
DELAWARE HOSPITAL
DISCHARGE SUMMARY
REPORT ♦ 2012

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DELAWARE HEALTH AND SOCIAL SERVICES

Division of Public Health

Acknowledgments

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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 2012 Delaware hospital discharge data, as well as trend data for selected characteristics. Hospitalization or hospital discharge refers to any discharge from a non-federal, short-stay, acute-care hospital in Delaware. Hospitalizations are expressed as numbers of discharges, not as unduplicated patients; as a result, a single patient with multiple hospitalizations can be counted more than once. Delaware hospital discharge data are based on inpatient hospitalizations and do not include outpatient, clinic, or emergency room data. Unless otherwise specified, the data presented represent discharges from the following hospitals and systems: Alfred I. duPont Hospital for Children, St. Francis Hospital, Select Specialty Hospital - Wilmington (also referred to as Select Medical Wilmington in some graphs), Christiana Care Health System (which consists of Wilmington Hospital and Christiana Hospital Newark), Bayhealth Medical Center (which consists of Kent General Hospital and Milford Memorial Hospital), Beebe Medical Center, and Nanticoke Memorial Hospital¹.

More information about the creation of annual files, as well as definitions of terms used in this report, can be found in the Technical Notes.

Key findings:

- The number of hospital discharges increased slightly from 2011 to 2012. While discharges have leveled off in recent years, aggregate hospital charges continued their steady increase (see page 20).
- Women accounted for 57.8 percent of all discharges compared to 42.2 percent for men. In the 25 to 34 year age group, four out of every five discharges were women.
- Inpatient hospitalizations in 2012 generated total charges of \$2.84 billion; 46.3 percent of that total (\$1.32 billion) was billed to Medicare.
- In 2012, the average length of stay (ALOS) was 4.7 days and the mean charge for a hospitalization was \$25,745.
- 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 heartbeat).
- The point of origin for 22.5 percent of hospitalizations was a clinic or physician's office.
- Non-residents accounted for 12.6 percent of all discharges from Delaware hospitals, most of whom came from Pennsylvania, Maryland, and New Jersey.

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

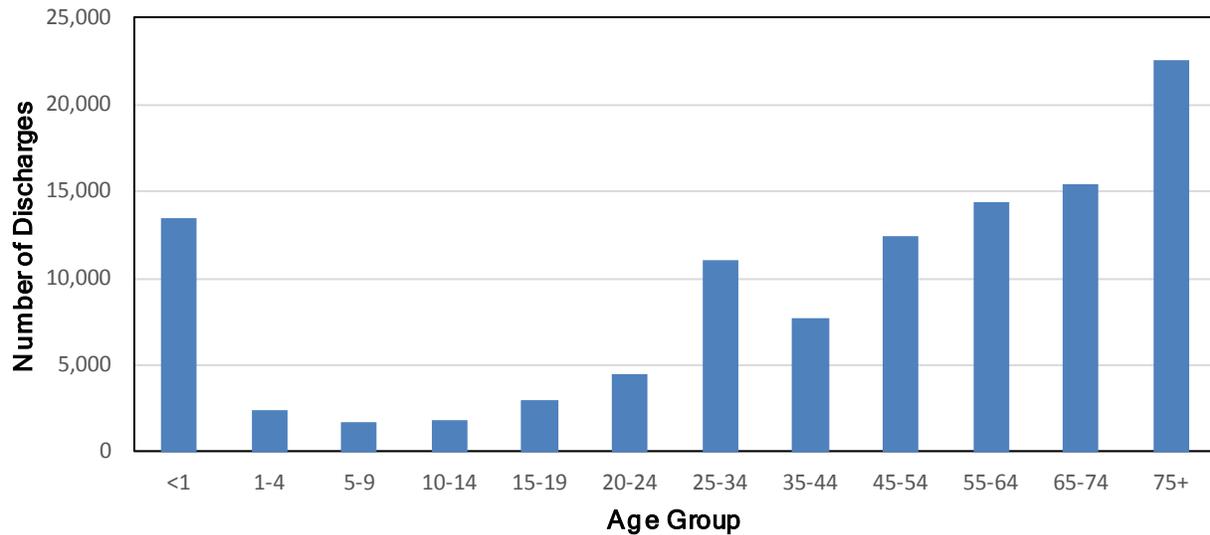
EXECUTIVE SUMMARY

- Hospital stays for previous C-sections represented 12.4 percent of pregnancy related discharges compared to 4.1 percent for normal deliveries.
- The average length of stay for premature and low birth weight babies was 25.0 days compared to 3.6 days for all deliveries.
- Over two-thirds of patients underwent a procedure while hospitalized; 23.9 percent had only one procedure, 17.5 had two procedures, and 26.8 had three or more during their stay.
- Patients who were uninsured and those covered by Medicare were more frequently admitted through the emergency department (ED) than any other route; 81.9 percent of uninsured patients and 65.3 percent of Medicare patients were admitted through the ED in 2012.
- Medicare and private insurers were the primary payers in 40.1 and 24.7 percent, respectively, of all hospital discharges in 2012. Medicaid was the primary payer in 21.6 percent of all hospital stays, and uninsured hospitalizations accounted for 2.3 percent of the total stays. The remaining 11.3 percent of hospitalizations were covered by other specified or unknown programs.

PATIENT CHARACTERISTICS

Patients under one year old accounted for 12.2 percent of all discharges in 2012; the majority of these discharges were infants hospitalized by virtue of being born in the hospital. Patients 65 and older were responsible for 34.4 percent of all discharges in 2012.

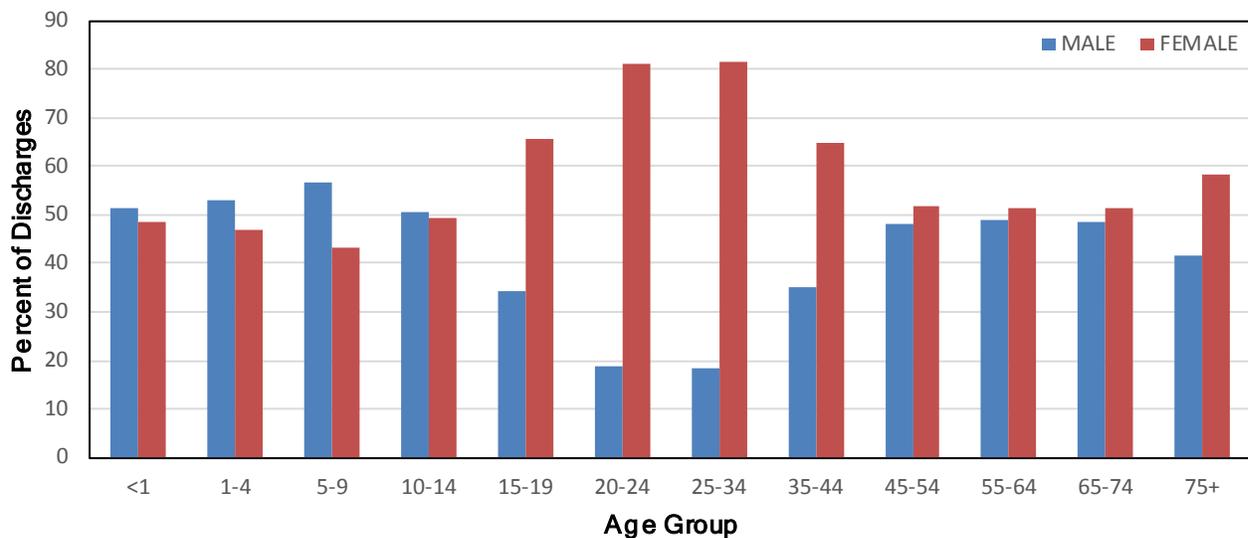
Figure 1. Hospital Discharges by Age Group, Delaware Hospitals, 2012.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Males made up the majority of discharges in the age groups under 15. For nearly all age groups age 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 2012, 57.8 percent of total discharges were women.

Figure 2. Percentage of Discharges by Sex and Age Group, Delaware Hospitals, 2012.

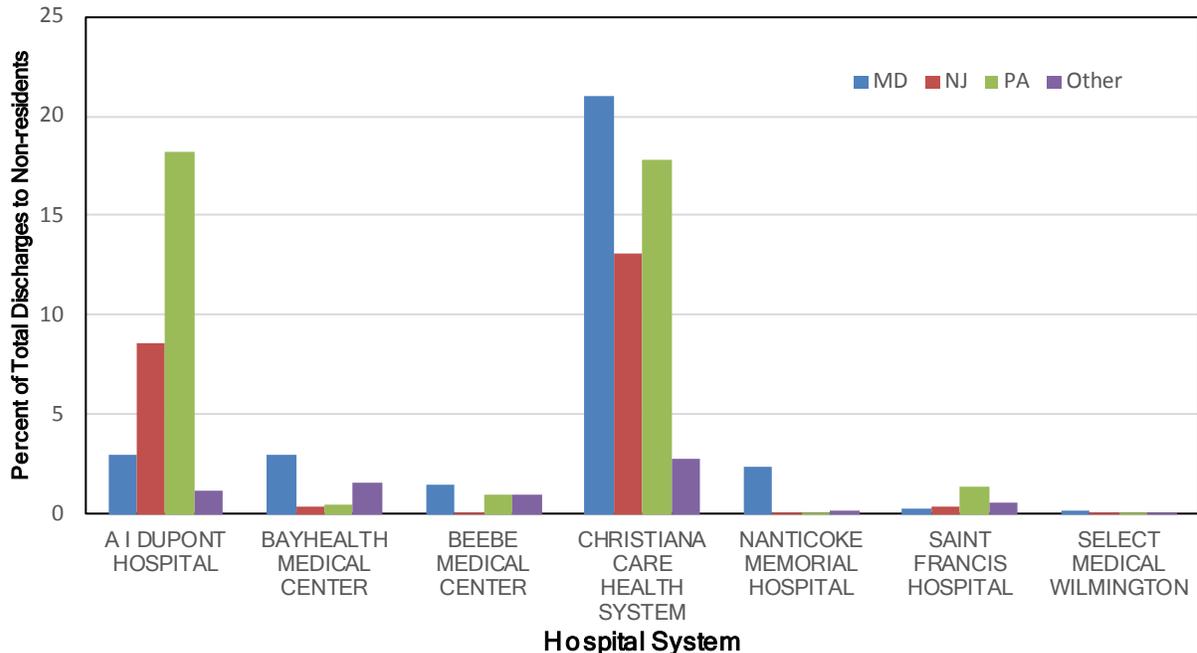


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

PATIENT CHARACTERISTICS

Non-residents accounted for 12.6 percent of all discharges from Delaware hospitals, most of whom came from Pennsylvania, Maryland, and New Jersey. Nearly half of the patients at A.I. duPont Hospital for Children were non-residents (49.9 percent).

