5	5.1	\$ 21,715	1.1	71.3
Anal and rectal conditions	111	1.0	4.6	\$ 20,553	0.9	62.2
Peritonitis and intestinal abscess	85	0.8	5.9	\$ 26,761	4.7	80.0
Biliary tract disease	1185	11.0	4.2	\$ 22,776	0.6	74.5
Other liver diseases	372	3.5	8.1	\$ 42,260	7.5	83.9
Pancreatic disorders (not diabetes)	870	8.1	5.6	\$ 22,012	0.9	92.8
Gastrointestinal hemorrhage	1009	9.4	4.8	\$ 21,986	3.4	91.4
Noninfectious gastroenteritis	450	4.2	3.2	\$ 11,559	0.2	89.6
Other gastrointestinal disorders	754	7.0	6.3	\$ 26,004	2.1	63.7
<b>Diseases of the genitourinary system</b>	<b>5300</b>	<b>100.0</b>	<b>4.4</b>	<b>\$17,580</b>	<b>2.1</b>	<b>71.4</b>
Nephritis; nephrosis; renal sclerosis	39	0.7	5.7	\$ 25,218	2.6	61.5
Acute and unspecified renal failure	1327	25.0	6.3	\$ 22,844	5.7	88.3
Chronic renal failure	36	0.7	4.2	\$ 35,201	2.8	58.3
Urinary tract infections	1739	32.8	4.9	\$ 14,768	1.7	92.2
Calculus of urinary tract	492	9.3	2.2	\$ 12,482	0.0	80.9
Other diseases of kidney and ureters	168	3.2	4.0	\$ 23,676	1.2	42.3
Other diseases of bladder and urethra	65	1.2	5.1	\$ 26,180	0.0	49.2
Genitourinary symptoms and ill-defined conditions	94	1.8	3.5	\$ 15,303	1.1	72.3
Hyperplasia of prostate	92	1.7	4.0	\$ 17,401	1.1	21.7
Inflammatory conditions of male genital organs	97	1.8	3.8	\$ 12,785	0.0	77.3
Other male genital disorders	39	0.7	4.7	\$ 25,043	0.0	76.9
Nonmalignant breast conditions	55	1.0	3.5	\$ 12,377	0.0	67.3
Inflammatory diseases of female pelvic organs	137	2.6	3.1	\$ 13,965	0.7	67.9
Endometriosis	86	1.6	2.5	\$ 16,250	0.0	11.6
Prolapse of female genital organs	348	6.6	1.7	\$ 17,032	0.0	0.0
Menstrual disorders	159	3.0	2.5	\$ 17,098	0.0	12.6
Ovarian cyst	162	3.1	2.7	\$ 15,590	0.6	40.7
Menopausal disorders	20	0.4	2.8	\$ 17,090	0.0	35.0
Other female genital disorders	145	2.7	2.6	\$ 16,178	0.0	25.5
<b>Complications of pregnancy, childbirth, &amp; the puerperium</b>	<b>13023</b>	<b>100.0</b>	<b>2.9</b>	<b>\$8,235</b>	<b>0.0</b>	<b>9.2</b>
Contraceptive and procreative management	3	0.0	3.0	\$ 15,063	0.0	0.0
Spontaneous abortion	33	0.3	2.0	\$ 8,904	0.0	39.4
Induced abortion	15	0.1	1.6	\$ 6,237	0.0	20.0
Postabortion complications	5	0.0	1.8	\$ 8,166	0.0	60.0
Ectopic pregnancy	61	0.5	1.4	\$ 12,490	0.0	80.3
Other complications of pregnancy	1500	11.5	2.5	\$ 7,366	0.1	25.0
Hemorrhage during pregnancy; abruptio placenta; placenta previa	175	1.3	7.4	\$ 13,025	0.0	27.4
Hypertension complicating pregnancy; childbirth and the puerperium	824	6.3	4.0	\$ 10,770	0.0	15.5
Early or threatened labor	662	5.1	4.1	\$ 7,899	0.0	26.9
Prolonged pregnancy	669	5.1	2.7	\$ 7,173	0.0	1.3
Diabetes or abnormal glucose tolerance complicating pregnancy; childbirth; or the puerperium	275	2.1	3.0	\$ 7,461	0.0	6.5



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<i>Clinical Classifications Software Categories and Chapter Headings</i>	Number of Discharges	Percent of Discharges	Mean LOS	Mean Total Charges	Percent Expired	Percent Admitted from ED
Malposition; malpresentation	528	4.1	3.3	\$ 10,448	0.0	4.2
Fetopelvic disproportion; obstruction	138	1.1	2.8	\$ 9,367	0.0	0.7
Previous C-section	1540	11.8	2.7	\$ 9,958	0.0	1.4
Fetal distress and abnormal forces of labor	618	4.7	3.2	\$ 9,413	0.0	3.4
Polyhydramnios and other problems of amniotic cavity	597	4.6	3.6	\$ 8,850	0.0	7.9
Umbilical cord complication	490	3.8	2.3	\$ 6,528	0.0	2.9
OB-related trauma to perineum and vulva	2385	18.3	2.2	\$ 6,126	0.0	3.3
Forceps delivery	54	0.4	2.3	\$ 6,416	0.0	0.0
Other complications of birth; puerperium affecting management of mother	1748	13.4	3.5	\$ 9,200	0.0	8.5
Normal pregnancy and/or delivery	703	5.4	2.1	\$ 6,033	0.0	2.0
<b>Diseases of the skin and subcutaneous tissue</b>	<b>2293</b>	<b>100.0</b>	<b>4.2</b>	<b>\$13,682</b>	<b>0.6</b>	<b>76.5</b>
Skin and subcutaneous tissue infections	1991	86.8	3.9	\$ 12,520	0.3	80.7
Other inflammatory condition of skin	49	2.1	3.4	\$ 10,425	0.0	93.9
Chronic ulcer of skin	202	8.8	7.6	\$ 24,761	3.5	38.6
Other skin disorders	51	2.2	5.0	\$ 18,320	0.0	47.1
<b>Diseases of the musculoskeletal system and connective tissue</b>	<b>6733</b>	<b>100.0</b>	<b>3.7</b>	<b>\$34,507</b>	<b>0.3</b>	<b>19.2</b>
Infective arthritis and osteomyelitis (except that caused by tuberculosis or STD)	324	4.8	8.0	\$ 31,226	0.9	51.9
Rheumatoid arthritis and related disease	51	0.8	3.9	\$ 24,816	0.0	49.0
Osteoarthritis	3039	45.1	3.1	\$ 31,630	0.1	1.7
Other non-traumatic joint disorders	183	2.7	4.1	\$ 29,041	0.0	45.9
Spondylosis; intervertebral disc disorders; other back problems	1705	25.3	2.9	\$ 34,205	0.2	22.7
Osteoporosis	1	0.0	2.0	\$ 27,726	0.0	0.0
Pathological fracture	227	3.4	5.7	\$ 27,119	2.2	65.6
Acquired foot deformities	38	0.6	3.1	\$ 31,045	0.0	2.6
Other acquired deformities	257	3.8	5.8	\$ 84,878	0.8	1.9
Systemic lupus erythematosus and connective tissue disorders	65	1.0	4.2	\$ 19,383	1.5	69.2
Other connective tissue disease	519	7.7	5.0	\$ 23,543	0.8	64.2
Other bone disease and musculoskeletal deformities	324	4.8	3.7	\$ 57,227	0.3	13.3
<b>Congenital anomalies</b>	<b>679</b>	<b>100.0</b>	<b>10.5</b>	<b>\$108,056</b>	<b>1.0</b>	<b>16.8</b>
Cardiac and circulatory congenital anomalies	222	32.7	15.8	\$ 194,041	2.7	7.2
Digestive congenital anomalies	126	18.6	9.4	\$ 69,963	0.8	53.2
Genitourinary congenital anomalies	56	8.2	3.5	\$ 28,890	0.0	19.6
Nervous system congenital anomalies	51	7.5	5.8	\$ 45,905	0.0	11.8
Other congenital anomalies	224	33.0	8.6	\$ 78,207	0.0	6.3
<b>Certain conditions originating in the perinatal period</b>	<b>618</b>	<b>100.0</b>	<b>11.4</b>	<b>\$58,206</b>	<b>1.3</b>	<b>36.1</b>
Short gestation; low birth weight; and fetal growth retardation	78	12.6	26.5	\$ 73,243	3.8	5.1
Intrauterine hypoxia and birth asphyxia	7	1.1	11.4	\$ 51,433	14.3	14.3
Respiratory distress syndrome	31	5.0	15.2	\$ 60,765	3.2	0.0
Hemolytic jaundice and perinatal jaundice	140	22.7	1.7	\$ 4,189	0.0	37.1
Birth trauma	4	0.6	3.8	\$ 28,515	0.0	25.0
Other perinatal conditions	358	57.9	11.7	\$ 76,297	0.8	46.1
<b>Injury and poisoning</b>	<b>9026</b>	<b>100.0</b>	<b>5.0</b>	<b>\$26,749</b>	<b>2.1</b>	<b>76.7</b>
Joint disorders and dislocations; trauma-related	87	1.0	2.9	\$ 20,713	1.1	52.9
Fracture of neck of femur (hip)	746	8.3	5.8	\$ 30,134	2.0	95.4
Spinal cord injury	51	0.6	10.8	\$ 62,288	11.8	92.2
Skull and face fractures	179	2.0	3.0	\$ 18,463	1.1	94.4
Fracture of upper limb	411	4.6	3.6	\$ 21,310	0.7	82.2
Fracture of lower limb	750	8.3	4.9	\$ 29,415	0.9	88.0
Other fractures	743	8.2	5.3	\$ 24,762	1.5	89.1
Sprains and strains	110	1.2	2.9	\$ 13,525	0.0	82.7
Intracranial injury	875	9.7	5.4	\$ 28,045	6.9	97.3

## APPENDIX A

<i>Clinical Classifications Software Categories and Chapter Headings</i>	Number of Discharges	Percent of Discharges	Mean LOS	Mean Total Charges	Percent Expired	Percent Admitted from ED
Crushing injury or internal injury	369	4.1	6.5	\$ 36,756	3.5	97.3
Open wounds of head; neck; and trunk	129	1.4	3.6	\$ 19,748	1.6	93.8
Open wounds of extremities	99	1.1	4.4	\$ 23,778	2.0	81.8
Complication of device; implant or graft	1780	19.7	5.8	\$ 37,372	1.9	43.7
Complications of surgical procedures or medical care	1380	15.3	5.4	\$ 21,901	1.2	58.6
Superficial injury; contusion	162	1.8	3.4	\$ 14,258	1.9	92.6
Burns	36	0.4	5.6	\$ 26,062	2.8	88.9
Poisoning by psychotropic agents	261	2.9	3.3	\$ 12,838	0.8	94.3
Poisoning by other medications and drugs	498	5.5	3.0	\$ 12,899	1.4	91.2
Poisoning by nonmedicinal substances	51	0.6	3.7	\$ 15,948	0.0	94.1
Other injuries and conditions due to external causes	309	3.4	4.3	\$ 20,661	2.3	89.0
<b>Liveborn</b>	<b>11758</b>	<b>100.0</b>	<b>3.5</b>	<b>\$6,661</b>	<b>0.4</b>	<b>0.0</b>
Liveborn	11758	100.0	3.5	\$ 6,661	0.4	0.0
<b>Other conditions</b>	<b>4098</b>	<b>100.0</b>	<b>7.3</b>	<b>\$19,361</b>	<b>0.7</b>	<b>44.4</b>
Syncope	660	16.1	2.7	\$ 13,682	0.3	95.8
Fever of unknown origin	264	6.4	2.5	\$ 10,696	0.0	69.3
Lymphadenitis	68	1.7	2.4	\$ 12,276	0.0	79.4
Gangrene	113	2.8	14.2	\$ 62,376	8.0	47.8
Shock	5	0.1	5.4	\$ 35,128	60.0	80.0
Nausea and vomiting	121	3.0	2.8	\$ 11,114	0.0	81.0
Abdominal pain	553	13.5	3.0	\$ 12,393	0.4	84.6
Malaise and fatigue	53	1.3	2.7	\$ 10,625	3.8	88.7
Allergic reactions	108	2.6	2.7	\$ 11,302	0.0	83.3
Rehabilitation care; fitting of prostheses; and adjustment of devices	1873	45.7	11.9	\$ 24,076	0.3	0.3
Administrative/social admission	2	0.0	7.0	\$ 20,403	0.0	50.0
Medical examination/evaluation	2	0.0	6.0	\$ 12,325	0.0	50.0
Other aftercare	10	0.2	4.4	\$ 24,361	0.0	0.0
Other screening for suspected conditions (not mental disorders or infectious disease)	12	0.3	1.8	\$ 6,759	0.0	50.0
Residual codes; unclassified	254	6.2	3.5	\$ 15,594	1.6	69.7
<b>Unknown</b>	<b>222</b>	<b>100.0</b>	<b>4.0</b>	<b>\$20,587</b>	<b>0.5</b>	<b>67.1</b>
<b>Total</b>	<b>112832</b>	<b>100.0</b>	<b>4.7</b>	<b>\$ 22,410</b>	<b>2.4</b>	<b>54.4</b>

## APPENDIX B

### Clinical classification system for Ecodes:

Ecodes are supplementary classifications of external causes of injury and poisoning. They provide additional information regarding the nature of the condition, or to allow more detailed analysis of the external cause of the diagnosis. Ecodes were coded according to the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM). These codes were then aggregated into broader diagnostic categories using the Clinical Classification System (CCS) developed by the Agency of Healthcare Research and Quality (AHRQ). The CCS classification system for Ecodes is used to categorize clinically similar diagnoses for ease in presentation and interpretation of hospital discharge data. A complete listing of CCS Ecodes and selected corresponding measures are presented below.

