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DELWARE HOSPITAL  
DISCHARGE SUMMARY  
REPORT ■ 2008



*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.

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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 2008 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: A.I. duPont, St. Francis, Christiana Care Health System (which consists of Wilmington and Christiana Care), Bayhealth Medical Center (which consists of Kent General and Milford), Beebe, and Nanticoke<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.

Maps displaying patient distribution and hospital location are located in the Maps section.

### Key findings:

- For the second year in a row the number of hospital discharges decreased. After increasing steadily between 1994 to 2006, discharges began declining, and in 2008, they were 5.4 percent lower than in 2006. During the same time, aggregate charges rose 11.7 percent.
- Six diagnoses accounted for one-fifth of the total billed charges in 2008: coronary atherosclerosis (coronary artery disease) and other heart disease, osteoarthritis, septicemia, acute myocardial infarction (heart attack), respiratory failure, and liveborn infants.
- In 2008, the average length of stay (ALOS) was 4.9 days and the mean charge for a hospitalization was \$21,122.
- 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).
- Admissions from the emergency department (ED) accounted for 52.5 percent of all hospital admissions in 2008; 43.6 percent were routine and came primarily from physicians, along with clinics and HMOs; the remaining 3.9 percent were transferred from other facilities and other sources.
- Thirteen percent of all discharges from Delaware hospitals were non-residents, most of whom came from Pennsylvania, Maryland, and New Jersey.

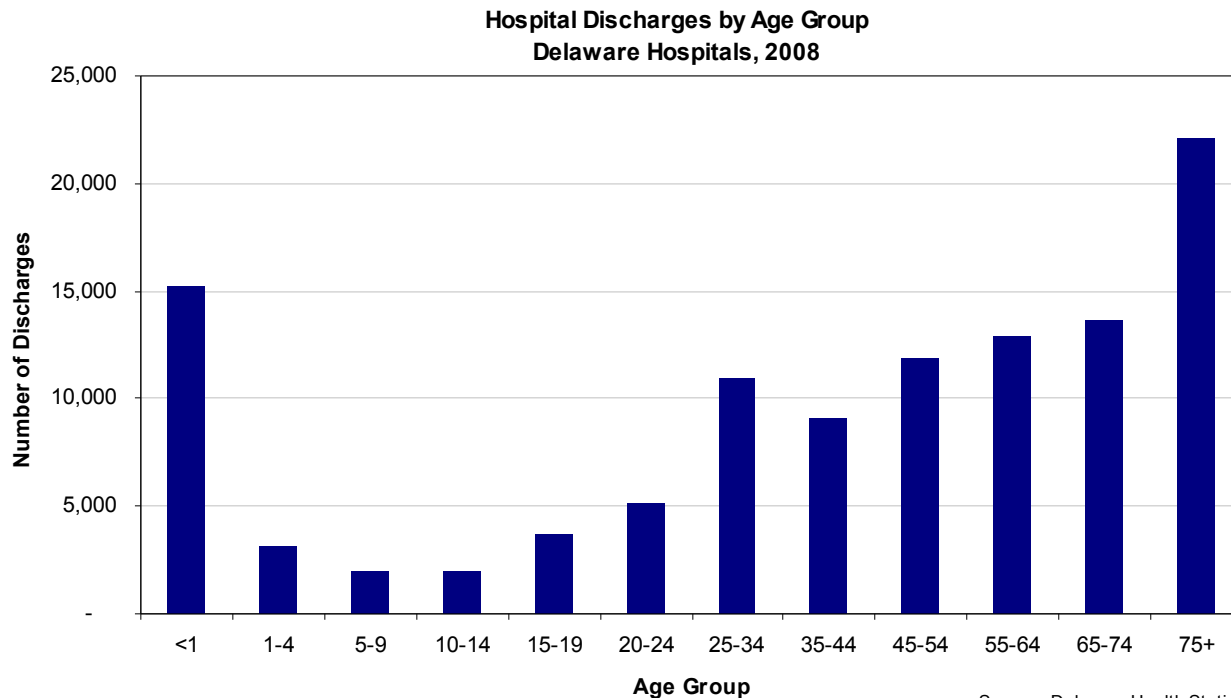
<sup>1</sup>See the Hospital Profiles at the end of this report for details about each of Delaware's acute care hospitals.

## EXECUTIVE SUMMARY

- Hospital stays for liveborn infants varied by type of delivery and plurality.
  - The average length of stay for infants delivered by cesarean section was 4.7 days, versus 2.6 days for infants delivered vaginally, and
  - The ALOS for infants who were part of a plural birth was more than three times that of singleton births (11 days versus 3 days).
- Women accounted for 58 percent of all discharges. In the 20 to 34 year age group, four out of every five discharges were women.
- The three most frequently performed principal procedures were related to pregnancy and childbirth; together, they accounted for 13 percent of all principal procedures.
- Patients who were uninsured were more frequently admitted through the ED than any other route; 76.8 percent of uninsured patients were admitted through the ED in 2008, a proportion that has increased 25 percent since 1995.
- Medicare and private insurers were the primary payers in 37 and 34 percent of all hospital discharges in 2008. 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.

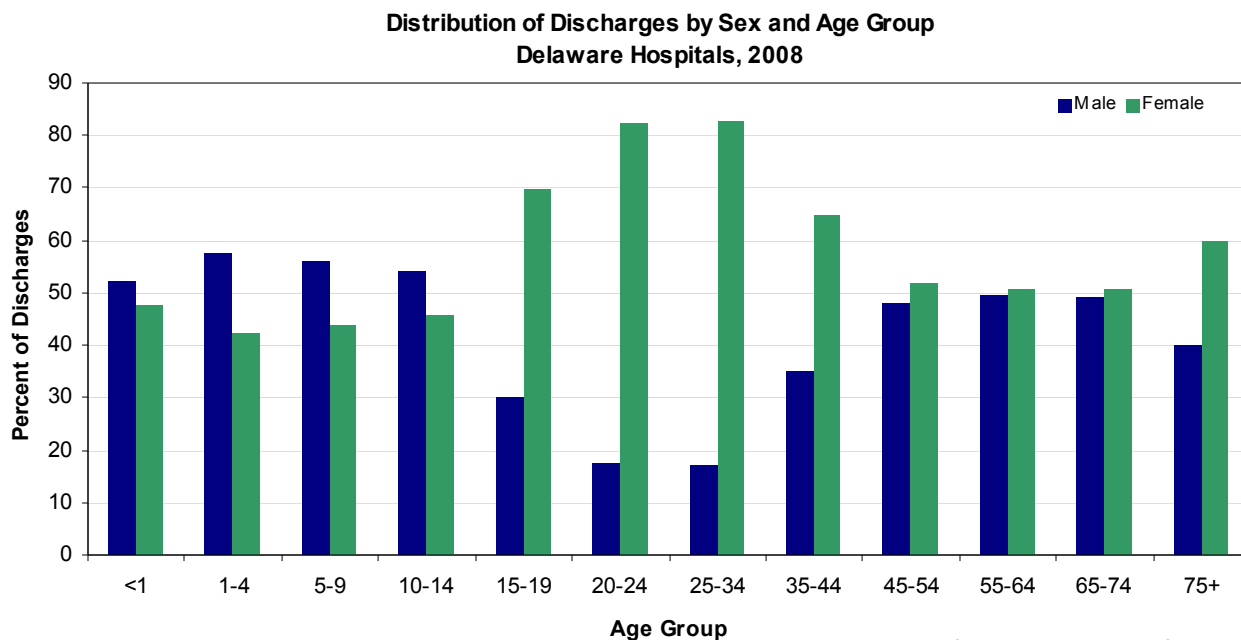
## PATIENT CHARACTERISTICS

Patients under 1 accounted for almost 14 percent of all discharges in 2008; 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 2008.



Source: Delaware Health Statistics Center

Males made up the majority of discharges in the age groups under 15. For those 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 2008, 58.2 percent of all discharges were women.

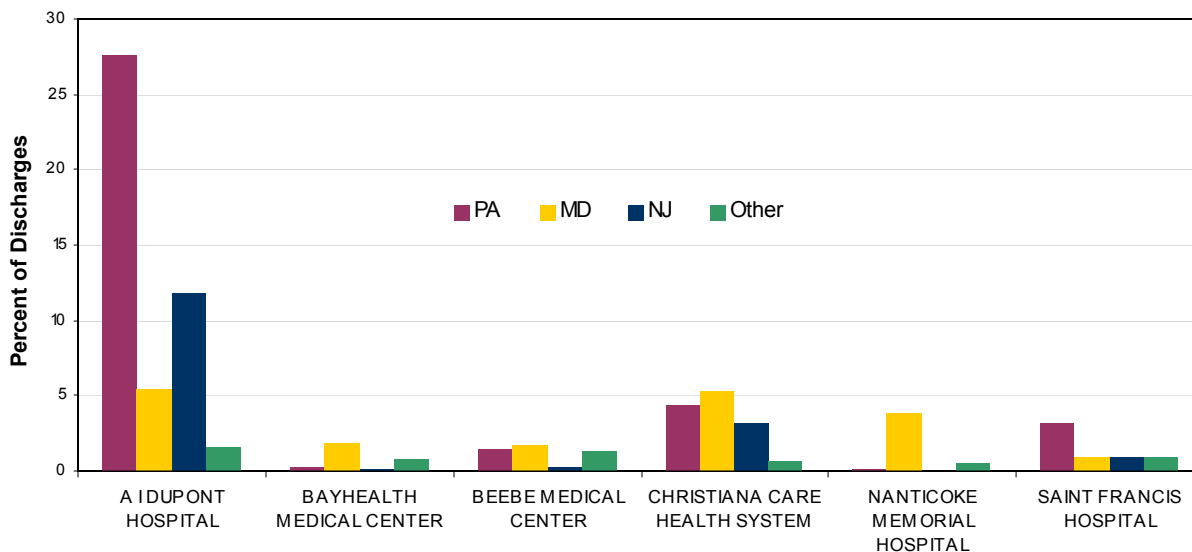


Source: Delaware Health Statistics Center

## 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.

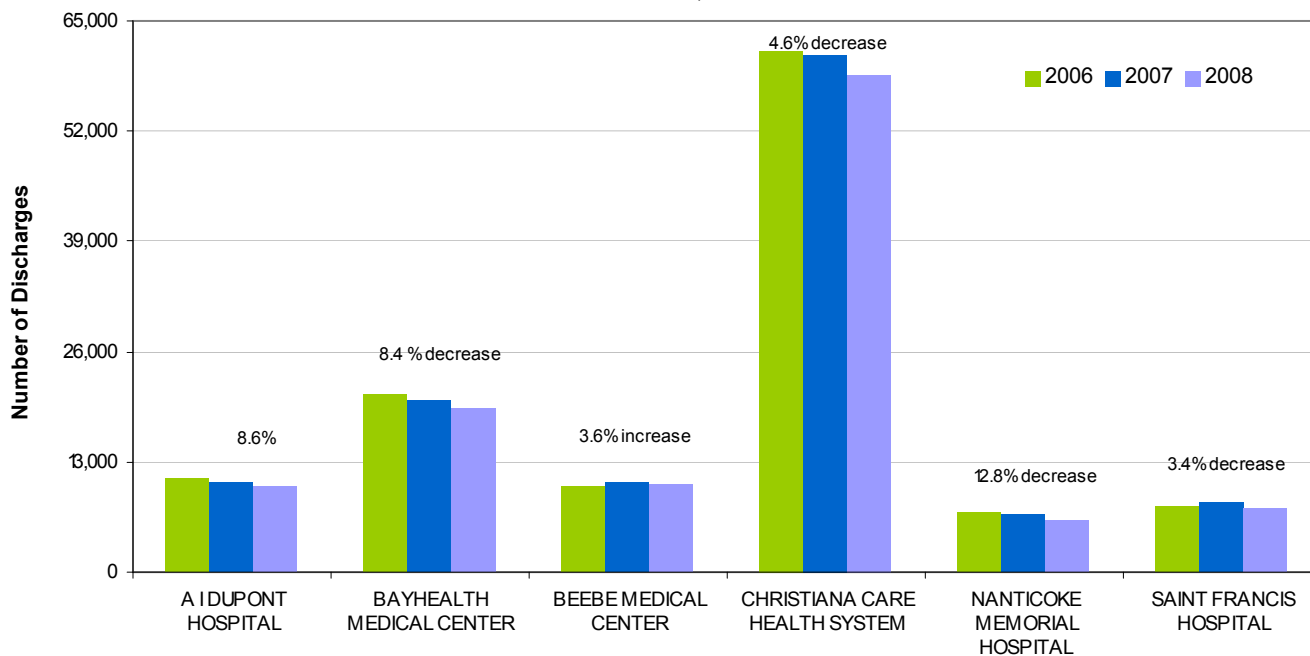
**Distribution of Non-resident Discharges by State of Residence and Hospital  
Delaware Hospitals, 2008**



Source: Delaware Health Statistics Center

With the exception of Beebe Medical Center, the number of discharges from each hospital system declined between 2006 and 2008. Nanticoke experienced the largest percentage decrease, followed by A. I. duPont and Bayhealth.

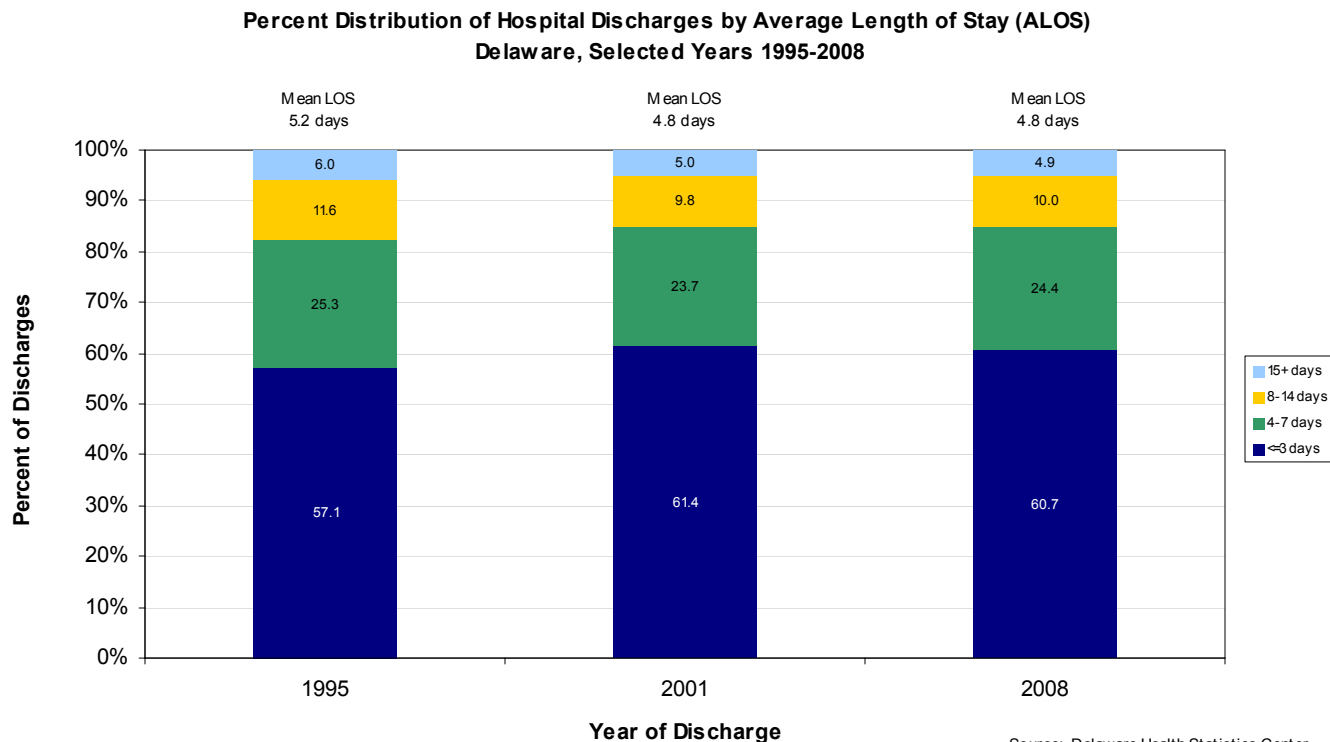
**Number of Discharges by Hospital System and Year of Discharge  
Delaware, 2006-2008**



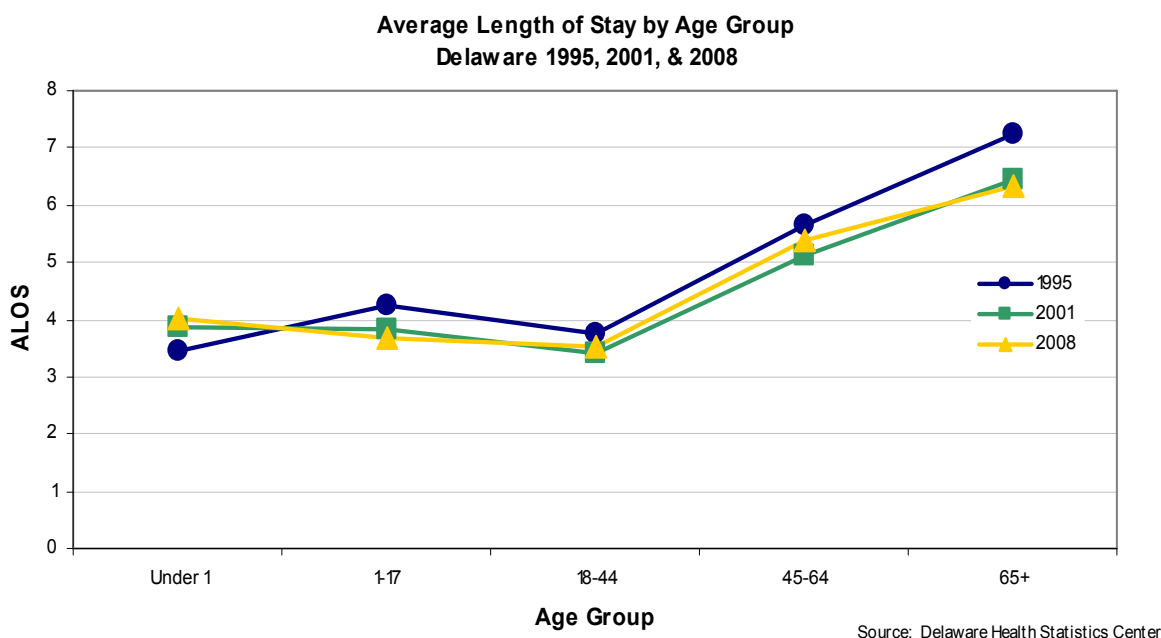
Source: Delaware Health Statistics Center

## PATIENT CHARACTERISTICS

Between 1995 and 2001, distribution in ALOS shifted toward shorter hospital stays; as the ALOS decreased, the percent of patients staying three or fewer days increased. The distribution of ALOS has remained steady since 2001, and in 2008, 60 percent of patients stayed three or fewer days in the hospital.



For patients 18-44 and higher, the ALOS in 2008 increased linearly with each increase in age group, rising from 3.5 days for those ages 18-44, to 6.3 days for those 65 and older. Patients under 1 had an ALOS of 4 days. With the exception of the under 1 age group, ALOS decreased for all groups from 1995 to 2008.

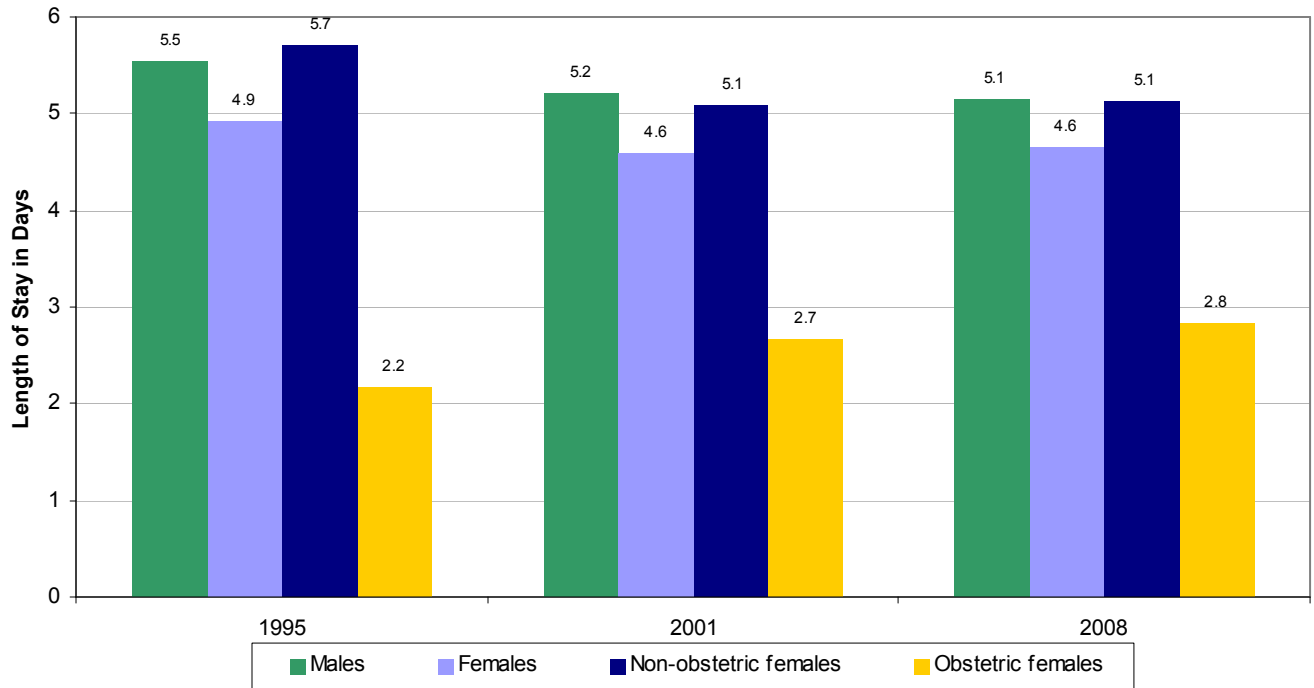




## PATIENT CHARACTERISTICS

Between 1995 and 2008, male and female patients experienced similar decreases in ALOS, though there was little change from 2001 to 2008. 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 2008 was seen in female obstetrical patients.

**Mean Length of Stay by Patient Type  
Delaware Hospitals, 1995-2008**

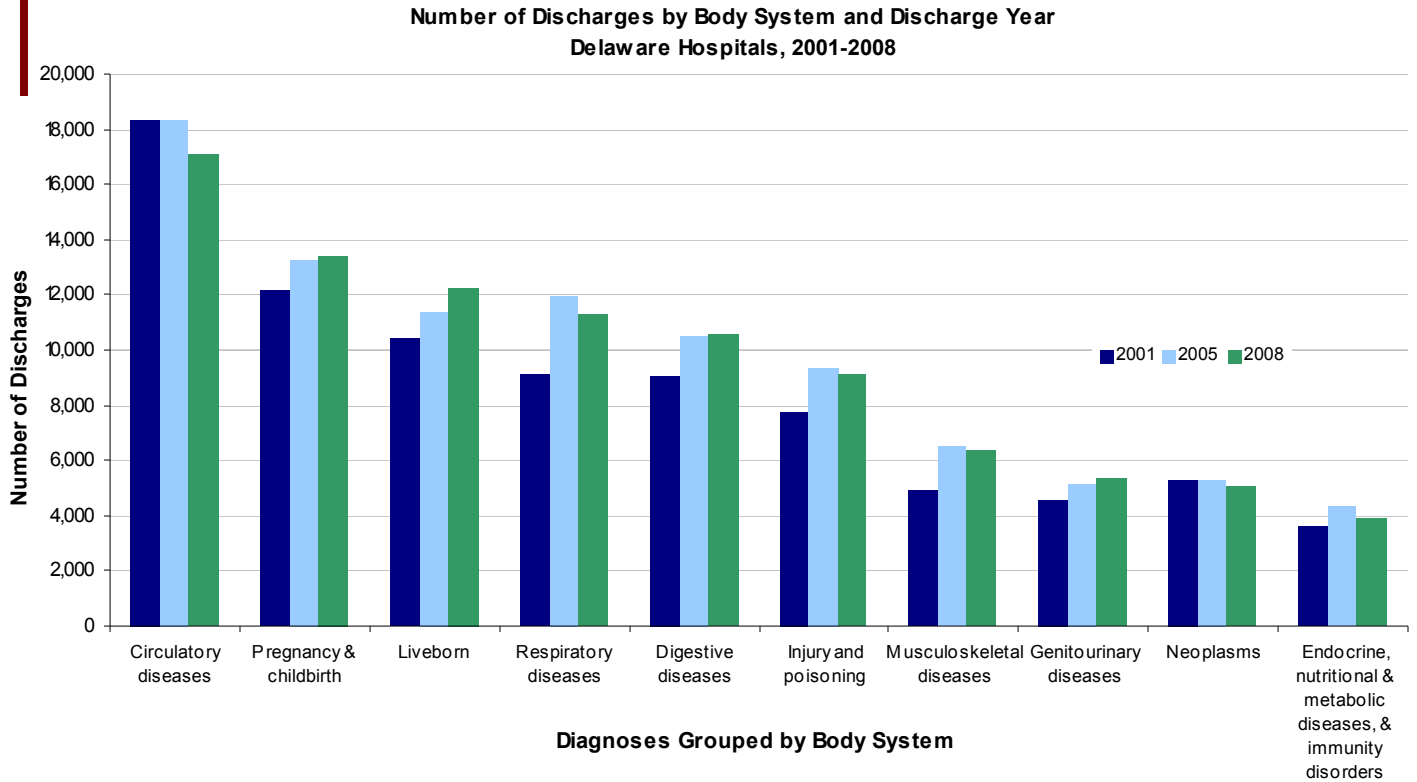


Source: Delaware Health Statistics Center

## WHY PATIENTS WERE HOSPITALIZED

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

In 2008, 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 10 percent of all discharges were related to diseases of the respiratory system, which included pneumonia, respiratory failure, chronic obstructive pulmonary disease, and asthma. Together, these three categories accounted for 37 percent of all hospitalizations.



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 (84.9) in hospitalizations from 2001 to 2008 occurred in that category. The increase was driven primarily by a rise in the number of septicemia hospitalizations, which made up 67.8 percent of all hospitalizations for infections and parasitic diseases in 2008. Diseases of the skin and subcutaneous tissue also demonstrated a large percentage increase (61.5) from 2001 to 2008, and at 44 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 osteoarthritis, pneumonia, 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, 2008**

CCS Principal Diagnosis	MALE			FEMALE		
	#	%	Rank	#	%	Rank
<i>All diagnoses</i>	46780	100		65080	100	
Pregnancy and childbirth	---	---	---	13433	20.6	1
Liveborn	6247	13.4	1	5970	11.6	2
Coronary atherosclerosis (artery disease)	1558	3.3	2	850	1.6	16
Pneumonia	1383	3.0	3	1468	2.8	4
Congestive heart failure	1289	2.8	4	1246	2.4	5
Acute myocardial infarction (heart attack)	1095	2.3	5	746	1.4	21
Osteoarthritis	1088	2.3	6	1769	3.4	3
Skin and subcutaneous tissue infections	1084	2.3	7	924	1.8	13
Cardiac dysrhythmias (irregular heart beat)	995	2.1	8	948	1.8	11
Septicemia	912	1.9	9	986	1.9	10
Complication of device; implant or graft	892	1.9	10	876	1.7	14
Urinary tract infections	389	0.8	32	1224	2.4	6
Chronic obstructive pulmonary disease and bronchiectasis	772	1.7	15	1100	2.1	7
Rehabilitation care; fitting of prostheses; and adjustment of devices	813	1.7	14	1067	2.1	8
Respiratory failure; insufficiency; arrest (adult)	887	1.9	11	1009	2.0	9

### 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 hemolytic and perinatal jaundice.
- For those ages 1 to 17, asthma, pneumonia, and epilepsy/convulsions 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 heart attack 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, and skin and subcutaneous tissue infections were present in three of the five age groups (when pregnancy and childbirth were excluded from the 18-44 age group).