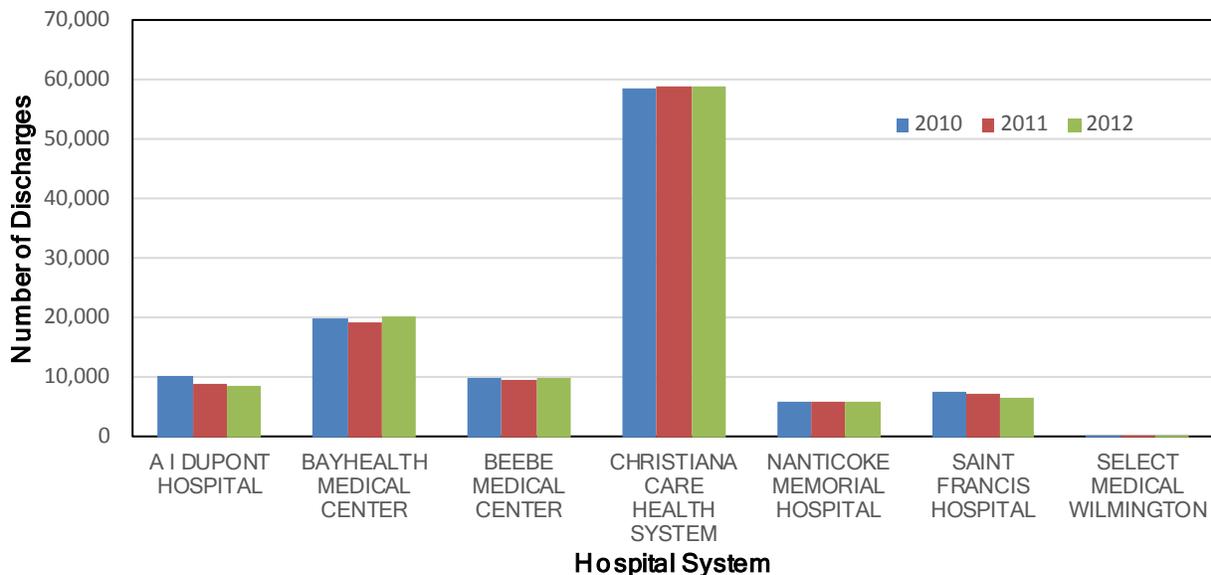
Figure 3. Percentage of Non-Resident Discharges by State, Delaware Hospitals, 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Hospital admissions declined slightly between 2010 and 2012. Total admissions fell 1.5 percent moving from 112,130 in 2010 to 110,427 in 2012. The two hospitals with the greatest percent change were A.I. duPont, which decreased 18.2 percent; and Saint Francis, which decreased 14.2 percent.

Figure 4. Number of Discharges by Hospital System, 2010-2012

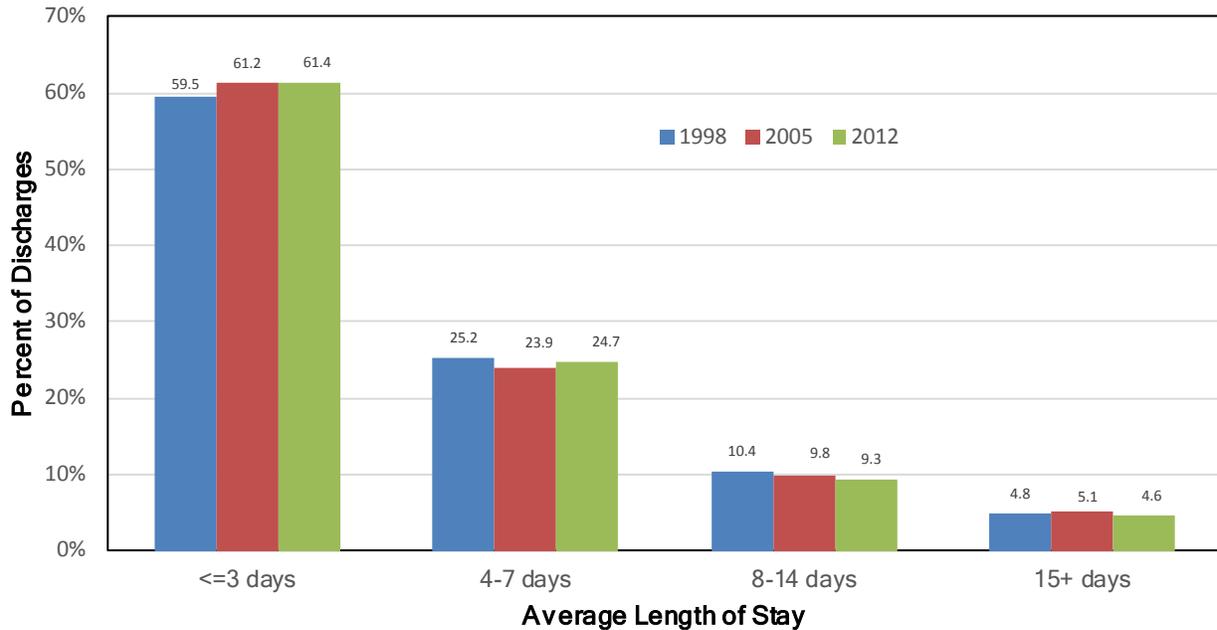


Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

PATIENT CHARACTERISTICS

Average length of stay (ALOS) dropped from 4.8 days in 1998 to 4.7 days in 2012. This decline was primarily due to an increase in the percentage of patients staying less than three days. In 2012 61.4 percent of patients stayed three or fewer days in the hospital. The largest percentage decline in length of stay occurred for patients admitted for 8-14 days (10.4 percent).

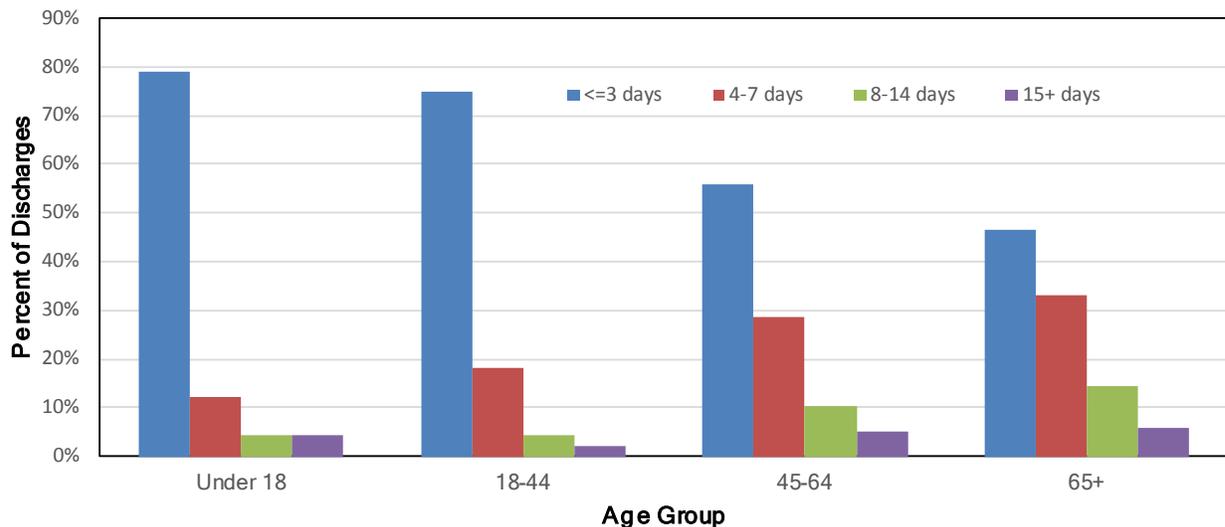
Figure 5. Percent of Hospital Discharges by Average Length of Stay Delaware, Selected Years 1998-2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Length of stay varies with age of patient. Patients under the age of 18 have the shortest lengths of stay. In 2012, 79.1 percent of patients under 18 had hospital stays of three days or less, compared to 46.7 percent for patients 65 and over. Patients aged 65 and over were more than three times as likely to have stays of 8 to 14 days when compared to patients under the age of 18.

Figure 6. Percent of Hospital Discharges by Average Length of Stay and Age Group Delaware Hospitals, 2012



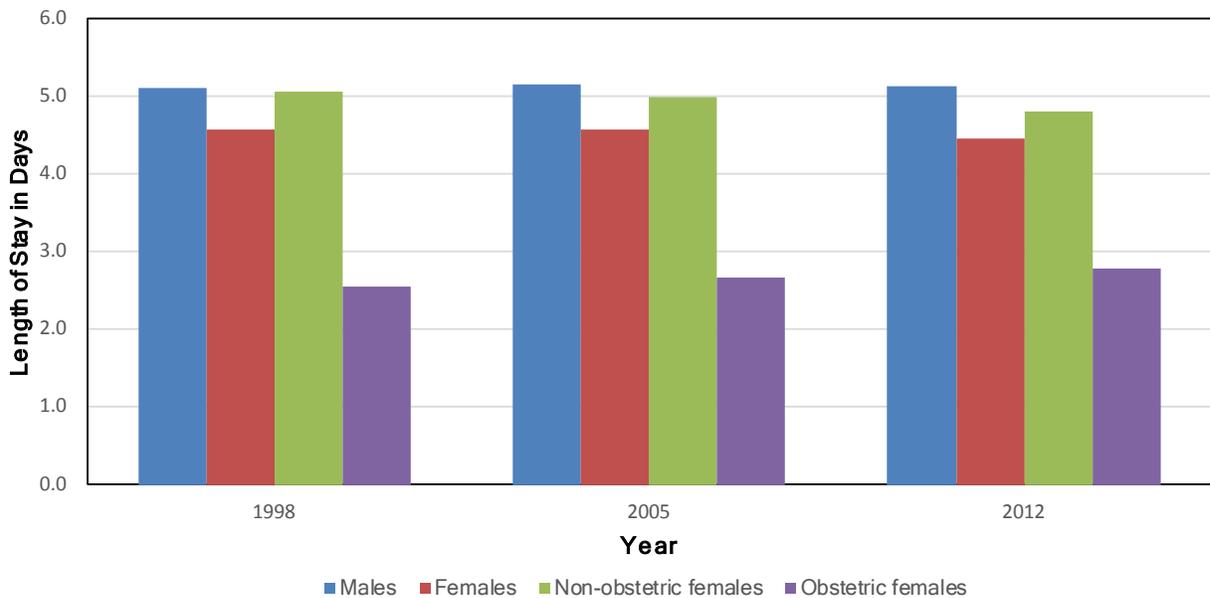
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

PATIENT CHARACTERISTICS

Gender

Between 1998 and 2012, the average length of stay (ALOS) for male patients increased 0.7 percent and decreased 2.7 percent for female patients. When female obstetrical patients were excluded from the calculation of average length of stay, male and female patients had similar ALOS figures in all time periods. The largest increase in average length of stay from 1998 to 2012 was seen in female obstetrical patients, whose length of stay increased 9.9 percent.

Figure 7. Mean Length of Stay by Patient Type, Delaware Hospitals Selected Years, 1998, 2005, 2012.