### Number and Percent of Discharges, Mean Length of Stay, Mean Charges, Percent Expired, and Percent Admitted from the ED by Ecode Delaware Hospitals, 2009

<i>Clinical Classifications Software Categories for Ecodes</i>	Number of Discharges	Percent of Discharges	Mean LOS	Mean Total Charges	Percent Expired	Percent Admitted from ED
E Codes: Cut/pierce	166	1.6	4.9	\$ 18,914	1.2	87.3
E Codes: Drowning/submersion	10	0.1	1.9	\$ 13,377	0.0	100.0
E Codes: Fall	3851	38.2	5.7	\$ 24,593	3.8	91.8
E Codes: Fire/burn	52	0.5	8.0	\$ 34,755	1.9	82.7
E Codes: Firearms	117	1.2	6.7	\$ 40,462	10.3	95.7
E Codes: Machinery	27	0.3	4.6	\$ 27,089	3.7	92.6
E Codes: Motor vehicle traffic (MVT)	1099	10.9	6.2	\$ 37,135	2.1	95.2
E Codes: Pedal cyclist; not MVT	78	0.8	3.1	\$ 17,876	0.0	96.2
E Codes: Pedestrian; not MVT	7	0.1	4.1	\$ 25,613	0.0	100.0
E Codes: Transport; not MVT	110	1.1	3.2	\$ 19,789	1.8	93.6
E Codes: Natural/environment	178	1.8	4.3	\$ 13,908	0.6	88.8
E Codes: Overexertion	101	1.0	4.6	\$ 22,274	2.0	82.2
E Codes: Poisoning	778	7.7	3.6	\$ 15,090	0.8	90.1
E Codes: Struck by; against	309	3.1	4.0	\$ 19,277	1.0	91.9
E Codes: Suffocation	67	0.7	11.4	\$ 51,918	10.4	83.6
E Codes: Adverse effects of medical care	961	9.5	11.0	\$ 88,926	1.7	39.4
E Codes: Adverse effects of medical drugs	1049	10.4	6.0	\$ 36,695	2.7	80.3
E Codes: Other specified and classifiable	372	3.7	7.4	\$ 32,500	2.7	57.8
E Codes: Other specified; NEC	147	1.5	6.7	\$ 28,103	2.0	66.0
E Codes: Unspecified	589	5.8	7.0	\$ 32,721	2.9	61.6
E Codes: Place of occurrence	14	0.1	3.7	\$ 24,118	0.0	85.7
<b>Total</b>	<b>10082</b>	<b>100.0</b>	<b>6.2</b>	<b>\$ 33,277</b>	<b>2.8</b>	<b>82.3</b>

APPENDIX C

**Number of All-listed Procedures Performed during the Inpatient Stay  
by Procedure and Sex of Patient  
Delaware Hospitals, 2009**

<i>Single level CCS Procedure Categories and Chapter Headings</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
<b>Operations on the nervous system</b>	<b>1918</b>	<b>1845</b>	<b>3763</b>
Incision and excision of CNS	183	158	341
Insertion; replacement; or removal of extracranial ventricular shunt	67	76	143
Laminectomy; excision intervertebral disc	647	646	1293
Diagnostic spinal tap	545	483	1028
Insertion of catheter or spinal stimulator and injection into spinal canal	115	133	248
Decompression peripheral nerve	19	11	30
Other diagnostic nervous system procedures	24	26	50
Other non-OR or closed therapeutic nervous system procedures	76	75	151
Other OR therapeutic nervous system procedures	242	237	479
<b>Operations on the endocrine system</b>	<b>76</b>	<b>117</b>	<b>193</b>
Thyroidectomy; partial or complete	21	50	71
Diagnostic endocrine procedures	9	22	31
Other therapeutic endocrine procedures	46	45	91
<b>Operations on the eye</b>	<b>97</b>	<b>67</b>	<b>164</b>
Lens and cataract procedures	0	1	1
Repair of retinal tear; detachment	1	1	2
Destruction of lesion of retina and choroid	1	2	3
Diagnostic procedures on eye	1	0	1
Other therapeutic procedures on eyelids; conjunctiva; cornea	56	56	112
Other intraocular therapeutic procedures	10	3	13
Other extraocular muscle and orbit therapeutic procedures	28	4	32
<b>Operations on the ear</b>	<b>165</b>	<b>97</b>	<b>262</b>
Tympanoplasty	2	3	5
Myringotomy	92	60	152
Mastoidectomy	4	4	8
Diagnostic procedures on ear	7	8	15
Other therapeutic ear procedures	60	22	82
<b>Operations on the nose, mouth, and pharynx</b>	<b>607</b>	<b>399</b>	<b>1006</b>
Control of epistaxis	55	58	113
Plastic procedures on nose	35	17	52
Dental procedures	130	92	222
Tonsillectomy and/or adenoidectomy	82	49	131
Diagnostic procedures on nose; mouth and pharynx	31	24	55
Other non-OR therapeutic procedures on nose; mouth and pharynx	87	48	135
Other OR therapeutic procedures on nose; mouth and pharynx	187	111	298
<b>Operations on the respiratory system</b>	<b>2123</b>	<b>1766</b>	<b>3889</b>
Tracheostomy; temporary and permanent	219	154	373
Tracheoscopy and laryngoscopy with biopsy	119	115	234
Lobectomy or pneumonectomy	143	118	261
Diagnostic bronchoscopy and biopsy of bronchus	489	430	919
Other diagnostic procedures on lung and bronchus	22	14	36
Incision of pleura; thoracentesis; chest drainage	731	648	1379
Other diagnostic procedures of respiratory tract and mediastinum	77	56	133
Other non-OR therapeutic procedures on respiratory system	135	105	240
Other OR Rx procedures on respiratory system and mediastinum	188	126	314
<b>Operations on the cardiovascular system</b>	<b>22525</b>	<b>16015</b>	<b>38540</b>
Heart valve procedures	272	188	460
Coronary artery bypass graft (CABG)	955	393	1348
Percutaneous transluminal coronary angioplasty (PTCA)	1595	852	2447
Diagnostic cardiac catheterization; coronary arteriography	7237	4863	12100
Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator	927	646	1573
Other OR heart procedures	470	326	796
Extracorporeal circulation auxiliary to open heart procedures	720	382	1102

## APPENDIX C

<i>Single level CCS Procedure Categories and Chapter Headings</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Extracorporeal circulation auxiliary to open heart procedures	720	382	1102
Enderarterectomy; vessel of head and neck	201	139	340
Aortic resection; replacement or anastomosis	214	73	287
Other vascular catheterization; not heart	3181	3469	6650
Peripheral vascular bypass	181	96	277
Other vascular bypass and shunt; not heart	22	14	36
Creation; revision and removal of arteriovenous fistula or vessel-to-vessel cannula for dialysis	55	42	97
Hemodialysis	1290	1147	2437
Other OR procedures on vessels of head and neck	93	59	152
Embolectomy and endarterectomy of lower limbs	128	75	203
Other OR procedures on vessels other than head and neck	3582	2289	5871
Other diagnostic cardiovascular procedures	190	170	360
Other non-OR therapeutic cardiovascular procedures	1212	792	2004
<b>Operations on the hemic and lymphatic system</b>	<b>606</b>	<b>594</b>	<b>1200</b>
Bone marrow transplant	42	21	63
Bone marrow biopsy	165	106	271
Procedures on spleen	35	47	82
Other therapeutic procedures; hemic and lymphatic system	364	420	784
<b>Operations on the digestive system</b>	<b>7452</b>	<b>9470</b>	<b>16922</b>
Injection or ligation of esophageal varices	1	0	1
Esophageal dilatation	31	31	62
Upper gastrointestinal endoscopy; biopsy	1359	1664	3023
Gastrostomy; temporary and permanent	248	239	487
Colostomy; temporary and permanent	67	69	136
Ileostomy and other enterostomy	84	62	146
Gastrectomy; partial and total	22	39	61
Small bowel resection	136	178	314
Colonoscopy and biopsy	541	752	1293
Proctoscopy and anorectal biopsy	114	108	222
Colorectal resection	466	550	1016
Local excision of large intestine lesion (not endoscopic)	3	7	10
Appendectomy	607	534	1141
Hemorrhoid procedures	20	10	30
Endoscopic retrograde cannulation of pancreas (ERCP)	33	51	84
Biopsy of liver	113	93	206
Cholecystectomy and common duct exploration	387	765	1152
Inguinal and femoral hernia repair	99	34	133
Other hernia repair	286	539	825
Laparoscopy (GI only)	52	89	141
Abdominal paracentesis	401	351	752
Exploratory laparotomy	30	39	69
Excision; lysis peritoneal adhesions	274	803	1077
Peritoneal dialysis	32	30	62
Other bowel diagnostic procedures	37	28	65
Other non-OR upper GI therapeutic procedures	276	255	531
Other OR upper GI therapeutic procedures	269	455	724
Other non-OR lower GI therapeutic procedures	274	251	525
Other OR lower GI therapeutic procedures	472	466	938
Other gastrointestinal diagnostic procedures	92	117	209
Other non-OR gastrointestinal therapeutic procedures	260	386	646
Other OR gastrointestinal therapeutic procedures	366	475	841
<b>Operations on the urinary system</b>	<b>1954</b>	<b>2518</b>	<b>4472</b>
Endoscopic and endoscopic biopsy of the urinary tract	161	306	467
Transurethral excision; drainage; or removal urinary obstruction	453	375	828
Ureteral catheterization	274	470	744
Nephrotomy and nephrostomy	67	75	142

## APPENDIX C

<i>Single level CCS Procedure Categories and Chapter Headings</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Nephrectomy; partial or complete	95	97	192
Kidney transplant	16	1	17
Genitourinary incontinence procedures	1	203	204
Extracorporeal lithotripsy; urinary	15	13	28
Indwelling catheter	499	558	1057
Procedures on the urethra	58	12	70
Other diagnostic procedures of urinary tract	40	27	67
Other non-OR therapeutic procedures of urinary tract	81	181	262
Other OR therapeutic procedures of urinary tract	194	200	394
<b>Operations on the male genital organs</b>	<b>5199</b>	<b>0</b>	<b>5199</b>
Transurethral resection of prostate (TURP)	117	0	117
Open prostatectomy	129	0	129
Circumcision	4799	0	4799
Diagnostic procedures; male genital	13	0	13
Other non-OR therapeutic procedures; male genital	51	0	51
Other OR therapeutic procedures; male genital	90	0	90
<b>Operations on the female genital organs</b>	<b>0</b>	<b>4323</b>	<b>4323</b>
Oophorectomy; unilateral and bilateral	0	889	889
Other operations on ovary	0	152	152
Ligation or occlusion of fallopian tubes	0	712	712
Other operations on fallopian tubes	0	100	100
Hysterectomy; abdominal and vaginal	0	1163	1163
Other excision of cervix and uterus	0	122	122
Abortion (termination of pregnancy)	0	6	6
Dilatation and curettage (D&C); aspiration after delivery or abortion	0	56	56
Diagnostic dilatation and curettage (D&C)	0	30	30
Repair of cystocele and rectocele; obliteration of vaginal vault	0	289	289
Other diagnostic procedures; female organs	0	69	69
Other non-OR therapeutic procedures; female organs	0	98	98
Other OR therapeutic procedures; female organs	0	637	637
<b>Obstetrical procedures</b>	<b>0</b>	<b>28593</b>	<b>28593</b>
Removal of ectopic pregnancy	0	43	43
Episiotomy	0	422	422
Cesarean section	0	4036	4036
Forceps; vacuum; and breech delivery	0	747	747
Artificial rupture of membranes to assist delivery	0	3148	3148
Other procedures to assist delivery	0	9737	9737
Diagnostic amniocentesis	0	21	21
Fetal monitoring	0	6310	6310
Repair of current obstetric laceration	0	3834	3834
Other therapeutic obstetrical procedures	0	295	295
<b>Operations on the musculoskeletal system</b>	<b>8318</b>	<b>9252</b>	<b>17570</b>
Partial excision bone	481	480	961
Bunionectomy or repair of toe deformities	9	17	26
Treatment; facial fracture or dislocation	71	11	82
Treatment; fracture or dislocation of radius and ulna	111	113	224
Treatment; fracture or dislocation of hip and femur	417	611	1028
Treatment; fracture or dislocation of lower extremity (other than hip or femur)	395	444	839
Other fracture and dislocation procedure	295	290	585
Arthroscopy	22	12	34
Division of joint capsule; ligament or cartilage	24	30	54
Excision of semilunar cartilage of knee	14	7	21
Arthroplasty knee	976	1456	2432
Hip replacement; total and partial	893	1073	1966