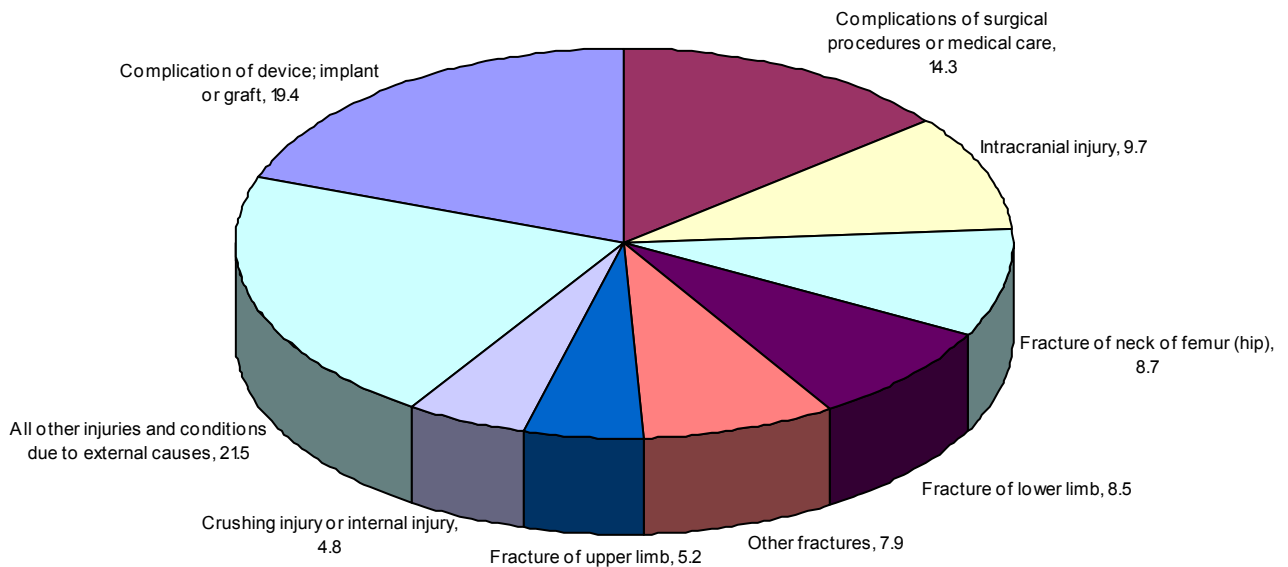
## WHY PATIENTS WERE HOSPITALIZED—INJURIES

### Injury hospitalizations:

Injury hospitalizations accounted for 8.2 percent of the total number of discharges and \$231 million in aggregate charges in 2008. The majority of patients were admitted through the emergency department (ED) and the average charge for an injury stay ranged from \$11,428 for burns to \$68,019 for spinal cord injuries, with an overall average charge of \$25,341 (see Appendix A ).

The most common primary diagnosis for an injury hospitalization in 2008 was complication of device, implant, or graft, which accounted for 19.4 percent of injury hospitalizations. Complications of surgical procedures or medical care were responsible for another 14.3 percent of injury hospitalizations, followed by intracranial injury, hip fractures, and lower limb fractures.

Most Frequent Injury Diagnoses, 2008



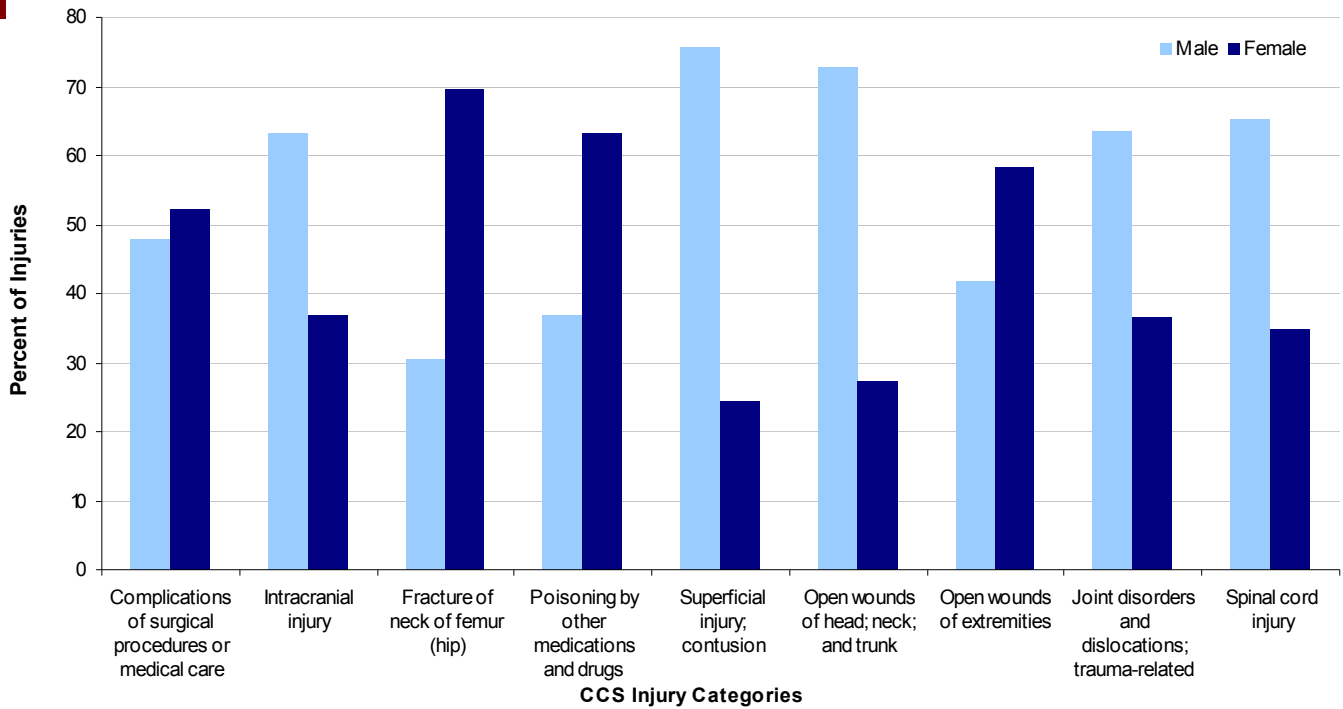
Source: Delaware Health Statistics Center

Falls were the most often specified external cause of injury (as defined by the Ecode listed on the discharge record); they accounted for 90 percent of hip fractures, 66 percent of upper limb fractures, 52 percent of intracranial injuries, and 57 percent of spinal cord injuries. Motor vehicle accidents were responsible for 31 percent of intracranial injuries and 29 percent of spinal cord injuries. Unintentional poisonings accounted for 7 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, poisoning by other medications and drugs, open wounds of extremities, and complications of surgical procedures or medical care. Men were more likely to have been hospitalized for superficial injuries and contusions, open wounds of head, neck, and trunk, spinal cord and intracranial injuries, and joint disorders and dislocations.

**Selected Primary Injury Diagnoses by Gender  
Delaware Hospitals, 2008**



Source: Delaware Health Statistics Center

## WHY PATIENTS WERE HOSPITALIZED -PROCEDURES

### Most frequent reasons for hospitalization by procedure:

In 2008, 76 percent of discharges had at least one associated procedure. Of the 85,402 hospital stays with an accompanying procedure, 28 percent had only a principal procedure performed; the remaining 72 percent had 2 or more procedures.

According to the CCS procedure classification system, procedures can be grouped into four broad classes: minor therapeutic, minor diagnostic, major therapeutic, and major diagnostic<sup>4</sup>. Major therapeutic and major diagnostic procedures are considered valid operating room procedures. Fewer than one-half of all principal procedures (41 percent) were valid operating room procedures; 59 percent were minor diagnostic and therapeutic procedures, such as CT scans, ultrasounds, and injections.

The three most frequently performed principal procedures were related to pregnancy and childbirth; together, other procedures to assist delivery, circumcisions, and cesarean sections accounted for 13 percent of all principal procedures.

### Most Frequently Performed Principal Procedures by Selected Characteristics, 2008

CCS Procedure	ALOS	Average Charges	Average Age	% of Discharges		Number Discharges
				Male	Female	
Other procedures to assist delivery	2.0	\$ 5,655	27	0.0	100.0	5864
Circumcision	3.0	\$ 4,065	0	100.0	0.0	4625
Cesarean section	4.0	\$ 11,024	28	0.0	100.0	3963
Prophylactic vaccinations and inoculations	2.0	\$ 2,145	0	20.6	79.4	3542
Computerized axial tomography (CT) scan head	5.0	\$ 12,341	63	44.7	55.3	2655
Respiratory intubation and mechanical ventilation	11.0	\$ 48,923	48	49.2	50.7	2603
Arthroplasty knee	3.0	\$ 29,956	65	36.0	64.0	2207
Percutaneous transluminal coronary angioplasty (PTCA)	3.0	\$ 42,789	64	65.9	34.1	2093
Diagnostic ultrasound of heart (echocardiogram)	5.0	\$ 16,580	67	45.3	54.7	2011
Upper gastrointestinal endoscopy; biopsy	6.0	\$ 19,023	58	44.6	55.4	1952
Diagnostic cardiac catheterization; coronary arteriography	4.0	\$ 25,865	62	51.1	48.9	1615
Other vascular catheterization; not heart	9.0	\$ 35,237	55	44.9	55.1	1608
CT scan abdomen	4.0	\$ 11,009	54	42.6	57.4	1572
Repair of current obstetric laceration	2.0	\$ 5,942	27	0.0	100.0	1530
Blood transfusion	5.0	\$ 23,674	60	46.8	53.2	1255

Note: Principal procedure refers to the first-listed procedure performed as a specific treatment for the hospitalization, or the one most closely related to the principal diagnosis; excludes unspecified minor diagnostic and therapeutic procedures.

Source: Delaware Health Statistics Center

Though many of the most frequently performed principal procedures remained the same from 2005 to 2008, including the top three, there were notable changes; ultrasounds and CT scans became some of the most frequently performed procedures and caused procedures such as cholecystectomies (surgical removal of gallbladder), and hip replacements to drop from the list. A 19 percent decrease in the number of hysterectomies prevented its being listed in the 15 most common procedures.

As women accounted for 58 percent of all hospitalizations in 2008, it is not surprising that 3 of the 15 most commonly performed procedures were performed exclusively on women, all 3 were obstetric procedures.

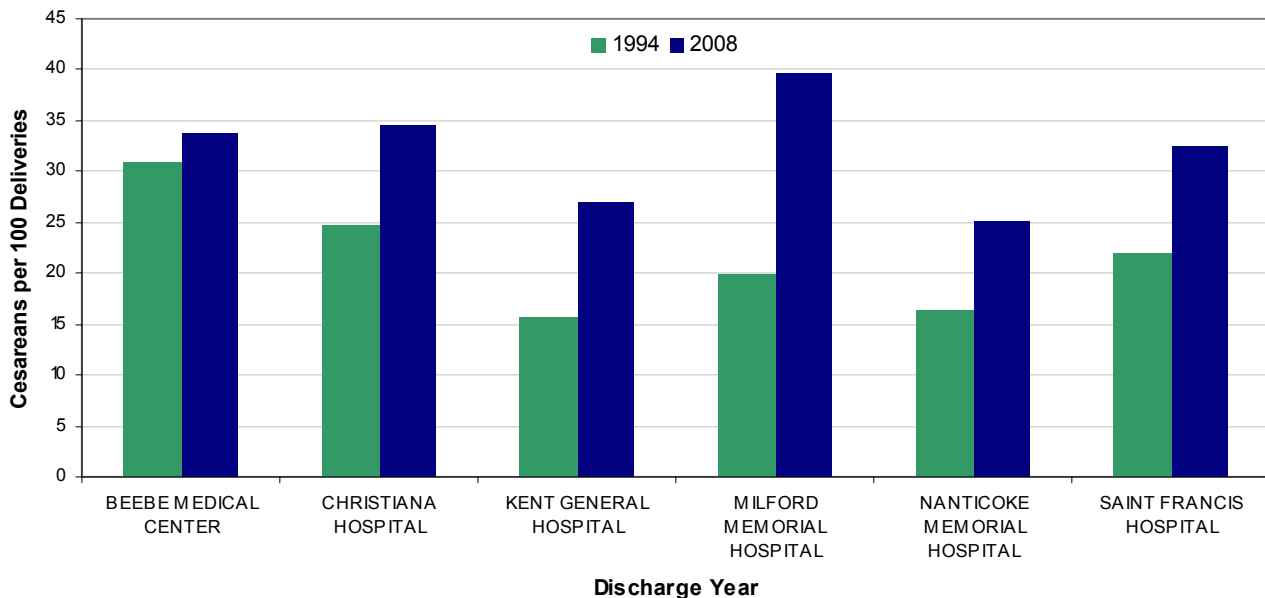
Patients undergoing obstetric procedures had a shorter than average length of stay (3 days), were younger (27 years of age), and had lower average charges associated with their stays than the average patient.

<sup>4</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 2008, 33 of every 100 deliveries were cesarean. Milford, Kent, and Nanticoke hospitals showed the greatest increases, at 100, 70, and 54 percent respectively. In 2008, Milford and Christiana Care had the highest rates, at 39.6 and 34.7 cesareans per 100 deliveries.

**Annual Cesarean Delivery Rates by Hospital  
Delaware Hospitals, 1994 and 2008**



Source: Delaware Health Statistics Center

### *Gender*

In 2008, obstetrical procedures accounted for one in four principal procedures performed on females, and included other procedures to assist delivery, cesarean sections, repair of current obstetrical laceration, and forceps; vacuum; and breech delivery.

Operations on the cardiovascular system accounted for 17 percent of the principal procedures performed on males, and included percutaneous transluminal coronary angioplasty (PTCA), diagnostic cardiac catheterization, and other vascular catheterization, not heart. Circumcision was the procedure most frequently performed on males.

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

- respiratory intubation and mechanical ventilation,
- vaccinations and inoculations,
- CT scan,
- upper gastrointestinal endoscopy; biopsy,
- arthroplasty knee, and
- echocardiogram.

## WHY PATIENTS WERE HOSPITALIZED—PROCEDURES

### *Age*

- Circumcision was the most commonly performed procedure for patients under 1, followed by prophylactic vaccinations and inoculations, and respiratory intubation and mechanical ventilation.
- For patients ages 1 to 17, appendectomy, other procedures to assist delivery, and cancer chemotherapy were the most frequent principal procedures.
- Obstetric procedures, specifically other procedures to assist delivery, cesarean section, and repair of current laceration, were the most common procedures for those ages 18-44.
- PTCA, knee arthroplasty, and CT scans were the most frequently performed procedures for those 45-64.
- The most commonly performed principal procedures on patients 65 and older were CT scans, knee arthroplasty, and echocardiograms.

### *Average Length of Stay*

The principal procedures associated with the longest hospital stays were extracorporeal circulation auxiliary to open heart procedures (59 days), tracheostomy (46 days), and bone marrow transplant (29 days). Because length of stay is closely related to the total charges incurred for a hospital stay, it is not surprising that these same procedures were also associated with the highest average charges, though extracorporeal circulation had average total charges more than twice that of tracheostomy and bone marrow transplant (\$791,925 versus \$273,959 and \$207,730).

### *In-hospital Mortality*

Patients who underwent the following principal procedures during their hospital stay had the highest proportions of in-hospital mortality<sup>5</sup>:

- Extracorporeal circulation auxiliary to open heart procedures - 50 percent expired
- Exploratory laparotomy - 36 percent expired
- Respiratory intubation and mechanical ventilation - 22 percent expired
- Tracheostomy - 18 percent expired

By itself, having one of the above procedures does not indicate a higher risk of mortality, but its presence on the discharge may be an indicator of severely ill patients and/or the employment of end-of-life care, both of which have a higher risk of mortality.

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<sup>5</sup>Principal procedures with fewer than 5 occurrences were excluded from the calculations.

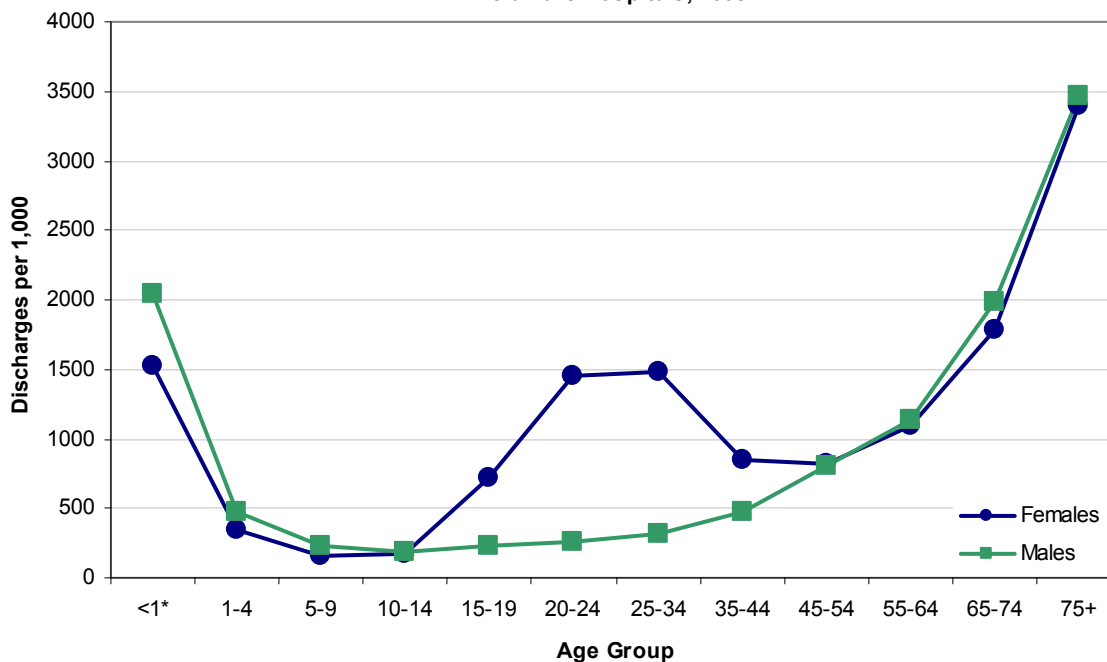


## HOSPITALIZATIONS OF DELAWARE RESIDENTS

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 5.5 times that of males.

**Resident Discharge Rates\* by Sex and Age**  
Delaware Hospitals, 2008

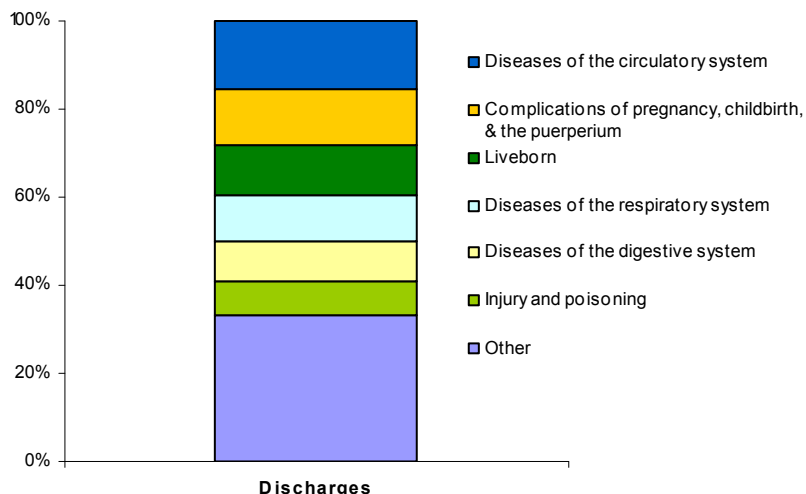


\*This rate excludes all infants <1 who were admitted by virtue of being born in the hospital.

Source: Delaware Health Statistics Center

In 2008, Delawareans were discharged most frequently for diseases of the circulatory system, which accounted for 15.5 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, respiratory failure, and COPD (chronic obstructive pulmonary disease), and diseases of the digestive systems, which included biliary tract disease, intestinal obstruction, and appendicitis.

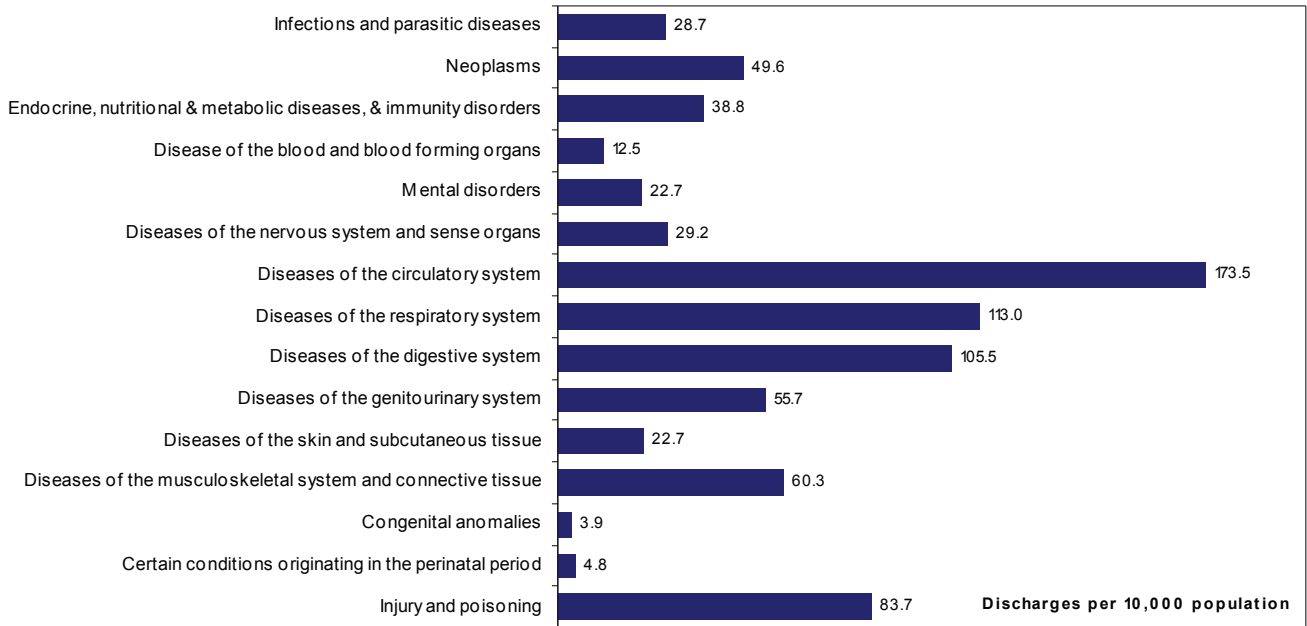
**Percent Distribution of Resident Discharges for Hospitalizations by Body System**  
Delaware Hospitals, 2008



Source: Delaware Health Statistics Center

# HOSPITALIZATIONS OF DELAWARE RESIDENTS

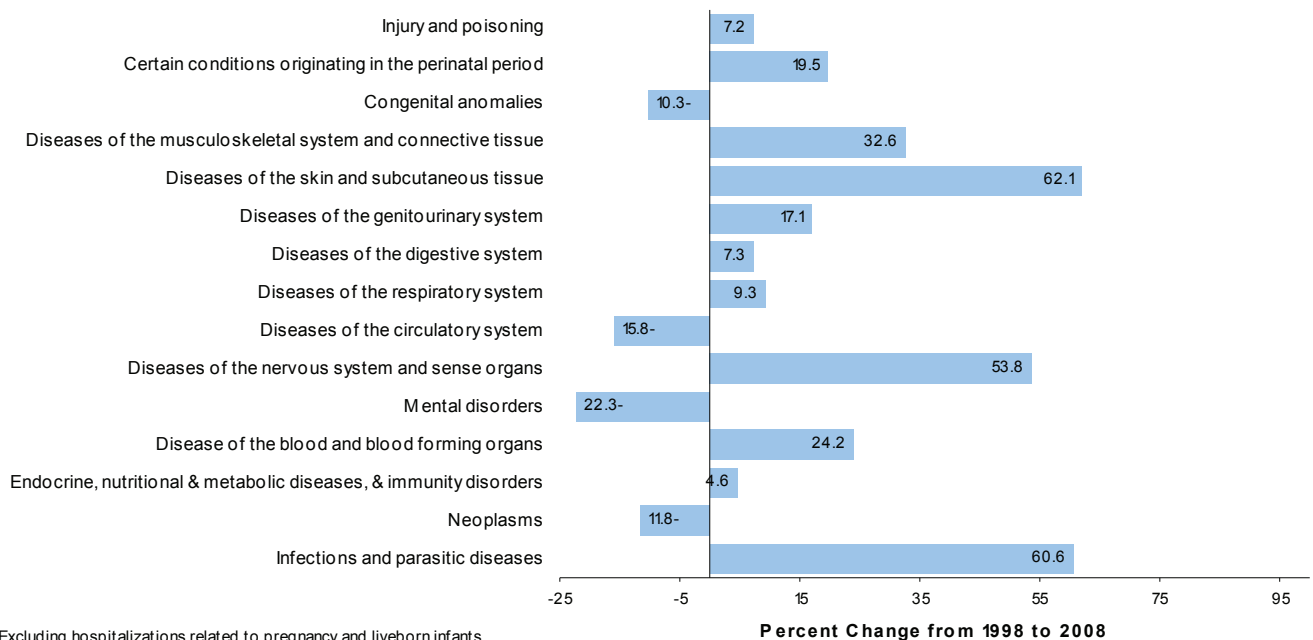
**Hospitalization Rates by Body System  
Delaware Residents, 2008**



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

High hospital discharge rates in 2008 were not necessarily indicative of large rate increases over the previous 10 years. In some categories, like diseases of the circulatory system, high 2008 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, 2008 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, 1998 versus 2008**



\*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 2008.

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

CCS Diagnosis	1998		2003		2008		% Difference from 1998 to 2008
	Number	Rate	Number	Rate	Number	Rate	
Osteoarthritis	981	12.9	1650	20.2	2539	29.1	126.7
Pneumonia (except that caused by tuberculosis or STD)	2790	36.6	3133	38.3	2518	28.9	-21.0
Congestive heart failure; nonhypertensive	2591	33.9	2857	34.9	2326	26.7	-21.4
Coronary atherosclerosis and other heart disease	2635	34.5	2146	26.2	2076	23.8	-31.0
Respiratory failure; insufficiency; arrest (adult)	603	7.9	899	11.0	1772	20.3	157.4
Septicemia (except in labor)	818	10.7	941	11.5	1766	20.3	89.1
Chronic obstructive pulmonary disease and bronchiectasis	1412	18.5	1570	19.2	1754	20.1	8.8
Skin and subcutaneous tissue infections	855	11.2	1202	14.7	1732	19.9	77.4
Cardiac dysrhythmias	1573	20.6	1623	19.8	1729	19.8	-3.7
Rehabilitation care; fitting of prostheses; and adjustment of devices	1809	23.7	2154	26.3	1724	19.8	-16.5
Acute cerebrovascular disease	1435	18.8	1438	17.6	1571	18.0	-4.1
Acute myocardial infarction	1669	21.9	1823	22.3	1533	17.6	-19.6
Urinary tract infections	966	12.7	1313	16.1	1478	17.0	34.0
Diabetes mellitus with complications	1177	15.4	1314	16.1	1469	16.9	9.3
Complication of device; implant or graft	999	13.1	1308	16.0	1438	16.5	26.1
Acute and unspecified renal failure	253	3.3	669	8.2	1374	15.8	375.6
Spondylosis; intervertebral disc disorders; other back problems	1455	19.1	1524	18.6	1343	15.4	-19.2
Asthma	1100	14.4	1435	17.5	1307	15.0	4.1
Biliary tract disease	1029	13.5	980	12.0	1200	13.8	2.1
Fluid and electrolyte disorders	1326	17.4	1496	18.3	1154	13.2	-23.8

\*Hospitalization rate per 10,000, ranked by 2008 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:

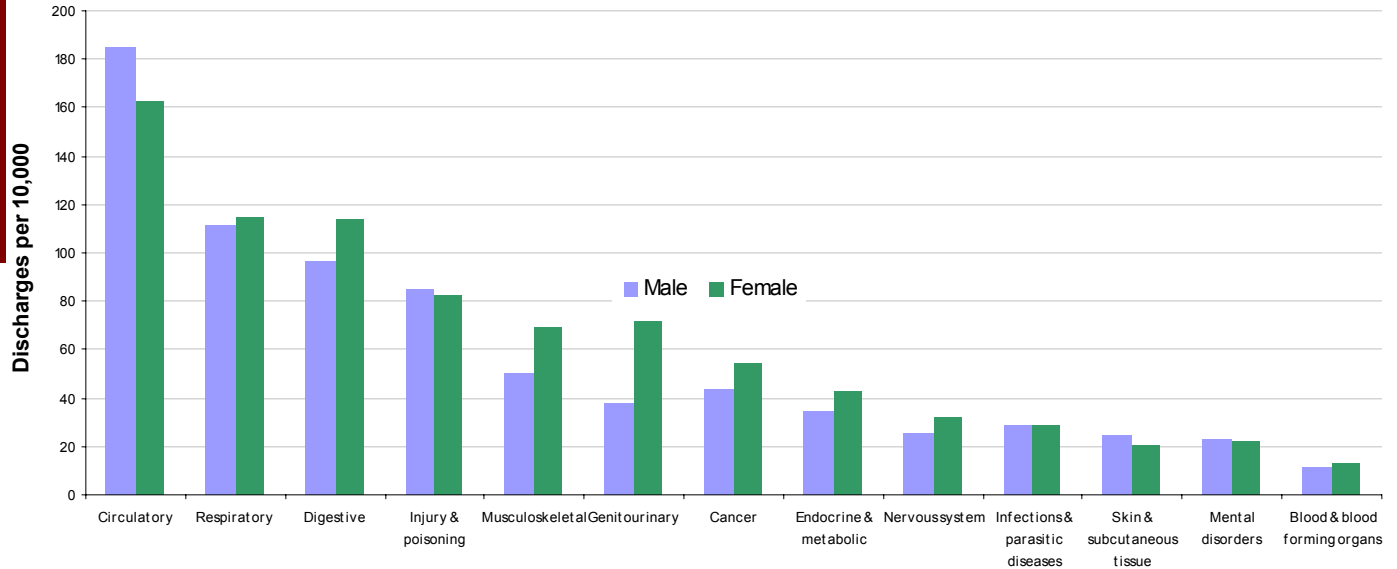
- congestive heart failure,
- coronary atherosclerosis and other heart disease (coronary artery disease),
- cardiac dysrhythmias (irregular heartbeat),
- acute cerebrovascular disease (stroke), and
- acute myocardial infarction (heart attack).