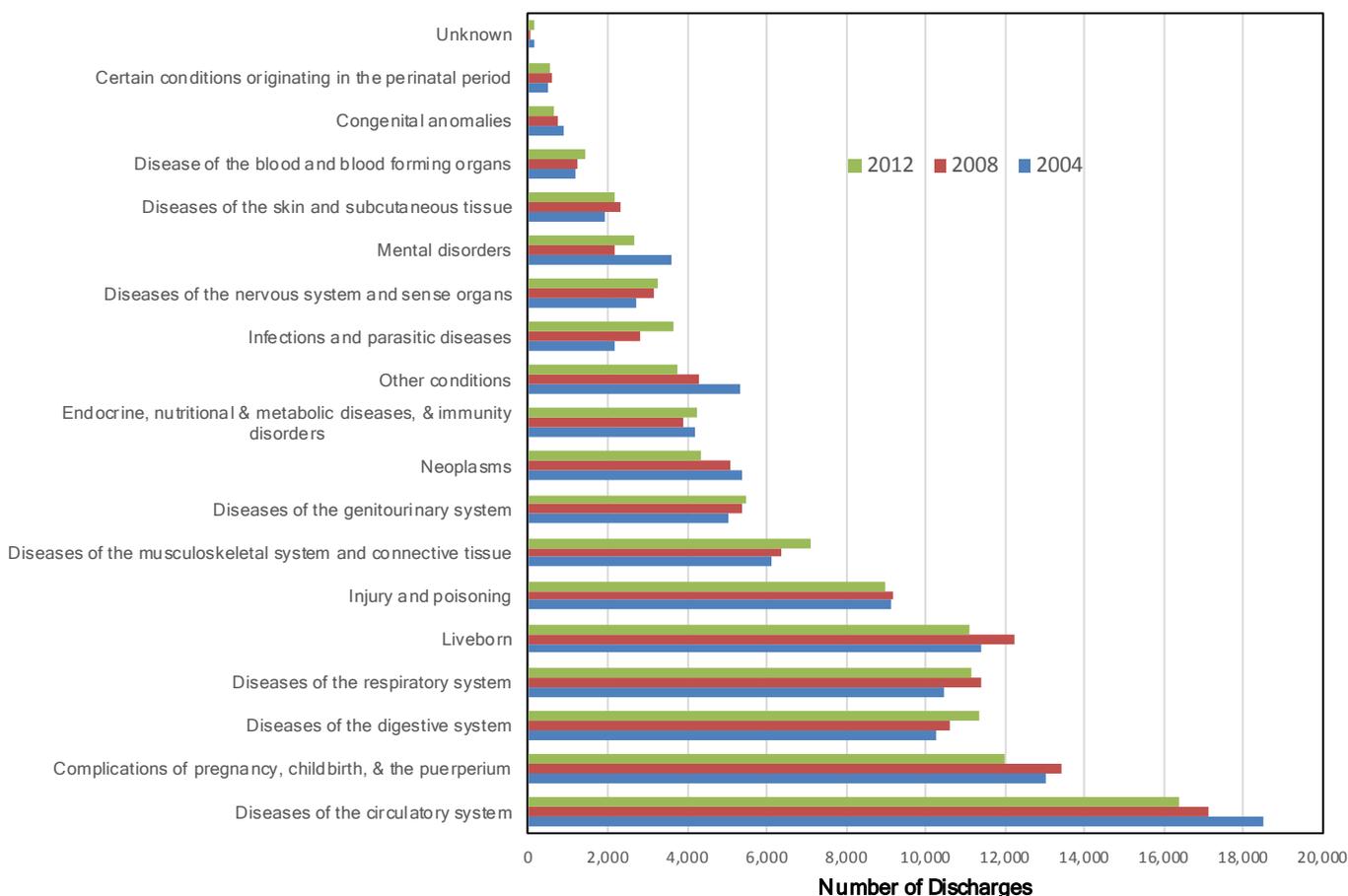
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

WHY PATIENTS WERE HOSPITALIZED

Most frequent reasons for hospitalization by primary diagnosis and body system²:

Diseases of the circulatory system accounted for 14.8 percent of the total discharges in 2012 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 heartbeat, heart attack, and stroke. Pregnancy and childbirth comprised 10.9 percent of the total discharges, and 10.1 percent of all discharges were related to diseases of the respiratory system, which included pneumonia, chronic obstructive pulmonary disease, asthma, and respiratory failure. Together, these three categories accounted for 35.8 percent of all hospitalizations.

Figure 8. Number of Discharges by Body System, Delaware Hospitals, Selected Years, 2004-2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

The largest percent increase (69.9 percent) in hospitalizations from 2004 to 2012 occurred in infections and parasitic diseases. Disease of the blood and blood forming organs also demonstrated a large percentage increase (22.1 percent) from 2004 to 2012. At 20.2 percent, the third largest increase in hospitalizations was due to diseases of the nervous system and sense organs. Other conditions accounted for the largest decrease in hospitalizations (29.6 percent).

² See Appendix A for details about the primary diagnoses and body system classifications.

WHY PATIENTS WERE HOSPITALIZED

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

Specific diagnoses varied by gender. Much of the variation was a result of the large number of women hospitalized due to pregnancy and delivery related conditions; four out of the top 10 diagnoses for women were related to pregnancy and childbirth. In Table 1, all of these diagnoses were rolled into the principal diagnosis of “Pregnancy & childbirth”. Both men and women experienced high numbers of discharges due to pneumonia, osteoarthritis, and congestive heart failure. Table 1 shows the most frequent diagnoses for both men and women, by number, percent, and rank of discharges by gender.

Table 1. Most Frequent Diagnoses (CCS Defined) by Gender, Delaware Hospitals 2012

CCS Principal Diagnosis	MALE			FEMALE		
	#	%	Rank	#	%	Rank
<i>All diagnoses</i>	46,634	100		63,793	100	
Pregnancy & childbirth	---	---	---	11,987	18.8	1
Liveborn Infant	5,592	12.0	1	5,532	8.7	2
Pneumonia (except that caused by tuberculosis or STD)	1,629	3.5	2	1,859	2.9	4
Osteoarthritis	1,269	2.7	5	1,884	3.0	3
Congestive heart failure; nonhypertensive	1,506	3.2	3	1,410	2.2	6
Septicemia (except in labor)	1,445	3.1	4	1,439	2.3	5
Spondylosis; intervertebral disc disorders; other back problems	1,035	2.2	7	1,072	1.7	9
Chronic obstructive pulmonary disease and bronchiectasis	864	1.9	15	1,199	1.9	8
Acute cerebrovascular disease	949	2.0	10	1,016	1.6	10
Skin and subcutaneous tissue infections	983	2.1	9	931	1.5	12
Cardiac dysrhythmias	944	2.0	11	968	1.5	11
Urinary tract infections	485	1.0	25	1,382	2.2	7
Diabetes mellitus with complications	1,014	2.2	8	845	1.3	15
Complication of device; implant or graft	934	2.0	13	895	1.4	14
Acute and unspecified renal failure	896	1.9	14	923	1.4	13

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Note: Clinical Classifications Software (CCS) is diagnostic classification system developed by the Agency for Healthcare Research and Quality (AHRQ). See Appendix A for more information. Table ordered based upon most frequent total diagnoses.

Most frequent reasons for hospitalization by age groups:

- Excluding liveborn infants, patients under 1 year were hospitalized most often for acute bronchitis, other perinatal conditions, and hemolytic jaundice and perinatal jaundice.
- For those ages 1-17, asthma, pneumonia (except that caused by tuberculosis or a sexually transmitted disease), appendicitis and other appendiceal conditions made up the top three diagnoses.
- For those ages 18-44, all of the top 10 diagnoses were associated with pregnancy and childbirth. If pregnancy and childbirth were excluded, diabetes mellitus with complications, skin and subcutaneous tissue infections, and mood disorders became the three most common reasons for hospitalization.
- For those ages 45-64, osteoarthritis, spondylosis; intervertebral disc disorders; other back problems, and septicemia (except in labor) comprised the top three diagnoses.
- For those over 65, congestive heart failure; nonhypertensive, pneumonia (except that caused by tuberculosis or a sexually transmitted disease), and osteoarthritis were the top three diagnoses.

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

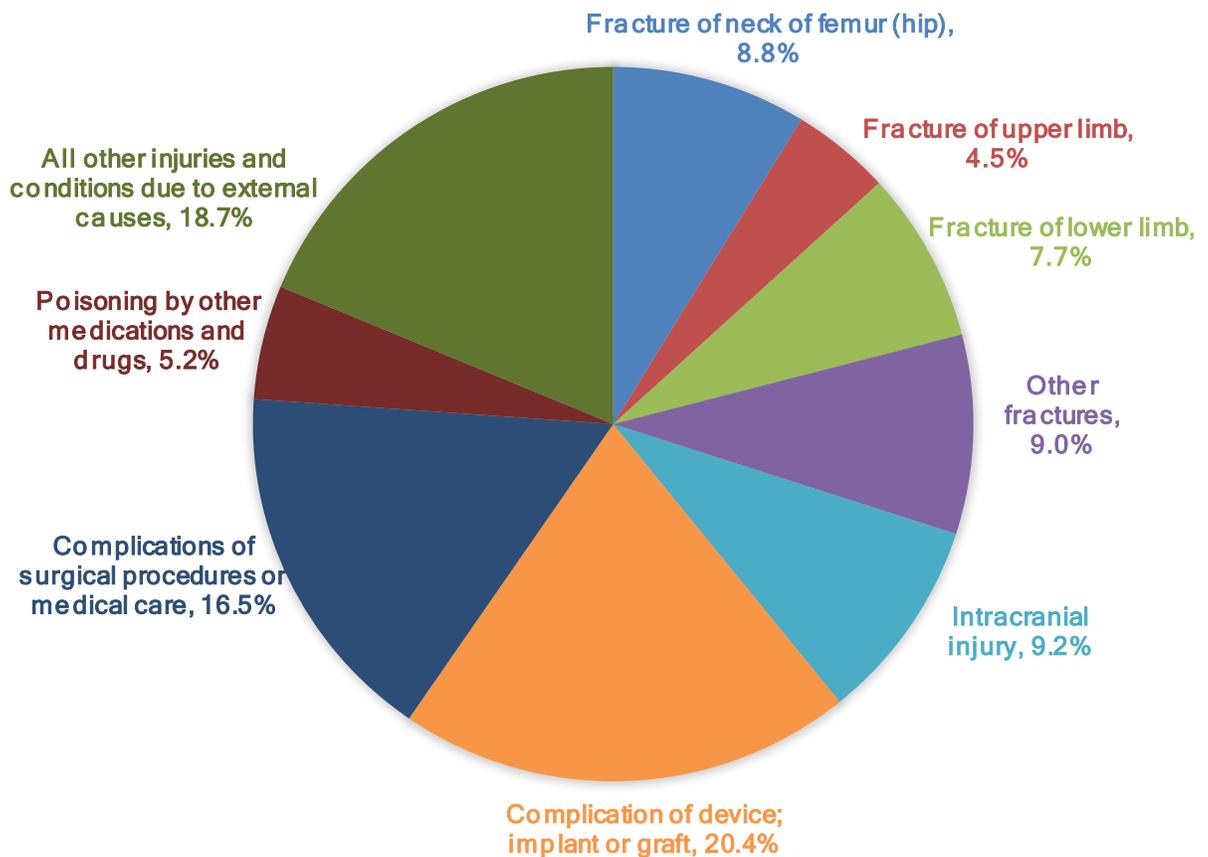
WHY PATIENTS WERE HOSPITALIZED - INJURIES

Injury hospitalizations:

Injury hospitalizations accounted for 8.1 percent of the total number of discharges and \$290 million in aggregate charges in 2012. The majority of patients were admitted through the emergency department, and the average charge for an injury stay ranged from \$15,234 for poisoning by other medications and drugs to \$86,076 for spinal cord injuries, with an overall average charge of \$32,357 (see Appendix A).

The most common primary diagnosis for an injury hospitalization in 2012 was complication of device; implant or graft, which accounted for 20.4 percent of injury hospitalizations. Complications of surgical procedures or medical care were responsible for another 16.5 percent of injury hospitalizations, followed by intracranial injury (9.2 percent), other fractures (9.0 percent), and fracture of neck of femur (hip) (8.8 percent).