## APPENDIX C

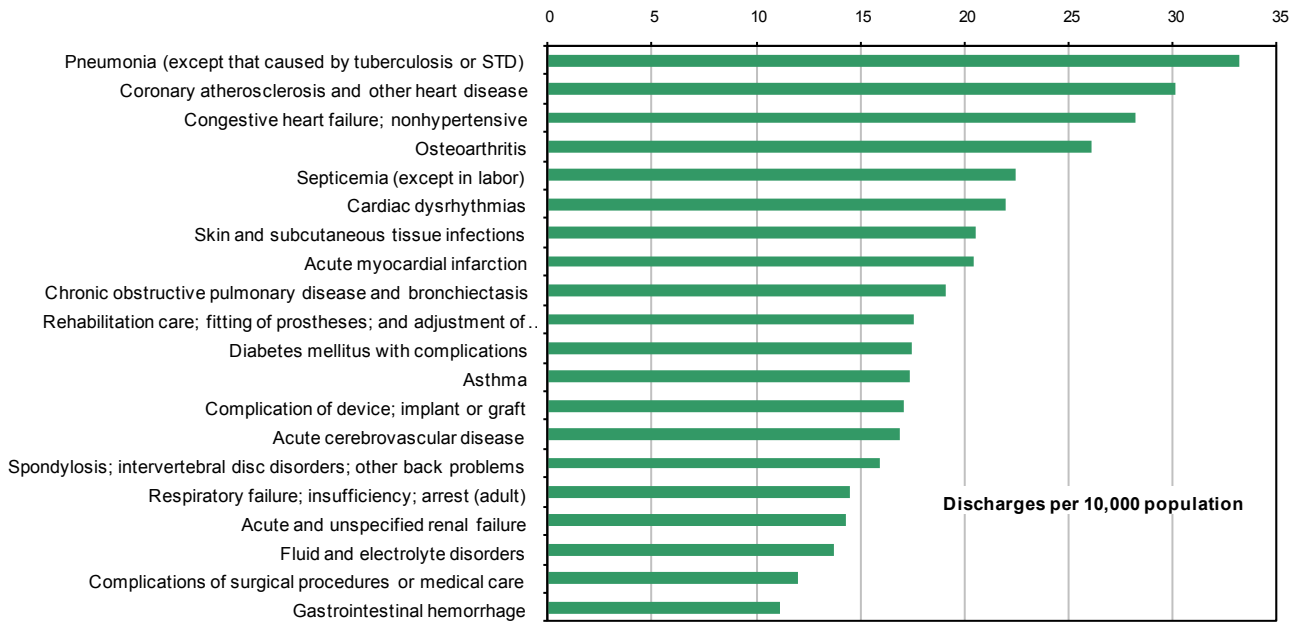
<i>Single level CCS Procedure Categories and Chapter Headings</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Arthroplasty other than hip or knee	68	83	151
Arthrocentesis	145	81	226
Injections and aspirations of muscles; tendons; bursa; joints and soft tissue	23	30	53
Amputation of lower extremity	244	131	375
Spinal fusion	1557	1822	3379
Other diagnostic procedures on musculoskeletal system	158	145	303
Other therapeutic procedures on muscles and tendons	891	685	1576
Other OR therapeutic procedures on bone	509	569	1078
Other OR therapeutic procedures on joints	253	192	445
Other non-OR therapeutic procedures on musculoskeletal system	697	936	1633
Other OR therapeutic procedures on musculoskeletal system	65	34	99
<b>Operations on the integumentary system</b>	<b>2201</b>	<b>2230</b>	<b>4431</b>
Breast biopsy and other diagnostic procedures on breast	0	17	17
Lumpectomy; quadrantectomy of breast	1	28	29
Mastectomy	1	80	81
Incision and drainage; skin and subcutaneous tissue	487	421	908
Debridement of wound; infection or burn	512	424	936
Excision of skin lesion	67	119	186
Suture of skin and subcutaneous tissue	369	204	573
Skin graft	209	173	382
Other diagnostic procedures on skin and subcutaneous tissue	33	31	64
Other non-OR therapeutic procedures on skin and breast	403	425	828
Other OR therapeutic procedures on skin and breast	119	308	427
<b>Miscellaneous diagnostic and therapeutic procedures</b>	<b>52108</b>	<b>60586</b>	<b>112694</b>
Other organ transplantation	5	3	8
Computerized axial tomography (CT) scan head	3906	4468	8374
CT scan chest	2116	2289	4405
CT scan abdomen	2515	3402	5917
Other CT scan	1501	1675	3176
Myelogram	1	1	2
Mammography	1	20	21
Routine chest X-ray	0	2	2
Intraoperative cholangiogram	40	57	97
Upper gastrointestinal X-ray	171	153	324
Lower gastrointestinal X-ray	1	5	6
Intravenous pyelogram	4	1	5
Cerebral arteriogram	143	169	312
Contrast aortogram	359	265	624
Contrast arteriogram of femoral and lower extremity arteries	990	690	1680
Arterio- or venogram (not heart and head)	882	720	1602
Diagnostic ultrasound of head and neck	926	1109	2035
Diagnostic ultrasound of heart (echocardiogram)	3543	3740	7283
Diagnostic ultrasound of gastrointestinal tract	20	18	38
Diagnostic ultrasound of urinary tract	58	37	95
Diagnostic ultrasound of abdomen or retroperitoneum	1824	2387	4211
Other diagnostic ultrasound	2394	4020	6414
Magnetic resonance imaging	2294	2896	5190
Electroencephalogram (EEG)	493	503	996
Nonoperative urinary system measurements	3	4	7
Cardiac stress tests	473	485	958
Electrocardiogram	13	13	26
Swan-Ganz catheterization for monitoring	36	29	65

## APPENDIX C

<i>Single level CCS Procedure Categories and Chapter Headings</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Arterial blood gases	7	2	9
Microscopic examination (bacterial smear; culture; toxicology)	0	12	12
Radioisotope bone scan	107	105	212
Radioisotope pulmonary scan	375	527	902
Radioisotope scan and function studies	244	314	558
Other radioisotope scan	74	82	156
Therapeutic radiology for cancer treatment	71	83	154
Diagnostic physical therapy	38	42	80
Physical therapy exercises; manipulation; and other procedures	400	498	898
Traction; splints; and other wound care	210	223	433
Other physical therapy and rehabilitation	856	920	1776
Respiratory intubation and mechanical ventilation	4023	3730	7753
Other respiratory therapy	117	175	292
Psychological and psychiatric evaluation and therapy	17	32	49
Alcohol and drug rehabilitation/detoxification	12	4	16
Ophthalmologic and otologic diagnosis and treatment	3284	3020	6304
Nasogastric tube	107	128	235
Blood transfusion	3512	3999	7511
Enteral and parenteral nutrition	369	379	748
Cancer chemotherapy	470	352	822
Conversion of cardiac rhythm	537	375	912
Other diagnostic radiology and related techniques	526	516	1042
Other diagnostic procedures (interview; evaluation; consultation)	1976	2225	4201
Prophylactic vaccinations and inoculations	3491	3270	6761
Nonoperative removal of foreign body	40	44	84
Other therapeutic procedures	6533	10368	16901
<b>Total</b>	<b>105349</b>	<b>137872</b>	<b>243221</b>

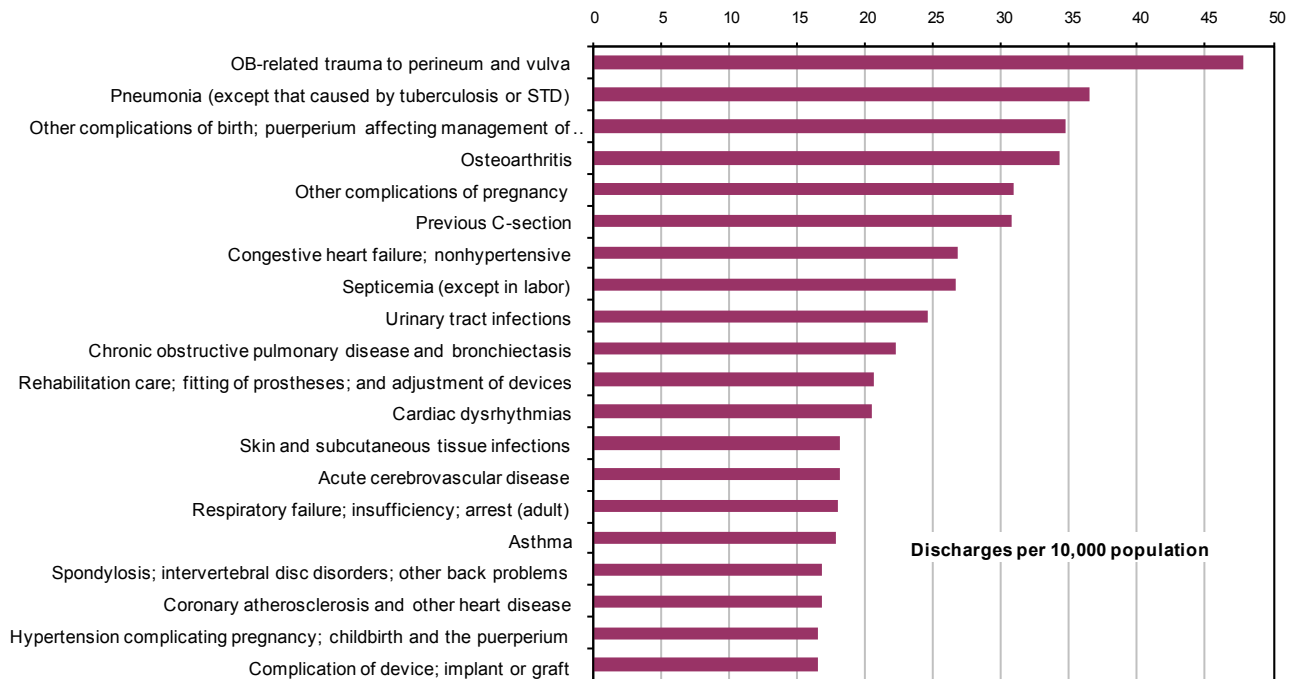


**Annual Hospitalization Rates for 20 Most Frequent Diagnoses\* of Males  
Delaware Residents, 2009**



\*Excluding liveborn infants.  
Source: Delaware Health Statistics Center

**Annual Hospitalization Rates for 20 Most Frequent Diagnoses\* of Females  
Delaware Residents, 2009**



\*Excluding liveborn infants.  
Source: Delaware Health Statistics Center

## APPENDIX E

### Conditions with the 10 Highest Total Charges 2009

Rank	CCS Principal Diagnoses	Total Billed Charges	% of Total Charges	Number of Discharges
1	Coronary atherosclerosis and other heart disease	\$ 111,105,399	4.4	2468
2	Septicemia (except in labor)	\$ 97,910,578	3.9	2338
3	Osteoarthritis	\$ 96,123,170	3.8	3039
4	Acute myocardial infarction	\$ 86,057,713	3.4	1823
5	Liveborn	\$ 78,320,501	3.1	11759
6	Pneumonia (except that caused by tuberculosis or STD)	\$ 75,451,368	3.0	3504
7	Respiratory failure; insufficiency; arrest (adult)	\$ 70,297,866	2.8	1563
8	Complication of device; implant or graft	\$ 66,522,477	2.6	1780
9	Congestive heart failure; nonhypertensive	\$ 65,120,227	2.6	2643
10	Spondylosis; intervertebral disc disorders; other back problems	\$ 58,320,156	2.3	1705
Total for 10 most expensive conditions		\$ 805,229,454	31.8	32622
Total aggregate charges for all discharges		\$ 2,528,555,952	100.0	112,832

Source: Delaware Health Statistics Center

### Discharges with Highest Mean Charges in 2009

CCS Principal Diagnoses	Number Discharges			Percent Discharges			Mean Charges		
	1999	2004	2009	1999	2004	2009	1999	2004	2009
All Discharges	94,665	111,806	112,832	100.0	100.0	100.0	\$ 9,495	\$ 15,222	\$ 22,410
Cardiac and circulatory congenital anomalies	278	351	222	0.3	0.3	0.2	\$ 52,912	\$ 89,126	\$ 194,041
Leukemias	99	151	117	0.1	0.1	0.1	\$ 49,672	\$ 51,877	\$ 101,495
Other CNS infection and poliomyelitis	25	26	18	0.0	0.0	0.0	\$ 36,704	\$ 40,293	\$ 91,183
Other acquired deformities	178	247	257	0.2	0.2	0.2	\$ 28,212	\$ 49,845	\$ 84,878
Other congenital anomalies	326	338	224	0.3	0.3	0.2	\$ 21,290	\$ 27,672	\$ 78,207
Heart valve disorders	183	287	327	0.2	0.3	0.3	\$ 36,703	\$ 57,197	\$ 76,516
Other perinatal conditions	225	263	358	0.2	0.2	0.3	\$ 20,702	\$ 43,426	\$ 76,297
Aortic; peripheral; and visceral artery aneurysms	226	227	301	0.2	0.2	0.3	\$ 30,003	\$ 44,248	\$ 73,792
Short gestation; low birth weight; and fetal growth retardation	79	74	78	0.1	0.1	0.1	\$ 31,972	\$ 83,823	\$ 73,243
Digestive congenital anomalies	94	119	126	0.1	0.1	0.1	\$ 16,792	\$ 29,973	\$ 69,963