Three of the circulatory conditions listed above showed significant decreases in their rates since 1998, heart failure, coronary artery disease, and heart attack.

Hospitalization rates for renal failure, respiratory failure, and osteoarthritis demonstrated the greatest increases between 1998 and 2008.

# HOSPITALIZATIONS OF DELAWARE RESIDENTS

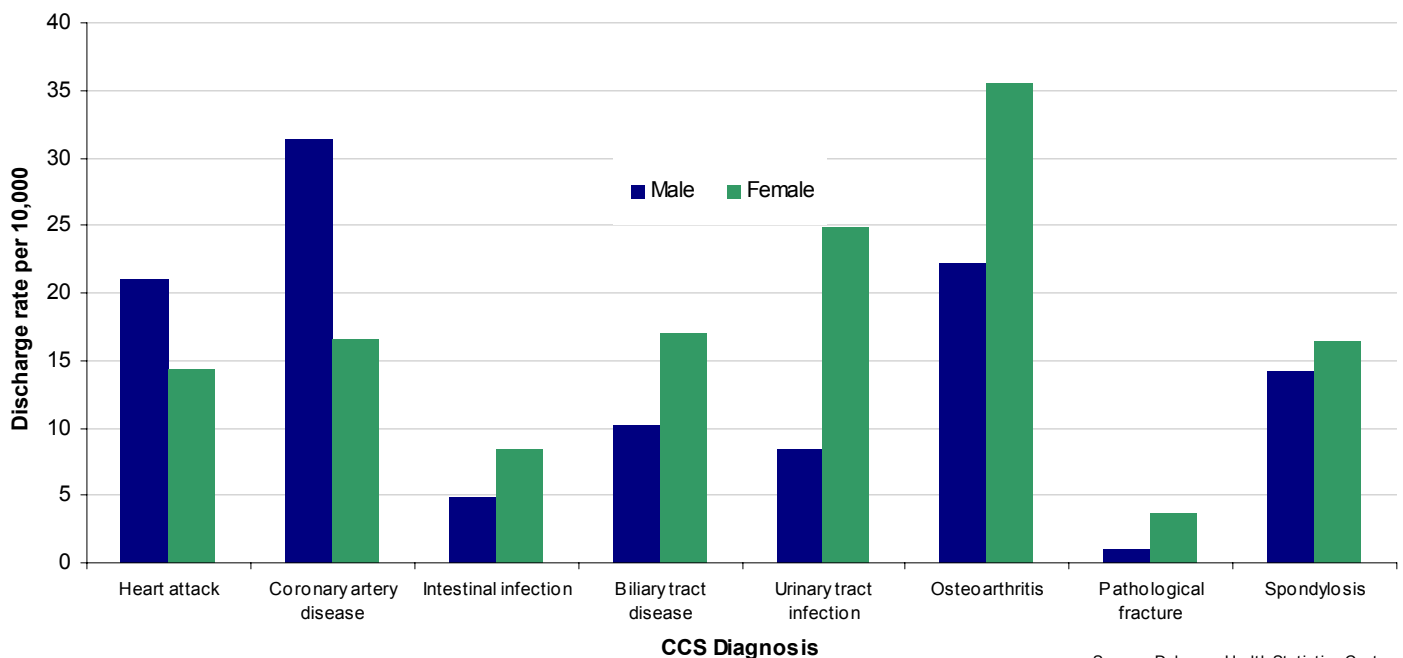
**DE Resident Discharge Rates by Body System and Gender  
Delaware Hospitals, 2008**



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.

**Delaware Resident Discharge Rates of CCS Diagnoses by Gender  
Delaware Hospitals, 2008**

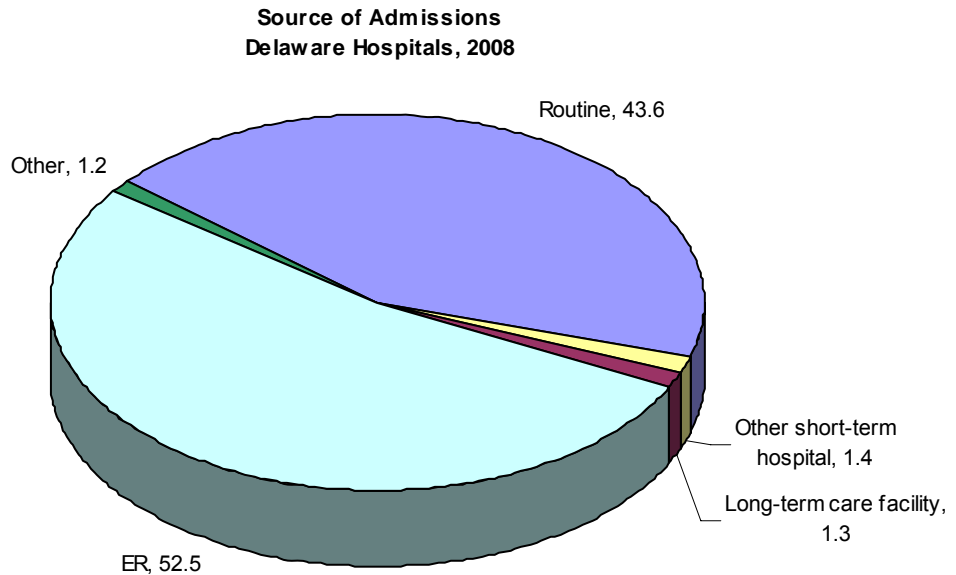


Source: Delaware Health Statistics Center

## HOW PATIENTS WERE ADMITTED

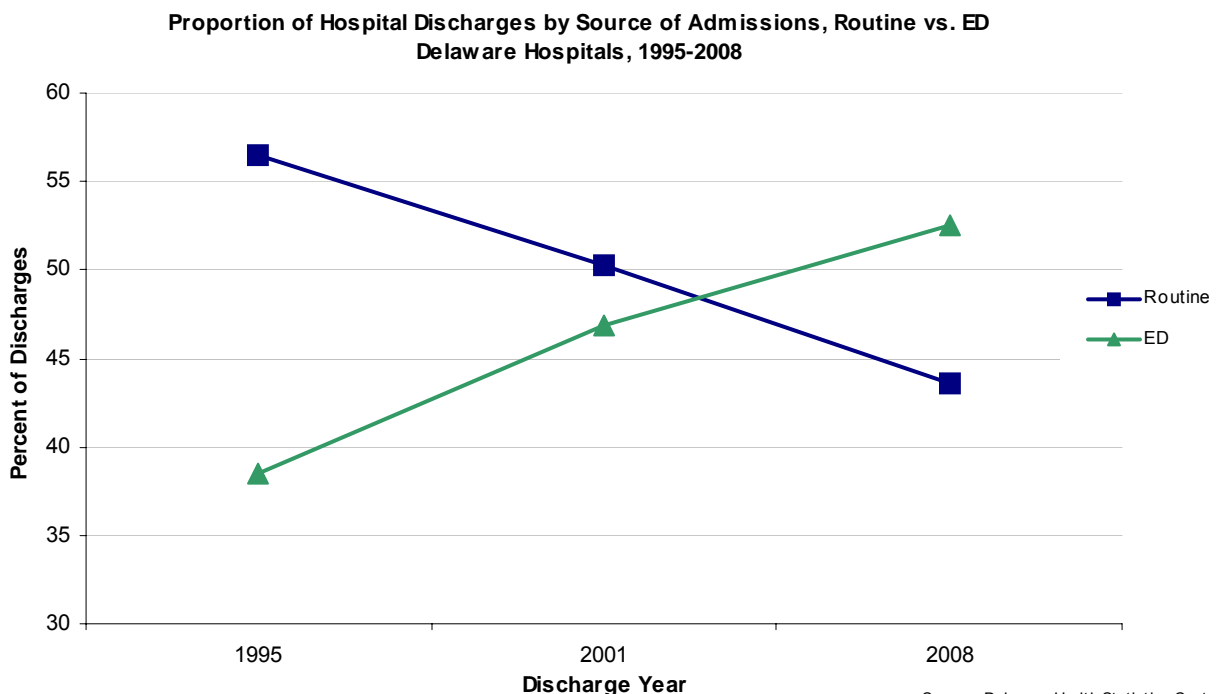
### Source of admissions:

Routine admissions and admissions from the ED accounted for 96 percent of all hospital discharges in 2008. The remaining hospital admissions came from other short-term hospitals, long-term care facilities, and other sources.



Source: Delaware Health Statistics Center

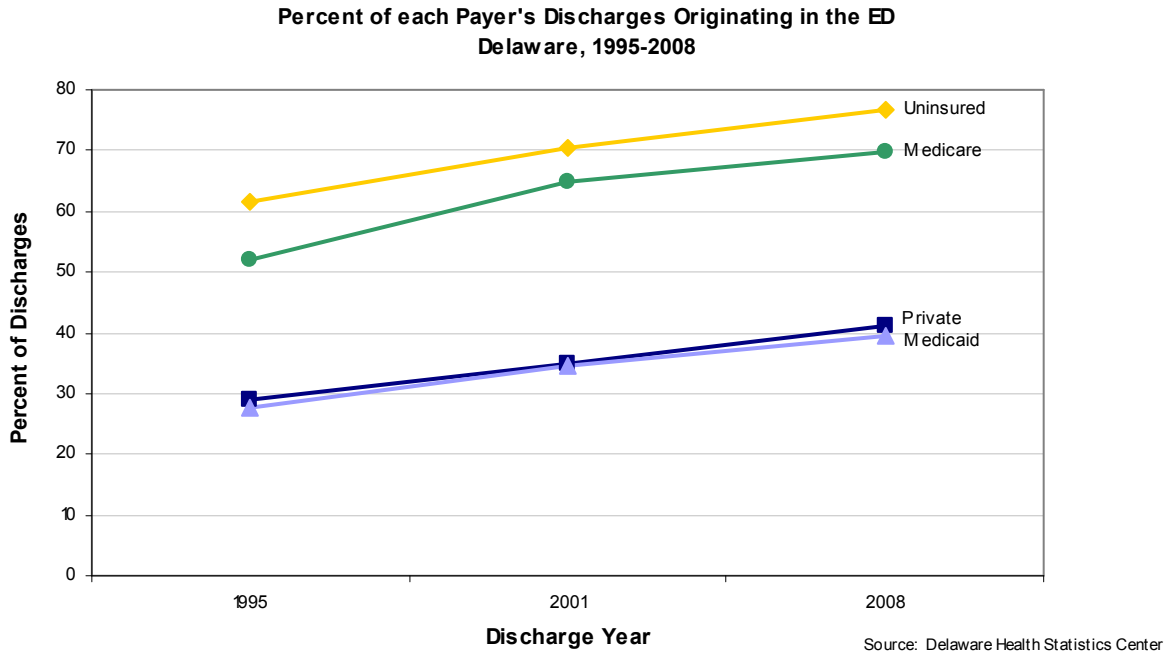
Between 1995 and 2008, the distribution of admission source shifted from the majority of patients being routinely admitted to the majority coming from the ED. In 1995, routine and ED admissions accounted for 57 and 39 percent of all admissions. By 2008, the proportion of routine admissions had decreased 23 percent and the proportion of ED admissions had risen by 36 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 2008, 77 percent of uninsured admissions, 70 percent of Medicare admissions, 41 percent of private admissions, and 40 percent of Medicaid admissions were admitted through the ED.



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

<b>2008 ED Admissions - Most Common Diagnoses</b>	<b>Frequency</b>	<b>Percent<sup>1</sup></b>
Pneumonia (except that caused by tuberculosis or STD)	2452	4.2
Congestive heart failure; nonhypertensive	2233	3.8
Respiratory failure; insufficiency; arrest (adult)	1664	2.8
Septicemia (except in labor)	1660	2.8
Chronic obstructive pulmonary disease and bronchiectasis	1657	2.8
Acute cerebrovascular disease	1618	2.8
Acute myocardial infarction	1552	2.6
Skin and subcutaneous tissue infections	1542	2.6
Cardiac dysrhythmias	1423	2.4
Urinary tract infections	1418	2.4

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

- Between 2005 and 2008, nonspecific chest pain and fluid and electrolyte disorders dropped from the 10 most common diagnoses for ED admissions; at the same time respiratory failure and septicemia moved into the top 10, as the 3rd and 4th ranked diagnoses.
- 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 infections: pneumonia, skin infections, septicemia, and urinary tract infections.

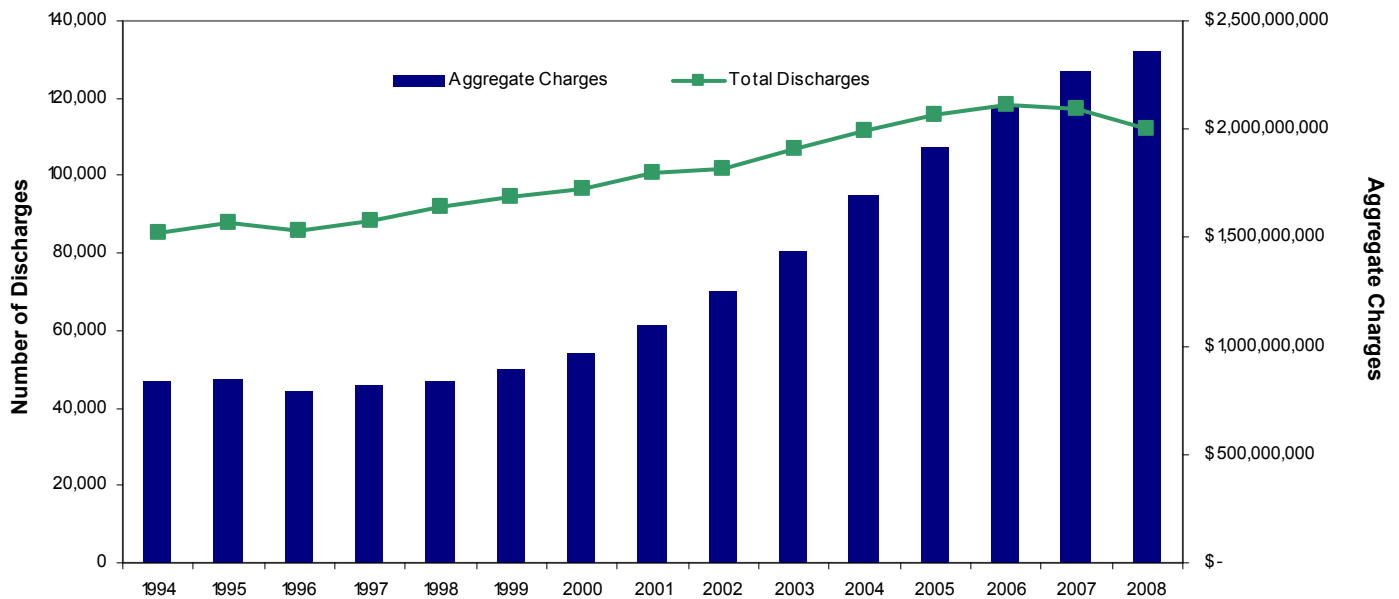
## HOSPITAL CHARGES AND BILLING

### 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 2008, total aggregate charges for all hospitalizations in Delaware equaled \$2.36 billion, more than double the aggregate charges in 2001. During the same time period, the number of discharges rose from 100,681 to 111,862, an 11 percent increase.

**Number of Discharges and Total Aggregate Charges by Year  
Delaware Hospitals, 1994-2008**



Source: Delaware Health Statistics Center

The average charge for a hospital stay rose again in 2008, to \$21,122; the median charge per stay was \$11,772.

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 \$37,785 to \$87,090. These three diagnostic groups also had the longest average stays, ranging from 8.8 to 10.5 days.

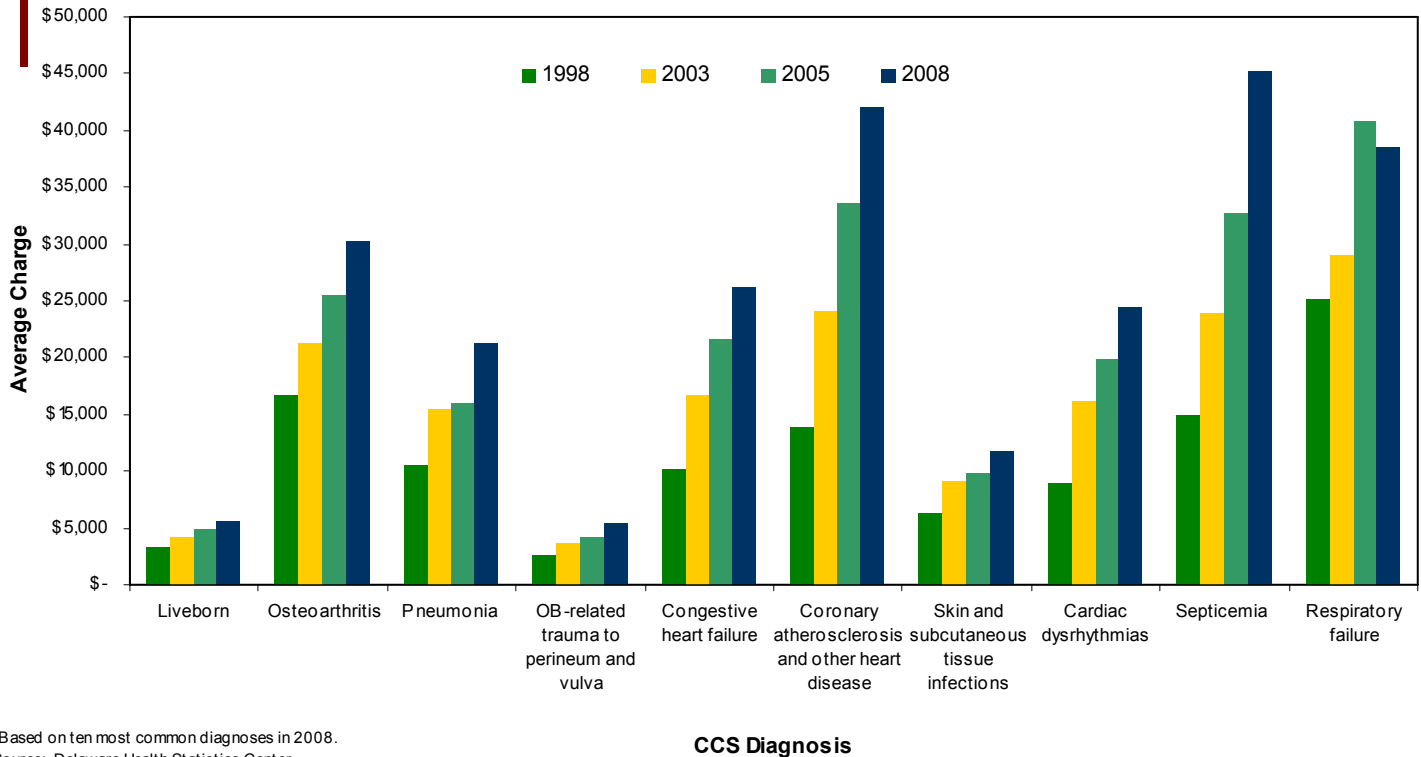
Looking at specific diagnoses within groups showed that the most expensive diagnoses were cardiac and circulatory birth defects, leukemias, nervous system birth defects, and heart valve disorders. However, the 10 most expensive diagnoses occurred relatively rarely and accounted for just over one percent of all discharges in 2008. In comparison, the 10 diagnoses that occurred most frequently accounted for 27 percent of the total discharges in 2008 (see Appendix E for more information).

## HOSPITAL CHARGES AND BILLING

From 1998 to 2008, 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 (206%),
- septicemia (202%), and
- cardiac dysrhythmias (173%).

**Average Hospital Charges for Highest\* Volume CCS Diagnoses  
Delaware Hospitals, 1998-2008**



\*Based on ten most common diagnoses in 2008.  
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 1998, the aggregate charges for the 10 highest volume diagnoses totaled \$209.4 million and accounted for 24.9 percent of the total aggregate charges for all diagnoses.
- By 2008, the aggregate charges for those same diagnoses had more than tripled, to \$630.2 million, which accounted for 26.7 percent of the total aggregate charges.

In 2008, the 10 conditions with the highest total billed charges accounted for 31 percent of the total aggregate charges. Coronary atherosclerosis incurred the largest aggregate charges of any diagnosis, resulting in a total hospital bill of \$102.7 million. Although hospital stays for newborns had relatively low average charges, their high frequency resulted in liveborn infants having the 6th highest aggregate charges (see Appendix E for more information).



## HOSPITAL CHARGES AND BILLING

### Insurance status:

The following payer sources are listed in this report:

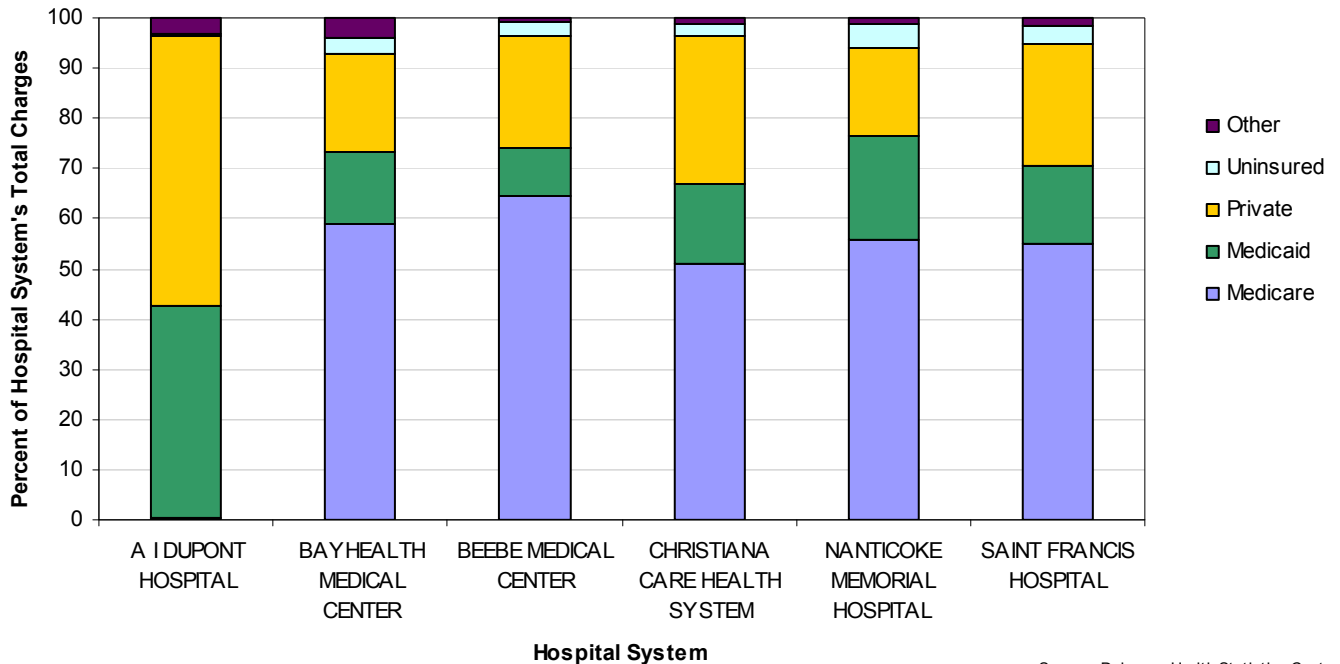
- Medicare
- Medicaid
- Private insurance carriers, such as:
  - Blue Cross Blue Shield
  - HMOs
  - Commercial Insurance
- Uninsured
  - Patients who have no insurance and self pay
- Other types of insurance, such as:
  - Workman's compensation
  - CHAMPUS (Civilian Health and Medical Program of the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

In 2008, 61 percent of hospitalizations were billed to Medicare (37) and Medicaid (24), 34 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 2008, Beebe had the highest proportion of patients whose primary payer was Medicare. A.I. DuPont had the highest proportion of both privately insured and Medicaid covered patients, and Nanticoke had the highest percent of uninsured patients.

**Distribution of Total Charges by Primary Payer Type and Hospital System  
Delaware, 2008**



Source: Delaware Health Statistics Center

## HOSPITAL CHARGES AND BILLING

### Medicare:

From 1995 to 2008, the percent of hospital stays whose primary payer was Medicare increased from 34 to 37.4 percent. Over the same time period, the proportion of aggregate charges billed to Medicare remained at 46 percent.

Four of the top 10 most frequent diagnoses for Medicare patients were related to diseases of the circulatory system; together they accounted for 14.7 percent of Medicare hospitalizations. The three most frequent diagnoses for Medicare patients in 2008 were<sup>7</sup>:

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

### Medicaid:

From 1995 to 2008, Medicaid covered hospitalizations increased from 16.4 to 23.5 percent. Over the same time period, the proportion of aggregate charges billed to Medicaid rose from 13.8 to 19 percent.

Six of the 10 most frequent diagnoses for Medicaid patients were related to pregnancy and childbirth, and accounted for 37.6 percent of Medicaid stays. The three most frequent diagnoses for Medicaid patients in 2008 were<sup>7</sup>:

- liveborn infants,
- OB-related trauma to perineum and vulva, and
- other complications of birth; puerperium affecting management of mother.

### Private Insurers:

From 1995 to 2008, privately insured stays decreased from 42.3 to 34.1 percent. Over the same time period, the proportion of aggregate charges billed to private insurance decreased from 34.1 to 29.8 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 23.5 percent of all stays covered by private insurers. The three most frequent diagnoses for privately insured patients in 2008 were<sup>7</sup>:

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

### Uninsured:

From 1995 to 2008, uninsured hospitalizations decreased from 5.7 to 2.9 percent. Over the same time period, the proportion of aggregate charges billed to uninsured patients decreased from 4.2 to 2.4 percent.

Unlike the other payer types, one of the 3 most frequent diagnoses for uninsured patients was mental health related, and accounted for 4.8 percent of uninsured stays. The three most frequent diagnoses for uninsured patients in 2008 were<sup>7</sup>:

- mood disorders,
- skin and subcutaneous tissue infections, and
- liveborn infants.

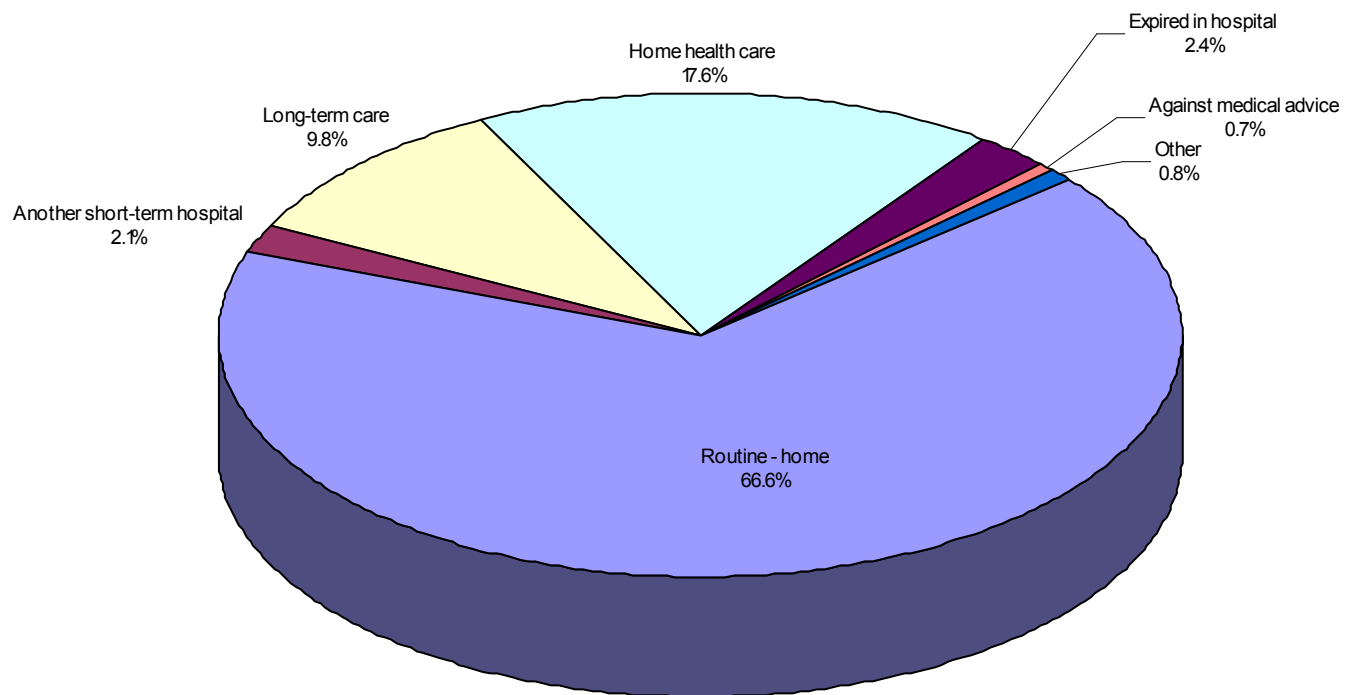
<sup>7</sup> See Appendix F for the top 10 principal diagnoses by payer type.