FIGURE 9. MOST FREQUENT INJURY DIAGNOSES, DELAWARE HOSPITALS, 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

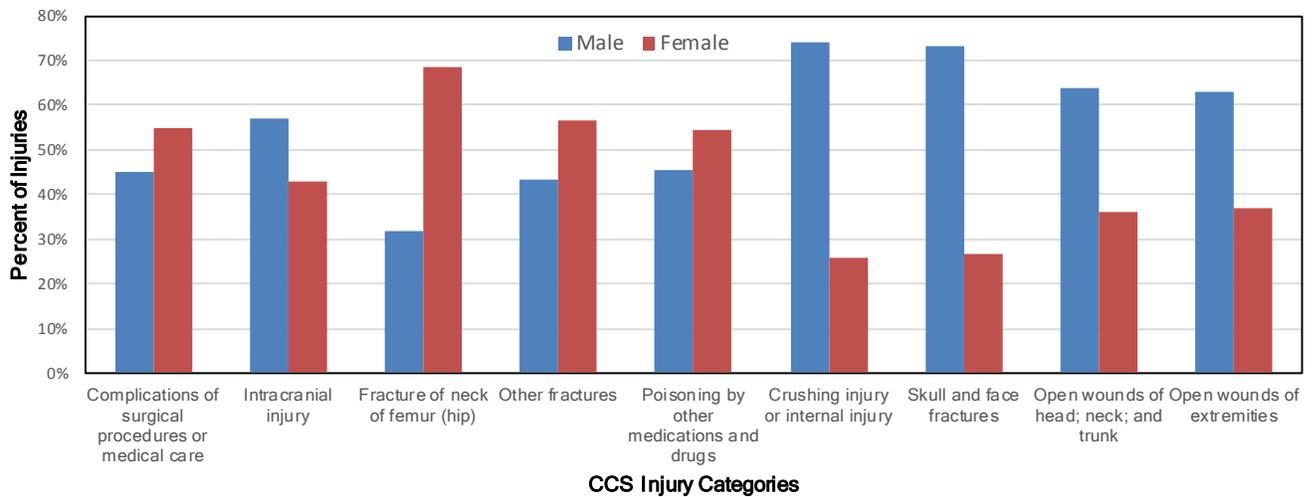
Falls were the most frequently specified external cause of injury (as defined by the Ecode listed on the discharge record). Falls accounted for 74.9 percent of hip fractures, 58.5 percent of upper limb fractures, 43.4 percent of intracranial injuries, and 36.8 percent of spinal cord injuries. Motor vehicle accidents were responsible for 20.1 percent of intracranial injuries and 17.1 percent of spinal cord injuries. Poisoning by psychotropic agents accounted for 3.1 percent of all injuries.

WHY PATIENTS WERE HOSPITALIZED - INJURIES

Gender

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

Figure 10. Selected Primary Injury Diagnoses by Gender, Delaware Hospitals, 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

WHY PATIENTS WERE HOSPITALIZED - PROCEDURES

Most frequent reasons for hospitalization by procedure:

In 2012, 68 percent of discharges had at least one associated procedure. Of the 75,280 hospital stays with an accompanying procedure, 35.0 percent had only a principal procedure performed; the remaining 65.0 percent had two or more procedures. Each discharge can have up to six procedures; this report examines the number of procedures, or the all-listed procedures.

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

Overall, the most frequently performed all-listed procedures were other therapeutic procedures; other procedures to assist delivery, respiratory intubation and mechanical ventilation, and diagnostic cardiac catheterization; coronary arteriography.

Table 2. Most Frequent All-listed Inpatient Procedures, Delaware Hospitals 2012

CCS Procedure	# of All -listed Procedures			% of Discharges with a Procedure
	MALE	FEMALE	Total	
Other therapeutic procedures	7,782	11,068	18,850	9.9
Other procedures to assist delivery	0	9,590	9,590	5.0
Respiratory intubation and mechanical ventilation	4,778	4,530	9,308	4.9
Diagnostic cardiac catheterization; coronary arteriography	5,527	3,772	9,299	4.9
Blood transfusion	4,254	4,757	9,011	4.7
Prophylactic vaccinations and inoculations	3,477	3,941	7,418	3.9
Other vascular catheterization; not heart	3,088	3,309	6,397	3.4
Fetal monitoring	0	5,653	5,653	3.0
Ophthalmologic and otologic diagnosis and treatment	2,809	2,828	5,637	3.0
Other OR procedures on vessels other than head and neck	3,203	1,973	5,176	2.7
Spinal fusion	2,301	2,382	4,683	2.5
Circumcision	4,482	22	4,504	2.4
Other diagnostic procedures (interview; evaluation; consultation)	2,033	2,298	4,331	2.3
Repair of current obstetric laceration	0	3,845	3,845	2.0
Cesarean section	0	3,632	3,632	1.9

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Notes: All-listed procedures refer to all procedures performed during a hospital stay; excludes other therapeutic procedures. Excludes 36 unknown genders.

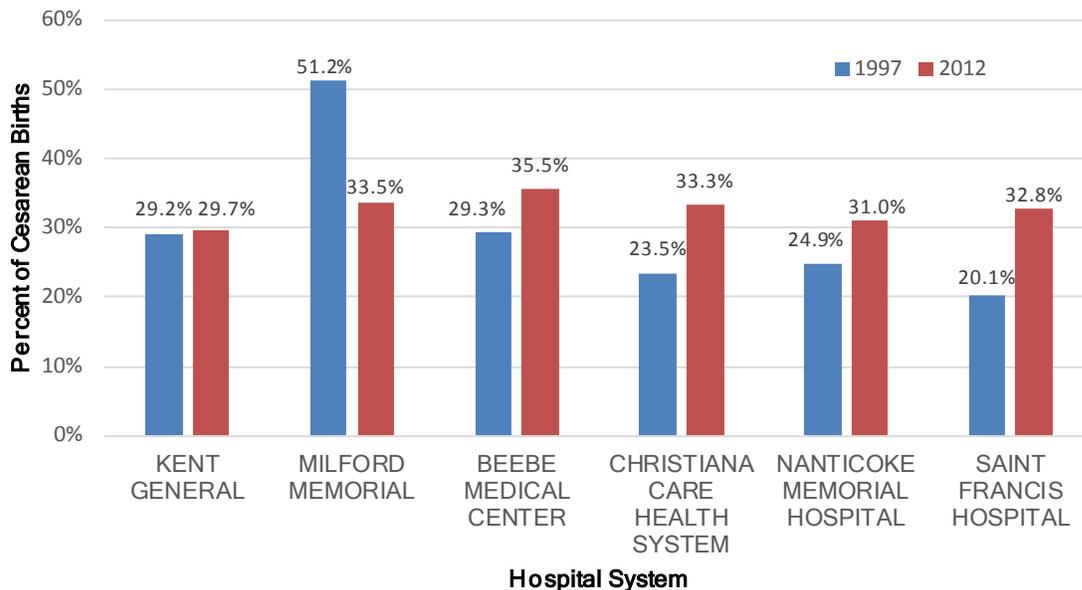
Males most frequently underwent other therapeutic procedures, diagnostic cardiac catheterization; coronary arteriography; and respiratory intubation and mechanical ventilation. Females most frequently underwent other therapeutic procedures, other procedures to assist delivery, and fetal monitoring. Four of the 10 most commonly performed procedures on females were related to pregnancy and childbirth.

³ 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 is related to cesarean delivery of newborn infants. Since 1997, annual cesarean delivery rates increased for every hospital in Delaware with the exception of Milford Memorial; by 2012, 32.7 percent of all births were delivered by cesarean. Saint Francis Hospital and Christiana Care Health System showed the greatest increases, rising 62.8 percent and 41.6 percent respectively. In 2012, Beebe Medical Center and Milford Memorial had the highest rates, with 35.5 percent and 33.5 percent of all births being delivered by cesareans. Kent General had the lowest percentage of births delivered by cesarean (29.7 percent).

Figure 11. Annual Cesarean Delivery Rates by Hospital, Delaware Hospitals, 1997 and 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Gender

In 2012, obstetrical procedures accounted for one in four all-listed procedures performed on females and included other procedures to assist delivery, fetal monitoring, cesarean sections, repair of current obstetrical laceration, and artificial rupture of membranes to assist delivery.

For males, other therapeutic procedures accounted for 9.5 percent of the total procedures, followed by diagnostic cardiac catheterization; coronary arteriography (6.7 percent), and respiratory intubation and mechanical ventilation (5.8 percent).

The following procedures were present in the ten most commonly performed procedures for both males and females:

- diagnostic cardiac catheterization; coronary arteriography
- blood transfusion
- respiratory intubation and mechanical ventilation
- prophylactic vaccinations and inoculations
- other vascular catheterization; not heart
- other therapeutic procedures.

WHY PATIENTS WERE HOSPITALIZED - PROCEDURES

Age

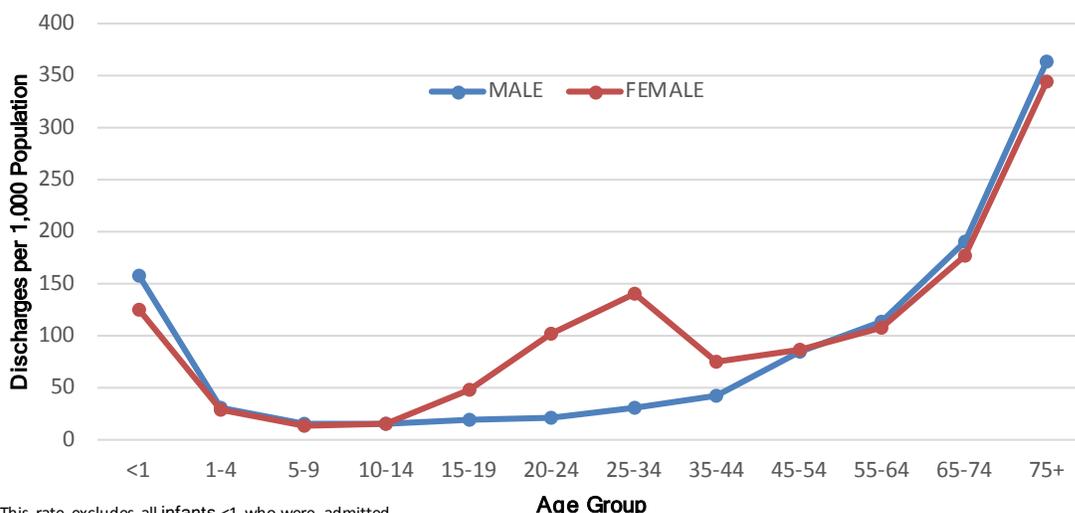
- For patients under 1 year, prophylactic vaccinations and inoculations, ophthalmologic and otologic diagnosis and treatment, and circumcision were the most common procedures.
- For patients ages 1 to 17, other therapeutic procedures on muscles and tendons, blood transfusion, and other vascular catheterization; not heart were the most frequently performed procedures.
- Obstetric procedures, specifically other procedures to assist delivery, fetal monitoring, and other therapeutic procedures, were the most common procedures for those ages 18-44.
- Other therapeutic procedures, diagnostic cardiac catheterization; coronary arteriography, and respiratory intubation and mechanical ventilation were the most frequently performed procedures for those 45-64.
- The most commonly performed principal procedures on patients 65 and older were other therapeutic procedures, blood transfusion, and diagnostic cardiac catheterization; coronary arteriography.

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 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 4.9 times that of males.