Source: Delaware Health Statistics Center

### Number, Percent, and Mean Charges for the Highest Volume Discharges in 2009

CCS Principal Diagnoses	Number Discharges			Percent Discharges			Mean Charges		
	1999	2004	2009	1999	2004	2009	1999	2004	2009
All Discharges	94,665	111,806	112,832	100.0	100.0	100.0	\$ 9,495	\$ 15,222	\$ 22,410
Liveborn	10,119	11,423	11,759	10.7	10.2	10.4	\$ 3,543	\$ 4,201	\$ 6,660
Pneumonia	3,111	3,211	3,504	3.3	2.9	3.1	\$ 11,051	\$ 15,520	\$ 21,533
Osteoarthritis	1,038	2,225	3,039	1.1	2.0	2.7	\$ 17,129	\$ 23,638	\$ 31,630
Congestive heart failure	2,726	3,134	2,643	2.9	2.8	2.3	\$ 11,267	\$ 19,955	\$ 24,639
Coronary atherosclerosis and other heart disease	2,928	3,205	2,468	3.1	2.9	2.2	\$ 14,781	\$ 27,246	\$ 45,018
OB-related trauma to perineum and vulva	2,321	2,224	2,385	2.5	2.0	2.1	\$ 2,727	\$ 3,925	\$ 6,126
Septicemia	616	1,325	2,338	0.7	1.2	2.1	\$ 17,685	\$ 28,604	\$ 41,878
Cardiac dysrhythmias	1,706	1,832	2,102	1.8	1.6	1.9	\$ 10,067	\$ 17,472	\$ 23,977
Skin and subcutaneous tissue infections	895	1,547	1,991	0.9	1.4	1.8	\$ 6,552	\$ 9,696	\$ 12,520
Chronic obstructive pulmonary disease and bronchiectasis	1,458	1,606	1,938	1.5	1.4	1.7	\$ 9,145	\$ 12,625	\$ 16,389

Source: Delaware Health Statistics Center

APPENDIX F

2009 Delaware Hospitalizations

**Top 10 Most Frequent Diagnoses for Medicare**

<i>CCS Diagnosis</i>	<i>Number of Discharges</i>	<i>Percent of hospitalizations for this condition billed to Medicare</i>
Congestive heart failure; nonhypertensive	2128	5.0
Osteoarthritis	1810	4.2
Pneumonia (except that caused by tuberculosis or STD)	1783	4.2
Septicemia (except in labor)	1665	3.9
Cardiac dysrhythmias	1487	3.5
Chronic obstructive pulmonary disease and bronchiectasis	1447	3.4
Rehabilitation care; fitting of prostheses; and adjustment of devices	1434	3.3
Coronary atherosclerosis and other heart disease	1412	3.3
Acute cerebrovascular disease	1220	2.8
Urinary tract infections	1116	2.6

**Top 10 Most Frequent Diagnoses for Medicaid**

<i>CCS Diagnosis</i>	<i>Number of Discharges</i>	<i>Percent of hospitalizations for this condition billed to Medicaid</i>
Liveborn	5814	21.5
OB-related trauma to perineum and vulva	958	3.5
Other complications of pregnancy	899	3.3
Other complications of birth; puerperium affecting management of mother	828	3.1
Asthma	768	2.8
Previous C-section	722	2.7
Pneumonia (except that caused by tuberculosis or STD)	697	2.6
Acute bronchitis	472	1.7
Skin and subcutaneous tissue infections	463	1.7
Normal pregnancy and/or delivery	424	1.6

**Top 10 Most Frequent Diagnoses for Privately Insured**

<i>CCS Diagnosis</i>	<i>Number of Discharges</i>	<i>Percent of hospitalizations for this condition billed to Private Insurers</i>
Liveborn	5376	14.6
OB-related trauma to perineum and vulva	1271	3.4
Osteoarthritis	1052	2.9
Other complications of birth; puerperium affecting management of mother	844	2.3
Pneumonia (except that caused by tuberculosis or STD)	832	2.3
Coronary atherosclerosis and other heart disease	763	2.1
Previous C-section	739	2.0
Asthma	726	2.0
Spondylosis; intervertebral disc disorders; other back problems	680	1.8
Skin and subcutaneous tissue infections	628	1.7

**Top 10 Most Frequent Diagnoses for Uninsured**

<i>CCS Diagnosis</i>	<i>Number of Discharges</i>	<i>Percent of hospitalizations for this condition billed to Uninsured Patients</i>
Liveborn	241	7.0
Skin and subcutaneous tissue infections	137	4.0
Diabetes mellitus with complications	132	3.8
Mood disorders	129	3.7
Pneumonia (except that caused by tuberculosis or STD)	124	3.6
Acute myocardial infarction	95	2.7
Coronary atherosclerosis and other heart disease	78	2.3
Nonspecific chest pain	74	2.1
Asthma	73	2.1
Congestive heart failure; nonhypertensive	71	2.1

Source: Delaware Health Statistics Center

**Conditions with the Highest Number of In-Hospital Deaths by Age Group  
Delaware Hospitals, 2009**

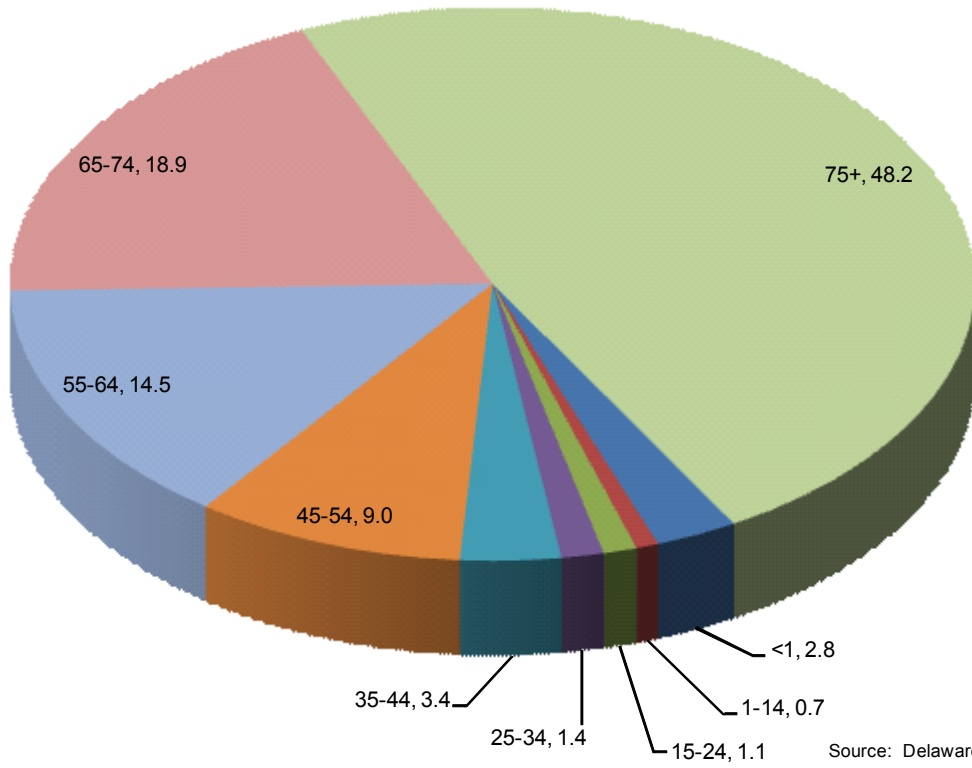
Diagnosis	Age Group in Years					TOTAL
	Under 1 <sup>1</sup>	1-17	18-44	45-64	65+	
<i>All Discharges</i>	<i>14,967</i>	<i>9,151</i>	<i>26,437</i>	<i>25,873</i>	<i>36,404</i>	<i>112,832</i>
Short gestation; low birth weight; and fetal growth retardation	23					23
Respiratory distress syndrome	19					19
Other perinatal conditions	8					8
Other congenital anomalies	7					7
Cardiac and circulatory congenital anomalies	5	1				6
Respiratory failure; insufficiency; arrest	4	5	9	51	162	231
Intracranial injury <sup>2</sup>	1	3	9	15	32	60
Other gastrointestinal disorders	1	1				2
Acute cerebrovascular disease		2	7	52	125	186
Cardiac arrest and ventricular fibrillation		2	5	9	14	30
Septicemia (except in labor)		1	20	98	279	398
Complication of device; implant or graft		1	5			6
Crushing injury or internal injury		1	4			5
HIV infection			8	17		25
Mental disorders <sup>3</sup>			15	27	10	52
Pneumonia (except that caused by tuberculosis or STD)			6	20	99	125
Other nervous system disorders			4	5	11	20
Acute and unspecified renal failure			2		64	66
Secondary malignancies				37	55	92
Acute myocardial infarction				31	77	108
Other liver diseases				17		17
Cancer of bronchus; lung				14	36	50
Congestive heart failure; nonhypertensive					104	104
Aspiration pneumonitis; food/vomitus					66	66

**Notes:**

1. Includes 51 cases where the secondary diagnosis was used in place of the general principal diagnosis of "liveborn infant".
2. 65 percent of intracranial injuries were due to falls.
3. 46 percent of these were delirium and mood disorders, 40 percent were alcohol-related, and 14 percent were drug-related.

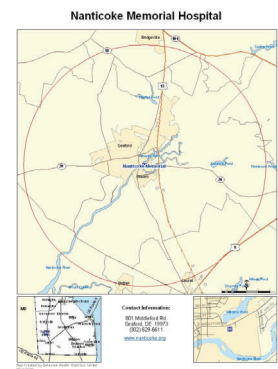
Source: Delaware Health Statistics Center

### Age Distribution of Patients who Died while Hospitalized Delaware Hospitals, 2009



Source: Delaware Health Statistics Center

# HOSPITAL PROFILES AND HOSPITAL LOCATION MAPS



## Alfred I. duPont Hospital for Children Profile

### Introduction:

Name  
General Background  
Accreditation

Alfred I. duPont Hospital for Children

Since our founding in 1940, the Alfred I. duPont Hospital for Children has served thousands of children from across the country and around the world. In 2009, the Alfred I. duPont Hospital for Children was named one of Parents Magazine's "Top 25 Best Children's Hospitals."

The hospital is a division of Nemours, one of the nation's largest pediatric health systems. Nemours is dedicated to achieving higher standards in children's health. Nemours offers an integrated spectrum of clinical treatment coupled with research, advocacy, and educational health and prevention services extending to all families in the communities it serves.

Starting with Alfred I. duPont's bequest more than seventy years ago, Nemours has grown into a multi-dimensional organization offering personalized clinical and preventive care focused on children.

In addition to the Alfred I. duPont Hospital for Children, Nemours owns and operates major children's specialty clinics in Delaware (Wilmington), Florida (Jacksonville, Orlando and Pensacola), Pennsylvania (Philadelphia, Lancaster and Newtown Square) and New Jersey (Egg Harbor Township and Voorhees). Nemours also operates primary care practices throughout Delaware and in southeastern Pennsylvania.

Together the duPont Hospital and Nemours are the academic partner of Thomas Jefferson University (Philadelphia) and Jefferson Medical College.

### Mission Statement:

To provide leadership, institutions, and services to restore and improve the health of children through care and programs not readily available, with one high standard of quality and distinction regardless of the recipient's financial status.

### Ownership:

Nemours (Jacksonville, Fla.)

### Medical Staff:

440 physicians, clinical psychologists, APNs and PAs

### Services Offered:

The Nemours/Alfred I. duPont Hospital for Children offers all the specialties of pediatric medicine, surgery, and dentistry in a spacious, comfortable, and family-centered facility.

### Number of Employees:

3,125 (in the Delaware Valley)

### Licensed Beds:

200

### Staffed Beds:

159

### Location of Facilities:

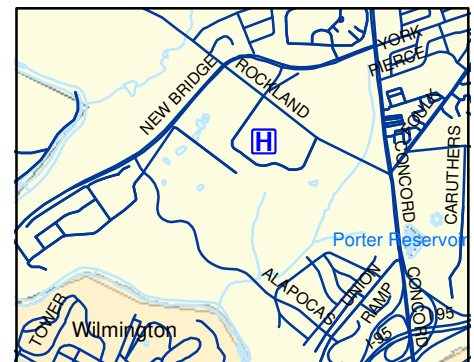
1600 Rockland Road  
Wilmington, Delaware 19803

# Alfred I. duPont Hospital for Children



## Contact Information:

1600 Rockland Rd  
 Wilmington, DE 19899  
 (302) 651-4000  
[www.nemours.org](http://www.nemours.org)



Map Created by Delaware Health Statistics Center  
 BG 4.27.06



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## Bayhealth Medical Center Profile

### Introduction:

#### *Name*

Bayhealth Medical Center

#### *General Background*

Kent General Hospital, founded in 1927, and Milford Memorial Hospital, founded in 1907, merged in January of 1997. The combined organization, Bayhealth Medical Center, is a not-for-profit health care facility that includes Middletown Medical Center and numerous satellite locations. Bayhealth is southern Delaware's largest healthcare system and is a member of the Premier Health Alliance.