## 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 2008 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, 2008**



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.

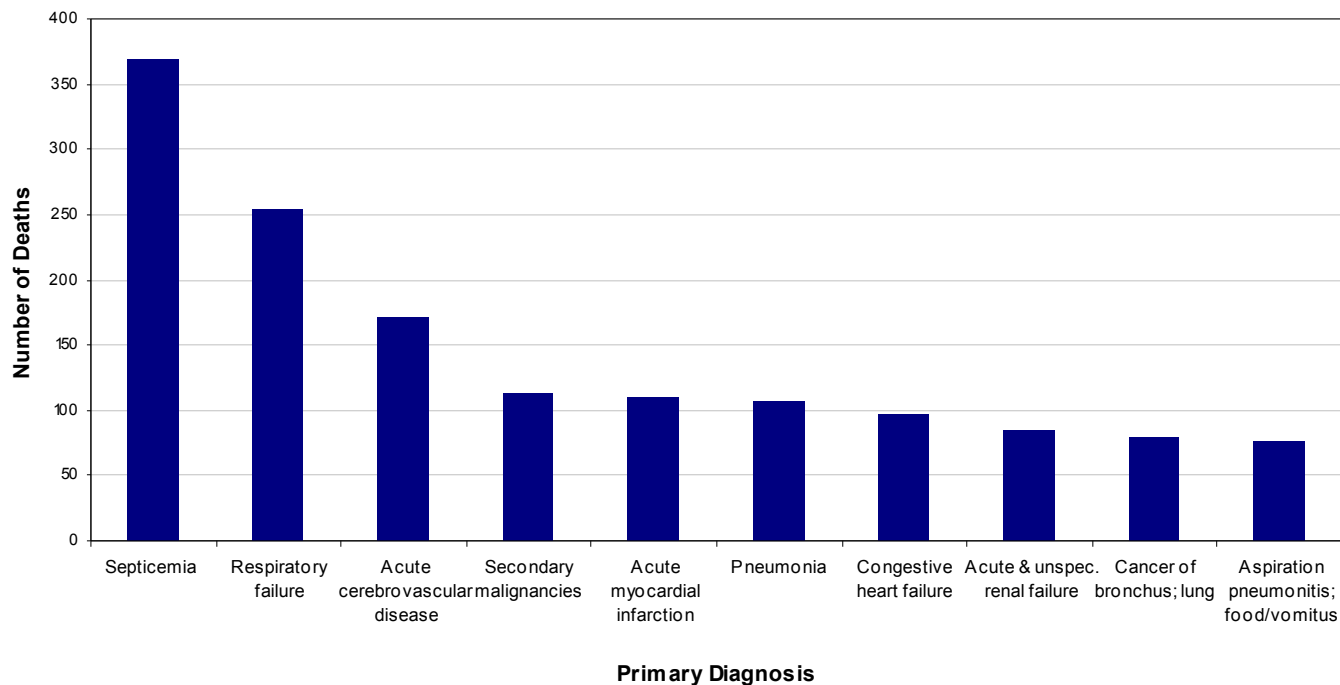
### Frequencies

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

**Diagnoses with the Greatest Numbers of In-Hospital Deaths  
Delaware Hospitals, 2008**



Source: Delaware Health Statistics Center

Age affected which diagnoses contributed to the largest numbers of deaths. Low birthweight and prematurity accounted for the largest number of deaths to those under one, while injuries 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 68 percent of all in-hospital mortality (for more information see Appendices G and H).

### *Percentages*

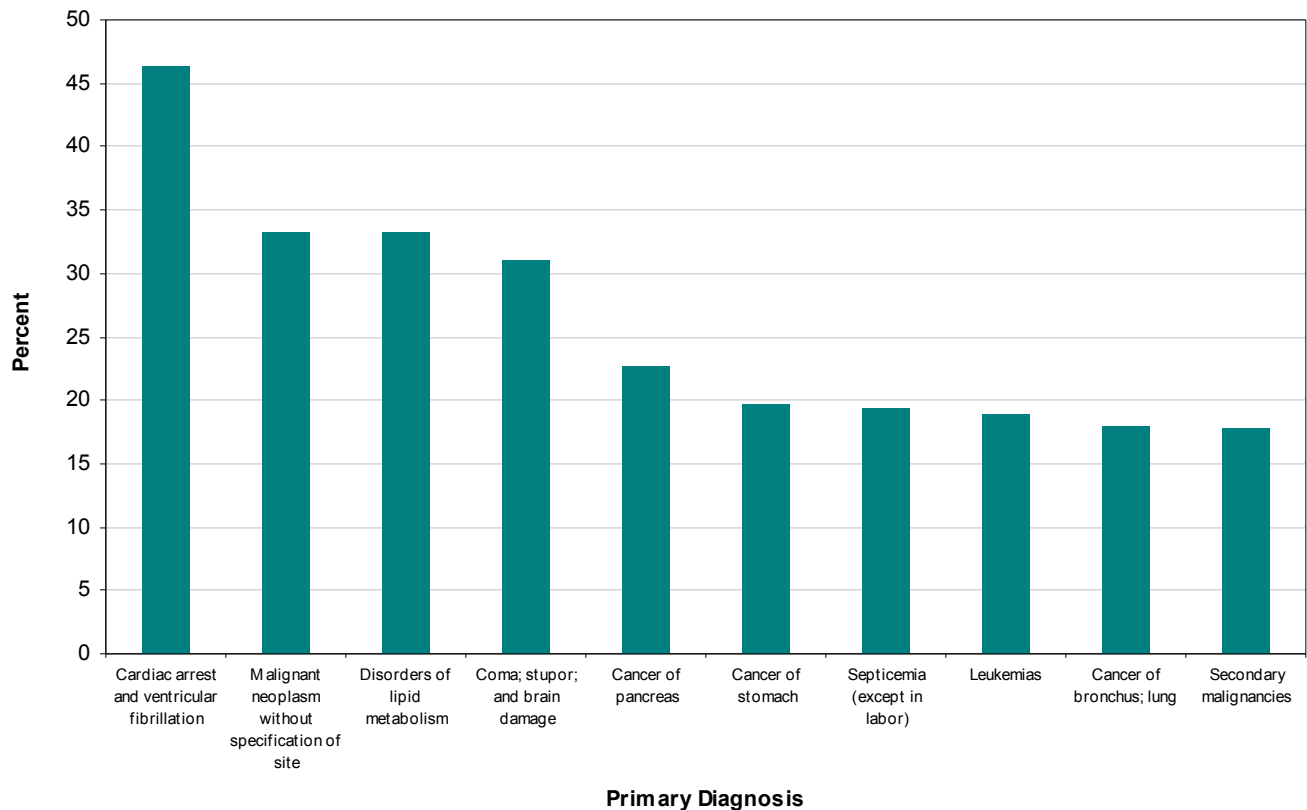
Those diagnoses with the greatest percentages of in-hospital mortality were:

- cardiac arrest and ventricular fibrillation,
- malignant neoplasm without specification of site, and
- disorders of lipid metabolism.

## HOW PATIENTS WERE DISCHARGED

Six of the ten diagnoses with the greatest percentages of in-hospital mortality were cancer-related, and included cancer of pancreas, cancer of stomach, leukemias, cancer of bronchus and lung, secondary malignancies, and cancer without specification of site.

**CCS Diagnoses with the Greatest Percent of In-Hospital Mortality  
Delaware Hospital, 2008**



Source: Delaware Health Statistics Center

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

Less than one percent of patients left the hospital against medical advice. Patients who left the hospital against medical advice were more likely to be:

- in the 18 to 44 age group (48 percent),
- male (56 percent), and
- covered by Medicaid (43 percent).

The three most frequent diagnoses of patients who left the hospital against medical advice were diabetes, skin and subcutaneous tissue infections, and nonspecific chest pain.

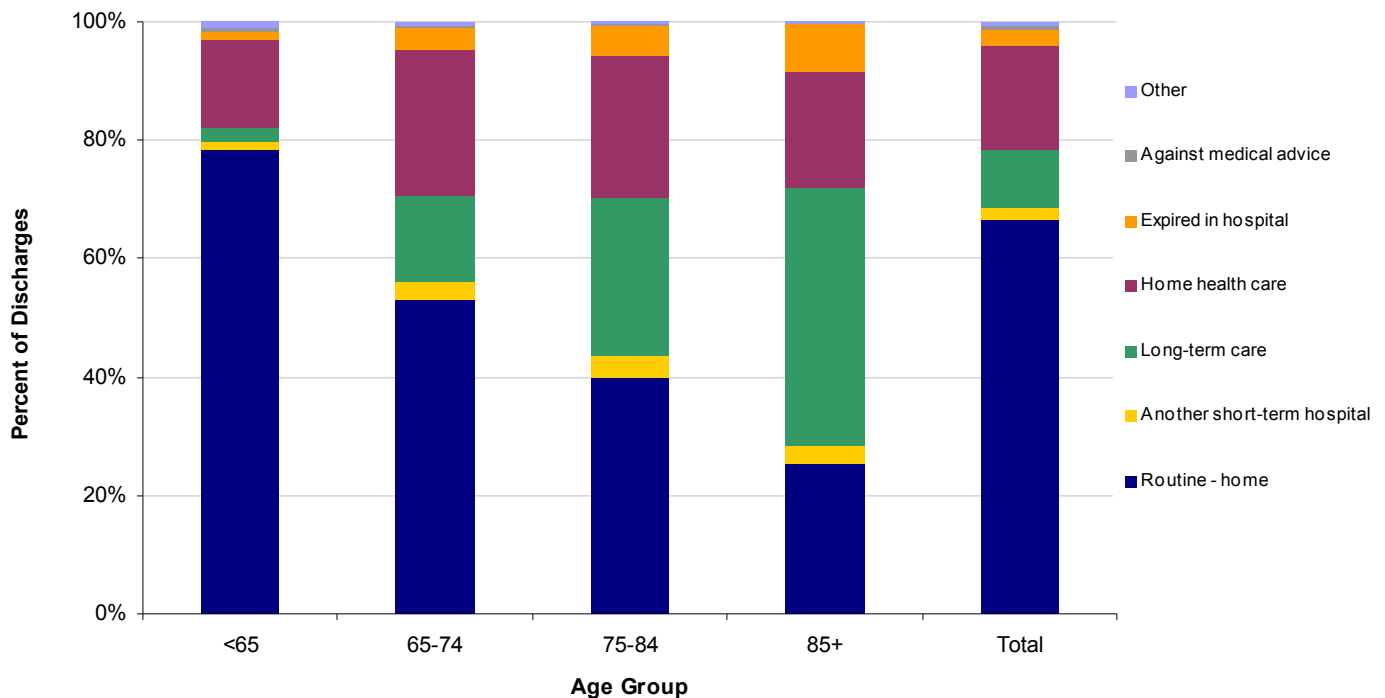
- For women, diabetes, COPD, and skin and subcutaneous tissue infections made up the top three.
- For men, diabetes, skin and subcutaneous tissue infections, and nonspecific chest pain made up the top three.

## 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 2008, less than 3 percent of those under 65 were discharged to long-term care facilities, compared to 14.4 percent of those 65-74, 26.6 percent of those 75-84, and 43.5 percent of those 85 and older.

**Distribution of Discharge Status by Age Group  
Delaware Hospitals, 2008**



Source: Delaware Health Statistics Center

In 2008, the most common diagnoses for patients discharged to LTC facilities were septicemia, hip fracture, and stroke.

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

## HOSPITAL SPECIFIC DATA

### A.I. duPont Hospital for Children

#### 2008 Discharge Distribution

Zip / State	Number	%
19720	524	5.2
19805	512	5.1
19702	431	4.3
19802	326	3.3
19701	248	2.5
19713	236	2.4
19808	235	2.3
19711	212	2.1
19709	196	2.0
19801	191	1.9
19804	164	1.6
19901	152	1.5
19809	151	1.5
19904	147	1.5
19703	139	1.4
19803	137	1.4
19810	127	1.3
19707	105	1.0
19977	104	1.0
19947	94	0.9
19956	89	0.9
19963	78	0.8
19734	68	0.7
19973	66	0.7
19966	59	0.6
19934	57	0.6
19806	44	0.4
19938	40	0.4
19962	38	0.4
19943	38	0.4
19968	31	0.3
19960	27	0.3
19958	27	0.3
19807	27	0.3
19952	25	0.2
19933	19	0.2
19950	18	0.2
19971	17	0.2
19953	17	0.2
19940	16	0.2
19939	16	0.2
19903	16	0.2
19946	14	0.1
19945	14	0.1
19706	14	0.1
19954	12	0.1
19899	11	0.1
19975	9	0.1
19970	7	0.1
19941	6	0.1
19961	4	0.0
DE Other	23	0.2
PA	2,766	27.6
NJ	1,177	11.8
MD	539	5.4
Other state	147	1.5
Invalid	10	0.1
<b>Total</b>	<b>10,017</b>	<b>100</b>

#### Utilization Characteristics

	2006	2007	2008
<b>Aggregate charges</b>	\$299,491,378	\$311,156,093	\$341,657,933
<b>Average charges</b>	\$27,333	\$29,527	\$34,108
<b>Average charge per day</b>	\$7,113	\$7,648	\$7,795
<b>Number of Discharges</b>	10,957	10,538	10,017
<b>Total All-listed Procedures<sup>1</sup></b>	13,237	12,527	11,361
<i>Non-operating room procedures<sup>2</sup></i>	6,876	6,044	5,642
<i>Valid operating room procedures<sup>2</sup></i>	6,361	6,483	5,719
<b>Average Length of Stay</b>	4.0	4.2	4.6
<b>Primary Payer Distribution</b>			
<i>Medicare</i>	0.2	0.1	0.2
<i>Medicaid</i>	38.6	39.5	38.8
<i>Private Insurance</i>	59.1	58.0	57.8
<i>Uninsured</i>	0.7	0.8	0.8
<i>Other</i>	1.5	1.6	2.4
<b>Admission Source Distribution</b>			
<i>Routine</i>	37.3	31.8	29.4
<i>Other short-term hospital</i>	8.7	6.7	7.2
<i>Long-term care facility</i>	1.9	4.2	2.9
<i>ER</i>	50.1	56.2	59.7
<i>Other</i>	2.0	1.1	0.7
<b>Discharge Status Distribution</b>			
<i>Routine</i>	92.8	93.4	92.7
<i>Another short-term hospital</i>	0.6	0.7	0.6
<i>Long-term care</i>	0.8	0.9	1.1
<i>Home health care</i>	5.1	4.3	4.9
<i>Expired</i>	0.3	0.3	0.4
<i>Against medical advice</i>	0.0	0.0	0.1
<i>Other/Unknown</i>	0.3	0.4	0.3
<b>Sex</b>			
<i>Male</i>	54.1	54.9	55.4
<i>Female</i>	45.9	45.1	44.6
<b>Age</b>			
<1	23.5	24.2	23.2
1-4	29.4	27.0	27.8
5-9	18.2	17.5	17.3
10-14	16.9	18.3	17.2
15-19	11.4	12.5	14.0
20-24	0.7	0.4	0.4
25-34	0.0	0.0	0.0
35-44	0.0	0.0	0.0
45-54	0.0	0.0	0.0
55-64	0.0	0.0	0.0
65-74	0.0	0.0	0.0
75+	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

#### 2008 Discharge Distribution

Zip / State	Number	%
19901	3,727	19.3
19904	2,769	14.4
19963	2,033	10.5
19977	1,505	7.8
19943	1,098	5.7
19934	1,060	5.5
19952	1,017	5.3
19962	846	4.4
19938	507	2.6
19960	438	2.3
19946	431	2.2
19953	377	2.0
19950	360	1.9
19947	313	1.6
19966	205	1.1
19968	195	1.0
19941	190	1.0
19734	149	0.8
19954	147	0.8
19709	146	0.8
19933	143	0.7
19973	133	0.7
19964	130	0.7
19958	129	0.7
19971	82	0.4
19903	69	0.4
19979	61	0.3
19936	54	0.3
19956	53	0.3
19980	39	0.2
19945	34	0.2
19939	33	0.2
19955	29	0.2
19970	23	0.1
19951	23	0.1
19975	19	0.1
19902	19	0.1
19702	16	0.1
19701	14	0.1
19720	12	0.1
19961	10	0.1
19801	10	0.1
19930	8	0.0
19802	8	0.0
19804	5	0.0
19713	5	0.0
19805	4	0.0
19706	4	0.0
19703	4	0.0
19967	3	0.0
19809	3	0.0
DE Other	25	0.1
DE Unk	1	0.0
MD	348	1.8
Other state	127	0.7
PA	49	0.3
NJ	30	0.2
Invalid	16	0.1
<b>Total</b>	<b>19,288</b>	<b>100</b>

#### Utilization Characteristics

	2006	2007	2008
<b>Aggregate charges</b>	\$333,556,518	\$355,152,301	\$364,818,809
<b>Average charges</b>	\$15,836	\$17,545	\$18,914
<b>Average charge per day</b>	\$3,978	\$4,424	\$4,900
<b>Number of Discharges</b>	21,063	20,242	19,288
<b>Total All-listed Procedures<sup>1</sup></b>	24,773	22,725	22,221
<i>Non-operating room procedures<sup>2</sup></i>	16,220	14,530	14,465
<i>Valid operating room procedures<sup>2</sup></i>	8,553	8,195	7,756
<b>Average Length of Stay</b>	5.0	5.1	5.0
<b>Primary Payer Distribution<sup>3</sup></b>			
<i>Medicare</i>	39.5	41.3	43.2
<i>Medicaid</i>	22.6	22.3	22.9
<i>Private Insurance</i>	27.9	26.4	24.8
<i>Uninsured</i>	3.8	3.9	3.3
<i>Other</i>	6.1	6.1	5.8
<b>Admission Source Distribution</b>			
<i>Routine</i>	53.0	53.8	55.2
<i>Other short-term hospital</i>	1.2	0.7	0.6
<i>Long-term care facility</i>	0.0	0.1	0.2
<i>ER</i>	44.9	45.1	43.7
<i>Other</i>	0.9	0.3	0.4
<b>Discharge Status Distribution</b>			
<i>Routine</i>	69.3	66.9	65.5
<i>Another short-term hospital</i>	2.5	2.4	2.1
<i>Long-term care</i>	9.8	11.0	12.6
<i>Home health care</i>	14.5	16.0	15.7
<i>Expired</i>	2.3	2.3	2.4
<i>Against medical advice</i>	0.9	0.8	0.8
<i>Other/Unknown</i>	0.6	0.7	0.8
<b>Sex</b>			
<i>Male</i>	40.6	40.0	40.5
<i>Female</i>	59.4	60.0	59.5
<b>Age</b>			
<1	12.3	13.1	13.5
1-4	1.5	1.4	1.1
5-9	0.7	0.7	0.6
10-14	0.5	0.5	0.4
15-19	2.7	2.6	2.6
20-24	5.9	5.5	5.7
25-34	9.6	9.1	8.7
35-44	9.2	8.0	6.8
45-54	10.6	10.6	10.6
55-64	12.7	12.7	12.1
65-74	13.8	13.9	15.0
75+	20.6	21.8	23.1

#### 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

#### 2008 Discharge Distribution

Zip / State	Number	%
19966	2,237	21.5
19958	1,858	17.9
19971	1,017	9.8
19947	1,011	9.7
19968	694	6.7
19970	463	4.5
19939	349	3.4
19945	339	3.3
19963	302	2.9
19975	246	2.4
19973	184	1.8
19960	160	1.5
19930	139	1.3
19951	136	1.3
19956	133	1.3
19933	92	0.9
19941	87	0.8
19950	68	0.7
19952	49	0.5
19967	35	0.3
19904	31	0.3
19901	31	0.3
19943	29	0.3
19969	25	0.2
19946	20	0.2
19977	16	0.2
19962	13	0.1
19954	12	0.1
19940	11	0.1
19944	10	0.1
19934	8	0.1
19808	8	0.1
19804	8	0.1
19805	6	0.1
19803	6	0.1
19711	6	0.1
19938	5	0.0
19720	5	0.0
19713	5	0.0
19964	4	0.0
19953	4	0.0
19810	4	0.0
19701	4	0.0
19807	3	0.0
19734	3	0.0
19709	3	0.0
19707	3	0.0
19979	2	0.0
19961	2	0.0
19903	2	0.0
19890	2	0.0
DE Other	6	0.1
DE Unk	1	0.0
MD	185	1.8
PA	145	1.4
Other state	137	1.3
NJ	22	0.2
<b>Total</b>	<b>10,386</b>	<b>100</b>

#### Utilization Characteristics

	2006	2007	2008
<b>Aggregate charges</b>	\$180,755,162	\$228,428,793	\$252,061,080
<b>Average charges</b>	\$18,030	\$21,765	\$24,269
<b>Average charge per day</b>	\$5,522	\$6,603	\$7,383
<b>Number of Discharges</b>	10,025	10,495	10,386
<b>Total All-listed Procedures<sup>1</sup></b>	11,596	13,855	15,247
<i>Non-operating room procedures<sup>2</sup></i>	6,709	8,313	9,495
<i>Valid operating room procedures<sup>2</sup></i>	4,887	5,542	5,752
<b>Average Length of Stay</b>	3.7	3.7	3.8
<b>Primary Payer Distribution</b>			
<i>Medicare</i>	49.1	50.3	50.5
<i>Medicaid</i>	18.1	18.0	18.1
<i>Private Insurance</i>	28.4	27.7	27.8
<i>Uninsured</i>	3.4	2.9	2.6
<i>Other</i>	1.1	1.0	5.8
<b>Admission Source Distribution</b>			
<i>Routine</i>	44.5	40.3	34.4
<i>Other short-term hospital</i>	0.1	0.1	0.0
<i>Long-term care facility</i>	0.1	2.3	9.9
<i>ER</i>	55.3	57.2	55.6
<i>Other</i>	0.0	0.1	0.0
<b>Discharge Status Distribution</b>			
<i>Routine</i>	57.6	61.8	59.6
<i>Another short-term hospital</i>	4.2	2.6	1.8
<i>Long-term care</i>	13.3	12.5	14.9
<i>Home health care</i>	21.7	19.8	20.3
<i>Expired</i>	2.2	2.0	2.3
<i>Against medical advice</i>	0.5	0.7	0.6
<i>Other/Unknown</i>	0.4	0.6	0.5
<b>Sex</b>			
<i>Male</i>	43.3	44.0	43.1
<i>Female</i>	56.7	56.0	56.9
<b>Age</b>			
<i>&lt;1</i>	10.6	10.0	10.7
<i>1-4</i>	0.7	0.6	0.4
<i>5-9</i>	0.2	0.2	0.2
<i>10-14</i>	0.3	0.2	0.2
<i>15-19</i>	1.8	1.9	1.6
<i>20-24</i>	4.2	4.2	3.8
<i>25-34</i>	7.7	7.0	7.5
<i>35-44</i>	7.3	6.3	6.2
<i>45-54</i>	9.6	9.4	9.5
<i>55-64</i>	12.5	13.4	13.6
<i>65-74</i>	18.8	19.8	19.4
<i>75+</i>	26.4	27.0	26.9

#### 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

#### 2008 Discharge Distribution

Zip / State	Number	%
19720	6,416	11.0
19702	4,330	7.4
19808	3,844	6.6
19805	3,810	6.5
19713	3,438	5.9
19711	3,358	5.7
19701	3,129	5.3
19802	3,025	5.2
19709	2,347	4.0
19804	1,947	3.3
19801	1,878	3.2
19810	1,684	2.9
19803	1,668	2.8
19707	1,244	2.1
19809	1,193	2.0
19703	1,016	1.7
19806	851	1.5
19734	700	1.2
19977	658	1.1
19807	620	1.1
19904	386	0.7
19901	324	0.6
19706	295	0.5
19938	267	0.5
19966	192	0.3
19963	151	0.3
19958	143	0.2
19973	141	0.2
19934	115	0.2
19943	108	0.2
19947	105	0.2
19899	83	0.1
19956	80	0.1
19971	79	0.1
19962	71	0.1
19952	71	0.1
19730	70	0.1
19968	64	0.1
19733	62	0.1
19953	58	0.1
19960	53	0.1
19933	52	0.1
19950	43	0.1
19970	38	0.1
19945	34	0.1
19946	33	0.1
19714	32	0.1
19939	31	0.1
19941	29	0.0
19975	24	0.0
19940	20	0.0
DE Other	203	0.3
DE Unk	9	0.0
MD	3,083	5.3
PA	2,600	4.4
NJ	1,889	3.2
Other state	366	0.6
Invalid	27	0.0
<b>Total</b>	<b>58,587</b>	<b>100</b>

#### Utilization Characteristics

	2006	2007	2008
<b>Aggregate charges</b>	\$1,028,426,663	\$1,094,875,751	\$1,139,808,746
<b>Average charges</b>	\$16,747	\$17,977	\$19,455
<b>Average charge per day</b>	\$4,140	\$4,382	\$4,659
<b>Number of Discharges</b>	61,411	60,904	58,587
<b>Total All-listed Procedures<sup>1</sup></b>	160,063	165,861	173,067
<i>Non-operating room procedures<sup>2</sup></i>	129,210	134,969	143,652
<i>Valid operating room procedures<sup>2</sup></i>	30,853	30,892	29,415
<b>Average Length of Stay</b>	5.0	5.1	5.2
<b>Primary Payer Distribution</b>			
<i>Medicare</i>	38.5	38.9	38.7
<i>Medicaid</i>	19.7	20.4	20.8
<i>Private Insurance</i>	38.2	37.1	36.6
<i>Uninsured</i>	2.4	2.4	2.7
<i>Other</i>	1.2	1.3	5.8
<b>Admission Source Distribution</b>			
<i>Routine</i>	44.1	43.3	44.4
<i>Other short-term hospital</i>	1.0	0.8	1.0
<i>Long-term care facility</i>	0.2	0.2	0.2
<i>ER</i>	53.5	53.5	52.3
<i>Other</i>	1.2	2.2	2.1
<b>Discharge Status Distribution</b>			
<i>Routine</i>	65.9	65.3	64.3
<i>Another short-term hospital</i>	2.2	2.3	2.3
<i>Long-term care</i>	8.2	8.6	8.8
<i>Home health care</i>	19.3	19.4	20.0
<i>Expired</i>	2.6	2.7	3.0
<i>Against medical advice</i>	0.8	0.7	0.6
<i>Other/Unknown</i>	0.9	1.1	1.0
<b>Sex</b>			
<i>Male</i>	39.9	40.2	40.5
<i>Female</i>	60.1	59.8	59.5
<b>Age</b>			
<i>&lt;1</i>	12.3	12.1	12.7
<i>1-4</i>	0.4	0.3	0.2
<i>5-9</i>	0.2	0.2	0.1
<i>10-14</i>	0.3	0.3	0.2
<i>15-19</i>	2.3	2.3	2.3
<i>20-24</i>	5.0	4.9	4.8
<i>25-34</i>	11.8	11.9	12.2
<i>35-44</i>	11.0	10.5	10.1
<i>45-54</i>	12.4	12.5	12.4
<i>55-64</i>	12.3	12.7	12.6
<i>65-74</i>	12.4	12.3	12.2
<i>75+</i>	19.7	20.0	20.1

#### 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

### Nanticoke Memorial Hospital

#### 2008 Discharge Distribution

Zip / State	Number	%
19973	2,282	37.4
19956	1,129	18.5
19947	730	12.0
19933	566	9.3
19966	281	4.6
19940	219	3.6
19950	185	3.0
19945	75	1.2
19975	70	1.1
19963	41	0.7
19939	35	0.6
19968	31	0.5
19952	27	0.4
19960	26	0.4
19970	22	0.4
19971	17	0.3
19941	17	0.3
19931	16	0.3
19958	11	0.2
19943	9	0.1
19901	9	0.1
19951	6	0.1
19930	6	0.1
19954	3	0.0
19805	2	0.0
19804	2	0.0
19720	2	0.0
19709	2	0.0
19977	1	0.0
19969	1	0.0
19967	1	0.0
19953	1	0.0
19944	1	0.0
19904	1	0.0
19903	1	0.0
19806	1	0.0
19802	1	0.0
19801	1	0.0
19706	1	0.0
MD	233	3.8
Other state	29	0.5
PA	10	0.2
NJ	4	0.1
<b>Total</b>	<b>6,108</b>	<b>100</b>