Figure 12. Resident Discharge Rates* by Sex and Age, Delaware Hospitals, 2012

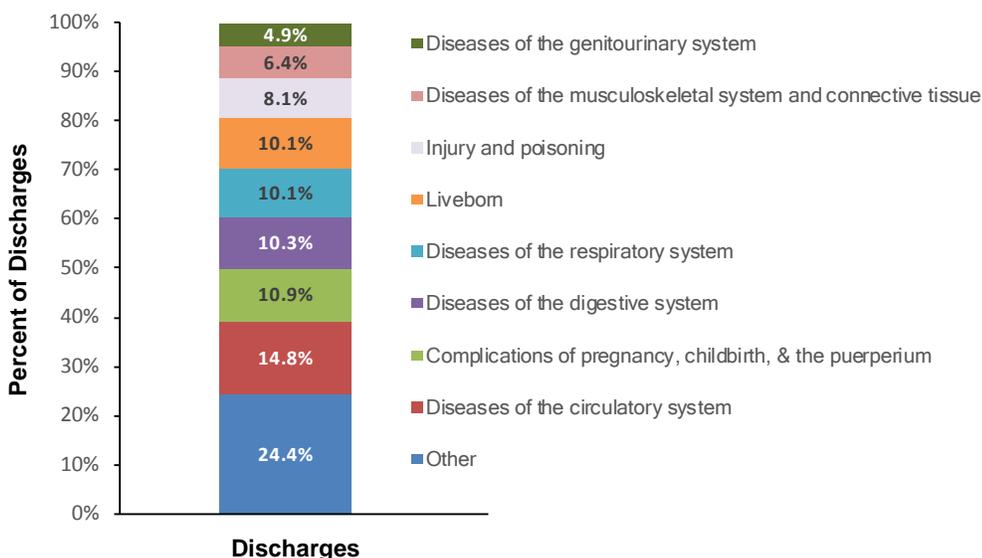


*This rate excludes all infants <1 who were admitted by virtue of being born in the hospital.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Figure 13. Percent of Resident Discharges by Body System Delaware Hospitals, 2012

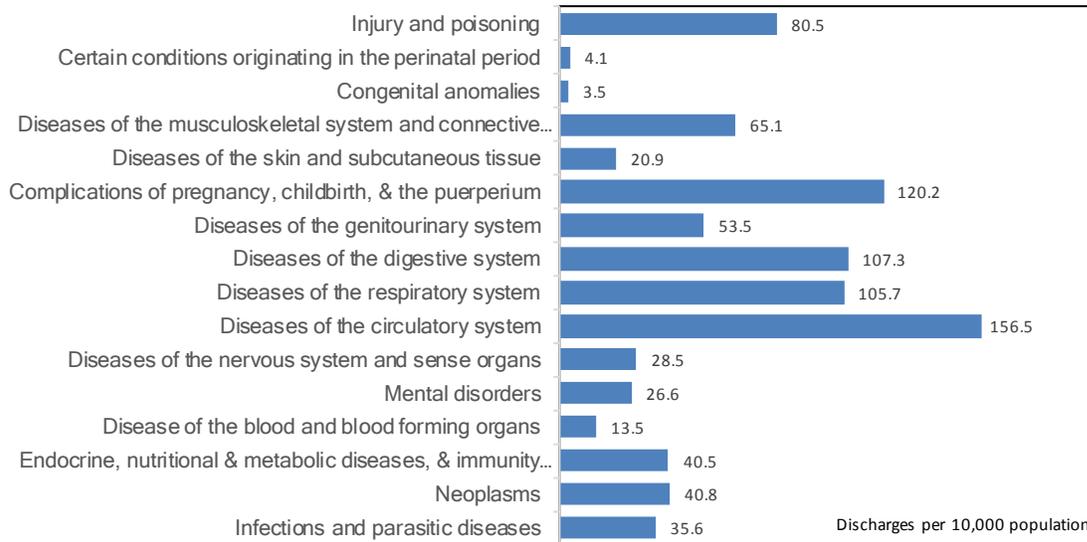
In 2012, Delawareans were discharged most frequently for diseases of the circulatory system, accounting for 14.8 percent of resident hospital stays. The most common diagnoses for diseases of the circulatory system included heart failure, coronary artery disease, and irregular heartbeat. Pregnancy and childbirth; and newborn infants were the second and fifth most common reasons for resident hospital stays, followed by diseases of the digestive system, which included biliary tract disease, gastrointestinal hemorrhage, and intestinal obstruction. These diseases of the respiratory system, including pneumonia, COPD (chronic obstructive pulmonary disease), and asthma.



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOSPITALIZATIONS OF DELAWARE RESIDENTS

Figure 14. Hospitalization Rates by Body System* Delaware Residents, 2012

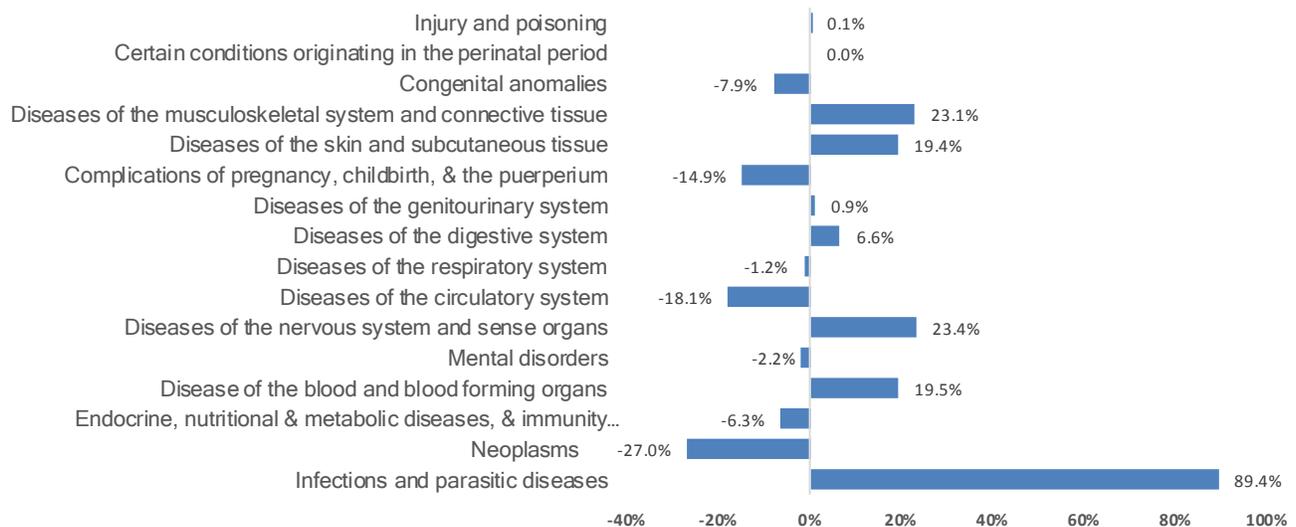


* Excluding hospitalizations related to pregnancy and liveborn infants.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

High hospital discharge rates in 2012 were not necessarily indicative of large rate increases over the previous 10 years. In some categories, like diseases of the circulatory system, high 2012 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, 2012 rates were comparatively low, though both had exhibited significant rate increases over the prior 10 year period.

Figure 15. Percent Change in Hospitalization Rates by Body System* Delaware Residents, 2002 versus 2012



*Excluding hospitalizations related to pregnancy and liveborn infants.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOSPITALIZATIONS OF DELAWARE RESIDENTS

When the specific diagnoses that comprise each body system were examined, the following 25 principal diagnoses had the highest discharge rates of Delaware residents in 2012.

Table 3. Top 25 CCS Diagnoses with the Highest Hospital Discharge Rates* for Delaware Residents

	2002		2007		2012		% Change from 2002 to 2012
	Number	Rate	Number	Rate	Number	Rate	
Pneumonia (except that caused by tuberculosis or STD)	2,832	35.1	2,869	32.9	3,097	33.8	-3.7%
Osteoarthritis	1,509	18.7	2,406	27.6	2,811	30.7	64.2%
Congestive heart failure; nonhypertensive	2,751	34.1	2,650	30.4	2,645	28.8	-15.5%
Septicemia (except in labor)	836	10.4	1,732	19.9	2,628	28.7	176.0%
Chronic obstructive pulmonary disease and bronchiectasis	1,483	18.4	1,665	19.1	1,949	21.3	15.8%
Spondylosis; intervertebral disc disorders; other back problems	1,522	18.9	1,438	16.5	1,797	19.6	3.7%
Acute cerebrovascular disease	1,501	18.6	1,516	17.4	1,753	19.1	2.7%
Skin and subcutaneous tissue infections	1,133	14.1	1,898	21.8	1,699	18.5	31.2%
Acute and unspecified renal failure	531	6.6	1,322	15.2	1,697	18.5	180.3%
Cardiac dysrhythmias	1,647	20.4	1,726	19.8	1,686	18.4	-9.8%
Urinary tract infections	1,196	14.8	1,559	17.9	1,676	18.3	23.6%
Diabetes mellitus with complications	1,224	15.2	1,441	16.5	1,666	18.2	19.7%
Complication of device; implant or graft	1,230	15.3	1,427	16.4	1,538	16.8	9.8%
Acute myocardial infarction	1,777	22.0	1,448	16.6	1,457	15.9	-27.7%
Rehabilitation care; fitting of prostheses; and adjustment of device	2,118	26.3	1,759	20.2	1,404	15.3	-41.8%
Complications of surgical procedures or medical care	1,175	14.6	1,219	14.0	1,271	13.9	-4.8%
Coronary atherosclerosis and other heart disease	1,944	24.1	2,240	25.7	1,202	13.1	-45.6%
Asthma	1,218	15.1	1,450	16.6	1,160	12.7	-15.9%
Respiratory failure; insufficiency; arrest (adult)	822	10.2	1,453	16.7	1,155	12.6	23.5%
Biliary tract disease	1,021	12.7	1,195	13.7	1,135	12.4	-2.4%
Fluid and electrolyte disorders	1,525	18.9	1,281	14.7	1,049	11.4	-39.7%
Gastrointestinal hemorrhage	841	10.4	825	9.5	1,006	11.0	5.8%
Intestinal obstruction without hernia	750	9.3	901	10.3	976	10.6	14.0%
Diverticulosis and diverticulitis	763	9.5	961	11.0	965	10.5	10.5%
Intestinal infection	370	4.6	704	8.1	870	9.5	106.5%

*Hospitalization rate per 10,000, ranked by 2012 figures. Excluding pregnancy-related discharges and liveborn infants.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Diseases of the circulatory system accounted for five of the 25 conditions with the highest hospitalization rates; these included:

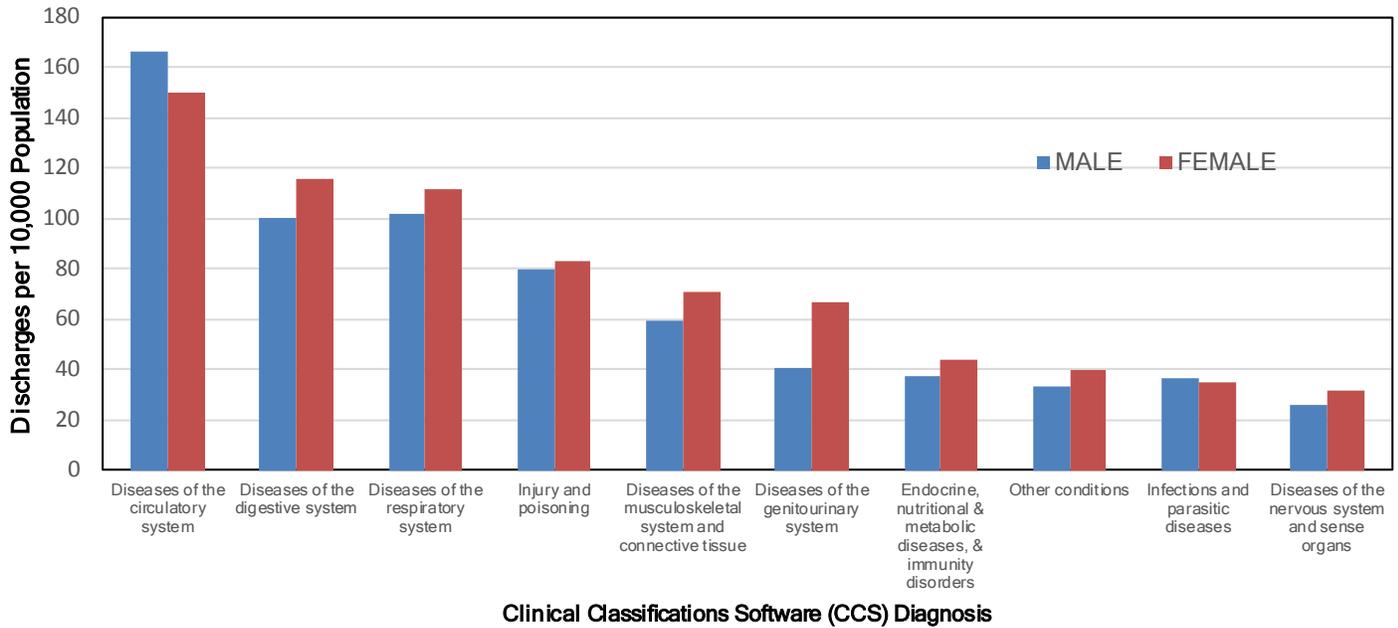
- congestive heart failure;
- coronary atherosclerosis and other heart disease (coronary artery disease);
- cardiac dysrhythmias (irregular heartbeat);
- acute cerebrovascular disease (stroke);
- acute myocardial infarction (heart attack).