#### *Accreditation*

- Bayhealth - Kent General Hospital and Milford Memorial Hospital - Accredited by the Joint Commission.
- Cancer Programs - The American College of Surgeons Community Hospital Comprehensive Cancer Program.
- Diagnostic Imaging and Women's Centers- ACR Mammography Accreditation, ACR Ultrasound Breast & Breast Biopsy Accreditation and ACR Ultrasound & Vascular Accreditation.
- Laboratory - The American Association of Blood Banks, Joint Commission - Pathology and Clinical Laboratory Services, and Certification by the Healthcare Financing Administration.
- Home Health Care - Skilled Home Health Agency License.
- Pharmacy at Kent General - DEA Controlled Substance Certificate, Certification with State of DE Division of Professional Regulation, Uniform Controlled Substance Certificate and ASHP - American Society of Health - System Pharmacists
- Rehabilitation Services - Council for the Accreditation of Rehabilitation Facilities (CARF).
- Bayhealth SleepCare Center at Kent - AASM - American Academy of Sleep Medicine

### Mission Statement:

To improve the health status of all members of the Bayhealth community.

### Ownership:

Bayhealth, Inc. is the non-profit and parent corporation of Bayhealth Medical Center, Inc. and six other corporate entities, including the Bayhealth Foundation.

### Medical Staff:

The medical staff of Bayhealth totals 450 active, provisional active and courtesy staff.

### Services Offered:

#### **Surgical Services**

- Cardiovascular Surgery and Intervention
- Affiliated with Penn Cardiac Care
- Major services include orthopedics, general and vascular surgery, ophthalmology, urology, gynecology and plastic surgery.
- Day Surgery Services
- Endoscopic Suite
- Incontinence Center

Services Offered:

- Otolaryngology
- Thoracic
- Wound Care Center - including Hyperbaric

**Diagnostic Imaging (Digital)**

- PET/CT Scanning
- Magnetic Resonance Imaging, including Open MRI
- Digital PACS (Picture Archiving Communications System)
- Magnetic Resonance Angiography
- Computerized Tomography
- Nuclear Medicine
- Digital Vascular Imaging
- Ultrasonography
- Low-dose Mammography
- General Radiography
- Fluoroscopy
- Stereotactic Breast Biopsy
- Bone densitometry

**Critical Care**

- Cardiovascular Surgical Intensive Care
- Intensive Care, Intermediate Care & Dialysis Units
- 33 Additional Monitored Beds on new 4<sup>th</sup> Floor Unit

**Emergency Services**

- 24-hour emergency and trauma services
- Kent General and Milford Memorial Emergency Departments are designated trauma centers

**Obstetric and Pediatric Services**

- Two-Floor Maternity and Women's Services unit at Kent General featuring all private rooms, 10 delivery rooms, 15 neonatal intensive care beds, and a newborn nursery
- LDRP Suites at Milford Memorial
- Level II neonatal intensive care (KGH)
- Perinatology (Maternal Fetal Medicine)
- Pediatric Intermediate Care Unit (KGH)
- Inpatient Pediatric Unit
- Ronald Room (for families with a newborn in the NICU)

**Cancer Services**

- Bayhealth Cancer Institute
- Chemotherapy and Radiation Therapy
- Affiliated with the Penn Cancer Network
- Trilogy Technology
- 3 - D imaging
- Prostate Seed Implants
- IMRT
- Clinical Trials
- Breast Care Coordinator
- Care Coordinators
- Nurse Navigators

Services Offered:

**Rehabilitation Services**

- Inpatient Rehabilitation Center (MMH) - CARF accredited
- Physical and Occupational Therapy Services
- Certified Speech Pathologists
- Sports Medicine
- Three-phase Cardiac Rehabilitation Services
- Aquatic Therapy
- Home Health Care

**Other Services**

- Wound Care Center
- Bayhealth Sleep Care Centers
- Bariatric Surgery Program
- WalkIn Medical Care - Milford

**Community Related Services**

- Community based outpatient laboratory services
- Planetree Affiliate
- Occupational Health Programs
- Consumer Health Education Programs
- Diabetes Care Centers
- Support Groups
- Health Fair and Health Screenings
- STEPS Program for Seniors
- Guest Relations Program
- High School-based Wellness Centers at Milford, Smyrna, Caesar Rodney and Woodbridge

Number of Employees: 2,900

Licensed Beds: 389

Staffed Beds: 336

Location of Facilities:

**Oncology Services**

- 793 S. Queen Street, Dover, DE 19904
- 21 W. Clarke Avenue, Milford, DE 19963
- 640 S. State Street, Dover, DE 19901

**Lifestyles Fitness Centers**

- 1255 S. State Street
- 21 W. Clarke Avenue

**Outpatient Rehabilitation Services at KGH**

560 S. Governors Avenue, Dover, DE 19904

**Outpatient Rehabilitation Services at MMH**

21 W. Clarke Avenue, Milford, DE 19963

**Outpatient Services Center at KGH**

Hope Street, Dover, DE 19901

**Dover Outpatient Imaging Center**

540 S. Governors Avenue, Dover, DE 19901

**Outpatient Services Center at MMH**

Kings Highway, Milford, DE 19963

Location of Facilities:

**Women's Center at KGH**

540 S. Governors Avenue, Dover, DE 19904

**Women's Center at MMH**

Medical Arts Building, Suite 3, Milford, DE 19963

**Harrington Outpatient Services**

201 Shaw Avenue, Harrington, DE 19952

**Middletown Medical Center**

209 E. Main Street, Middletown, DE 19709

**Milford Outpatient Imaging Center**

1020 Mattlind Way, Milford, DE

**Milton Outpatient Services**

632 Mulberry Street, Milton, DE 19968

**Smyrna-Clayton Medical Services**

315 N. Carter Road, Smyrna, DE 19977

**High School Wellness Centers**

- Caesar Rodney High School
- Smyrna High School
- Milford High School
- Woodbridge High School

**WalkIn Medical Care**

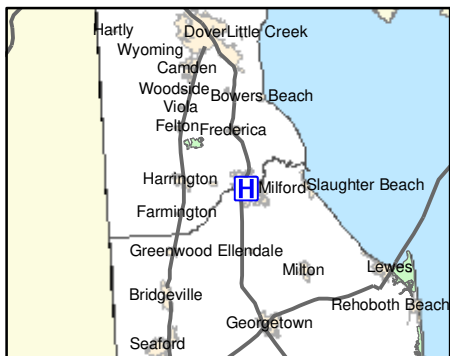
301 Jefferson Avenue, Milford, DE 19963

**Bayhealth Outpatient Imaging Center**

Eden Hill Medical Center

200 Banning Street, Suite 140, Dover, DE 19904

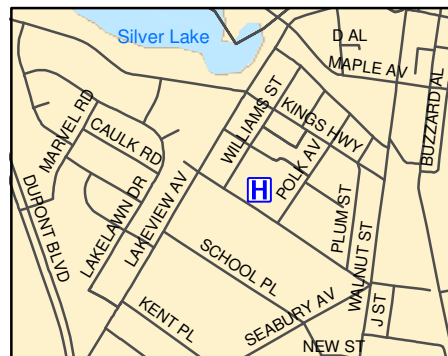
# Milford Memorial Hospital BayHealth Medical Center



### Contact Information:

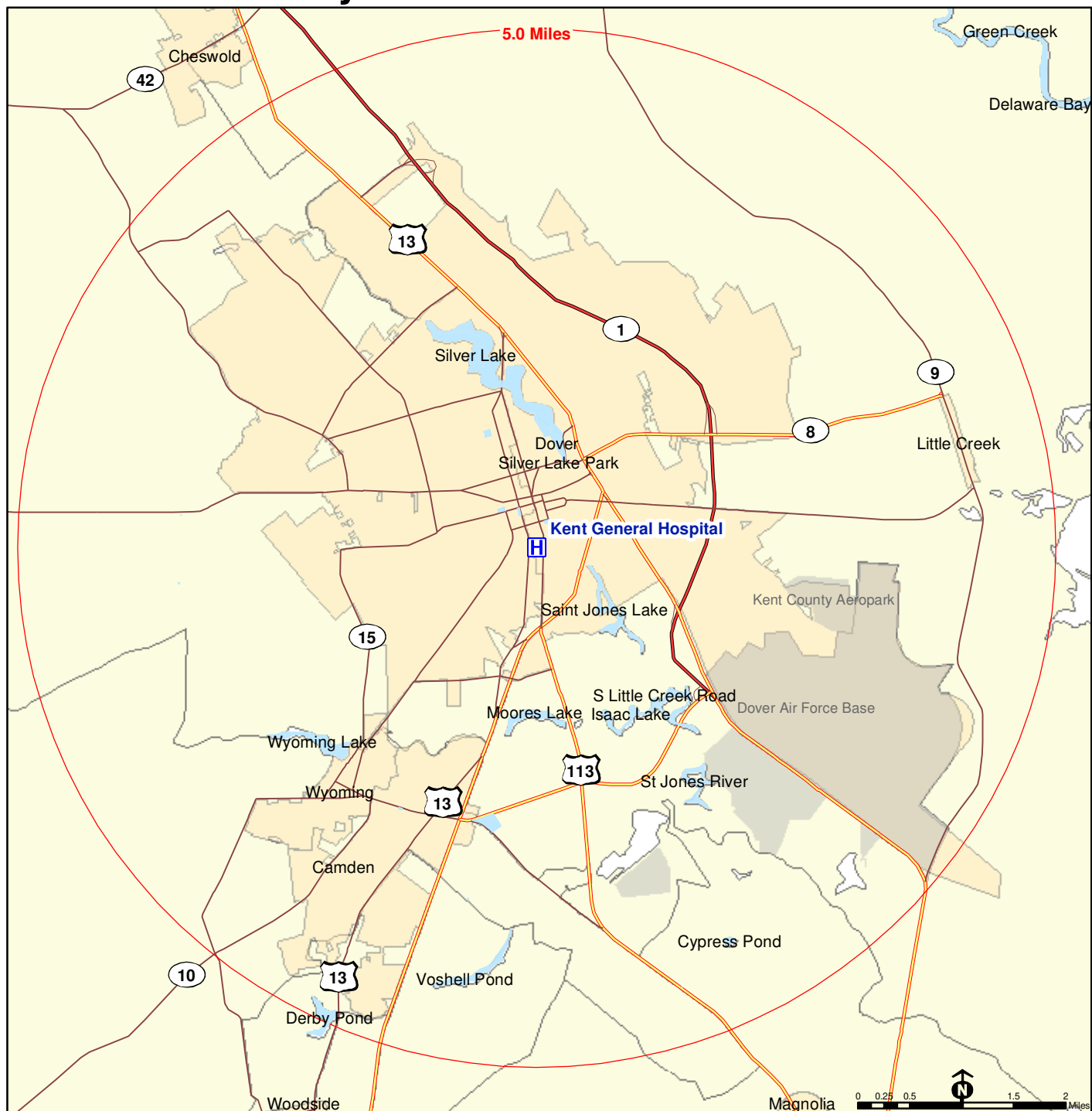
21 West Clarke Avenue  
Milford, DE 19963  
(302) 422-3311

[www.bayhealth.org/about/milford.asp](http://www.bayhealth.org/about/milford.asp)



Map Created by Delaware Health Statistics Center  
BG 4.27.06

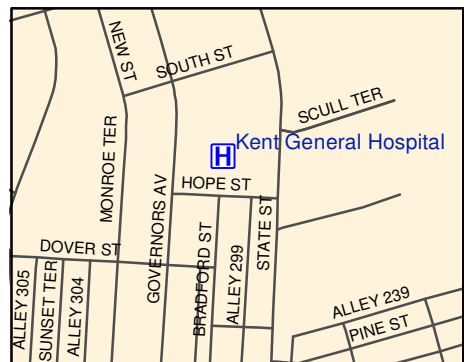
# Kent General Hospital Bayhealth Medical Center



### Contact Information:

640 South State St.  
Dover, DE 19901  
(302) 674-4700

[www.bayhealth.org](http://www.bayhealth.org)