#### Utilization Characteristics

	2006	2007	2008
<b>Aggregate charges</b>	\$96,694,606	\$95,103,262	\$90,103,024
<b>Average charges</b>	\$13,798	\$14,135	\$14,752
<b>Average charge per day</b>	\$3,390	\$3,626	\$4,025
<b>Number of Discharges</b>	7,008	6,728	6,108
<b>Total All-listed Procedures<sup>1</sup></b>	14,817	13,936	12,066
<i>Non-operating room procedures<sup>2</sup></i>	12,543	11,850	10,248
<i>Valid operating room procedures<sup>2</sup></i>	2,274	2,086	1,818
<b>Average Length of Stay</b>	4.3	4.1	3.8
<b>Primary Payer Distribution</b>			
<i>Medicare</i>	40.6	39.6	40.0
<i>Medicaid</i>	30.1	33.4	35.7
<i>Private Insurance</i>	23.1	21.9	19.0
<i>Uninsured</i>	6.2	5.1	4.2
<i>Other</i>	0.0	0.0	5.8
<b>Admission Source Distribution</b>			
<i>Routine</i>	37.0	42.9	43.6
<i>Other short-term hospital</i>	0.1	0.0	0.0
<i>Long-term care facility</i>	0.1	0.0	0.0
<i>ER</i>	62.8	57.0	56.4
<i>Other</i>	0.0	0.0	0.0
<b>Discharge Status Distribution</b>			
<i>Routine</i>	71.3	71.8	67.9
<i>Another short-term hospital</i>	2.8	2.8	3.6
<i>Long-term care</i>	12.0	11.7	12.4
<i>Home health care</i>	10.0	10.0	13.1
<i>Expired</i>	1.7	1.7	1.4
<i>Against medical advice</i>	0.6	0.5	0.5
<i>Other/Unknown</i>	1.6	1.5	1.1
<b>Sex</b>			
<i>Male</i>	39.8	38.8	39.0
<i>Female</i>	60.2	61.2	61.0
<b>Age</b>			
<i>&lt;1</i>	13.5	15.3	15.3
<i>1-4</i>	0.6	0.4	0.1
<i>5-9</i>	0.2	0.3	0.0
<i>10-14</i>	0.4	0.3	0.1
<i>15-19</i>	2.9	3.2	3.3
<i>20-24</i>	6.1	7.4	7.3
<i>25-34</i>	9.6	9.3	10.1
<i>35-44</i>	9.0	7.8	7.6
<i>45-54</i>	11.0	10.6	10.1
<i>55-64</i>	12.9	12.0	12.9
<i>65-74</i>	12.4	12.0	11.5
<i>75+</i>	21.4	21.4	21.6

#### 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

#### 2008 Discharge Distribution

Zip / State	Number	%
19805	1,764	23.6
19802	724	9.7
19801	652	8.7
19720	583	7.8
19806	445	6.0
19803	333	4.5
19810	328	4.4
19703	268	3.6
19804	261	3.5
19808	244	3.3
19809	240	3.2
19702	203	2.7
19711	144	1.9
19701	141	1.9
19707	123	1.6
19713	120	1.6
19709	98	1.3
19807	88	1.2
19899	26	0.3
19734	25	0.3
19901	21	0.3
19904	18	0.2
19977	16	0.2
19938	15	0.2
19943	13	0.2
19706	13	0.2
19952	12	0.2
19966	10	0.1
19963	10	0.1
19953	9	0.1
19973	8	0.1
19962	7	0.1
19958	7	0.1
19956	6	0.1
19971	5	0.1
19947	5	0.1
19945	4	0.1
19934	4	0.1
19960	3	0.0
19933	3	0.0
19970	2	0.0
19964	2	0.0
19946	2	0.0
19941	2	0.0
19850	2	0.0
19733	2	0.0
19730	2	0.0
19950	1	0.0
19939	1	0.0
19936	1	0.0
19930	1	0.0
19736	1	0.0
19714	1	0.0
PA	243	3.3
MD	72	1.0
NJ	71	0.9
Other state	70	0.9
Invalid	1	0.0
<b>Total</b>	<b>7,476</b>	<b>100</b>

#### Utilization Characteristics

	2006	2007	2008
<b>Aggregate charges</b>	\$175,418,879	\$182,792,252	\$174,287,257
<b>Average charges</b>	\$22,655	\$22,492	\$23,313
<b>Average charge per day</b>	\$7,835	\$7,150	\$6,533
<b>Number of Discharges</b>	7,743	8,127	7,476
<b>Total All-listed Procedures<sup>1</sup></b>	9,108	9,535	8,613
<i>Non-operating room procedures<sup>2</sup></i>	5,717	5,976	5,326
<i>Valid operating room procedures<sup>2</sup></i>	3,391	3,559	3,287
<b>Average Length of Stay</b>	4.4	4.3	4.5
<b>Primary Payer Distribution</b>			
<i>Medicare</i>	43.9	42.2	41.9
<i>Medicaid</i>	23.4	22.9	23.9
<i>Private Insurance</i>	28.2	28.3	27.9
<i>Uninsured</i>	3.4	5.5	4.8
<i>Other</i>	1.0	1.0	5.8
<b>Admission Source Distribution</b>			
<i>Routine</i>	42.5	41.9	38.5
<i>Other short-term hospital</i>	2.2	2.5	2.1
<i>Long-term care facility</i>	0.7	0.7	0.1
<i>ER</i>	54.2	54.5	59.1
<i>Other</i>	0.4	0.3	0.2
<b>Discharge Status Distribution</b>			
<i>Routine</i>	62.7	63.2	61.7
<i>Another short-term hospital</i>	1.1	1.4	1.3
<i>Long-term care</i>	15.3	14.7	13.2
<i>Home health care</i>	17.5	17.5	20.3
<i>Expired</i>	2.1	1.8	1.7
<i>Against medical advice</i>	1.1	1.3	1.5
<i>Other/Unknown</i>	0.2	0.1	0.3
<b>Sex</b>			
<i>Male</i>	36.7	37.3	37.6
<i>Female</i>	63.3	62.7	62.4
<b>Age</b>			
<1	8.9	11.6	11.0
1-4	0.0	0.0	0.0
5-9	0.0	0.0	0.0
10-14	0.1	0.0	0.1
15-19	1.9	2.2	1.7
20-24	4.4	4.6	4.3
25-34	10.2	10.5	10.1
35-44	9.9	9.6	10.3
45-54	13.6	12.3	13.6
55-64	12.3	12.4	12.9
65-74	13.3	12.5	12.3
75+	25.5	24.3	23.7

#### 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/toi/software/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, 2008

<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>2801</b>	<b>100.0</b>	<b>8.8</b>	<b>\$37,785</b>	<b>14.1</b>	<b>85.1</b>
Tuberculosis	14	0.5	10.1	\$ 24,717	0.0	85.7
Septicemia (except in labor)	1898	67.8	10.3	\$ 45,329	19.4	87.5
Bacterial infection; unspecified site	32	1.1	4.8	\$ 29,016	3.1	68.8
Mycoses	84	3.0	7.8	\$ 25,481	2.4	82.1
HIV infection	241	8.6	9.1	\$ 33,229	8.3	90.5
Hepatitis	90	3.2	4.6	\$ 16,230	1.1	73.3
Viral infection	306	10.9	3.1	\$ 12,235	0.3	78.8
Other infections; including parasitic	120	4.3	5.4	\$ 22,767	1.7	72.5
Sexually transmitted infections (not HIV or hepatitis)	12	0.4	8.4	\$ 34,485	0.0	50.0
Immunizations and screening for infectious disease	4	0.1	2.3	\$ 6,935	0.0	50.0
<b>Neoplasms</b>	<b>5072</b>	<b>100.0</b>	<b>6.6</b>	<b>\$32,471</b>	<b>7.2</b>	<b>27.4</b>
Cancer of head and neck	80	1.6	13.5	\$ 48,362	3.8	32.5
Cancer of esophagus	38	0.7	8.9	\$ 32,713	7.9	39.5
Cancer of stomach	56	1.1	9.5	\$ 39,891	19.6	44.6
Cancer of colon	283	5.6	8.4	\$ 35,391	4.9	30.4
Cancer of rectum and anus	137	2.7	8.4	\$ 36,658	1.5	24.8
Cancer of liver and intrahepatic bile duct	35	0.7	11.3	\$ 55,618	17.1	54.3
Cancer of pancreas	97	1.9	7.6	\$ 28,214	22.7	57.7
Cancer of other GI organs; peritoneum	50	1.0	9.3	\$ 36,648	14.0	46.0
Cancer of bronchus; lung	439	8.7	7.9	\$ 34,870	18.0	48.3
Cancer; other respiratory and intrathoracic	10	0.2	6.4	\$ 27,182	10.0	40.0
Cancer of bone and connective tissue	57	1.1	7.6	\$ 46,137	3.5	19.3
Melanomas of skin	5	0.1	4.6	\$ 16,861	0.0	0.0
Other non-epithelial cancer of skin	20	0.4	3.4	\$ 13,262	0.0	20.0
Cancer of breast	136	2.7	3.6	\$ 20,857	8.1	12.5
Cancer of uterus	142	2.8	4.6	\$ 23,736	0.7	7.7
Cancer of cervix	51	1.0	3.2	\$ 19,045	2.0	11.8
Cancer of ovary	57	1.1	9.2	\$ 41,384	10.5	29.8
Cancer of other female genital organs	28	0.6	4.5	\$ 18,901	0.0	14.3
Cancer of prostate	191	3.8	3.0	\$ 21,756	0.0	3.1
Cancer of testis	2	0.0	12.0	\$ 36,465	0.0	0.0
Cancer of other male genital organs	2	0.0	1.0	\$ 11,908	0.0	0.0
Cancer of bladder	85	1.7	7.4	\$ 45,692	4.7	23.5
Cancer of kidney and renal pelvis	126	2.5	4.4	\$ 25,792	3.2	7.1
Cancer of other urinary organs	5	0.1	4.6	\$ 19,942	0.0	20.0
Cancer of brain and nervous system	106	2.1	10.2	\$ 55,712	10.4	59.4
Cancer of thyroid	19	0.4	2.8	\$ 21,636	0.0	5.3
Hodgkin's disease	18	0.4	11.2	\$ 55,572	5.6	33.3

## 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
Non-Hodgkin`s lymphoma	116	2.3	11.3	\$ 56,807	12.1	42.2
Leukemias	132	2.6	18.2	\$ 124,844	18.9	45.5
Multiple myeloma	57	1.1	12.3	\$ 55,197	14.0	56.1
Cancer; other and unspecified primary	24	0.5	9.2	\$ 45,099	0.0	25.0
Secondary malignancies	639	12.6	6.9	\$ 27,430	17.8	58.1
Malignant neoplasm without specification of site	9	0.2	5.2	\$ 21,015	33.3	77.8
Neoplasms of unspecified nature or uncertain behavior	142	2.8	5.8	\$ 30,805	2.8	44.4
Maintenance chemotherapy; radiotherapy	619	12.2	5.4	\$ 29,579	0.6	1.5
Benign neoplasm of uterus	535	10.5	2.4	\$ 14,718	0.0	3.4
Other and unspecified benign neoplasm	524	10.3	4.7	\$ 24,409	0.4	18.9
<b>Endocrine, nutritional &amp; metabolic diseases, &amp; immunity disorders</b>	<b>3905</b>	<b>100.0</b>	<b>4.4</b>	<b>\$17,171</b>	<b>1.2</b>	<b>70.6</b>
Thyroid disorders	82	2.1	3.5	\$ 14,358	0.0	50.0
Diabetes mellitus without complication	68	1.7	2.4	\$ 8,756	0.0	75.0
Diabetes mellitus with complications	1624	41.6	5.2	\$ 18,643	1.2	82.9
Other endocrine disorders	116	3.0	5.7	\$ 19,403	0.9	80.2
Nutritional deficiencies	30	0.8	8.9	\$ 19,511	0.0	53.3
Disorders of lipid metabolism	3	0.1	13.0	\$ 52,520	33.3	66.7
Gout and other crystal arthropathies	73	1.9	4.8	\$ 12,417	0.0	91.8
Fluid and electrolyte disorders	1319	33.8	3.8	\$ 11,774	1.5	78.8
Cystic fibrosis	35	0.9	9.0	\$ 56,441	0.0	22.9
Immunity disorders	1	0.0	2.0	\$ 6,817	0.0	0.0
Other nutritional; endocrine; and metabolic disorders	554	14.2	3.3	\$ 24,533	1.1	16.6
<b>Disease of the blood and blood forming organs</b>	<b>1250</b>	<b>100.0</b>	<b>4.8</b>	<b>\$19,779</b>	<b>1.6</b>	<b>69.4</b>
Deficiency and other anemia	522	41.8	4.0	\$ 16,353	2.5	70.7
Acute posthemorrhagic anemia	44	3.5	5.5	\$ 21,386	0.0	68.2
Sickle cell anemia	305	24.4	5.9	\$ 18,049	0.0	87.2
Coagulation and hemorrhagic disorders	155	12.4	4.3	\$ 28,909	1.9	62.6
Diseases of white blood cells	212	17.0	5.4	\$ 23,818	1.9	46.7
Other hematologic conditions	12	1.0	4.5	\$ 17,585	0.0	58.3
<b>Mental disorders</b>	<b>2174</b>	<b>100.0</b>	<b>6.2</b>	<b>\$12,903</b>	<b>2.2</b>	<b>75.7</b>
Adjustment disorders	5	0.2	1.8	\$ 6,107	0.0	80.0
Anxiety disorders	47	2.2	2.9	\$ 9,184	0.0	89.4
Delirium	216	9.9	8.2	\$ 14,838	1.9	88.4
Developmental disorders	7	0.3	6.0	\$ 11,669	14.3	100.0
Disorders usually diagnosed in infancy	6	0.3	1.3	\$ 7,315	0.0	50.0
Impulse control disorders	3	0.1	7.3	\$ 7,814	0.0	66.7
Mood disorders	861	39.6	6.6	\$ 9,263	0.8	60.5
Personality disorders	3	0.1	3.0	\$ 5,537	0.0	100.0
Schizophrenia and other psychotic disorders	213	9.8	6.7	\$ 9,613	0.9	79.3
Alcohol-related disorders	309	14.2	6.2	\$ 16,431	2.3	94.5
Substance-related disorders	223	10.3	3.7	\$ 13,155	1.3	87.9
Screening and history of mental health and substance abuse codes	177	8.1	7.5	\$ 28,839	13.6	89.3
Miscellaneous disorders	104	4.8	3.4	\$ 10,395	0.0	54.8
<b>Diseases of the nervous system and sense organs</b>	<b>3161</b>	<b>100.0</b>	<b>4.7</b>	<b>\$18,626</b>	<b>1.7</b>	<b>78.1</b>
Meningitis (except that caused by tuberculosis or STD)	154	4.9	4.9	\$ 19,128	0.6	90.3
Encephalitis (except that caused by tuberculosis or STD)	24	0.8	10.0	\$ 38,917	4.2	91.7
Other CNS infection and poliomyelitis	29	0.9	12.9	\$ 52,178	6.9	75.9
Parkinson`s disease	27	0.9	5.5	\$ 14,891	3.7	81.5
Multiple sclerosis	84	2.7	4.6	\$ 14,877	0.0	71.4
Other hereditary and degenerative nervous system conditions	150	4.7	8.5	\$ 41,553	2.0	62.0
Paralysis	73	2.3	5.3	\$ 34,897	0.0	35.6
Epilepsy; convulsions	909	28.8	3.4	\$ 13,780	0.6	81.6
Headache; including migraine	258	8.2	3.1	\$ 10,582	0.0	84.1
Coma; stupor; and brain damage	29	0.9	10.7	\$ 38,643	31.0	89.7

## 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	6	0.2	4.7	\$ 28,274	0.0	83.3
Glaucoma	3	0.1	1.3	\$ 14,295	0.0	33.3
Blindness and vision defects	21	0.7	3.2	\$ 12,219	0.0	100.0
Inflammation; infection of eye (except that caused by tuberculosis or STD)	93	2.9	3.4	\$ 11,195	0.0	76.3
Other eye disorders	21	0.7	2.0	\$ 10,743	0.0	61.9
Otitis media and related conditions	97	3.1	3.7	\$ 16,220	0.0	43.3
Conditions associated with dizziness or vertigo	199	6.3	2.9	\$ 10,534	0.0	93.0
Other ear and sense organ disorders	43	1.4	3.8	\$ 18,341	0.0	37.2
Other nervous system disorders	941	29.8	5.9	\$ 21,764	3.3	79.2
<b>Diseases of the circulatory system</b>	<b>17106</b>	<b>100.0</b>	<b>5.1</b>	<b>\$31,590</b>	<b>3.6</b>	<b>72.2</b>
Heart valve disorders	374	2.2	8.9	\$ 81,878	2.9	24.9
Peri-; endo-; and myocarditis; cardiomyopathy (except that caused by tuberculosis or STD)	331	1.9	6.7	\$ 48,320	5.4	59.5
Essential hypertension	139	0.8	3.1	\$ 12,230	0.0	85.6
Hypertension with complications and secondary hypertension	634	3.7	5.1	\$ 21,911	2.5	81.1
Acute myocardial infarction	1841	10.8	5.4	\$ 44,560	6.0	84.3
Coronary atherosclerosis and other heart disease	2408	14.1	3.7	\$ 42,647	0.7	43.4
Nonspecific chest pain	1170	6.8	2.1	\$ 12,618	0.2	93.2
Pulmonary heart disease	435	2.5	7.0	\$ 32,103	6.0	85.7
Other and ill-defined heart disease	6	0.0	6.5	\$ 36,713	16.7	100.0
Conduction disorders	193	1.1	4.2	\$ 44,534	3.1	58.5
Cardiac dysrhythmias	1943	11.4	4.1	\$ 24,460	1.4	73.2
Cardiac arrest and ventricular fibrillation	56	0.3	10.9	\$ 72,422	46.4	94.6
Congestive heart failure; nonhypertensive	2535	14.8	6.1	\$ 26,252	3.8	88.1
Acute cerebrovascular disease	1756	10.3	6.8	\$ 27,029	9.8	92.1
Occlusion or stenosis of precerebral arteries	498	2.9	2.4	\$ 19,382	0.0	19.1
Other and ill-defined cerebrovascular disease	52	0.3	7.5	\$ 60,897	0.0	67.3
Transient cerebral ischemia	521	3.0	2.9	\$ 13,249	0.0	96.7
Late effects of cerebrovascular disease	43	0.3	7.5	\$ 16,622	2.3	86.0
Peripheral and visceral atherosclerosis	607	3.5	5.7	\$ 36,239	5.4	38.7
Aortic; peripheral; and visceral artery aneurysms	279	1.6	7.2	\$ 62,458	8.6	30.1
Aortic and peripheral arterial embolism or thrombosis	117	0.7	7.4	\$ 45,598	4.3	48.7
Other circulatory disease	467	2.7	4.5	\$ 18,973	2.4	85.9
Phlebitis; thrombophlebitis and thromboembolism	549	3.2	6.5	\$ 24,836	2.0	67.0
Varicose veins of lower extremity	10	0.1	3.6	\$ 9,543	0.0	40.0
Hemorrhoids	77	0.5	3.9	\$ 12,322	0.0	85.7
Other diseases of veins and lymphatics	65	0.4	6.5	\$ 24,080	1.5	63.1
<b>Diseases of the respiratory system</b>	<b>11295</b>	<b>100.0</b>	<b>5.5</b>	<b>\$21,839</b>	<b>4.6</b>	<b>84.0</b>
Pneumonia (except that caused by tuberculosis or STD)	2851	25.2	5.8	\$ 21,362	3.8	86.0
Influenza	154	1.4	4.3	\$ 13,474	0.6	84.4
Acute and chronic tonsillitis	243	2.2	1.6	\$ 10,059	0.0	31.3
Acute bronchitis	835	7.4	3.2	\$ 13,273	0.1	80.8
Other upper respiratory infections	401	3.6	2.3	\$ 10,400	0.5	83.8
Chronic obstructive pulmonary disease and bronchiectasis	1872	16.6	5.2	\$ 16,456	2.0	88.5
Asthma	1531	13.6	2.9	\$ 11,850	0.3	86.1
Aspiration pneumonitis; food/vomitus	523	4.6	9.6	\$ 37,014	14.7	93.5
Pleurisy; pneumothorax; pulmonary collapse	385	3.4	7.9	\$ 30,471	4.9	74.3
Respiratory failure; insufficiency; arrest (adult)	1896	16.8	8.5	\$ 38,537	13.4	87.8
Lung disease due to external agents	16	0.1	5.9	\$ 20,357	0.0	56.3
Other lower respiratory disease	406	3.6	4.0	\$ 18,943	3.4	67.0
Other upper respiratory disease	182	1.6	4.9	\$ 26,784	0.5	70.9

## 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>10607</b>	<b>100.0</b>	<b>5.0</b>	<b>\$21,023</b>	<b>1.6</b>	<b>77.8</b>
Intestinal infection	677	6.4	5.3	\$ 17,171	2.1	85.5
Disorders of teeth and jaw	69	0.7	3.2	\$ 18,945	0.0	43.5
Diseases of mouth; excluding dental	85	0.8	3.6	\$ 14,102	0.0	61.2
Esophageal disorders	457	4.3	4.1	\$ 16,927	0.7	66.7
Gastroduodenal ulcer (except hemorrhage)	120	1.1	5.6	\$ 23,031	3.3	85.8
Gastritis and duodenitis	347	3.3	4.2	\$ 14,650	0.6	89.3
Other disorders of stomach and duodenum	253	2.4	6.5	\$ 24,659	3.2	70.4
Appendicitis and other appendiceal conditions	1041	9.8	2.8	\$ 18,362	0.4	90.7
Abdominal hernia	690	6.5	4.5	\$ 25,931	0.6	37.0
Regional enteritis and ulcerative colitis	257	2.4	5.6	\$ 20,064	0.4	68.5
Intestinal obstruction without hernia	989	9.3	6.5	\$ 25,064	2.7	87.5
Diverticulosis and diverticulitis	934	8.8	5.7	\$ 22,813	0.6	72.7
Anal and rectal conditions	119	1.1	5.4	\$ 18,033	0.8	68.9
Peritonitis and intestinal abscess	90	0.8	9.1	\$ 30,132	7.8	82.2
Biliary tract disease	1319	12.4	4.3	\$ 21,250	0.4	75.8
Other liver diseases	307	2.9	6.2	\$ 22,576	8.8	83.4
Pancreatic disorders (not diabetes)	800	7.5	6.3	\$ 24,494	0.9	91.4
Gastrointestinal hemorrhage	898	8.5	4.9	\$ 19,909	2.9	89.9
Noninfectious gastroenteritis	460	4.3	3.1	\$ 10,987	0.0	88.9
Other gastrointestinal disorders	695	6.6	5.8	\$ 23,652	2.9	59.7
<b>Diseases of the genitourinary system</b>	<b>5381</b>	<b>100.0</b>	<b>4.6</b>	<b>\$17,258</b>	<b>2.3</b>	<b>68.1</b>
Nephritis; nephrosis; renal sclerosis	40	0.7	6.0	\$ 28,184	0.0	60.0
Acute and unspecified renal failure	1458	27.1	6.8	\$ 22,306	5.8	87.2
Chronic renal failure	62	1.2	6.5	\$ 32,110	4.8	43.5
Urinary tract infections	1613	30.0	4.9	\$ 13,792	2.0	87.9
Calculus of urinary tract	492	9.1	2.3	\$ 12,566	0.0	76.0
Other diseases of kidney and ureters	145	2.7	4.4	\$ 22,118	0.0	47.6
Other diseases of bladder and urethra	76	1.4	6.0	\$ 28,148	0.0	43.4
Genitourinary symptoms and ill-defined conditions	78	1.4	4.2	\$ 14,857	0.0	80.8
Hyperplasia of prostate	96	1.8	2.7	\$ 12,904	0.0	16.7
Inflammatory conditions of male genital organs	53	1.0	5.0	\$ 14,379	3.8	81.1
Other male genital disorders	53	1.0	6.9	\$ 41,726	0.0	83.0
Nonmalignant breast conditions	56	1.0	2.9	\$ 10,269	0.0	57.1
Inflammatory diseases of female pelvic organs	139	2.6	3.3	\$ 13,087	0.0	69.8
Endometriosis	125	2.3	2.5	\$ 14,739	0.0	4.8
Prolapse of female genital organs	310	5.8	1.9	\$ 15,960	0.0	0.3
Menstrual disorders	204	3.8	2.2	\$ 14,193	0.0	11.8
Ovarian cyst	191	3.5	2.5	\$ 13,002	0.0	42.9
Menopausal disorders	31	0.6	3.5	\$ 22,526	0.0	19.4
Female infertility	1	0.0	1.0	\$ 13,800	0.0	0.0
Other female genital disorders	158	2.9	3.5	\$ 17,745	0.0	20.9
<b>Complications of pregnancy, childbirth, &amp; the puerperium</b>	<b>13433</b>	<b>100.0</b>	<b>2.8</b>	<b>\$7,431</b>	<b>0.0</b>	<b>8.7</b>
Contraceptive and procreative management	2	0.0	2.5	\$ 10,506	0.0	0.0
Spontaneous abortion	36	0.3	1.9	\$ 7,434	0.0	44.4
Induced abortion	15	0.1	2.3	\$ 6,901	0.0	33.3
Postabortion complications	4	0.0	3.3	\$ 17,396	0.0	75.0
Ectopic pregnancy	52	0.4	1.5	\$ 11,637	0.0	75.0
Other complications of pregnancy	1228	9.1	2.5	\$ 6,827	0.0	28.3
Hemorrhage during pregnancy; abruptio placenta; placenta previa	129	1.0	6.5	\$ 12,847	0.0	31.8
Hypertension complicating pregnancy; childbirth and the puerperium	803	6.0	3.9	\$ 9,625	0.0	15.4
Early or threatened labor	654	4.9	4.3	\$ 7,585	0.0	33.3
Prolonged pregnancy	735	5.5	2.7	\$ 6,622	0.0	0.4
Diabetes or abnormal glucose tolerance complicating pregnancy; childbirth; or the puerperium	250	1.9	2.7	\$ 7,076	0.0	3.6



## 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
Malposition; malpresentation	451	3.4	3.1	\$ 9,763	0.0	3.1
Fetopelvic disproportion; obstruction	139	1.0	2.5	\$ 7,543	0.0	1.4
Previous C-section	1585	11.8	2.8	\$ 9,443	0.0	1.0
Fetal distress and abnormal forces of labor	693	5.2	2.9	\$ 8,216	0.0	4.0
Polyhydramnios and other problems of amniotic cavity	639	4.8	3.8	\$ 8,308	0.0	10.6
Umbilical cord complication	550	4.1	2.2	\$ 5,754	0.0	2.0
OB-related trauma to perineum and vulva	2703	20.1	2.1	\$ 5,508	0.0	1.5
Forceps delivery	130	1.0	2.4	\$ 5,689	0.0	2.3
Other complications of birth; puerperium affecting management of mother	1883	14.0	3.1	\$ 7,936	0.0	8.2
Normal pregnancy and/or delivery	752	5.6	2.0	\$ 5,623	0.0	2.8
<b>Diseases of the skin and subcutaneous tissue</b>	<b>2288</b>	<b>100.0</b>	<b>4.8</b>	<b>\$13,280</b>	<b>0.8</b>	<b>74.0</b>
Skin and subcutaneous tissue infections	2008	87.8	4.2	\$ 11,827	0.6	76.8
Other inflammatory condition of skin	33	1.4	5.0	\$ 15,717	0.0	69.7
Chronic ulcer of skin	206	9.0	10.4	\$ 26,867	2.9	47.6
Other skin disorders	41	1.8	4.6	\$ 14,177	0.0	70.7
<b>Diseases of the musculoskeletal system and connective tissue</b>	<b>6378</b>	<b>100.0</b>	<b>4.0</b>	<b>\$32,846</b>	<b>0.5</b>	<b>20.4</b>
Infective arthritis and osteomyelitis (except that caused by tuberculosis or STD)	275	4.3	9.8	\$ 33,132	0.7	59.3
Rheumatoid arthritis and related disease	50	0.8	5.2	\$ 25,201	0.0	64.0
Osteoarthritis	2857	44.8	3.2	\$ 30,369	0.0	1.2
Other non-traumatic joint disorders	160	2.5	4.4	\$ 28,943	1.3	54.4
Spondylosis; intervertebral disc disorders; other back problems	1581	24.8	3.2	\$ 31,103	0.3	27.8
Osteoporosis	5	0.1	3.0	\$ 10,737	0.0	0.0
Pathological fracture	240	3.8	7.2	\$ 27,977	3.8	60.4
Acquired foot deformities	60	0.9	2.5	\$ 24,428	0.0	0.0
Other acquired deformities	286	4.5	6.2	\$ 73,957	1.4	3.8
Systemic lupus erythematosus and connective tissue disorders	61	1.0	5.4	\$ 24,989	1.6	62.3
Other connective tissue disease	455	7.1	4.8	\$ 20,446	1.3	63.5
Other bone disease and musculoskeletal deformities	348	5.5	3.7	\$ 52,690	0.0	17.5
<b>Congenital anomalies</b>	<b>757</b>	<b>100.0</b>	<b>9.1</b>	<b>\$87,090</b>	<b>1.6</b>	<b>12.4</b>
Cardiac and circulatory congenital anomalies	235	31.0	13.6	\$ 159,516	4.7	5.1
Digestive congenital anomalies	120	15.9	7.8	\$ 48,885	0.0	50.0
Genitourinary congenital anomalies	53	7.0	4.2	\$ 30,714	0.0	9.4
Nervous system congenital anomalies	34	4.5	12.2	\$ 89,828	0.0	8.8
Other congenital anomalies	315	41.6	6.8	\$ 56,803	0.3	4.4
<b>Certain conditions originating in the perinatal period</b>	<b>579</b>	<b>100.0</b>	<b>10.5</b>	<b>\$45,045</b>	<b>0.9</b>	<b>34.2</b>
Short gestation; low birth weight; and fetal growth retardation	87	15.0	26.4	\$ 74,688	1.1	0.0
Intrauterine hypoxia and birth asphyxia	4	0.7	5.0	\$ 14,640	0.0	50.0
Respiratory distress syndrome	37	6.4	14.5	\$ 46,753	2.7	0.0
Hemolytic jaundice and perinatal jaundice	163	28.2	1.8	\$ 4,371	0.0	31.9
Birth trauma	4	0.7	1.3	\$ 11,965	0.0	50.0
Other perinatal conditions	284	49.1	10.3	\$ 59,981	1.1	50.0
<b>Injury and poisoning</b>	<b>9129</b>	<b>100.0</b>	<b>5.2</b>	<b>\$25,341</b>	<b>2.4</b>	<b>77.0</b>
Joint disorders and dislocations; trauma-related	91	1.0	3.5	\$ 20,931	1.1	53.8
Fracture of neck of femur (hip)	797	8.7	6.4	\$ 29,173	2.1	92.6
Spinal cord injury	49	0.5	11.2	\$ 68,019	8.2	93.9
Skull and face fractures	233	2.6	2.7	\$ 14,310	0.9	88.0
Fracture of upper limb	471	5.2	3.0	\$ 17,756	0.6	83.0
Fracture of lower limb	776	8.5	4.2	\$ 23,621	0.9	87.1
Other fractures	725	7.9	5.4	\$ 22,835	1.9	88.7
Sprains and strains	125	1.4	3.1	\$ 13,273	0.8	79.2
Intracranial injury	885	9.7	6.0	\$ 27,695	7.7	96.9