Four of the circulatory conditions listed above showed significant decreases in their rates since 2002: heart failure, coronary artery disease, irregular heartbeat, and heart attack.

Hospitalization rates for acute and unspecified renal failure, septicemia (except in labor), and intestinal infection demonstrated the greatest increases between 2002 and 2012.

HOSPITALIZATIONS OF DELAWARE RESIDENTS

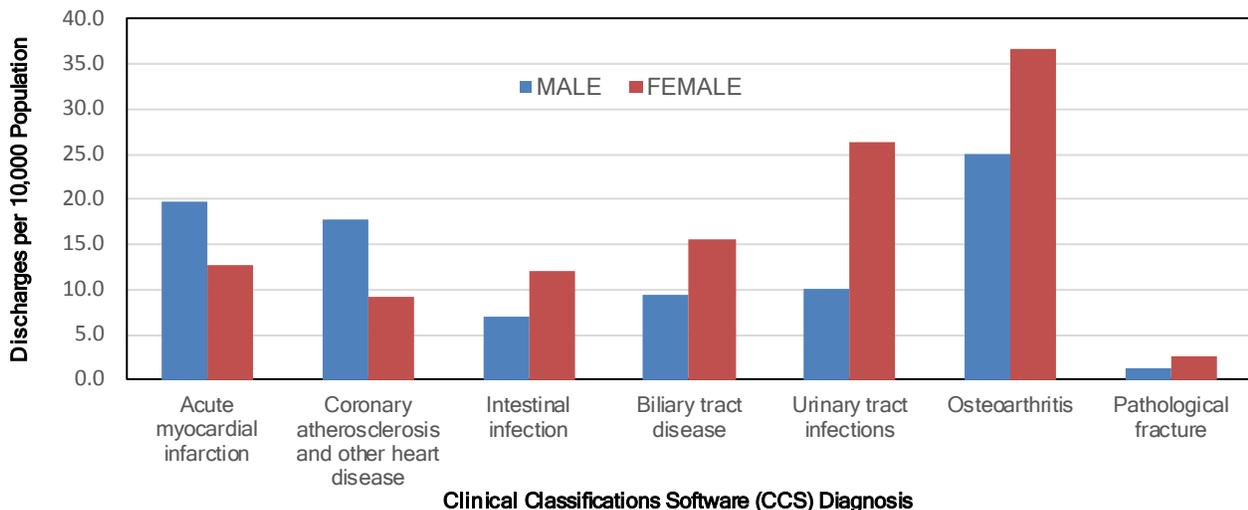
Figure 16. Delaware Resident Discharge Rates by Body System and Gender Delaware Hospitals, 2012



Source: Delaware Health and Social Services, Division of Public Health, 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.

Figure 17. Delaware Hospitals Discharge Rates for Residents by Gender and Selected Primary Diagnoses, 2012



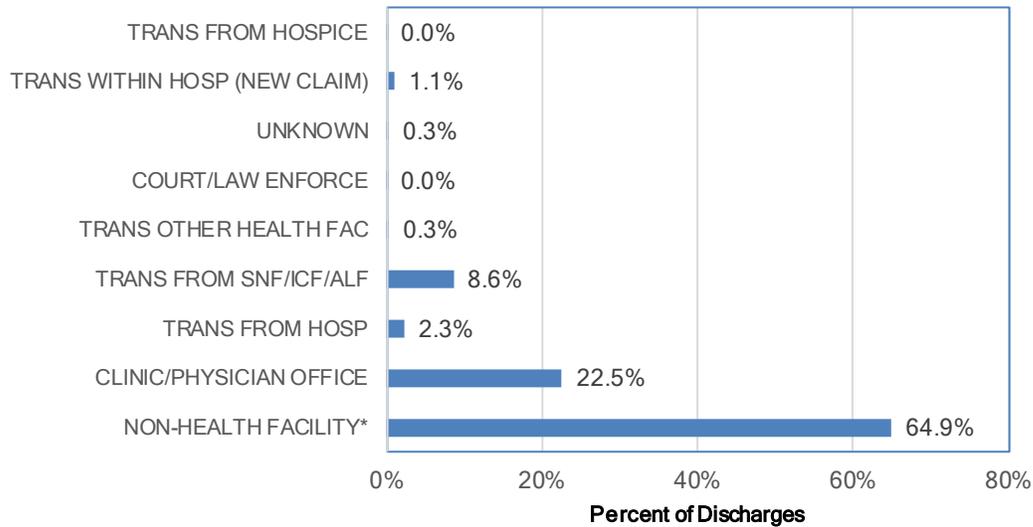
Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOW PATIENTS WERE ADMITTED

Point of Origin:

Non-health facilities and clinic/physician offices accounted for 87.4 percent of all hospital discharges in 2012. The majority of the remaining points of origin were transfers from nursing homes (skilled nursing facilities (SNF), intermediate care facilities (ICF), assisted living facilities (ALF)) 8.6 percent, and other hospitals, 2.3 percent.

Figure 18. Point of Origin Delaware Hospitals, 2012

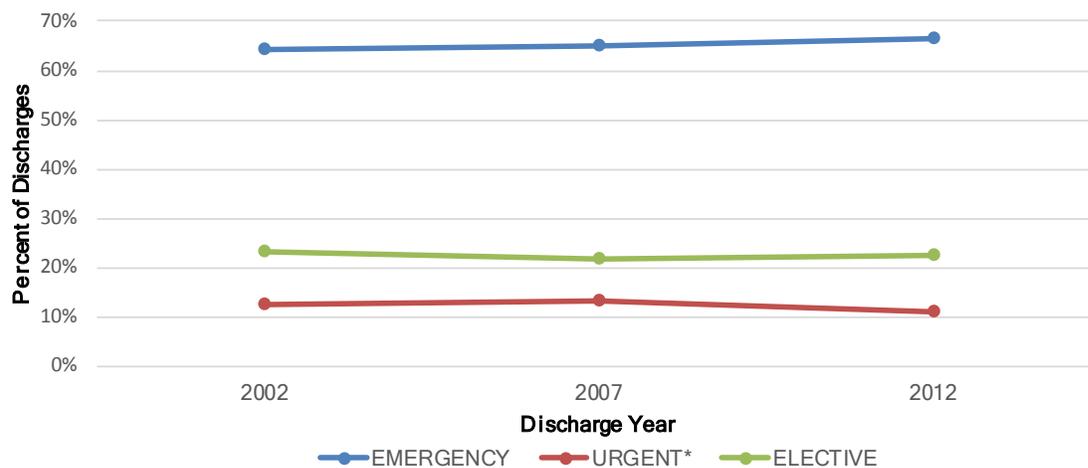


* Non-Health Care Facility includes walk-ins, auto accidents, and ambulance runs

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Between 2002 and 2012, the majority of admissions continued to be classified as emergency in nature. In 2002, emergency admissions accounted for 64.4 percent of all admissions. By 2012, the proportion of emergency admissions had increased to 66.6 percent, while urgent admissions fell from 12.5 percent to 11.1 percent between 2002 and 2012.

Figure 19. Proportion of Hospital Discharges by Type of Admission Delaware Hospitals, 2002 - 2012



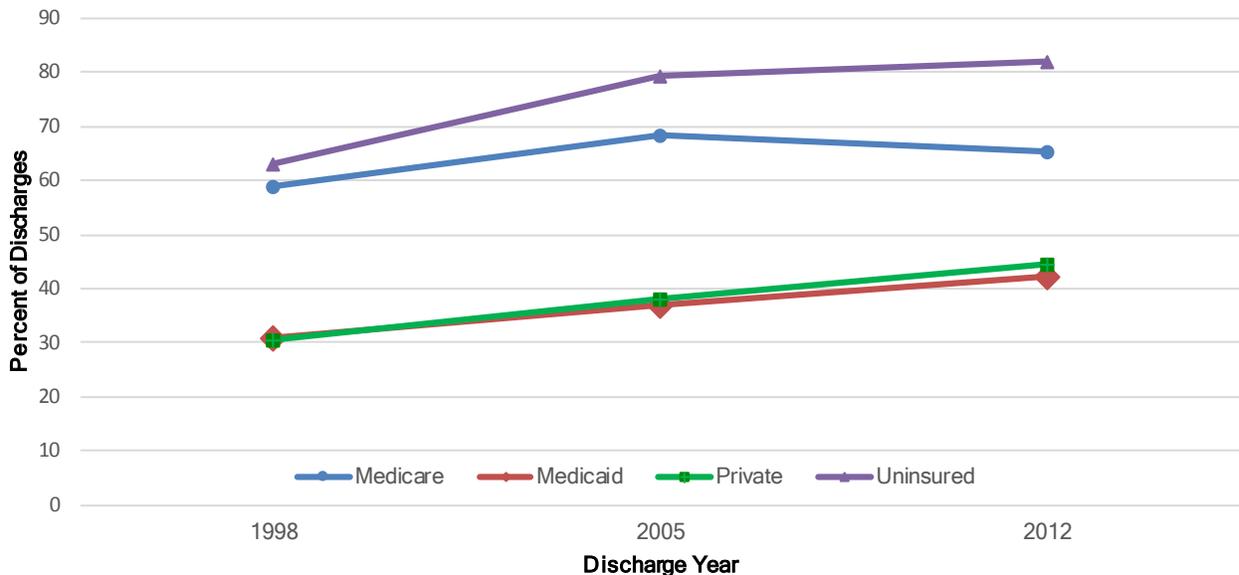
* Urgent encompasses situations that require immediate attention due to a physical or mental disorder but are not life threatening

Source: Delaware Health and Social Services, Division of Public Health, 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 2012, 81.9 percent of uninsured admissions, 65.3 percent of Medicare admissions, 44.5 percent of private admissions, and 42.2 percent of Medicaid admissions were admitted through the ED.