Map Created by Delaware Health Statistics Center  
BG 4.27.06

## Beebe Medical Center Profile

Introduction:	Beebe Medical Center, in conjunction with its Medical-Dental Staff, provides healthcare services in a variety of locations throughout eastern Sussex County.
<i>Name</i>	Beebe Medical Center
<i>General Background</i>	Beebe Medical Center is a community hospital system offering a broad spectrum of services and facilities to serve people living in or visiting our service area.
<i>Accreditation</i>	<u>Beebe Medical Center</u> - Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) <u>Beebe Home Health Agency</u> - Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) <u>Cancer Program</u> - The Commission on Cancer, the American College of Surgeons <u>Beebe School of Nursing</u> - National League for Nursing <u>Vascular Laboratory</u> - Intersocietal Commission for the Accreditation of Vascular Laboratories <u>Laboratory</u> - The College of American Pathologists; American Association of Blood Banks <u>Mammography</u> - The American College of Radiology <u>Ultrasonography</u> - The American College of Radiology
Mission Statement:	Beebe Medical Center's charitable mission is to encourage healthy living, prevent illness, and restore optimal health with the people residing, working, or visiting in the communities we serve.
Ownership:	Community owned, private, not-for-profit hospital, governed by a local Board of Directors.
Medical Staff:	173 active staff doctors serving a variety of medical specialties.
Services Offered:	<ul style="list-style-type: none"><li>• Tunnell Cancer Center, offering comprehensive, hospital-based diagnosis and treatment, including medical oncology, radiation oncology, and surgical oncology.</li><li>• Comprehensive Cardiac Care, including cardiac catheterization, non-invasive diagnostic testing, cardiac rehabilitation, and preventive care. Open Heart Surgery in affiliation with Christiana Care Health System.</li><li>• Physical Rehabilitation Therapy Services offering physical therapy, occupational therapy, and speech therapy.</li><li>• Women's Health Pavilion.</li><li>• Diagnostic Imaging services including magnetic resonance imaging (MRI), computed tomography (CT), nuclear imaging, Positron Emission Tomography (PET), Electronic Beam Computed Tomography (EBCT) digital interventional radiology, ultrasonography, mammography, stereotactic breast biopsy, bone densitometry, fluoroscopy, and general radiography.</li><li>• Beebe Lab Express.</li></ul> <p><u>Specialized programs such as:</u></p> <ul style="list-style-type: none"><li>• Wound Care and Diabetes Management Center</li><li>• Sleep Disorders Center</li><li>• Integrative Health</li><li>• 24-hour Emergency Medicine Department in Lewes Level III Trauma Designation</li><li>• Millville Emergency Center (summer)</li></ul>

Services Offered:

Specialized programs such as:

- Accredited Vascular Laboratory
- Inpatient and Outpatient surgery
- Home Health services
- Beebe School of Nursing (RN to BSN option offered in conjunction with Wilmington University, CAN program)
- High School-based Wellness Centers (Cape Henlopen, Indian River and Sussex Central High Schools)
- Gull House–Adult Day Care

Number of Employees:

1,600 employees

Licensed Beds:

210 - Beebe Medical Center

Staffed Beds:

155 - Beebe Medical Center

Location of Facilities:

**Beebe Medical Center**

Lewes, DE

**Beebe Medical Foundation**

Lewes, DE

**Beebe Health Campus**

Rehoboth Beach, DE, Route 24

Diagnostic Imaging

Physical Therapy

Walk-in lab, x-ray, EKG, and blood draw

Tunnell Cancer Center

**Beebe Physician Network Practices**

Lewes, DE (Lewes Pulmonary)

Lewes, DE (Lewes Infectious Diseases)

Rehoboth Beach, DE (Surgical Oncology)

Lewes, DE (Interventional Cardiology)

Lewes, DE (Hospitalists)

Lewes, DE (Primary Care)

Lewes, DE (Beebe Gastroenterology)

Lewes, DE (Dr. Bhaskar Palekar)

Lewes, DE (Dr. Kathryn Grinnen)

Rehoboth DE (Beebe Health Center at Kmart)

Millville, DE (Millville Weekend Walk In Health Center) Labor Day through Memorial Day)

**Beebe Imaging**

Georgetown, DE

Millville, DE

Rehoboth Beach, DE

Lewes, DE

**Beebe Emergency Services**

Lewes, DE

Millville, DE (summer only)

**Gull House Adult Day Care Center**

Rehoboth Beach, DE

**Beebe Lab Express**

Lewes, DE

Rehoboth Beach, DE

Georgetown, DE

Milton, DE



Location of Facilities:

Millsboro, DE

Millville, DE

Long Neck, DE

**Beebe Physical Rehabilitation Therapy**

Lewes, DE

Rehoboth Beach, DE

Millsboro, DE

Millville, DE

**Wellness Centers**

Indian River High School

Cape Henlopen High School

Sussex Central High School

**Wound Care and Diabetes Management**

Long Neck, DE

**Beebe Sleep Disorders Center**

Rehoboth Beach, DE

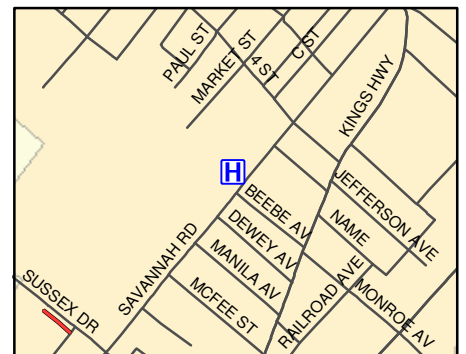
# Beebe Medical Center



## Contact Information:

424 Savannah Rd.  
Lewes, DE 19958  
(302) 645-3300

[www.beebemed.org](http://www.beebemed.org)



Map Created by Delaware Health Statistics Center  
BG 4.27.06

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## St. Francis Hospital Profile

Introduction:

*Name*

St. Francis Healthcare Services

*General Background*

The Sisters of St. Francis of Philadelphia established St. Francis Hospital in 1924. Today, St. Francis Hospital is a member of Catholic Health East, the largest Catholic healthcare system on the East Coast and operates under the identity of St. Francis Healthcare Services. In addition to the hospital, St. Francis Healthcare Services includes Franciscan Care Center at Brackenville, the Center of Hope, the North Wilmington Women's Center the Women's Place, Women to Women OB/GYN.

*Accreditation*

St. Francis Hospital is accredited by the Joint Commission on Accreditation of Healthcare Organizations. St. Francis Home Care is accredited by the Joint Commission on Accreditation of Healthcare Services, and the Family Practice Residency Program is accredited by the American Council on Graduate Medical Education.

Mission Statement:

**Our Mission**

St. Francis Healthcare Services, a member of Catholic Health East, under the sponsorship of Hope ministries, is a compassionate, healing presence in our community, providing state-of-the-art, person-centered health services that enable those we care for to achieve their optimal quality of life, and those who serve to achieve their highest potential.

**Our Vision**

Committed to our Mission, our Faith, and our Core Values, St. Francis Healthcare Services will achieve excellence in all we do.

**Our Core Values**

*Reverence for each person*

We believe that each person is a manifestation of the sacredness of human life.

*Community*

We demonstrate our connectedness to each other through inclusive and compassionate relationships.

*Justice*

We advocate for a society in which all can realize their full potential and achieve the common good.

*Commitment to those who are poor*

We give priority to those whom society ignores.

*Stewardship*

We care for and strengthen the ministry and all resources entrusted to us.

*Courage*

We dare to take the risks our faith demands of us.

*Integrity*

We keep our word and are faithful to who we say we are.

Ownership:

Not for profit Catholic healthcare system

Medical Staff:	679 members of the medical staff and 131 allied health professionals. With retirees, we have 803 members of the medical staff.
Services Offered:	<p>24-Hour Emergency Services - Level IV Trauma Designation          Ambulatory Rehabilitation          Bariatric Surgery Center of Excellence          daVinci@ Surgical System          Emergency Medical Services - Basic Life Support and transport.          Home Care Services          Imaging Services, including x-ray, CT, nuclear medicine, ultrasound, MRI, digital mammography, R2 ImageChecker System (computerized detection unit that assists the radiologist in locating abnormalities depicted in mammograms)          GI Lab          Inpatient and Outpatient Cardiac Catheterization Lab          Level II Neonatal Nursery          Maternity and Family Birthplace          Minimally Invasive Surgery Center          Orthopaedics/joint replacement          Neurodiagnostics/Sleep Center          Franciscan Care Center at Brackenville          North Wilmington Women's Center          Physical Medicine Rehabilitation          The Women's Place          St. Francis Family Practice Center          St. Francis Heart Center          St. Francis OB/GYN Centers          St. Francis Pain Center          Women to Women OB/GYN</p>
Number of Employees:	900
Licensed Beds:	395
Staffed Beds:	110
Location of Facilities:	<p><b>St. Francis Hospital</b>, Wilmington, DE  <b>Franciscan Care Center at Brackenville</b>, Hockessin, DE  <b>St. Francis Home Care</b>, Wilmington, DE  <b>St. Francis Pain Center</b>, Wilmington, DE  <b>St. Francis Family Practice Center</b>, Wilmington, DE  <b>St. Francis OB/GYN Center</b></p> <ul style="list-style-type: none"> <li>• St. Francis Hospital, Wilmington, DE</li> <li>• North Wilmington Women's Center, Wilmington, DE</li> <li>• Henderson OB/GYN, Wilmington, DE</li> </ul> <p><b>St. Francis Imaging</b></p> <ul style="list-style-type: none"> <li>• St. Francis Hospital, Wilmington, DE</li> <li>• North Wilmington Women's Center</li> <li>• The Woman's Place</li> </ul> <p><b>St. Francis Rehabilitation</b></p> <ul style="list-style-type: none"> <li>• Inpatient only - St. Francis Hospital, Wilmington, DE</li> <li>• Cardiac Rehabilitation, Wilmington, DE</li> </ul> <p><b>St. Clare Medical Outreach Program</b> (providing medical care to the uninsured, in partnership with the Ministry of Caring), Wilmington, DE  <b>Center of Hope</b> (providing medical care to all people - immigrants and citizens, insured and uninsured), Newark, DE  <b>Tiny Steps</b> (providing prenatal and postpartum care to low-income women) Wilmington (Family Practice Center) and Newark (Center of Hope), DE</p>

# St. Francis Hospital

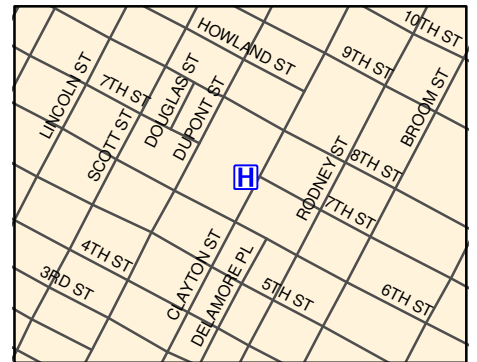


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BG 4.27.06

## Contact Information:

7th and Clayton Streets  
Wilmington, DE 19805  
(302) 421-4100

[www.stfrancishealthcare.org/](http://www.stfrancishealthcare.org/)



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## Christiana Care Health System Profile

Introduction:

*Name*

Christiana Care Health System

*General Background*

Christiana Care Health System is one of the country's largest health care providers, serving more than 500,000 patients yearly, placing it as the 14<sup>th</sup> leading hospital in the nation and 9<sup>th</sup> on the East Coast in terms of admissions. A not-for-profit teaching hospital affiliated with Thomas Jefferson Medical College, Christiana Care is recognized as a regional center for excellence in cardiology, cancer and women's health services, as well as for its Level-I trauma care and Level-3 neonatal intensive care (both highest capability).

Christiana Hospital is the only Level I trauma center between Philadelphia and Baltimore. Christiana Care includes two hospitals with 1,100 patient beds, a home health care service, preventive medicine, rehabilitation services, a network of primary care physicians and an extensive range of outpatient services.

With more than 10,000 employees, Christiana Care is the largest private employer in Delaware and the 10th largest employer in the Philadelphia region. In 2008 Christiana Care had more than \$1.7 billion in total patient revenue and provided the community with \$37.7 million of free care and medicine. Find more information at [www.christianacare.org](http://www.christianacare.org)

*Accreditation*

In the 2007 survey, Christiana Care was accredited by the Joint Commission.

Mission Statement:

Christiana Care Health System is dedicated to improving the health of all individuals in the communities we serve through health care services, education, and research.

Ownership:

Christiana Care is a not-for-profit, private teaching health system operated by the Board of Directors of the Christiana Care Corporation. The Board represents a cross-section of business and community leaders.

Medical Staff:

Christiana Care's Medical-Dental Staff includes more than 1,400 community physicians, surgeons and dentists representing every medical practice and specialty.

Services Offered:

Christiana Hospital, Christiana Care's flagship tertiary care facility, is the state's designated Level I (highest capability) trauma center. The Christiana Hospital campus is also home to Christiana Care's:

- **Helen F. Graham Cancer Center** - a state-of-the-art outpatient facility, which serves as headquarters for our regionally acclaimed cancer program. The Cancer Program emphasizes improving prevention and early detection and improving survival and quality-of-life. Selected by the National Cancer Institute as a community clinical oncology program, Christiana Care provides access to today's most promising cancer research clinical trials.
- **Center for Heart and Vascular Health**- the program's comprehensive services include open heart surgery (more than 800 cardiovascular surgeries each year), diagnostic and interventional cardiac catheterization, dedicated electrophysiology lab, noninvasive studies, research, lipid program, rehabilitation and primary and secondary heart disease prevention.
- **Women's health program** - one of the busiest (more than 7,200 births a year), most advanced maternity services in the nation, including a Level III (highest capability) neonatal intensive care unit.

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The Eugene du Pont Preventive Medicine & Rehabilitation Institute features a full range of medically supervised preventive and alternative/complementary health services including nutrition and fitness, stress reduction and smoking cessation, adolescent pregnancy prevention, and special programs for arthritis, asthma, cancer, cardiovascular disease, diabetes weight management and osteoporosis.