## 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	394	4.3	6.5	\$ 43,046	4.8	94.9
Open wounds of head; neck; and trunk	128	1.4	2.2	\$ 12,961	0.8	93.0
Open wounds of extremities	104	1.1	3.2	\$ 13,947	0.0	83.7
Complication of device; implant or graft	1768	19.4	6.1	\$ 34,821	2.4	45.5
Complications of surgical procedures or medical care	1308	14.3	6.1	\$ 23,001	0.8	60.9
Superficial injury; contusion	168	1.8	3.1	\$ 12,105	1.2	93.5
Burns	21	0.2	3.6	\$ 11,428	0.0	76.2
Poisoning by psychotropic agents	268	2.9	2.9	\$ 11,662	1.1	92.2
Poisoning by other medications and drugs	438	4.8	2.9	\$ 12,540	2.3	88.8
Poisoning by nonmedicinal substances	47	0.5	4.0	\$ 20,212	0.0	85.1
Other injuries and conditions due to external causes	333	3.6	4.4	\$ 19,641	3.9	88.3
<b>Liveborn</b>	<b>12218</b>	<b>100.0</b>	<b>3.3</b>	<b>\$5,574</b>	<b>0.5</b>	<b>0.0</b>
Liveborn	12218	100.0	3.3	\$ 5,574	0.5	0.0
<b>Other conditions</b>	<b>4277</b>	<b>100.0</b>	<b>7.6</b>	<b>\$18,365</b>	<b>0.6</b>	<b>45.0</b>
Syncope	685	16.0	3.0	\$ 13,748	0.1	92.6
Fever of unknown origin	310	7.2	2.9	\$ 12,271	0.0	70.0
Lymphadenitis	80	1.9	3.4	\$ 15,421	0.0	77.5
Gangrene	106	2.5	12.5	\$ 49,885	7.5	41.5
Shock	5	0.1	8.2	\$ 33,312	0.0	100.0
Nausea and vomiting	105	2.5	2.2	\$ 9,397	1.0	77.1
Abdominal pain	619	14.5	2.9	\$ 10,527	0.2	88.9
Malaise and fatigue	53	1.2	3.5	\$ 11,624	0.0	79.2
Allergic reactions	102	2.4	2.5	\$ 9,821	2.0	89.2
Rehabilitation care; fitting of prostheses; and adjustment of devices	1880	44.0	12.7	\$ 23,518	0.3	0.1
Medical examination/evaluation	2	0.0	3.0	\$ 6,117	0.0	0.0
Other aftercare	21	0.5	3.4	\$ 18,870	0.0	0.0
Other screening for suspected conditions (not mental disorders or infectious disease)	13	0.3	1.3	\$ 6,087	0.0	76.9
Residual codes; unclassified	296	6.9	4.2	\$ 16,262	2.7	63.2
<b>Unknown</b>	<b>51</b>	<b>100.0</b>	<b>4.3</b>	<b>\$18,013</b>	<b>0.0</b>	<b>41.2</b>
<b>Total</b>	<b>111862</b>	<b>100.0</b>	<b>4.9</b>	<b>\$ 21,122</b>	<b>2.4</b>	<b>52.5</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, 2008

<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	217	1.7	4.1	\$ 14,353	0.0	87.6
E Codes: Drowning/submersion	8	0.1	3.6	\$ 27,091	25.0	75.0
E Codes: Fall	3914	30.5	6.0	\$ 23,682	4.1	89.9
E Codes: Fire/burn	36	0.3	5.1	\$ 17,594	2.8	75.0
E Codes: Firearms	128	1.0	5.4	\$ 30,788	8.6	98.4
E Codes: Machinery	31	0.2	6.6	\$ 36,116	0.0	96.8
E Codes: Motor vehicle traffic (MVT)	1166	9.1	5.0	\$ 28,087	2.3	94.8
E Codes: Pedal cyclist; not MVT	79	0.6	2.8	\$ 15,170	0.0	91.1
E Codes: Pedestrian; not MVT	12	0.1	4.2	\$ 21,039	0.0	91.7
E Codes: Transport; not MVT	157	1.2	4.2	\$ 21,914	0.0	95.5
E Codes: Natural/environment	165	1.3	4.4	\$ 13,332	0.6	84.8
E Codes: Overexertion	133	1.0	4.0	\$ 15,185	0.8	77.4
E Codes: Poisoning	913	7.1	3.0	\$ 12,357	1.3	89.2
E Codes: Struck by; against	353	2.7	4.2	\$ 29,179	0.3	85.0
E Codes: Suffocation	50	0.4	9.1	\$ 43,332	8.0	80.0
E Codes: Adverse effects of medical care	2238	17.4	7.7	\$ 50,725	1.3	40.5
E Codes: Adverse effects of medical drugs	2140	16.7	5.9	\$ 28,317	2.4	72.3
E Codes: Other specified and classifiable	371	2.9	9.6	\$ 33,753	3.0	54.2
E Codes: Other specified; NEC	150	1.2	6.6	\$ 24,160	3.3	69.3
E Codes: Unspecified	547	4.3	6.6	\$ 27,593	1.6	68.0
E Codes: Place of occurrence	34	0.3	4.9	\$ 19,578	0.0	73.5
<b>Total</b>	<b>12842</b>	<b>100.0</b>	<b>6.0</b>	<b>\$ 29,073</b>	<b>2.5</b>	<b>76.2</b>

APPENDIX C

**Number of Patients who had a Principal Procedure during the Inpatient Stay  
by Principal Procedure and Sex of Patient  
Delaware Hospitals, 2008**

<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>1002</b>	<b>970</b>	<b>1972</b>
Incision and excision of CNS	166	133	299
Insertion; replacement; or removal of extracranial ventricular shunt	39	39	78
Laminectomy; excision intervertebral disc	222	212	434
Diagnostic spinal tap	371	385	756
Insertion of catheter or spinal stimulator and injection into spinal canal	29	44	73
Decompression peripheral nerve	4	6	10
Other diagnostic nervous system procedures	21	12	33
Other non-OR or closed therapeutic nervous system procedures	16	19	35
Other OR therapeutic nervous system procedures	134	120	254
<b>Operations on the endocrine system</b>	<b>43</b>	<b>108</b>	<b>151</b>
Thyroidectomy; partial or complete	10	47	57
Diagnostic endocrine procedures	3	14	17
Other therapeutic endocrine procedures	30	47	77
<b>Operations on the eye</b>	<b>38</b>	<b>30</b>	<b>68</b>
Lens and cataract procedures	1	1	2
Repair of retinal tear; detachment	0	1	1
Destruction of lesion of retina and choroid	1	0	1
Diagnostic procedures on eye	1	1	2
Other therapeutic procedures on eyelids; conjunctiva; cornea	22	18	40
Other intraocular therapeutic procedures	2	3	5
Other extraocular muscle and orbit therapeutic procedures	11	6	17
<b>Operations on the ear</b>	<b>69</b>	<b>53</b>	<b>122</b>
Tympanoplasty	7	5	12
Myringotomy	38	31	69
Mastoidectomy	4	4	8
Diagnostic procedures on ear	3	0	3
Other therapeutic ear procedures	17	13	30
<b>Operations on the nose, mouth, and pharynx</b>	<b>343</b>	<b>257</b>	<b>600</b>
Control of epistaxis	38	17	55
Plastic procedures on nose	10	10	20
Dental procedures	20	25	45
Tonsillectomy and/or adenoidectomy	117	85	202
Diagnostic procedures on nose; mouth and pharynx	8	2	10
Other non-OR therapeutic procedures on nose; mouth and pharynx	37	34	71
Other OR therapeutic procedures on nose; mouth and pharynx	113	84	197
<b>Operations on the respiratory system</b>	<b>1054</b>	<b>920</b>	<b>1974</b>
Tracheostomy; temporary and permanent	150	127	277
Tracheoscopy and laryngoscopy with biopsy	39	30	69
Lobectomy or pneumonectomy	118	129	247
Diagnostic bronchoscopy and biopsy of bronchus	210	202	412
Other diagnostic procedures on lung and bronchus	18	10	28
Incision of pleura; thoracentesis; chest drainage	347	311	658
Other diagnostic procedures of respiratory tract and mediastinum	42	34	76
Other non-OR therapeutic procedures on respiratory system	23	19	42
Other OR Rx procedures on respiratory system and mediastinum	107	58	165
<b>Operations on the cardiovascular system</b>	<b>6022</b>	<b>4594</b>	<b>10616</b>
Heart valve procedures	210	177	387
Coronary artery bypass graft (CABG)	499	180	679
Percutaneous transluminal coronary angioplasty (PTCA)	1380	713	2093
Diagnostic cardiac catheterization; coronary arteriography	825	790	1615
Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator	597	406	1003
Other OR heart procedures	222	171	393
Extracorporeal circulation auxiliary to open heart procedures	6	6	12

## APPENDIX C

<i>Single level CCS Procedure Categories and Chapter Headings</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Endarterectomy; vessel of head and neck	244	147	391
Aortic resection; replacement or anastomosis	146	59	205
Other vascular catheterization; not heart	722	886	1608
Peripheral vascular bypass	140	90	230
Other vascular bypass and shunt; not heart	20	14	34
Creation; revision and removal of arteriovenous fistula or vessel-to-vessel cannula	63	53	116
Hemodialysis	280	291	571
Other OR procedures on vessels of head and neck	37	37	74
Embolectomy and endarterectomy of lower limbs	20	37	57
Other OR procedures on vessels other than head and neck	441	385	826
Other diagnostic cardiovascular procedures	51	44	95
Other non-OR therapeutic cardiovascular procedures	119	108	227
<b>Operations on the hemic and lymphatic system</b>	<b>230</b>	<b>191</b>	<b>421</b>
Bone marrow transplant	27	20	47
Bone marrow biopsy	69	58	127
Procedures on spleen	38	21	59
Other therapeutic procedures; hemic and lymphatic system	96	92	188
<b>Operations on the digestive system</b>	<b>4369</b>	<b>5245</b>	<b>9614</b>
Injection or ligation of esophageal varices	1	0	1
Esophageal dilatation	9	16	25
Upper gastrointestinal endoscopy; biopsy	871	1081	1952
Gastrostomy; temporary and permanent	107	99	206
Colostomy; temporary and permanent	13	11	24
Ileostomy and other enterostomy	14	4	18
Gastrectomy; partial and total	26	16	42
Small bowel resection	112	139	251
Colonoscopy and biopsy	206	316	522
Proctoscopy and anorectal biopsy	18	23	41
Colorectal resection	447	492	939
Local excision of large intestine lesion (not endoscopic)	0	2	2
Appendectomy	552	441	993
Hemorrhoid procedures	7	11	18
Endoscopic retrograde cannulation of pancreas (ERCP)	19	18	37
Biopsy of liver	51	59	110
Cholecystectomy and common duct exploration	417	740	1157
Inguinal and femoral hernia repair	88	34	122
Other hernia repair	155	235	390
Laparoscopy (GI only)	15	26	41
Abdominal paracentesis	225	148	373
Exploratory laparotomy	22	20	42
Excision; lysis peritoneal adhesions	74	189	263
Peritoneal dialysis	14	11	25
Other bowel diagnostic procedures	6	6	12
Other non-OR upper GI therapeutic procedures	140	100	240
Other OR upper GI therapeutic procedures	197	413	610
Other non-OR lower GI therapeutic procedures	144	108	252
Other OR lower GI therapeutic procedures	196	200	396
Other gastrointestinal diagnostic procedures	33	32	65
Other non-OR gastrointestinal therapeutic procedures	73	94	167
Other OR gastrointestinal therapeutic procedures	117	161	278
<b>Operations on the urinary system</b>	<b>618</b>	<b>619</b>	<b>1237</b>
Endoscopy and endoscopic biopsy of the urinary tract	50	27	77
Transurethral excision; drainage; or removal urinary obstruction	127	103	230
Ureteral catheterization	77	122	199
Nephrotomy and nephrostomy	61	47	108
Nephrectomy; partial or complete	86	88	174
Kidney transplant	14	7	21
Genitourinary incontinence procedures	1	24	25
Extracorporeal lithotripsy; urinary	4	3	7
Indwelling catheter	25	25	50
Procedures on the urethra	30	9	39
Other diagnostic procedures of urinary tract	18	24	42
Other non-OR therapeutic procedures of urinary tract	31	62	93

## APPENDIX C

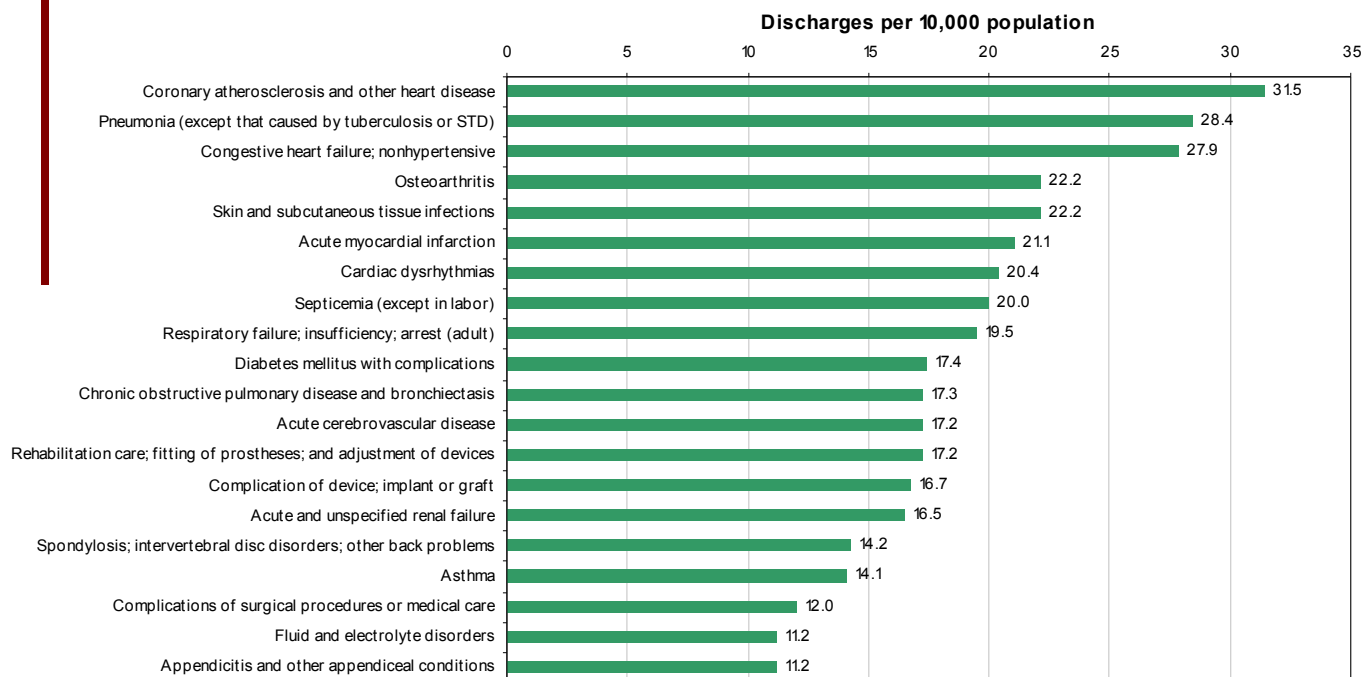
<b>Single level CCS Procedure Categories and Chapter Headings</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Other OR therapeutic procedures of urinary tract	94	78	172
<b>Operations on the male genital organs</b>	<b>5001</b>	<b>0</b>	<b>5001</b>
Transurethral resection of prostate (TURP)	110	0	110
Open prostatectomy	173	0	173
Circumcision	4625	0	4625
Diagnostic procedures; male genital	11	0	11
Other non-OR therapeutic procedures; male genital	25	0	25
Other OR therapeutic procedures; male genital	57	0	57
<b>Operations on the female genital organs</b>	<b>0</b>	<b>2031</b>	<b>2031</b>
Oophorectomy; unilateral and bilateral	0	231	231
Other operations on ovary	0	75	75
Ligation or occlusion of fallopian tubes	0	53	53
Other operations on fallopian tubes	0	15	15
Hysterectomy; abdominal and vaginal	0	1204	1204
Other excision of cervix and uterus	0	88	88
Abortion (termination of pregnancy)	0	6	6
Dilatation and curettage (D&C); aspiration after delivery or abortion	0	44	44
Diagnostic dilatation and curettage (D&C)	0	27	27
Repair of cystocele and rectocele; obliteration of vaginal vault	0	105	105
Other diagnostic procedures; female organs	0	36	36
Other non-OR therapeutic procedures; female organs	0	16	16
Other OR therapeutic procedures; female organs	0	131	131
<b>Obstetrical procedures</b>	<b>0</b>	<b>12352</b>	<b>12352</b>
Removal of ectopic pregnancy	0	33	33
Episiotomy	0	128	128
Cesarean section	0	3963	3963
Forceps; vacuum; and breech delivery	0	534	534
Artificial rupture of membranes to assist delivery	0	31	31
Other procedures to assist delivery	0	5864	5864
Diagnostic amniocentesis	0	2	2
Fetal monitoring	0	250	250
Repair of current obstetric laceration	0	1530	1530
Other therapeutic obstetrical procedures	0	17	17
<b>Operations on the musculoskeletal system</b>	<b>3819</b>	<b>4706</b>	<b>8525</b>
Partial excision bone	96	64	160
Bunionectomy or repair of toe deformities	2	2	4
Treatment; facial fracture or dislocation	70	11	81
Treatment; fracture or dislocation of radius and ulna	73	71	144
Treatment; fracture or dislocation of hip and femur	303	530	833
Treatment; fracture or dislocation of lower extremity (other than hip or femur)	246	246	492
Other fracture and dislocation procedure	168	158	326
Arthroscopy	2	5	7
Division of joint capsule; ligament or cartilage	8	5	13
Excision of semilunar cartilage of knee	11	7	18
Arthroplasty knee	795	1412	2207
Hip replacement; total and partial	528	683	1211
Arthroplasty other than hip or knee	41	73	114
Arthrocentesis	59	46	105
Injections and aspirations of muscles; tendons; bursa; joints and soft tissue	8	8	16
Amputation of lower extremity	210	121	331
Spinal fusion	542	650	1192
Other diagnostic procedures on musculoskeletal system	99	128	227
Other therapeutic procedures on muscles and tendons	266	206	472
Other OR therapeutic procedures on bone	140	147	287
Other OR therapeutic procedures on joints	94	82	176
Other non-OR therapeutic procedures on musculoskeletal system	15	27	42
Other OR therapeutic procedures on musculoskeletal system	43	24	67
<b>Operations on the integumentary system</b>	<b>1121</b>	<b>1119</b>	<b>2240</b>
Breast biopsy and other diagnostic procedures on breast	1	12	13
Lumpectomy; quadrantectomy of breast	0	12	12
Mastectomy	2	87	89
Incision and drainage; skin and subcutaneous tissue	348	273	621
Debridement of wound; infection or burn	224	226	450
Excision of skin lesion	20	22	42

## APPENDIX C

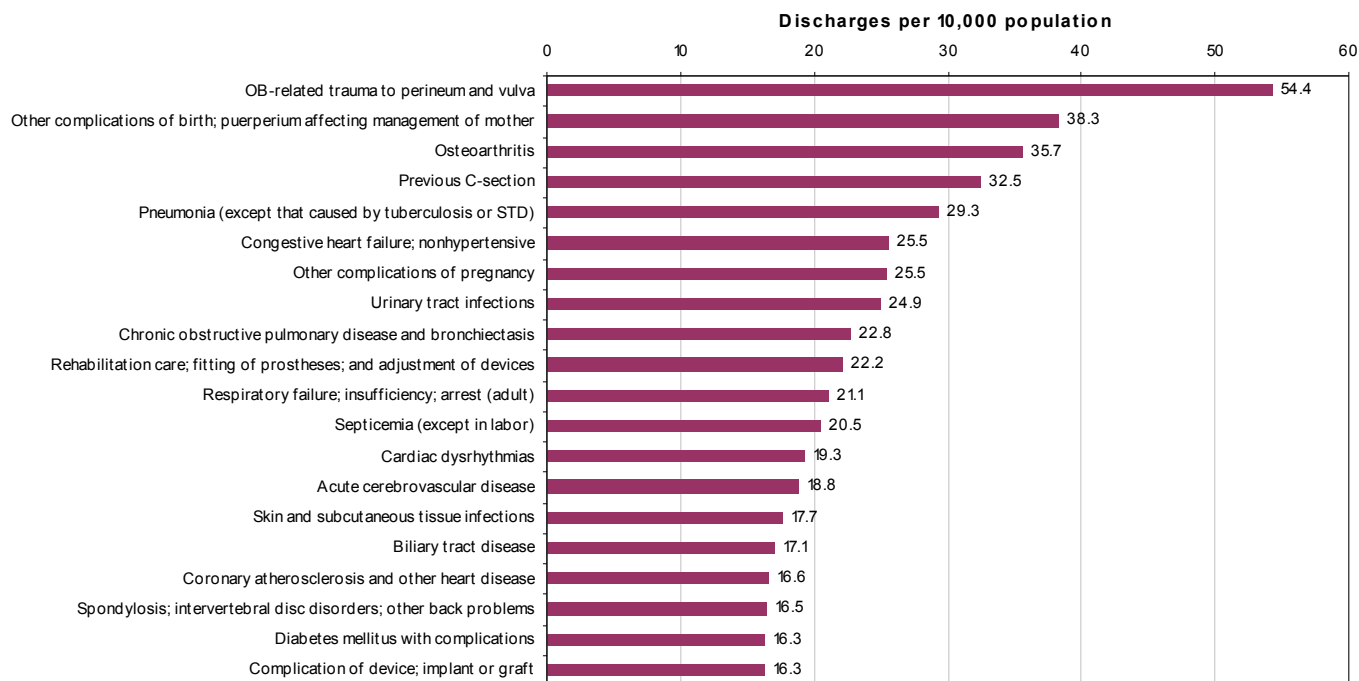
<i>Single level CCS Procedure Categories and Chapter Headings</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Suture of skin and subcutaneous tissue	183	106	289
Skin graft	95	63	158
Other diagnostic procedures on skin and subcutaneous tissue	22	23	45
Other non-OR therapeutic procedures on skin and breast	178	218	396
Other OR therapeutic procedures on skin and breast	48	77	125
<b>Miscellaneous diagnostic and therapeutic procedures</b>	<b>11727</b>	<b>16755</b>	<b>28483</b>
Other organ transplantation	4	4	8
Computerized axial tomography (CT) scan head	1187	1468	2655
CT scan chest	366	445	811
CT scan abdomen	670	902	1572
Other CT scan	258	344	602
Myelogram	1	2	3
Mammography	0	2	2
Routine chest X-ray	1	1	2
Intraoperative cholangiogram	0	2	2
Upper gastrointestinal X-ray	22	26	48
Lower gastrointestinal X-ray	4	10	14
Cerebral arteriogram	37	55	92
Contrast aortogram	18	14	32
Contrast arteriogram of femoral and lower extremity arteries	7	11	18
Arterio- or venogram (not heart and head)	52	56	108
Diagnostic ultrasound of head and neck	59	122	181
Diagnostic ultrasound of heart (echocardiogram)	911	1100	2011
Diagnostic ultrasound of gastrointestinal tract	1	1	2
Diagnostic ultrasound of urinary tract	11	0	11
Diagnostic ultrasound of abdomen or retroperitoneum	332	424	756
Other diagnostic ultrasound	366	585	951
Magnetic resonance imaging	407	575	982
Electroencephalogram (EEG)	208	223	431
Cardiac stress tests	216	227	443
Electrocardiogram	1	4	5
Swan-Ganz catheterization for monitoring	1	3	4
Microscopic examination (bacterial smear; culture; toxicology)	0	2	2
Radioisotope bone scan	21	42	63
Radioisotope pulmonary scan	57	93	150
Radioisotope scan and function studies	38	63	101
Other radioisotope scan	10	22	32
Therapeutic radiology for cancer treatment	22	31	53
Diagnostic physical therapy	9	3	12
Physical therapy exercises; manipulation; and other procedures	247	312	559
Traction; splints; and other wound care	61	73	134
Other physical therapy and rehabilitation	3	0	3
Respiratory intubation and mechanical ventilation	1281	1321	2603
Other respiratory therapy	5	8	13
Psychological and psychiatric evaluation and therapy	7	17	24
Alcohol and drug rehabilitation/detoxification	19	7	26
Ophthalmologic and otologic diagnosis and treatment	81	299	380
Nasogastric tube	20	17	37
Blood transfusion	587	668	1255
Enteral and parenteral nutrition	67	169	236
Cancer chemotherapy	359	270	629
Conversion of cardiac rhythm	181	116	297
Other diagnostic radiology and related techniques	46	59	105
Other diagnostic procedures (interview; evaluation; consultation)	1066	1208	2274
Prophylactic vaccinations and inoculations	728	2814	3542
Nonoperative removal of foreign body	21	12	33
Other therapeutic procedures	1651	2523	4174
<b>Total Principal Procedures</b>	<b>35456</b>	<b>49950</b>	<b>85407</b>

## APPENDIX D

### Annual Hospitalization Rates for 20 Most Frequent Diagnoses\* of Males Delaware Residents, 2008



### Annual Hospitalization Rates for 20 Most Frequent Diagnoses\* of Females Delaware Residents, 2008



\*Excluding liveborn infants.