Figure 20. Percent of each Payer's Discharges Originating in the ED Delaware, 1998 - 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

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

Table 4. Most Common Diagnoses for ED Admissions

Delaware Hospitals, 2012	Frequency	Percent *
Pneumonia (except that caused by tuberculosis or STD)	2,788	5.1
Septicemia (except in labor)	2,344	4.3
Congestive heart failure; nonhypertensive	2,291	4.2
Chronic obstructive pulmonary disease and bronchiectas	1,642	3.0
Acute cerebrovascular disease	1,525	2.8
Acute and unspecified renal failure	1,462	2.7
Urinary tract infections	1,462	2.7
Cardiac dysrhythmias	1,417	2.6
Skin and subcutaneous tissue infections	1,386	2.6
Diabetes mellitus with complications	1,373	2.5

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

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

- There was one change in the ten most common diagnoses originating in the ED from 2011 to 2012. Acute myocardial infarction (dropped to eleventh place) was replaced by acute and unspecified renal failure.
- Three of the 10 most common emergency department diagnoses were related to circulatory conditions: heart failure, stroke, and irregular heartbeat.
- Another four of the most common emergency department diagnoses were primarily due to infections: pneumonia, skin infections, septicemia, and urinary tract infections.

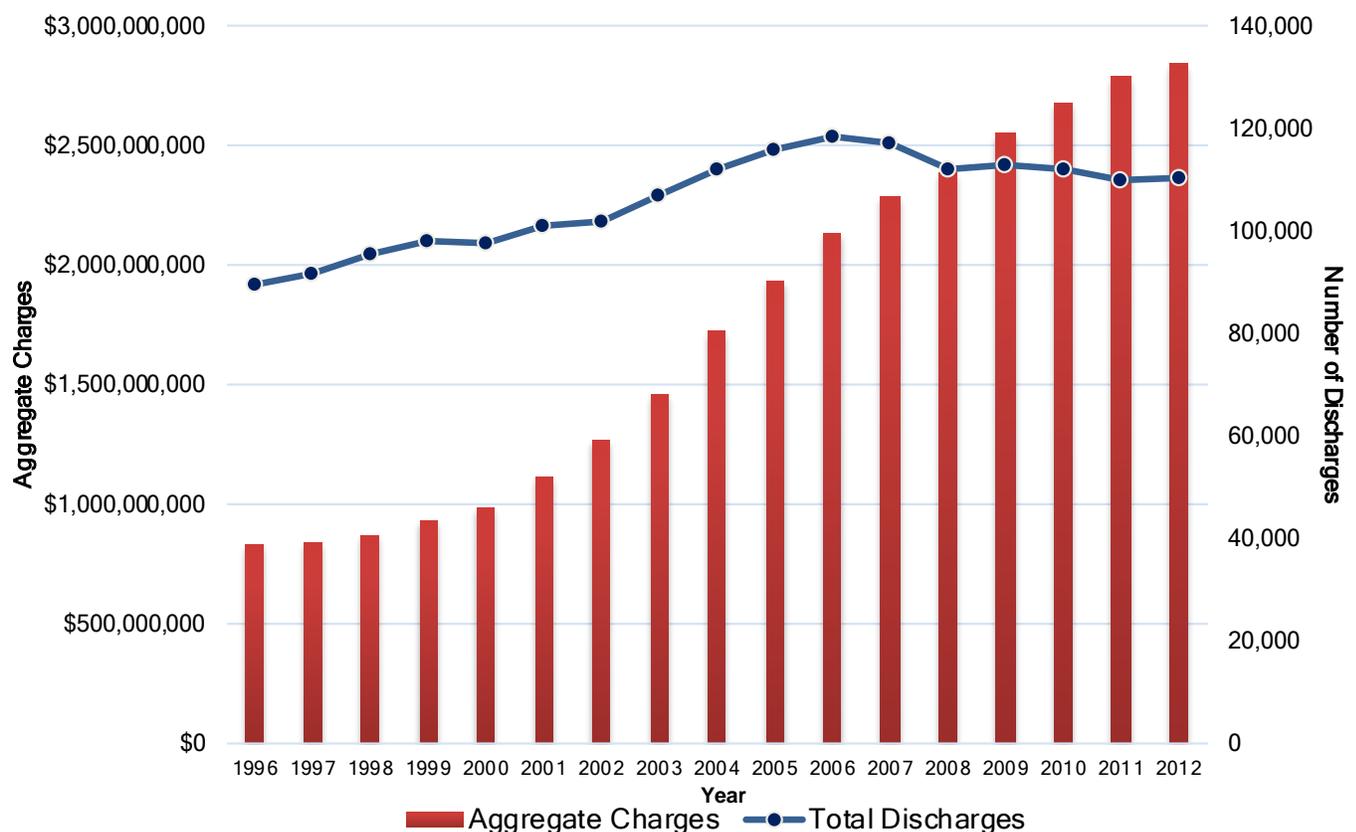
HOSPITAL CHARGES AND BILLING

Inpatient charges:

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

In 2012, total aggregate charges for all hospitalizations in Delaware equaled \$2.84 billion, a 65.4 percent increase in aggregate charges from 2004. The number of discharges fell from 112,026 in 2004 to 110,427 in 2012, a 1.4 percent decrease.

Figure 21. Number of Discharges and Total Aggregate Charges by Year Delaware Hospitals, 1996 - 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

The average charge for a hospital stay rose in 2012 to \$25,745 compared to \$15,345 in 2004, while the median charge per stay was \$14,083 in 2012 compared to \$8,482 in 2004.

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 \$40,970 to \$163,056. These three diagnostic groups also had the longest average stays, ranging from 7.7 to 12.2 days.

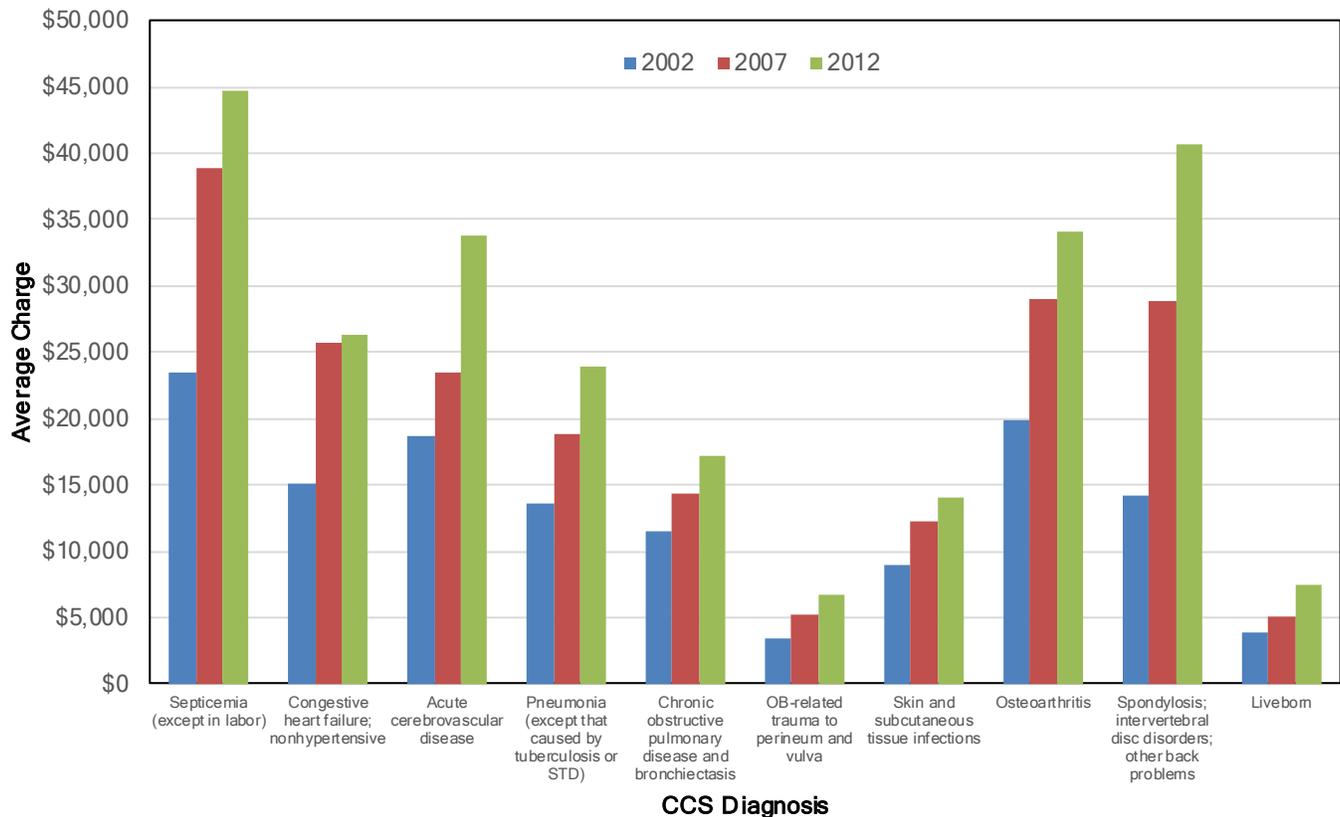
Looking at specific diagnoses within groups showed that the most expensive diagnoses were leukemias, digestive congenital anomalies, nervous system congenital anomalies, and heart valve disorders. However, the ten most expensive diagnoses occurred relatively rarely and accounted for just 1.1 percent of all discharges in 2012. In comparison, the 10 diagnoses that occurred most frequently accounted for 30.9 percent of the total discharges in 2012 (see Appendix E for more information).

HOSPITAL CHARGES AND BILLING

From 2002 to 2012, the average charges rose for each of the 10 highest volume diagnoses. The highest volume diagnoses whose average charges increased the most were:

- spondylosis; intervertebral disc disorders; other back problems (186 percent),
- liveborn (98 percent).
- OB-related trauma to perineum and vulva (97 percent).

Figure 22. Average Hospital Charges for Highest* Volume CCS Diagnoses Delaware Hospitals, 2002-2012



*Based on 10 most common diagnoses in 2012.

Source: Delaware Health and Social Services, Division of Public Health, 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 2002, the aggregate charges for 2012's highest volume diagnoses totaled \$275.7 million and accounted for 21.7 percent of the total aggregate charges for all diagnoses.
- By 2012, the aggregate charges for those same diagnoses had more than doubled to \$711.6 million, which accounted for 25.0 percent of the total aggregate charges.

In 2012, the 10 conditions with the highest total billed charges accounted for 31.7 percent of the total aggregate charges. Septicemia (except in labor) incurred the largest aggregate charges of any diagnosis, resulting in a total hospital bill of \$129.0 million. Although hospital stays for newborns had relatively low average charges, their high frequency resulted in liveborn infants having the fifth highest aggregate charges (see Appendix E for more information).