Wilmington Hospital - includes an inpatient rehabilitation facility, joint replacement center, outpatient surgical facility, psychiatry services, speech and hearing services and an accredited sleep disorders center.

Number of Employees: 10,487 full and part-time, system-wide

Licensed Beds: Wilmington Hospital -- 241  
Christiana Hospital -- 906  
Wilmington and Christiana - 1,147

Staffed Beds:

Location of Facilities: Throughout the state of Delaware, in southern New Jersey and southeastern Pennsylvania. The major facilities are:

- Wilmington Hospital, Wilmington, DE
- Christiana Hospital, Newark, DE
- Eugene du Pont Preventive Medicine & Rehabilitation Institute, Wilmington, DE
- Helen F. Graham Cancer Center, Newark, DE
- Christiana Care Visiting Nurse Association, New Castle, DE
- Primary Care/Internal Medicine Offices
- HealthCare Center at Christiana, Newark, DE
- Springside Plaza, Glasgow, DE

# Wilmington Hospital Christiana Care Health System

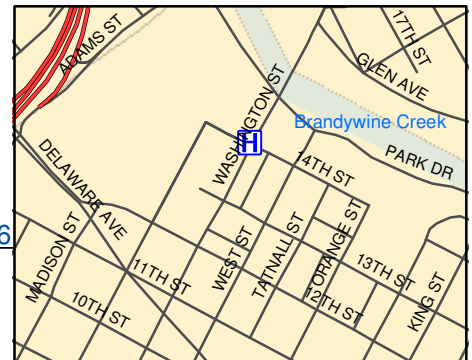


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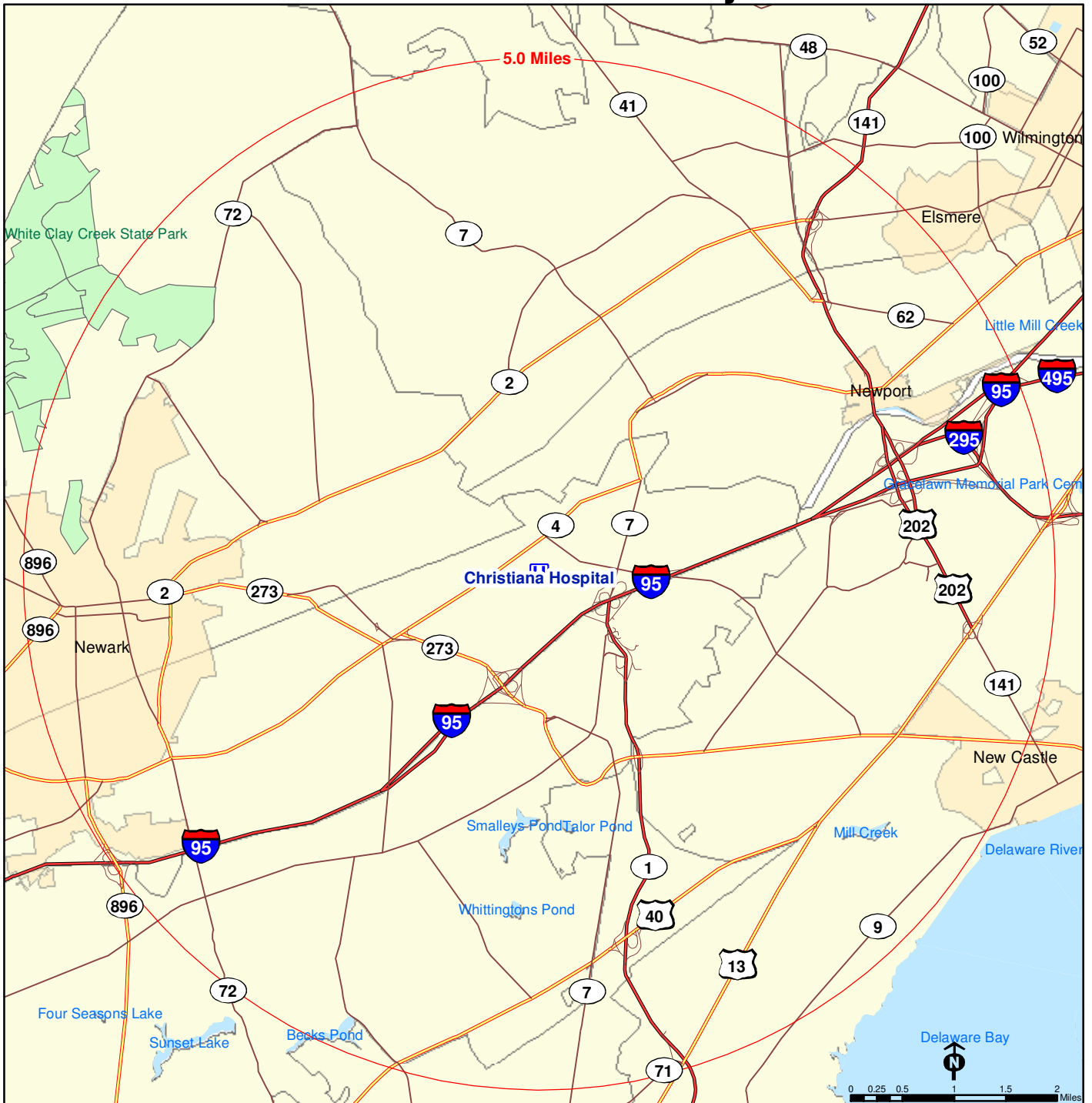
501 W. 14th St.  
Wilmington, DE 19801  
(302) 733-1000

[www.christianacare.org/body.cfm?id=336](http://www.christianacare.org/body.cfm?id=336)





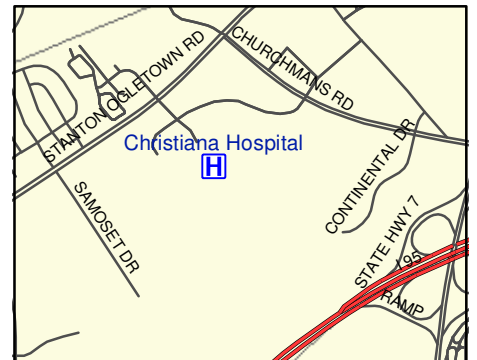
# Christiana Hospital Christiana Care Health System



### Contact Information:

4755 Ogletown-Stanton Rd  
Newark, DE 19718  
(302) 733-1000

[www.christianacare.org](http://www.christianacare.org)



Map Created by Delaware Health Statistics Center  
BG 4.27.06

## Nanticoke Memorial Hospital Profile

### Introduction:

#### *Name*

Nanticoke Memorial Hospital

#### *General Background*

Nanticoke Memorial Hospital was originally incorporated in 1945 by a group of citizens concerned by the lack of health care facilities in western Sussex County. Over the years, involved citizens and a progressive administrative team have continued to direct the course of Nanticoke Memorial Hospital, and its affiliates, organized under the corporate title of Nanticoke Health Services. What started as a 32-bed hospital in 1952 has grown to include extended care, business services, outpatient services, cancer care services, medical centers across Sussex County Delaware, and a host of preventative medicine and health programs.

#### *Accreditation*

#### **Accreditation**

Joint Commission on Accreditation of Healthcare Organizations  
American Association of Blood Banks  
Nuclear Regulatory Commission  
American College on Radiology  
Mammography Quality Standards Act

### Mission Statement:

"We exist to positively impact our communities' quality of life through improved health status."

### Ownership:

Nanticoke Health Services, Inc. is the non-profit and parent corporation of Nanticoke Memorial Hospital and four other corporate entities.

### Medical Staff:

The medical staff of Nanticoke Memorial Hospital totals 139 active and consultant staff members.

### Services Offered:

#### **Medical Services**

- Major services include acute inpatient care comprised of cardiology, gastroenterology, infectious disease, neurology and pulmonology.
- Nutrition Services
- Cardiac Services including cardiac catherizations, echocardiography, pacemakers, stress testing and telemetry
- Cancer Services including radiation therapy, chemotherapy and pain management

#### **Surgical Services**

- Major services include general and vascular surgery, ophthalmology, urology, gynecology, plastic/reconstructive surgery, otolaryngology (ENT), thoracic, podiatry and laser
- Day Surgery Services
- Lithotripsy

#### **Diagnostic Services**

- General radiology
- Fluoroscopy
- Magnetic resonance imaging
- Computerized tomography
- Nuclear medicine
- Ultrasound
- Endoscopy suite
- EEG
- Sleep disorder studies
- Mammography
- Stereotactic breast biopsy

Services Offered:

**Critical Care**

- Multidisciplinary intensive care and progressive care unit
- Hemodialysis
- Peritoneal dialysis

**Emergency Services**

- 24-hour emergency services

**Obstetric and Pediatric Services**

- Birthing suites
- Ronald McDonald rooms

**Rehabilitation Services**

- Physical and occupational therapy
- Speech pathology
- Cardiac rehabilitation services
- Wound Care & Hyperbaric Chambers

**Community Related Services**

- Laboratory courier services
- Consumer health education programs
- Support groups
- Health Screenings: cholesterol, blood sugar monitoring, prostate cancer screening, risk for stroke assessment, blood pressure checks
- High school-based wellness centers
- Nutrition counseling

Number of Employees:

1050

Licensed Beds:

139 Hospital Beds  
110 Extended Care Beds

Location of Facilities:

**Acute Care**

Nanticoke Memorial Hospital, Seaford, DE

**Extended Care**

LifeCare at Lofland Park, Seaford, DE

**Off Campus Care**

Mid-Sussex Medical Center, Millsboro, DE

Georgetown Medical Center

Seaford Medical Center

**Wellness Centers**

Seaford High School Wellness Center

Laurel High School Wellness Center

Delmar High School Wellness Center

**Business Services**

Nanticoke Occupational Health Services, Seaford, DE

Practice Management Associates, Seaford, DE

Affiliations:

- Clinical rotations with various schools in nursing, radiology, laboratory, and certified nursing assistant
- Student intern program with Seaford and Laurel High School

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Patient Mix:

Based on Discharges (FY07)

Medicare % 47

Medicaid % 23

Others (Commercial & Self Pay) % 30

Based on Patient Days (FY07)

Medicare % 60

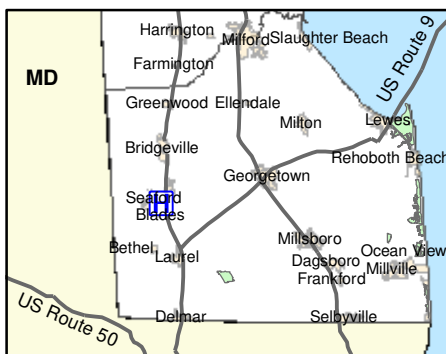
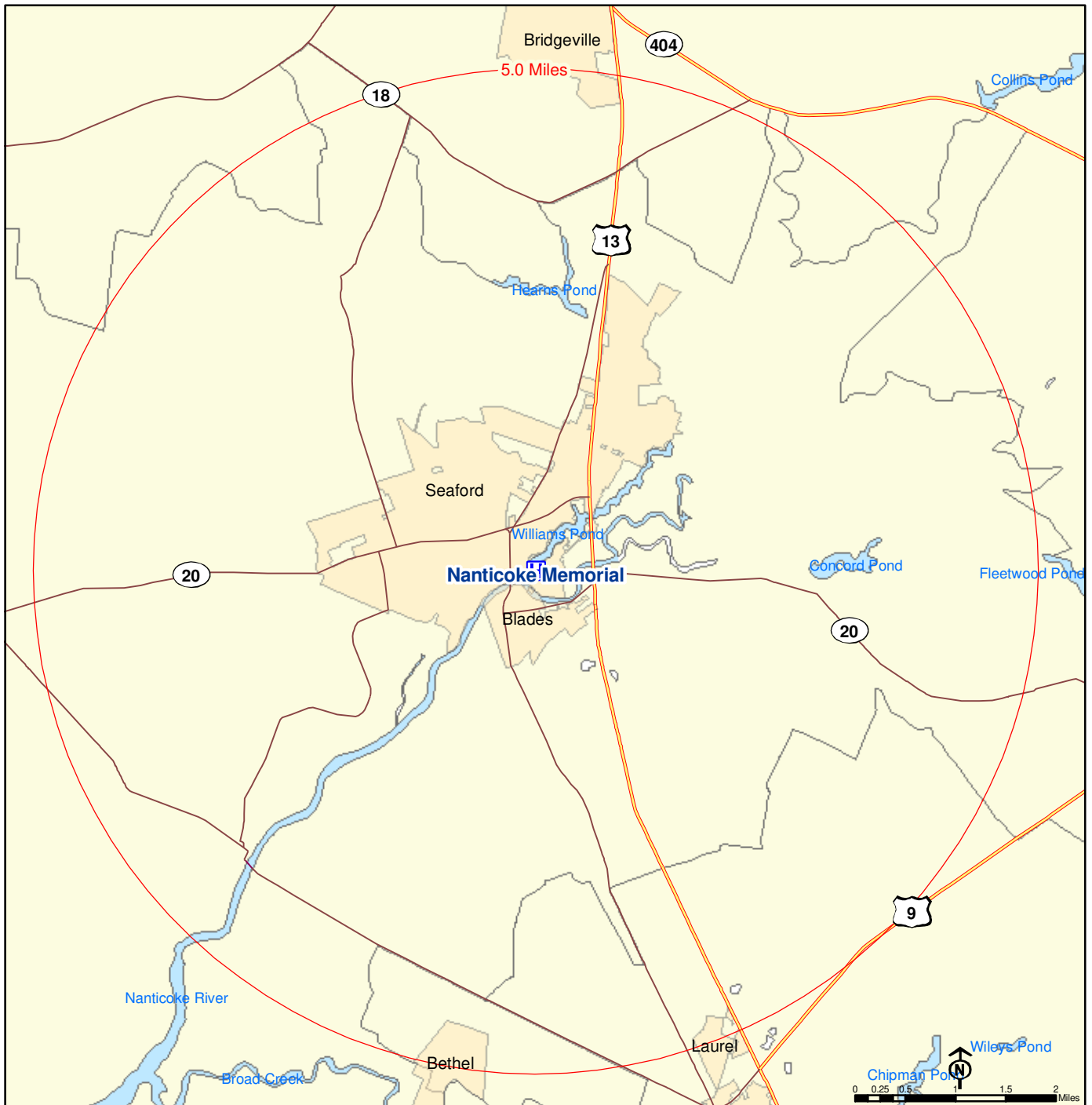
Medicaid % 15