Source: Delaware Health Statistics Center



## APPENDIX E

**Number, Percent, and Mean Charges for the Highest Volume Discharges in 2008**

CCS Principal Diagnoses	Number Discharges			Percent Discharges			Mean Charges		
	1998	2003	2008	1998	2003	2008	1998	2003	2008
All Discharges	92,110	106,780	111,862	100.0	100.0	100.0	\$ 9,138	\$ 13,511	\$ 21,122
Liveborn	9829	11490	12218	10.7	10.8	10.9	\$ 3,298	\$ 4,159	\$ 5,574
Osteoarthritis	1066	1874	2857	1.2	1.8	2.6	\$ 16,715	\$ 21,298	\$ 30,369
Pneumonia	3009	3449	2851	3.3	3.2	2.5	\$ 10,505	\$ 15,482	\$ 21,362
OB-related trauma to perineum and vulva	2213	2455	2703	2.4	2.3	2.4	\$ 2,714	\$ 3,727	\$ 5,508
Congestive heart failure	2748	3034	2535	3.0	2.8	2.3	\$ 10,134	\$ 16,696	\$ 26,252
Coronary atherosclerosis and other heart disease	3057	2496	2408	3.3	2.3	2.2	\$ 13,936	\$ 24,033	\$ 42,647
Skin and subcutaneous tissue infections	931	1351	2008	1.0	1.3	1.8	\$ 6,410	\$ 9,142	\$ 11,827
Cardiac dysrhythmias	1736	1863	1943	1.9	1.7	1.7	\$ 8,961	\$ 16,179	\$ 24,460
Septicemia	882	1007	1898	1.0	0.9	1.7	\$ 15,020	\$ 23,995	\$ 45,329
Respiratory failure	648	960	1896	0.7	0.9	1.7	\$ 25,263	\$ 29,026	\$ 38,537

Source: Delaware Health Statistics Center

**Discharges with Highest Mean Charges in 2008**

CCS Principal Diagnoses	Number Discharges			Percent Discharges			Mean Charges		
	1998	2003	2008	1998	2003	2008	1998	2003	2008
All Discharges	92,110	106,780	111,862	100.0	100.0	100.0	\$ 9,138	\$ 13,511	\$ 21,122
Cardiac and circulatory congenital anomalies	265	385	235	0.3	0.4	0.2	\$ 47,060	\$ 76,105	\$ 159,516
Leukemias	93	105	132	0.1	0.1	0.1	\$ 45,186	\$ 81,313	\$ 124,844
Nervous system congenital anomalies	28	33	34	0.0	0.0	0.0	\$ 26,752	\$ 34,306	\$ 89,828
Heart valve disorders	204	232	374	0.2	0.2	0.3	\$ 38,412	\$ 59,952	\$ 81,878
Short gestation; low birth weight; and fetal growth retardation	78	96	87	0.1	0.1	0.1	\$ 29,239	\$ 38,996	\$ 74,688
Other acquired deformities	188	241	286	0.2	0.2	0.3	\$ 32,698	\$ 45,027	\$ 73,957
Cardiac arrest and ventricular fibrillation	61	62	56	0.1	0.1	0.1	\$ 23,957	\$ 41,103	\$ 72,422
Spinal cord injury	29	27	49	0.0	0.0	0.0	\$ 37,769	\$ 80,780	\$ 68,019
Aortic; peripheral; and visceral artery aneurysms	222	229	279	0.2	0.2	0.2	\$ 32,273	\$ 40,515	\$ 62,458
Other and ill-defined cerebrovascular disease	49	66	52	0.1	0.1	0.0	\$ 16,574	\$ 11,435	\$ 60,897

Source: Delaware Health Statistics Center

**Conditions with the 10 Highest Total Charges 2008**

Rank	CCS Principal Diagnoses	Total Billed Charges	% of Total Charges	Number of Discharges
1	Coronary atherosclerosis and other heart disease	\$ 102,694,801	4.3	2,408
2	Osteoarthritis	\$ 86,764,444	3.7	2,857
3	Septicemia (except in labor)	\$ 86,034,957	3.6	1,898
4	Acute myocardial infarction	\$ 82,034,901	3.5	1,841
5	Respiratory failure; insufficiency; arrest (adult)	\$ 73,065,633	3.1	1,896
6	Liveborn	\$ 68,098,225	2.9	12,218
7	Congestive heart failure; nonhypertensive	\$ 66,547,886	2.8	2,535
8	Complication of device; implant or graft	\$ 61,564,073	2.6	1,768
9	Pneumonia (except that caused by tuberculosis or	\$ 60,902,229	2.6	2,851
10	Spondylosis; intervertebral disc disorders; other b	\$ 49,173,374	2.1	1,581
Total for 10 most expensive conditions		\$ 736,880,523	31.2	31,853
Total aggregate charges for all discharges		\$ 2,362,736,848	100.0	111,862

Source: Delaware Health Statistics Center

APPENDIX F

2008 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	2038	4.9
Osteoarthritis	1633	3.9
Pneumonia (except that caused by tuberculosis or STD)	1520	3.6
Coronary atherosclerosis and other heart disease	1427	3.4
Rehabilitation care; fitting of prostheses; and adjustment of devices	1421	3.4
Respiratory failure; insufficiency; arrest (adult)	1407	3.4
Chronic obstructive pulmonary disease and bronchiectasis	1367	3.3
Septicemia (except in labor)	1366	3.3
Cardiac dysrhythmias	1360	3.2
Acute cerebrovascular disease	1239	3.0

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	5989	22.7
OB-related trauma to perineum and vulva	1040	4.0
Other complications of birth; puerperium affecting management of mother	929	3.5
Previous C-section	731	2.8
Other complications of pregnancy	720	2.7
Asthma	571	2.2
Pneumonia (except that caused by tuberculosis or STD)	520	2.0
Skin and subcutaneous tissue infections	486	1.8
Normal pregnancy and/or delivery	479	1.8
Diabetes mellitus with complications	416	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	5783	15.2
OB-related trauma to perineum and vulva	1510	4.0
Osteoarthritis	1036	2.7
Other complications of birth; puerperium affecting management of mother	891	2.3
Previous C-section	800	2.1
Coronary atherosclerosis and other heart disease	733	1.9
Pneumonia (except that caused by tuberculosis or STD)	704	1.8
Skin and subcutaneous tissue infections	691	1.8
Appendicitis and other appendiceal conditions	649	1.7
Spondylosis; intervertebral disc disorders; other back problems	639	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>
Mood disorders	155	4.8
Skin and subcutaneous tissue infections	151	4.7
Liveborn	143	4.5
Diabetes mellitus with complications	96	3.0
Appendicitis and other appendiceal conditions	93	2.9
Nonspecific chest pain	88	2.7
Acute myocardial infarction	81	2.5
Pancreatic disorders (not diabetes)	76	2.4
Biliary tract disease	73	2.3
Pneumonia (except that caused by tuberculosis or STD)	71	2.2

Source: Delaware Health Statistics Center

APPENDIX G

Conditions with the Highest Number of In-Hospital Deaths by Age Group  
Delaware Hospitals, 2008

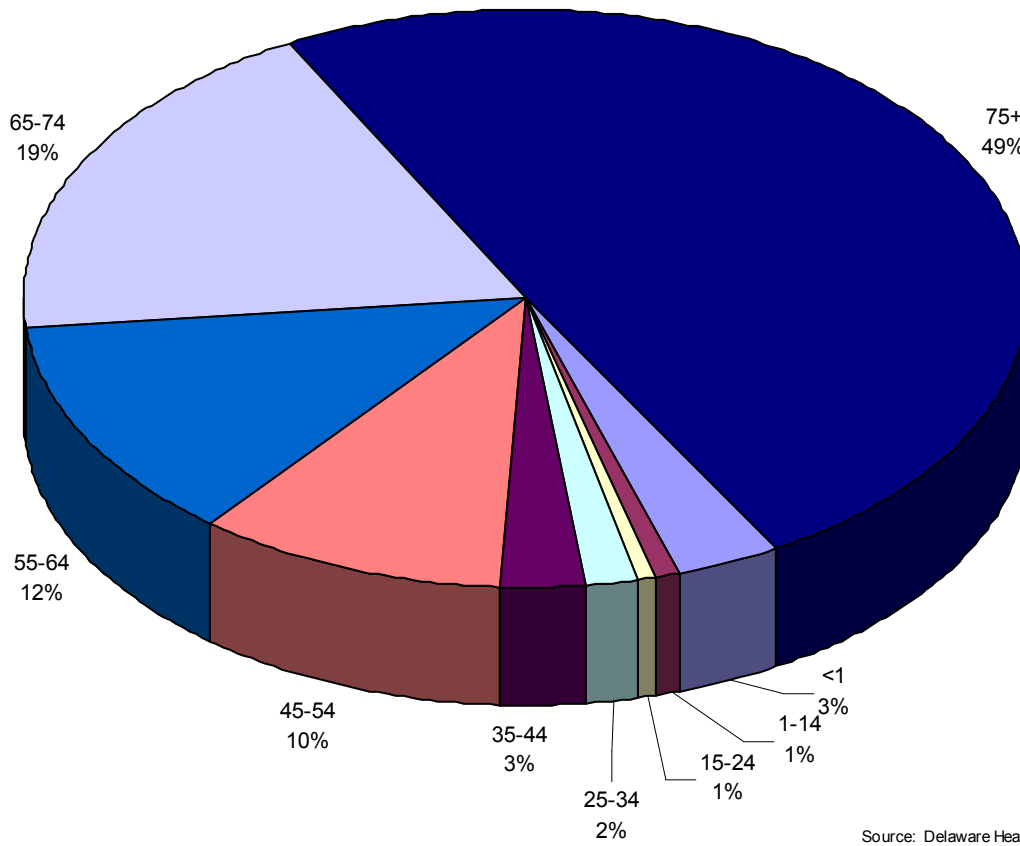
Diagnosis	Age Group in Years					TOTAL <sup>1</sup>
	Under 1 <sup>2</sup>	1-17	18-44	45-64	65+	
<i>All Discharges</i>	15,251	8,977	27,028	24,830	35,767	111,862
Short gestation; low birth weight; and fetal growth retardation	30					30
Respiratory distress syndrome	18					18
Other perinatal conditions	16					16
Cardiac and circulatory congenital anomalies	11					11
Other congenital anomalies	6					6
Other injuries and conditions due to external causes	2	2		2		6
Respiratory failure; insufficiency; arrest	1	3	6	53	191	254
Septicemia (except in labor)	1	1	14	91	262	369
Intracranial injury		3	11	13	41	68
Other acquired deformities		2	1	1		4
Leukemias		2	4	6	13	25
Crushing injury or internal injury		1	10	4	4	19
Pneumonia (except that caused by tuberculosis or STD)		1	3	15	88	107
HIV infection			7	12	1	20
Screening and history of mental health and substance abuse codes			5	17	2	24
Secondary malignancies			5	40	69	114
Acute cerebrovascular disease			4	33	135	172
Mood disorders			4	3		
Cancer of bronchus; lung				28	51	79
Acute myocardial infarction			2	24	84	110
Other liver diseases			1	18	8	27
Complication of device; implant or graft			3	15	24	42
Congestive heart failure; nonhypertensive			2	8	86	96
Acute and unspecified renal failure				11	74	85
Aspiration pneumonitis; food/vomitus			1	9	67	77

**Notes:**

1. Total will not equal the age group sum due to 9 discharges of unknown age.
2. Includes 66 cases where the secondary diagnosis was used in place of the very general principal diagnosis of "liveborn infant".
3. 64 percent of intracranial injuries were due to motor vehicle accidents.
4. The majority of screening and history of mental health and substance abuse codes were hospitalizations for alcoholic liver disease.

Source: Delaware Health Statistics Center

Age Distribution of Patients who Died while Hospitalized  
Delaware Hospitals, 2008



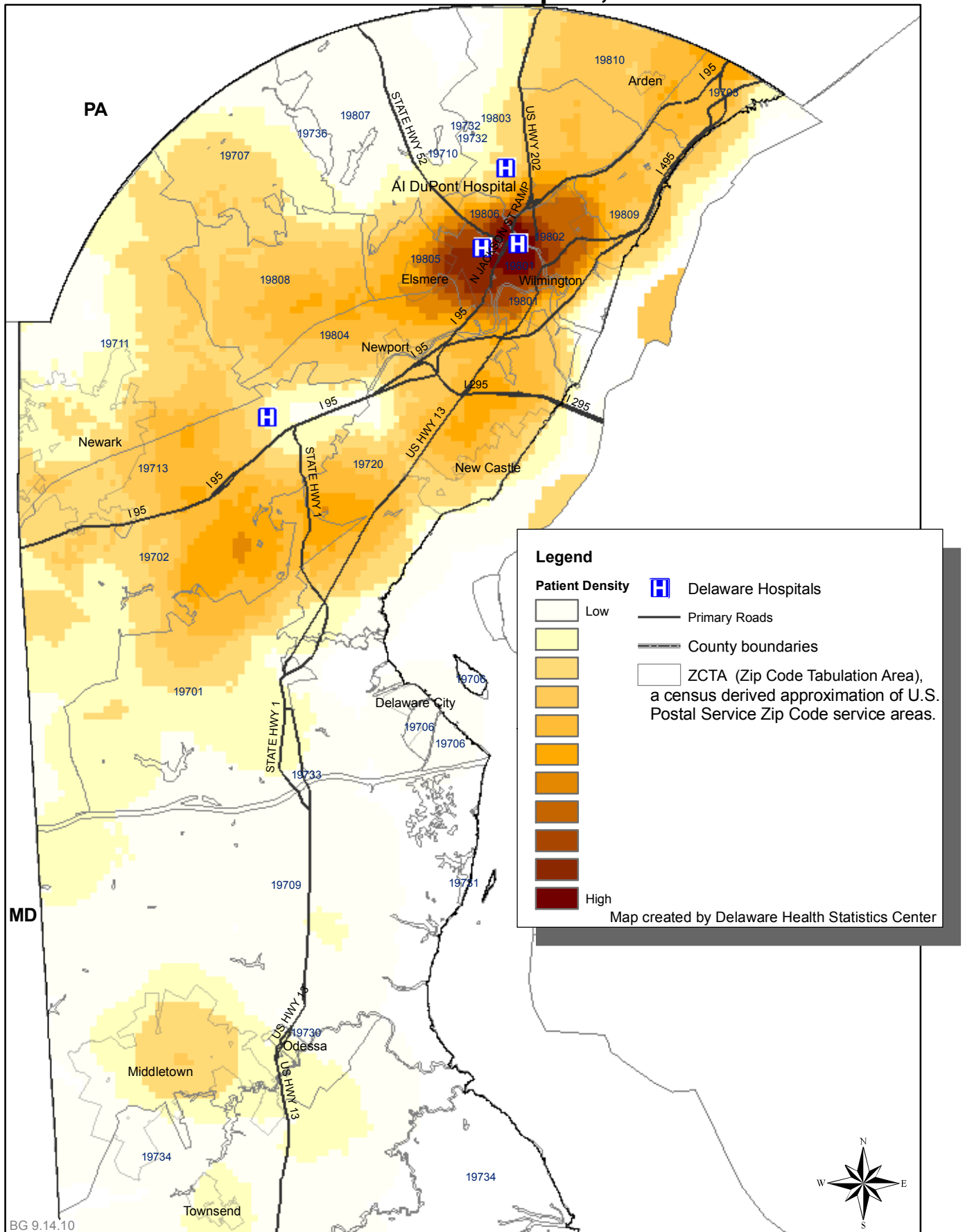
Source: Delaware Health Statistics Center

# PATIENT DISTRIBUTION MAPS

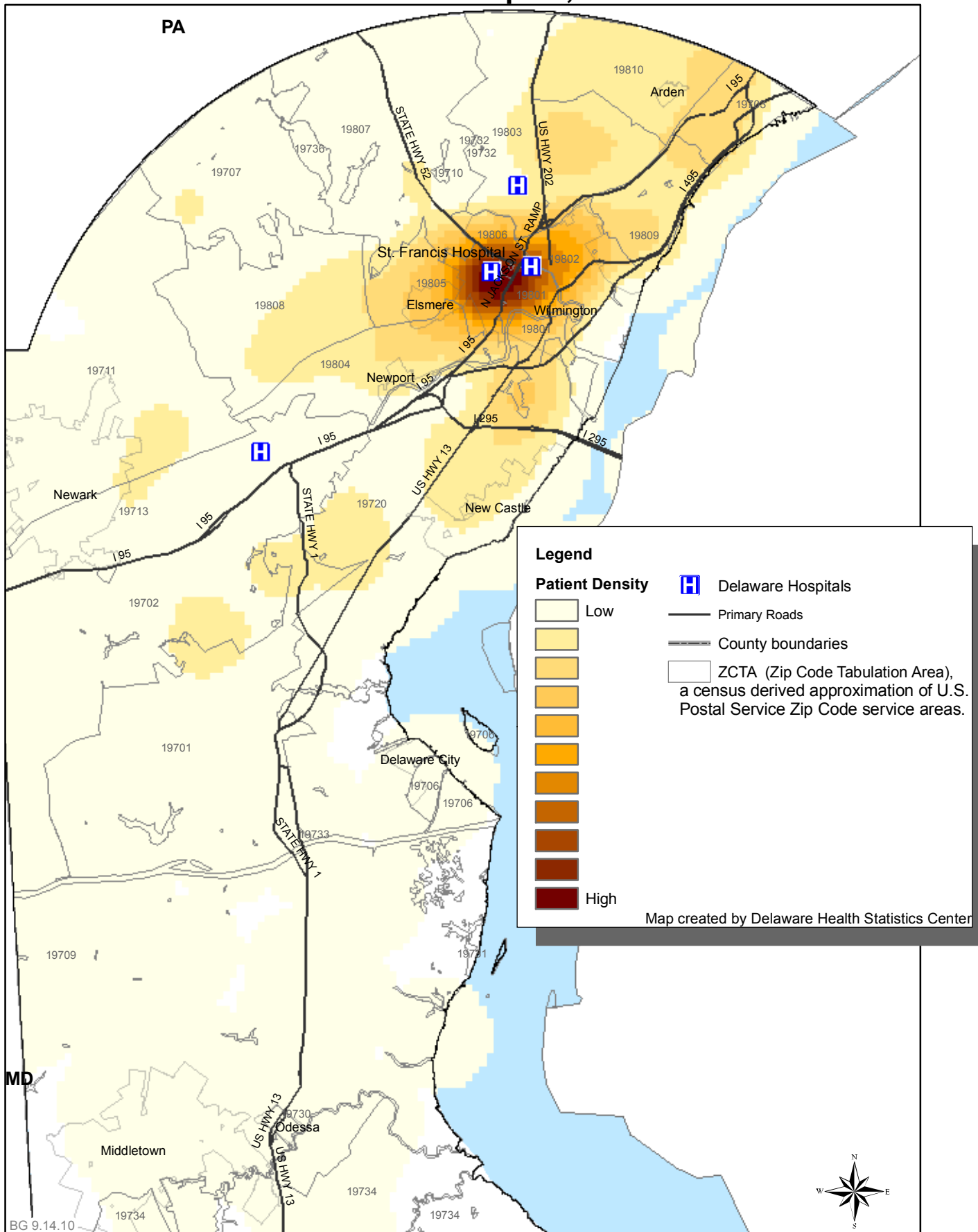
Patient density maps display the quantity and distribution of 2008 hospital discharges as a graphical display of areas of lowest concentration to areas of highest concentration for each hospital in Delaware.

Density layers were created using ESRI's Spatial Analyst and were based on point locations geocoded from the patient's address.

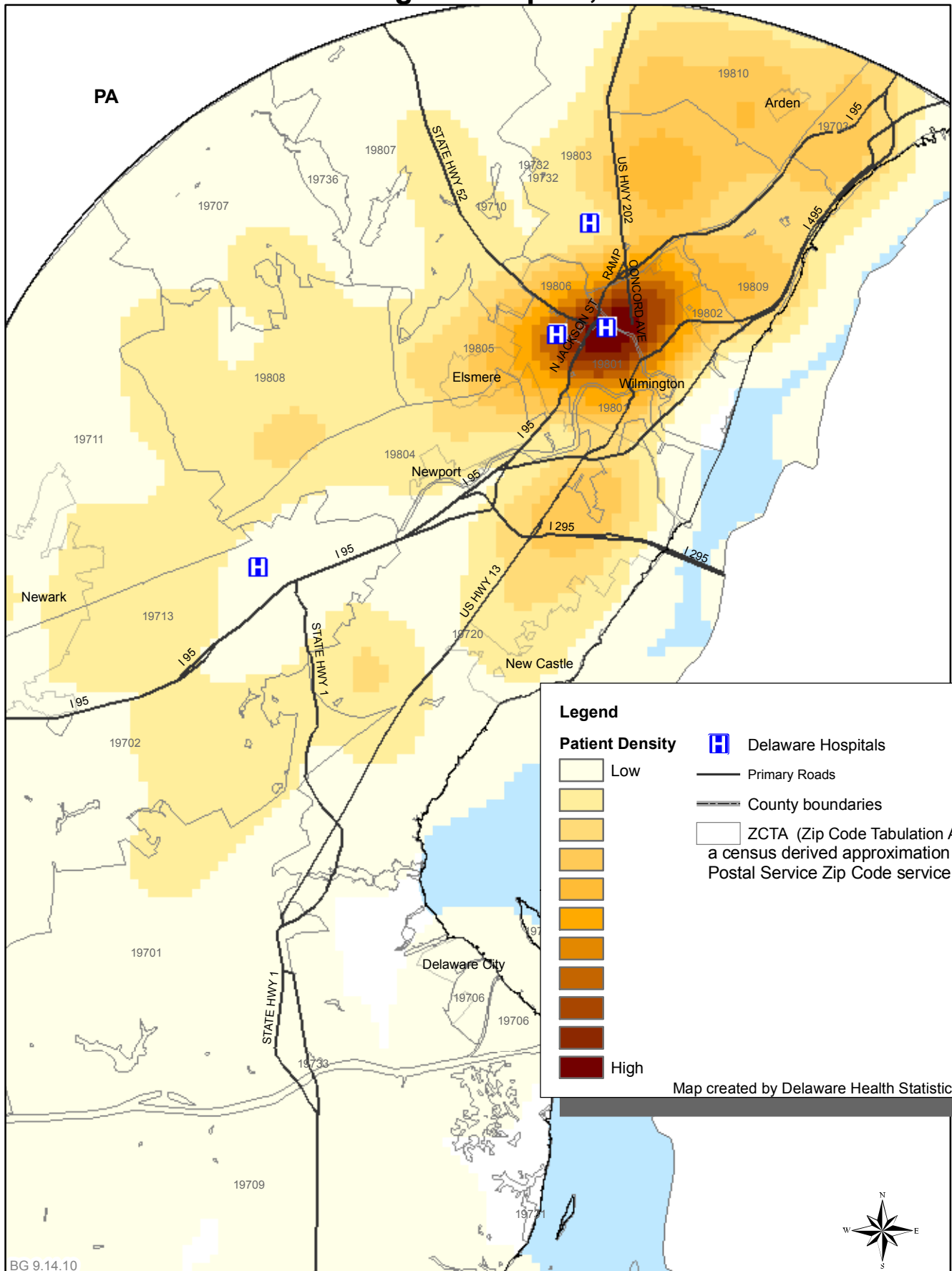
# Discharge Density Alfred I. duPont Hospital, 2008



# Discharge Density St. Francis Hospital, 2008



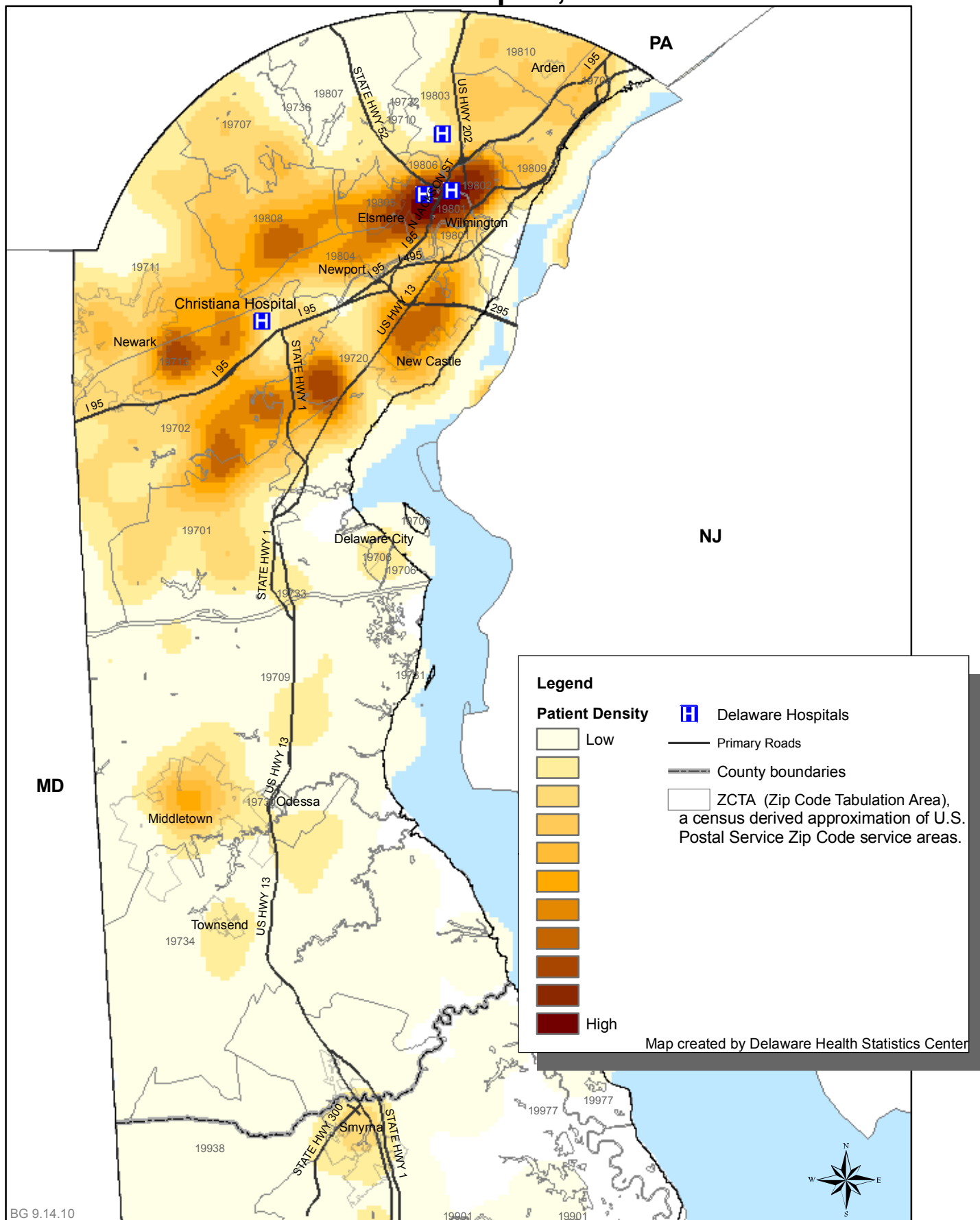
# Discharge Density Wilmington Hospital, 2008