Others (Commercial & Self Pay) % 25

Uncompensated Care:

Charity Care & Bad Debt at cost - (FY07) - \$ 15,649,000

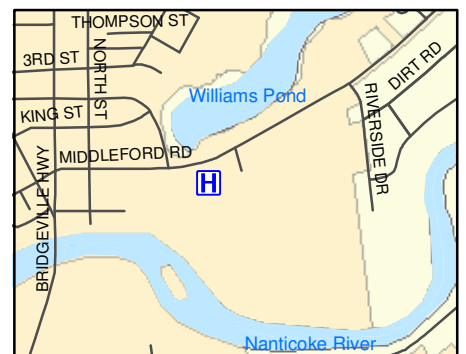
# Nanticoke Memorial Hospital



## Contact Information:

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(302) 629-6611

[www.nanticoke.org](http://www.nanticoke.org)



Map Created by Delaware Health Statistics Center  
BG 4.27.06

**Methods:**

Hospital discharge data is recorded in the state’s uniform claims and billing database, which is maintained under contract by the University of Delaware. Pursuant to the Uniform Health Data Act (16 Del Code, C.20) Delaware hospitals must submit uniform claims and billing data each quarter. These quarterly submissions are checked for data quality and completeness, and collated into an annual file by the University of Delaware. Each annual data file is stored at the Delaware Health Statistics Center, which is responsible for all data analysis, reports, and fulfilling of data requests.

Due to its status as a long-term care facility, Select Specialty in Wilmington is excluded from the data presented in this report. Select Specialty is associated with St. Francis hospital. A short-stay hospital is one where the average length of stay is less than 30 days.

Maps were created using ESRI’s ArcView software.

**Rate calculations and significance testing:**

Hospital Discharge Rates were calculated using the Delaware Population Consortium’s (DPC) October 2007 population projections, and were presented as the number of discharges per 10,000 population. Significance testing for the difference between rates was performed using the following formula:

Rates - When the absolute value of the following statistic is greater than 1.96, then the difference between two rates ( $R_1 - R_2$ ) is considered statistically significant at the 95-percent confidence level.

$$z = \frac{R_1 - R_2}{\sqrt{\left(\frac{R_1^2}{N_1} + \frac{R_2^2}{N_2}\right)}}$$

where

- $R_1$  = first rate
- $R_2$  = second rate
- $N_1$  = first number of discharges
- $N_2$  = second number of discharges

Percents - When the absolute difference between two proportions is greater than the statistic in the formula below, the difference is considered statistically significant at the 95-percent confidence level.

$$1.96 \times \sqrt{p(1-p) \left(\frac{1}{N_1} + \frac{1}{N_2}\right)}$$

where

- $N_1$  = first denominator
- $N_2$  = second denominator
- $p = \frac{N_1 * p_1 + N_2 * p_2}{N_1 + N_2}$
- $p_1$  = the first percent
- $p_2$  = the second percent

**Definitions:**

**Admission source** - The source of the patient's admission, e.g., emergency, another hospital, or long term care facility, which describes how the patient was admitted.

**Aggregate charges** - The sum of all charges for all hospital stays.

**Body System** - In this report, it represents the more generalized grouping of CCS categories that correspond with ICD-9 CM chapter headings.

**Clinical Classification System (CCS)** - This refers to the classification system developed at the Agency for Healthcare Research and Quality (AHRQ) used to aggregate ICD-9-CM codes into broader, homogeneous groups. In this report, the 2009 version of the single-level diagnosis classification scheme is used for both diagnoses and procedures. Because CCS codes are based on ICD-9-CM diagnoses, they can be mapped to ICD-9-CM chapter headings. Data in this report are presented by both CCS diagnoses and by ICD-9-CM chapters. For more information, see <http://www.ahrq.gov/data/hcup/>.

**Discharge** - A completed inpatient hospitalization. A hospitalization may be completed by death or by releasing the patient to his or her home, a long-term care facility, another hospital, or if the patient leaves against medical advice.

**Discharge Status** - The disposition of a patient at discharge from the hospital into one of the following categories:

- Home or routine discharge - patient returned to previous place of residence after discharge from the hospital.
- Long-term care facility - patient entered a nursing home including skilled nursing facilities, extended care facilities, custodial care facilities, or other long term care placement upon discharge from the hospital.
- Another short-term hospital - patient transferred to another short-term hospital at discharge, including short-term maternity hospitals.
- Against medical advice (AMA) - patient left the hospital against medical advice.
- Expired - patient who died during the inpatient stay.
- Home health care - patient discharge to home where care is provided by a home health care agency for the purpose of promoting, maintaining, or restoring health, or for minimizing the effects of disability and illness, including terminal illness.
- Unknown - patient whose status was not entered.

**Expected source of payment** - The principal expected source of payment for the hospitalization.

- Medicare - The health insurance program for the aged and disabled administered by the Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration).
- Medicaid - A jointly funded Federal-State health insurance program providing medical care to those unable to afford it.
- Worker's compensation - A State or municipal disability insurance or industrial accident insurance.
- Private health insurance- Includes HMO/PPO, Blue Cross/Blue Shield, and other private.
  - HMO/PPO - Any health maintenance organization (HMO) or preferred provider organization (PPO) sponsored by consumers, communities, physicians, or hospitals.
  - Blue Cross/Blue Shield and other private - A private insurance plan not specified as an HMO/PPO. This includes Blue Cross/Blue Shield plans, medical coverage provided by life insurance companies, casualty insurance companies, health insurance companies, and independent plans such as employer/union-sponsored plans and/or self-funded plans (partial or total).
- Self-pay - The majority of the costs for the hospitalization were expected to be paid by the patient, spouse, family, or next-of-kin.
- Other government- Other Federal, State, or local government other than worker's compensation, Medicare, and Medicaid not listed separately including casualty insurance paid by the State, Federal or State medical research grant.

## TECHNICAL NOTES

- No charge- Patients admitted with the understanding that payment would not be expected because the medical services are free, e.g., charity patients or research or teaching patients.
- Other and not stated.

**Hospital charges** - The amount the hospital charged for the entire hospital stay.

**International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)** - The official system of assigning codes to diagnoses and procedures associated with hospital stays in the United States. The ICD-9-CM is based on and is compatible with the World Health Organization's International Classification of Diseases, Ninth Revision. ICD-9-CM is divided into 17 chapters and 2 supplemental classifications. Diagnoses are grouped under chapters arranged primarily by body system. In addition, there are chapters for infectious and parasitic diseases; neoplasms; endocrine, metabolic, and nutritional diseases; mental disorders; complications of pregnancy, childbirth and puerperium; certain conditions originating in the perinatal period; congenital anomalies; and symptoms, signs and ill-defined conditions. The two supplemental classifications are for factors influencing health status and contact with health services and classification of external causes of injury and poisoning. More information can be found online at [www.cdc.gov/nchs/icd9.htm](http://www.cdc.gov/nchs/icd9.htm).

**Length of stay** - The number of nights the patient remained in the hospital for this stay.

**Liveborn** - The term for the hospitalization that results from an infant being born in the hospital, also referred to as newborn. They are identified by a specific range of ICD-9 CM codes on the discharge record. Records of infants born in the hospital are separate and distinct from the mothers' discharge records, so excluding liveborn infants does not remove the mother's discharge data from the analysis.

**Long-term care facility** - A facility that provides a specific level of personal or medical care or supervision to residents. Types of long-term care facilities include licensed nursing homes, skilled nursing facilities (SNF), intermediate care facilities (ICF), hospice medical facilities, and other health care institutions, such as institutions for the mentally retarded and developmentally disabled.

**Mean length of stay** - Average length of stay for discharges. It is calculated by dividing the total number of days of care by the number of discharges.

**Obstetric** - The branch of care that deals with the management of pregnancy, labor, and the puerperium.

**Primary diagnosis** - The diagnosis chiefly responsible for the admission of the patient to the hospital; it is the first-listed diagnosis specified on the discharge summary of the medical record.

**Procedures**—Up to six procedures, the principal and five additional, may be recorded on a single hospital stay.

- Principal procedure - refers to the first-listed procedure, which is the procedure performed as a specific treatment for the hospitalization, or the one most closely related to the principal diagnosis.
- All-listed procedures - refers to the principal plus any secondary procedures appearing on a single discharge record/performed during a hospital stay. Because patients often receive more than one procedure, the number of all-listed procedures usually exceeds the number of discharge with procedures.

**Procedure classes** - Refers to AHRQ's HCUP classification system for procedures, which are categorized into four general categories: minor diagnostic, minor therapeutic, major diagnostic, and major therapeutic. The two minor categories are considered non-operating procedures and the two major categories are considered valid operating procedures. This report uses the 2008 version of the classification system. More information can be found at: <http://www.hcup-us.ahrq.gov/toolssoftware/procedure/procedure.jsp>.

**Puerperium** - The period or state of confinement after labor and giving birth.



## TECHNICAL NOTES

**Rate** - A rate is a measure of an event, disease, or condition in relation to a unit of population for a specified time. For example, the five-year average discharge rate per 10,000 population is calculated as follows:

$$(\text{Five-year total number of discharges} / \text{Five-year total population}) * 10,000$$

**Short-stay Hospitals** - A short-stay hospital is one where the average length of stay is less than 30 days. Due to its status as a long-term care facility, Select Specialty in Wilmington was excluded from the data presented in this report. Select Specialty is associated with St. Francis hospital.

**Uninsured patients** - A term for those patients whose primary payer is listed as self-pay.

## REFERENCES

- CMS National Health Expenditure Data. Accessed 3/24/2006. [http://www.cms.hhs.gov/NationalHealthExpendData/02\\_NationalHealthAccountsHistorical.asp#TopOfPage](http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp#TopOfPage)
- DeFrances CJ, Hall MJ, Podogornik MN. *2003 National Hospital Discharge Survey*. Advance data from vital and health statistics; no 359. Hyattsville, MD: National Center for Health Statistics. 2005.
- DHSC Hospital Discharge Summary Report, 1992-2000. Division of Public Health, Delaware Health and Social Services, Jan 2002. Doc. No. 350520-020106.
- Elixhauser A, Steiner C, Palmer L. Clinical Classifications Software (CCS),2006. U.S. Agency for Healthcare Research and Quality. Available: <http://www.ahrq.gov/data/hcup/ccs.htm#download>.
- HCUPnet, Healthcare Cost and Utilization Project. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/HCUPnet/>
- Levit K, Ryan K, Elixhauser A, Stranges E, Kassed C, Coffey R. *HCUP Facts and Figures: Statistics on Hospital-based Care in the United States in 2005*. Rockville, MD: Agency for Healthcare Research and Quality, 2007. <http://www.hcup-us.ahrq.gov/reports.jsp>
- Merrill CT, Elixhauser A. *Hospitalization in the United States, 2002*. Rockville, MD: Agency for Healthcare Research and Quality, 2005. HCUP Fact Book No. 6. AHRW Publication No. 05-0056. ISBN 1-58763-217-9.
- National Center for Health Statistics. *Health, United States, 2005 with Chartbook on Trends in the Health of Americans*. Hyattsville, Maryland: 2005.
- National Center for Health Statistics. *National Trends in Injury Hospitalizations 1979-2001*. Hyattsville, Maryland: 2005.
- National Health Expenditure Accounts: Definitions, Sources, and Methods Used in the NHEA 2004. <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/dsm-04.pdf>
- Owens P, Myers M, Elixhauser A, Brach C. *Care of Adults With Mental Health and Substance Abuse Disorders in U.S. Community Hospitals, 2004*. Agency for Healthcare Research and Quality, 2007. HCUP Fact Book No.10. AHRQ Publication No.07-0008. ISBN 1-58763-229-2.
- The National Association of Health Data Organizations. 2005. *Public Health Data Dissemination Guidelines: NAHDO Working Technical Paper Series*.