BG 9.14.10

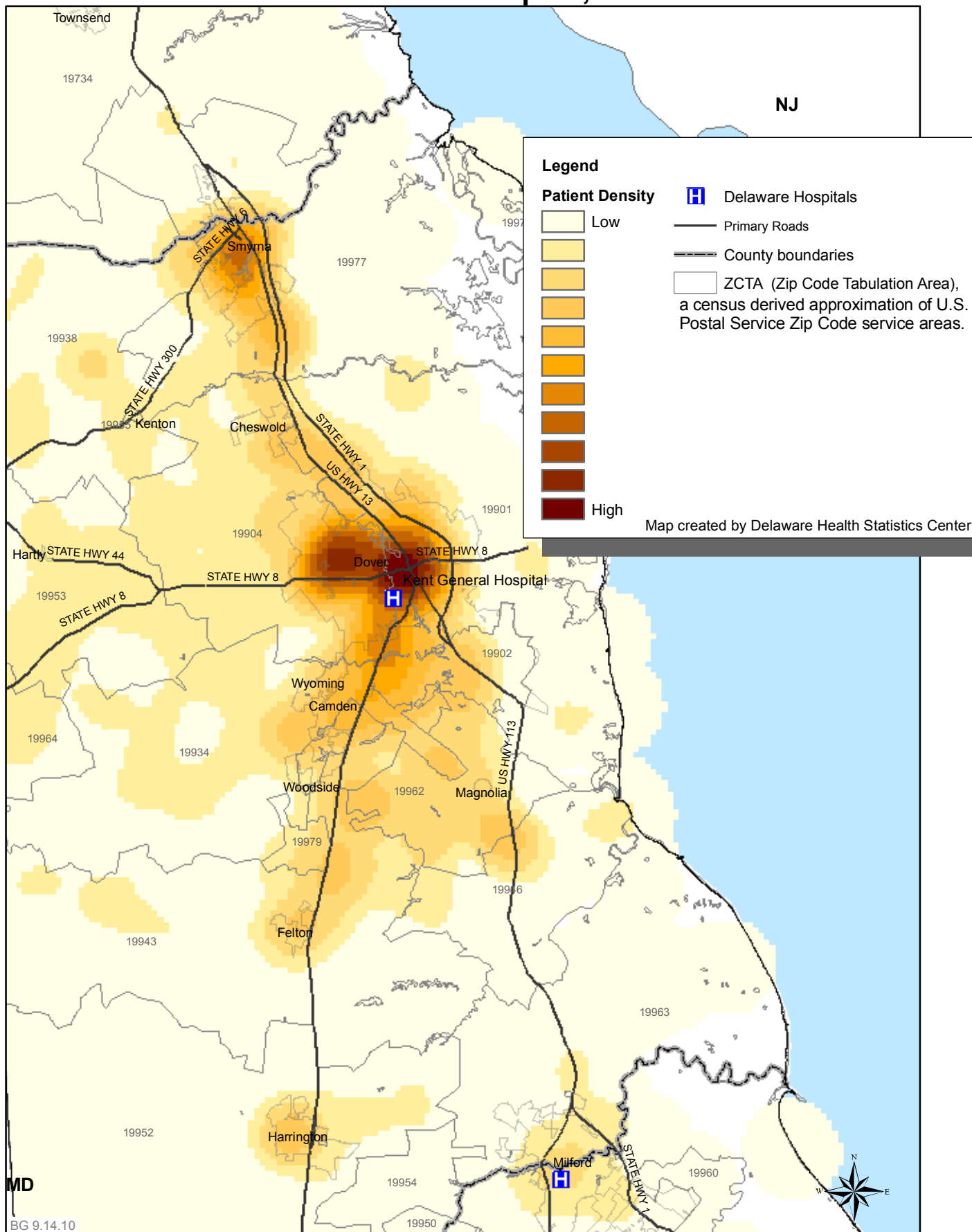


# Discharge Density Christiana Hospital, 2008

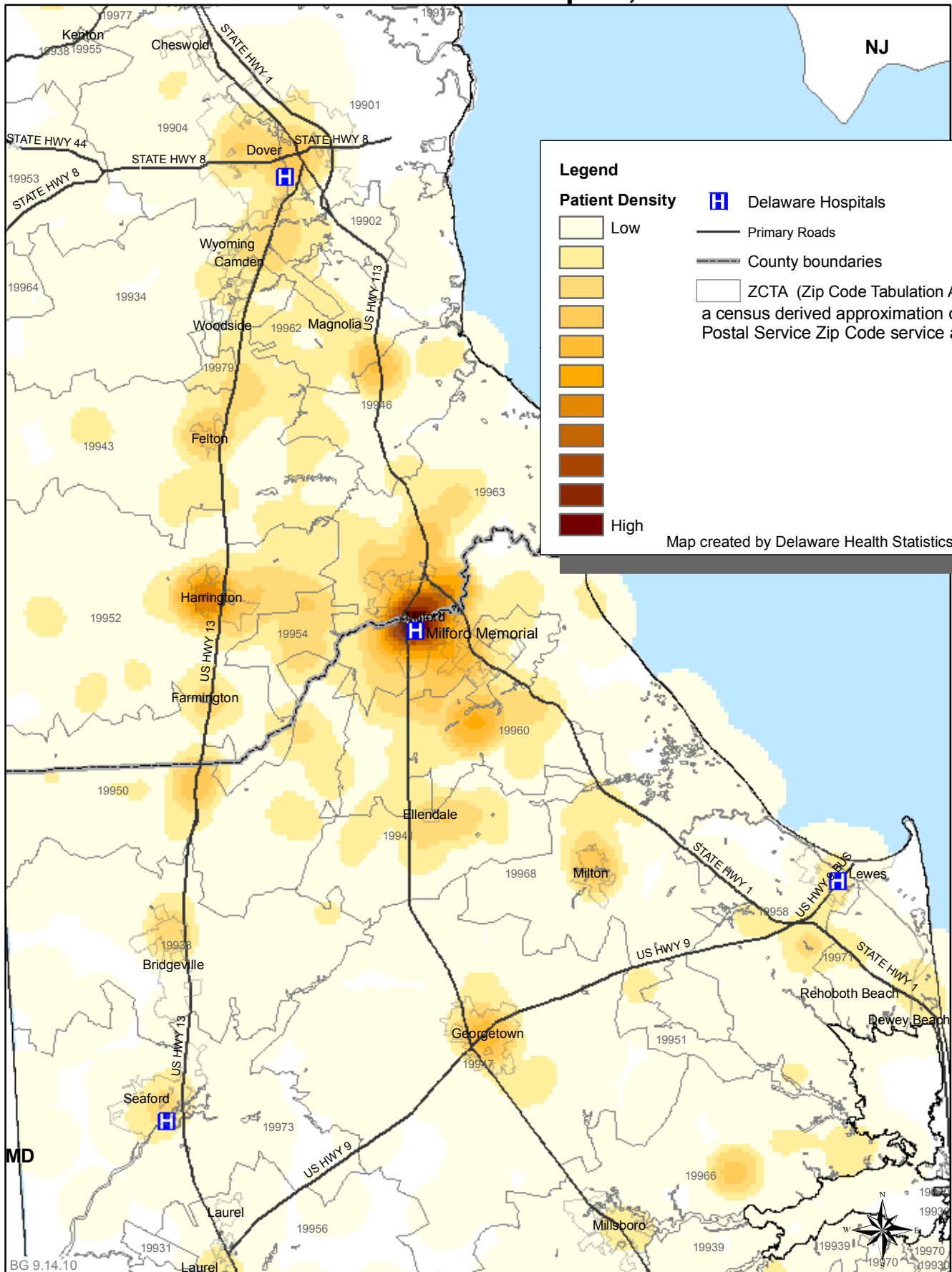


BG 9.14.10

# Discharge Density Kent General Hospital, 2008



# Discharge Density Milford Memorial Hospital, 2008

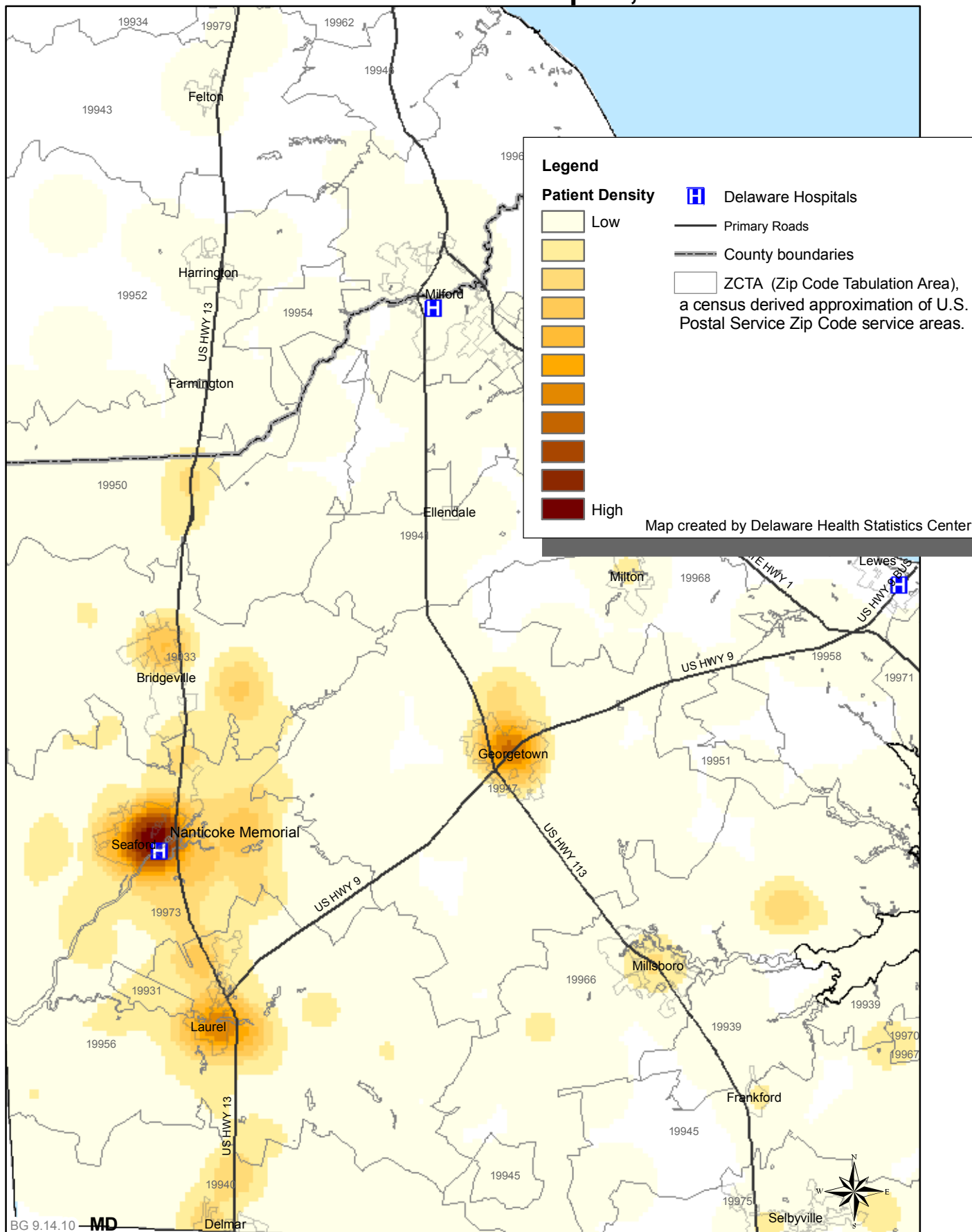


**Legend**

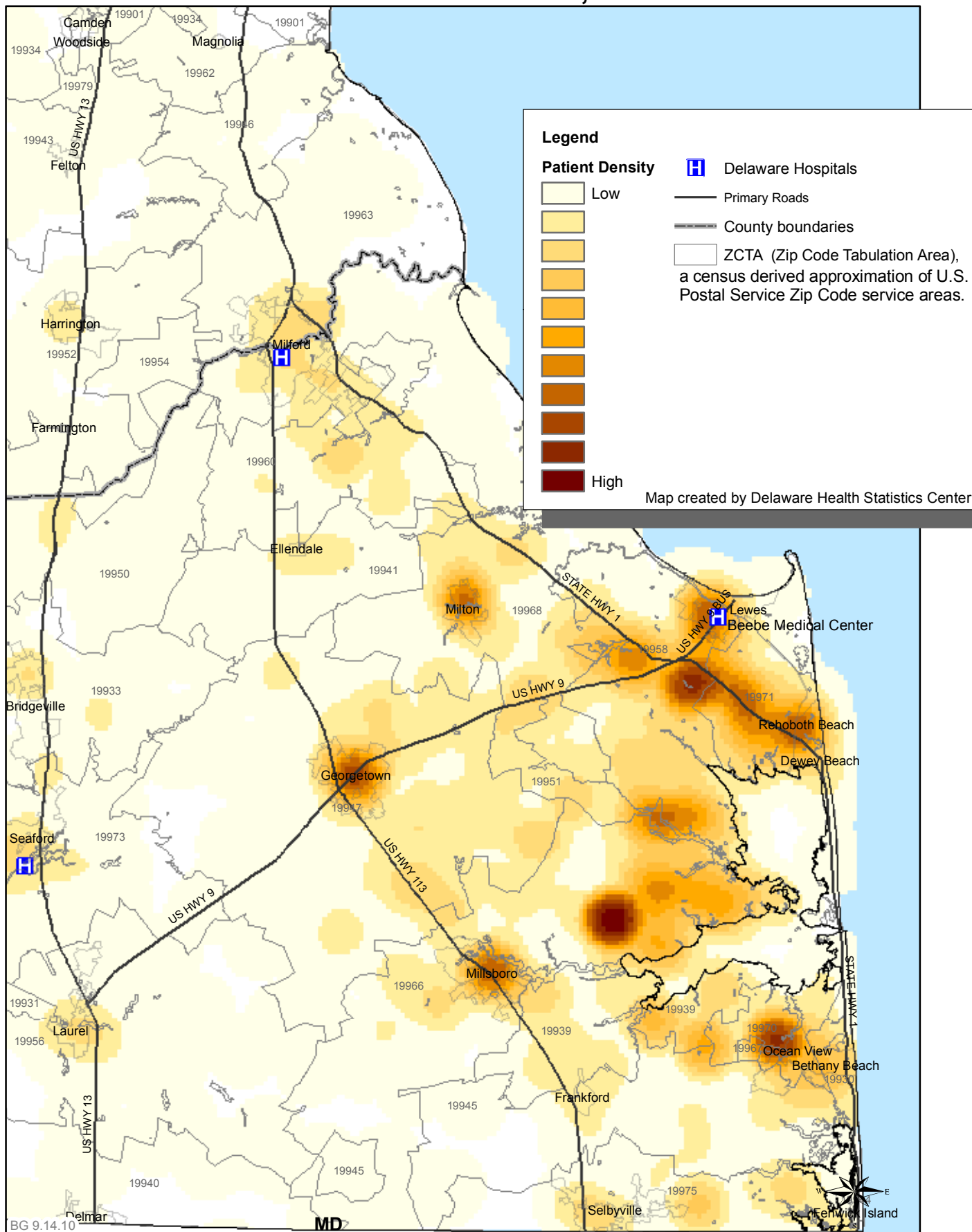
<b>Patient Density</b>	Delaware Hospitals
Low	Primary Roads
	County boundaries
	ZCTA (Zip Code Tabulation Area), a census derived approximation of U.S. Postal Service Zip Code service areas.
High	

Map created by Delaware Health Statistics Center

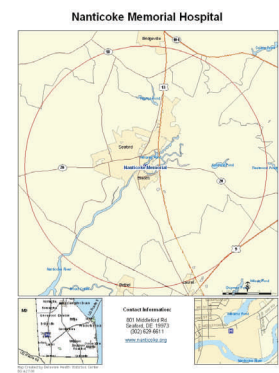
# Discharge Density Nanticoke Memorial Hospital, 2008



# Discharge Density Beebe Medical Center, 2008



# HOSPITAL PROFILES AND HOSPITAL LOCATION MAPS



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## 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

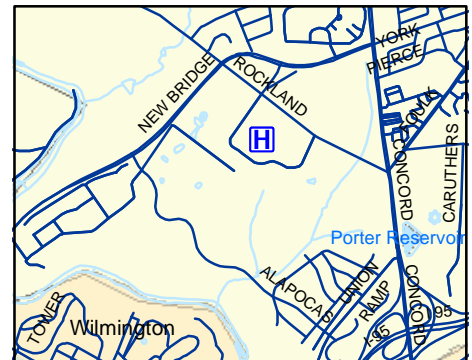
# Alfred I. duPont Hospital for Children



## 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

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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**

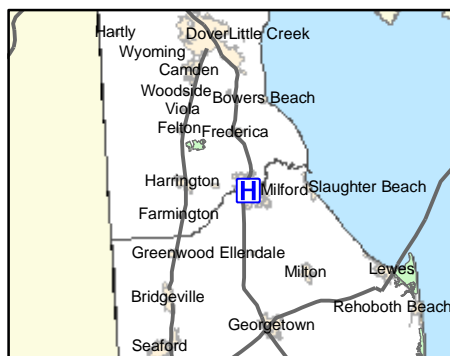
301 Jefferson Avenue, Milford, DE 19963

**Bayhealth Outpatient Imaging Center**

Eden Hill Medical Center

200 Banning Street, Suite 140, Dover, DE 19904

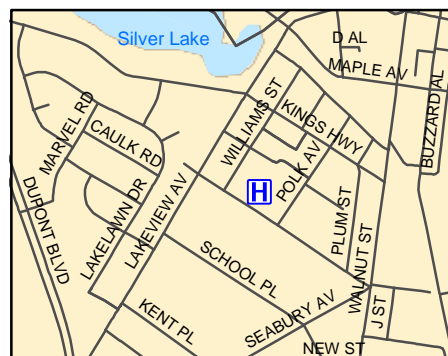
# Milford Memorial Hospital BayHealth Medical Center



### Contact Information:

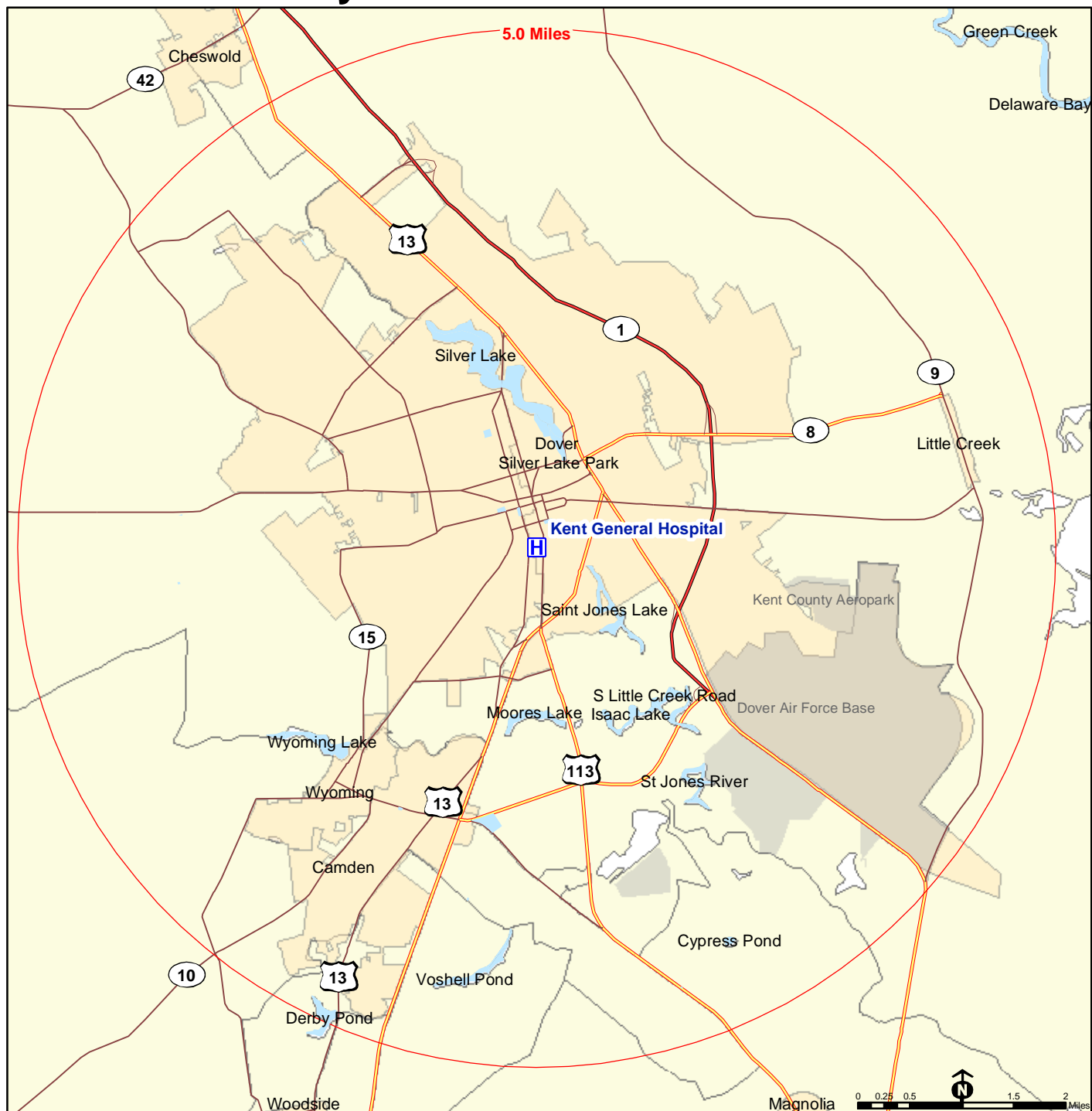
21 West Clarke Avenue  
Milford, DE 19963  
(302) 422-3311

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



Map Created by Delaware Health Statistics Center  
BG 4.27.06

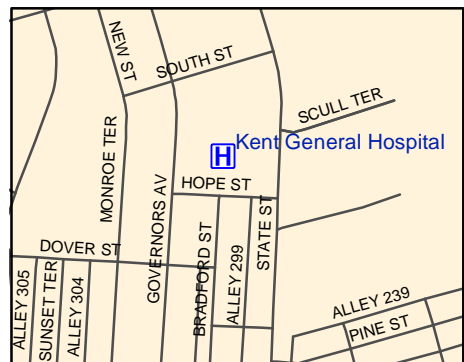
# Kent General Hospital Bayhealth Medical Center



### 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

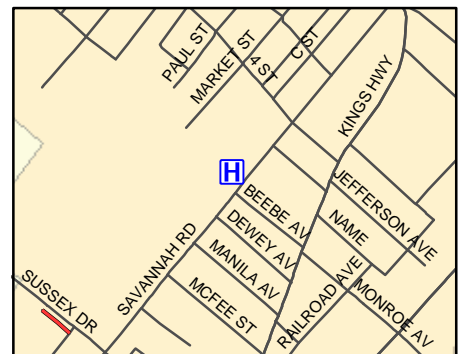
# Beebe Medical Center



## 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

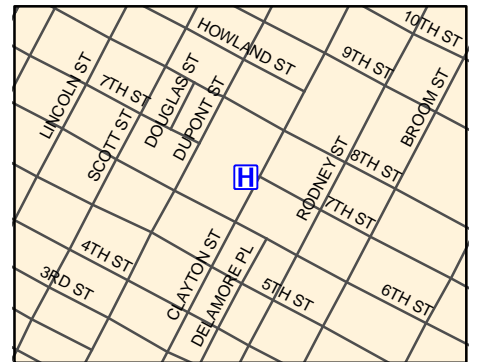


Map Created by Delaware Health Statistics Center  
BG 4.27.06

## 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

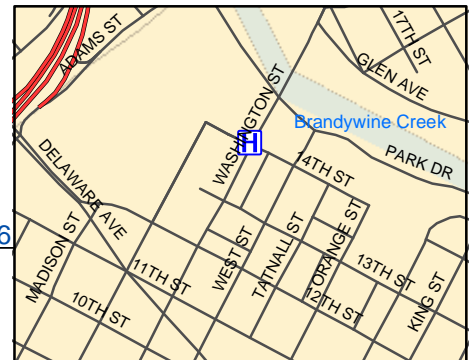


Map Created by Delaware Health Statistics Center  
BG 4.27.06

### Contact Information:

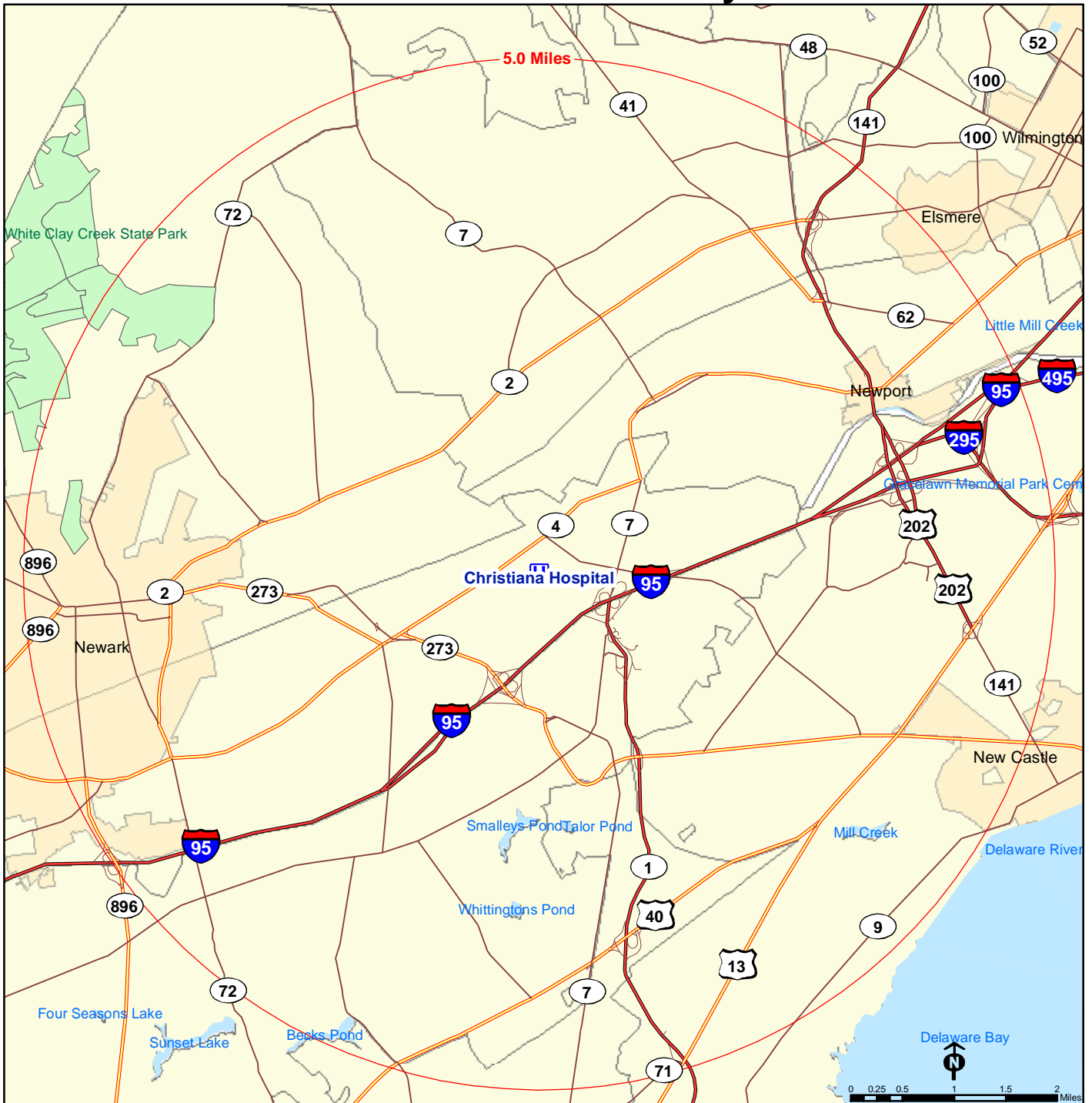
501 W. 14th St.  
Wilmington, DE 19801  
(302) 733-1000

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





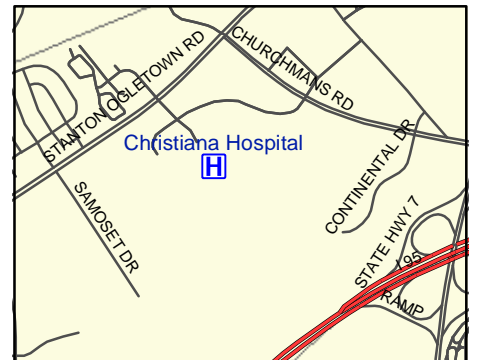
# Christiana Hospital Christiana Care Health System



### 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  
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## 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

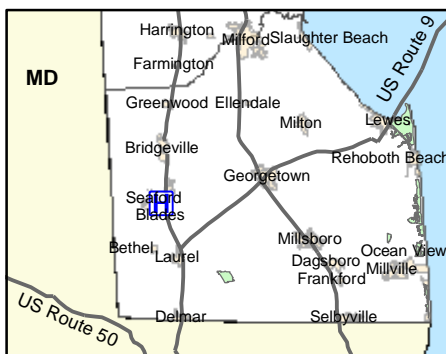
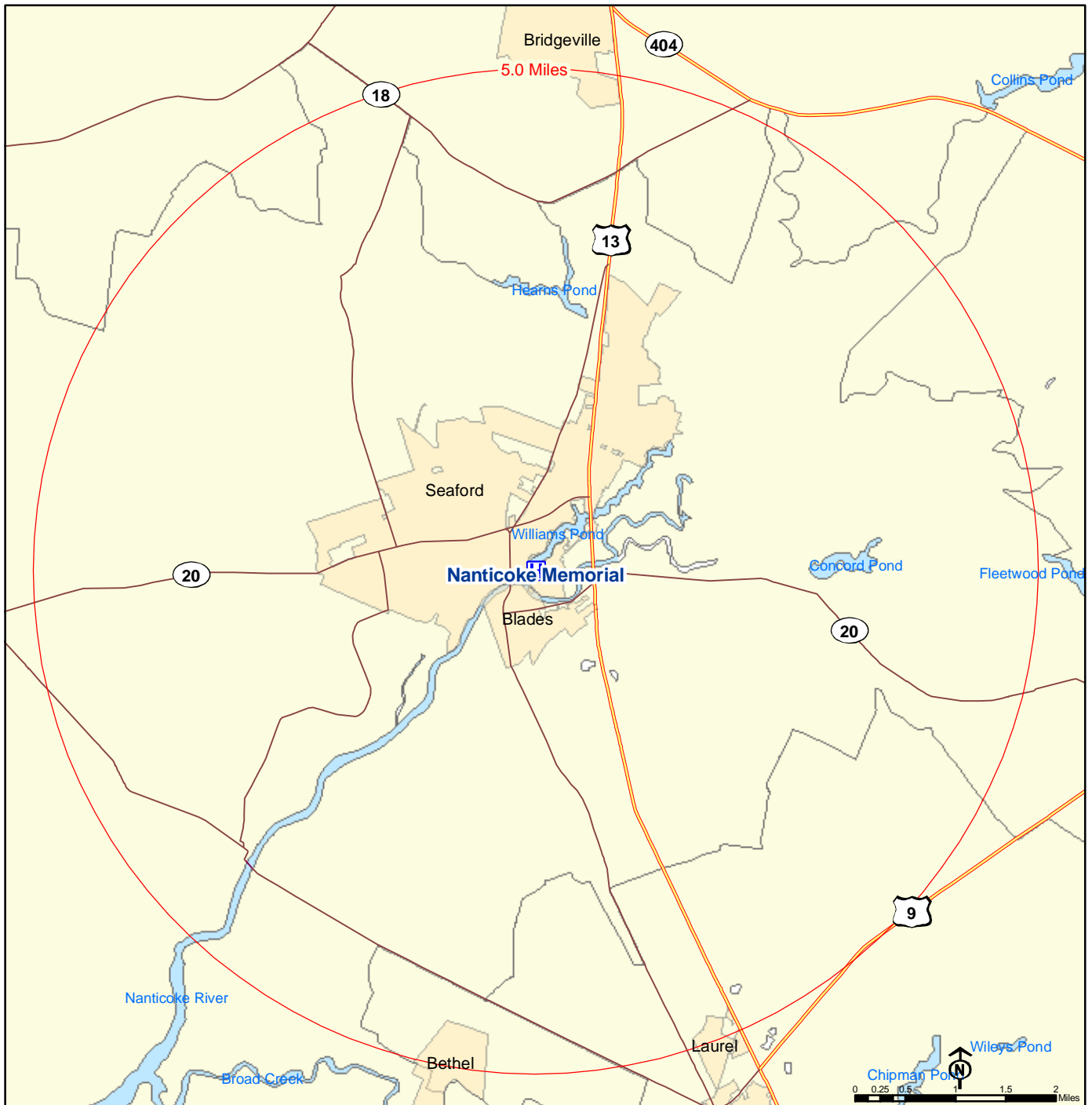
Medicaid % 15

Others (Commercial & Self Pay) % 25

Uncompensated Care:

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

# Nanticoke Memorial Hospital



## Contact Information:

801 Middleford Rd.  
Seaford, DE 19973  
(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 summaries are provided to each hospital for review. Final quarterly submissions are 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. Hospitals are given the opportunity to review and provide feedback on the annual report prior to its release.

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

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**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.

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