HOSPITAL CHARGES AND BILLING

Insurance status:

The following payer sources are listed in this report:

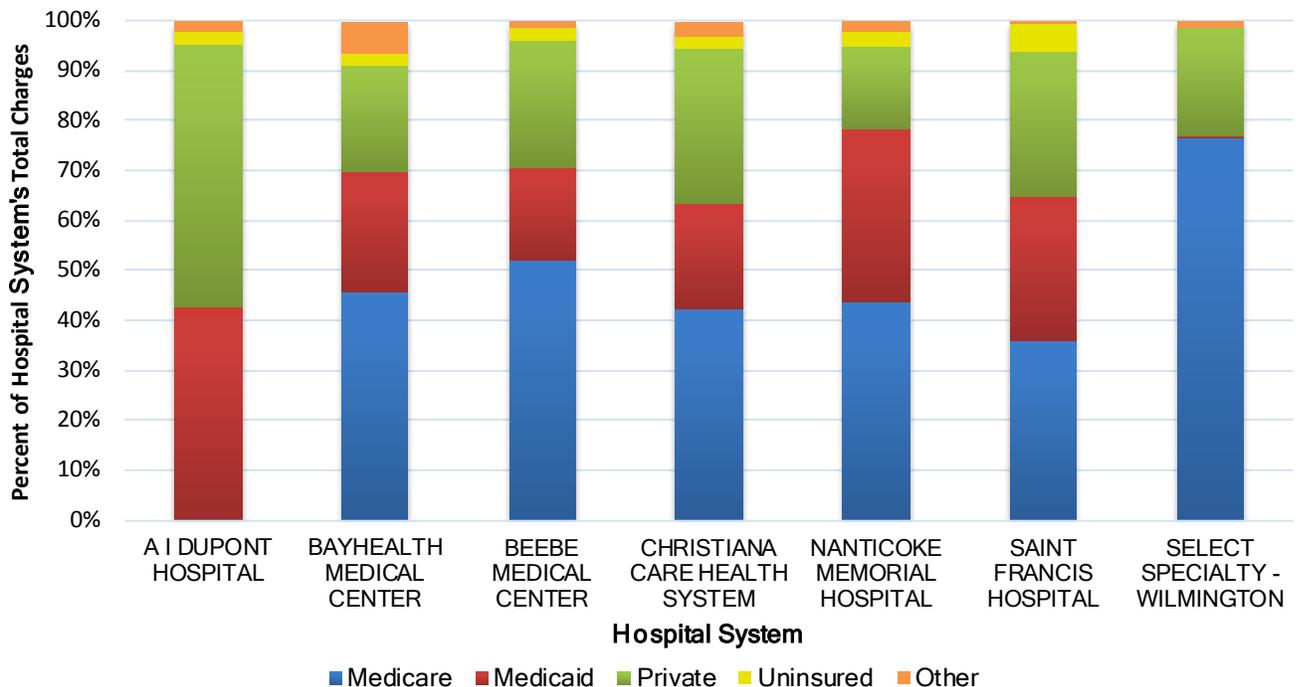
- Medicare
- Medicaid
- Private insurance carriers, such as:
 - Blue Cross Blue Shield
 - HMOs
 - Commercial insurance
- Uninsured
 - Patients who have no insurance and self-pay
- Other types of insurance, such as:
 - Workman’s compensation
 - CHAMPUS (Civilian Health and Medical Program of the Uniformed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

In 2012, 64.7 percent of hospitalizations were billed to Medicare (40.3 percent) and Medicaid (24.3 percent), 29.4 percent were billed to private insurance, and the remaining 6.0 percent was billed to other types of coverage (3.3 percent) or to the patient (2.7 percent uninsured).

Patients whose care was primarily billed to Medicare had both the highest average charges (\$29,552) and the greatest aggregate charges (\$1.3 billion).

In 2012, Select Specialty - Wilmington had the highest percent of charges billed to Medicare. A. I. DuPont Hospital for Children had the highest percentage billed to both privately insured and Medicaid covered patients, and Saint Francis Hospital had the highest percent of charges with no coverage.

Figure 23. Distribution of Total Charges by Primary Payer Type and Hospital System Delaware, 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOSPITAL CHARGES AND BILLING

Medicare:

From 1998 to 2012, the percent of hospital stays whose primary payer was Medicare increased from 35.9 to 40.3 percent. Over the same time period, the proportion of aggregate charges billed to Medicare remained at 46.3 percent.

Four of the 10 most frequent diagnoses for Medicare patients were related to diseases of the circulatory system. The three most frequent diagnoses accounted for 14.5 percent of Medicare hospitalizations. The three most frequent diagnoses for Medicare patients in 2012 were⁷:

- congestive heart failure; nonhypertensive;
- pneumonia (except that caused by tuberculosis or a sexually transmitted disease);
- septicemia (except in labor).

Medicaid:

From 1998 to 2012, Medicaid covered hospitalizations increased from 13.4 to 24.3 percent. Over the same time period, the proportion of aggregate charges billed to Medicaid rose from 11.5 to 21.3 percent.

Five of the 10 most frequent diagnoses for Medicaid patients were related to pregnancy and childbirth. The three most frequent diagnoses accounted for 28.2 percent of Medicaid stays. The three most frequent diagnoses for Medicaid patients in 2012 were⁷:

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

Private Insurers:

From 1998 to 2012, privately insured stays decreased from 43.2 to 29.4 percent. Over the same time period, the proportion of aggregate charges billed to private insurance decreased from 35.8 to 25.9 percent.

Four of the 10 most frequent diagnoses for patients whose primary payer was private insurance were related to pregnancy and childbirth. The most frequent diagnosis, liveborn infants, accounted for 14.8 percent of all stays covered by private insurers. The three most frequent diagnoses for privately insured patients in 2012 were⁷:

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

Uninsured:

From 1998 to 2012, uninsured hospitalizations decreased from 4.2 to 2.7 percent. Over the same time period, the proportion of aggregate charges billed to uninsured patients decreased from 3.4 to 3.0 percent.

The three most frequent diagnoses accounted for 12.7 percent of uninsured stays.

The three most frequent diagnoses for uninsured patients in 2012 were⁷:

- mood disorders;
- skin and subcutaneous tissue infections;
- liveborn.

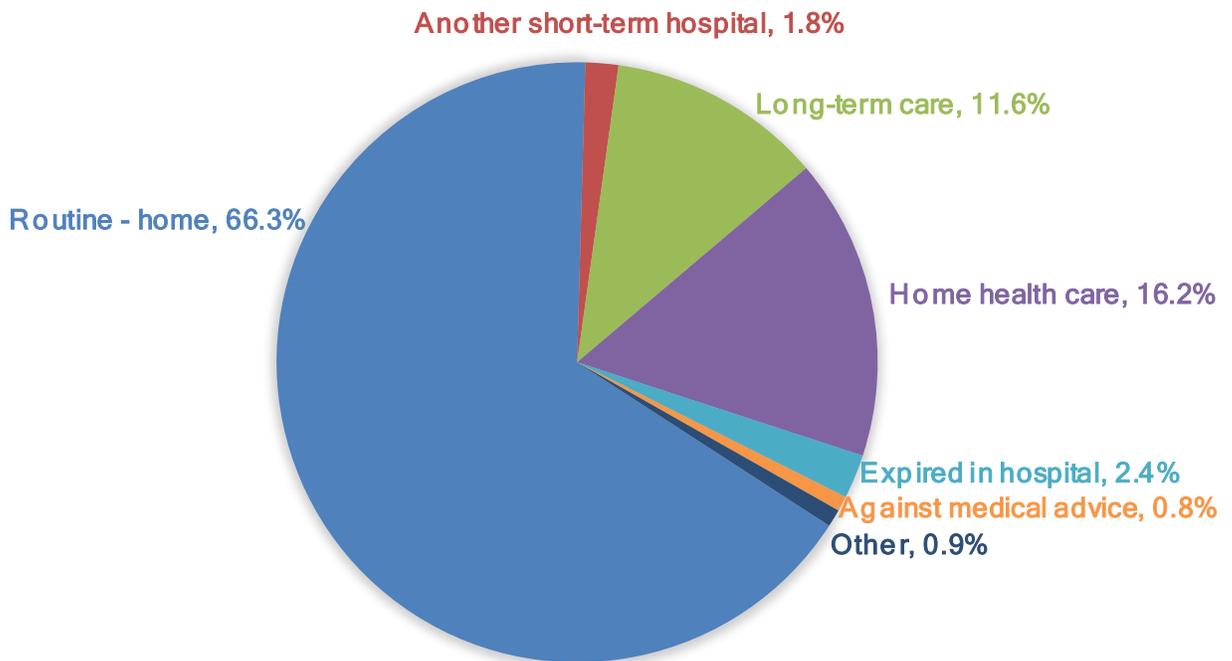
⁷ See Appendix F for the top 10 principal diagnoses by payer type.

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. In 2012 the majority of patients (66.3 percent) were discharged to their homes, less than three percent of patients died in the hospital, and less than one percent left against medical advice.

Figure 24. Percent of Discharges by Discharge Status Delaware Hospitals, 2011



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOW PATIENTS WERE DISCHARGED

Expired Patients:

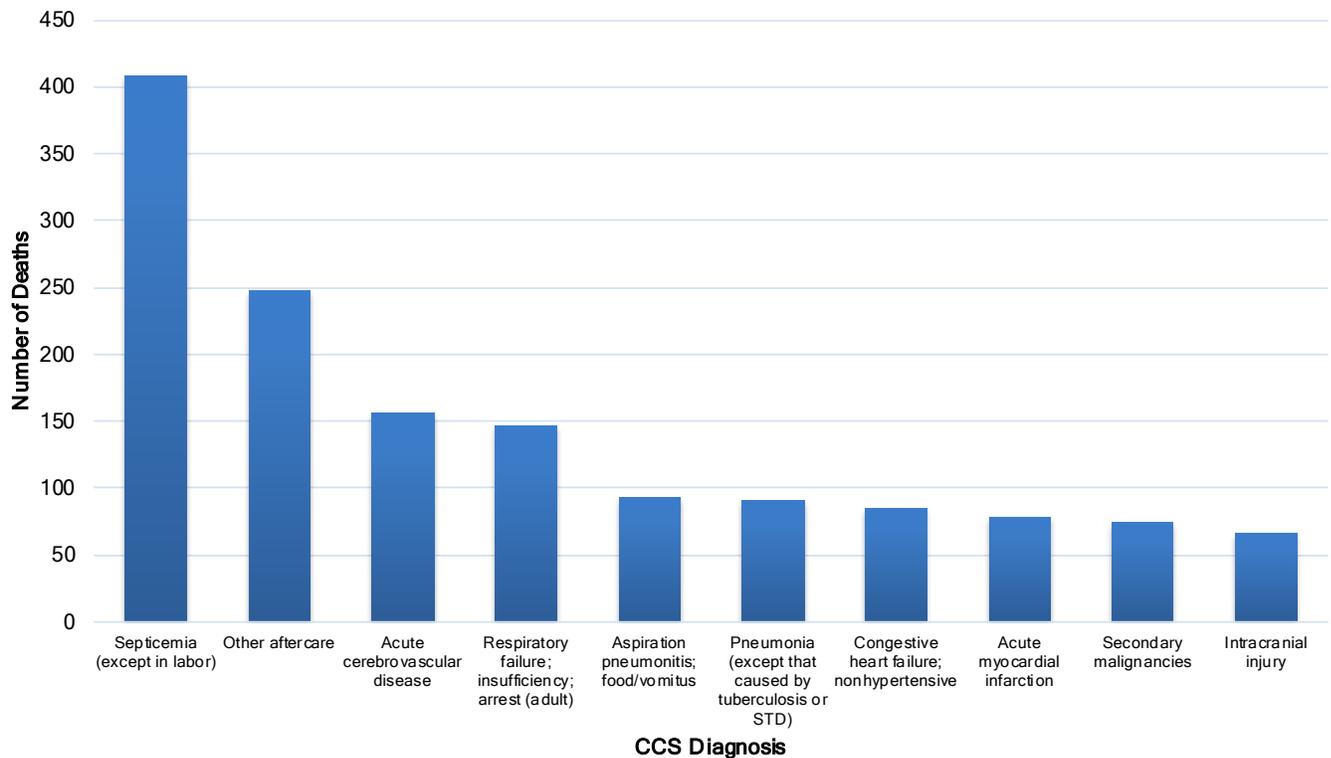
Patients who died during their hospital stay contributed to the “in-hospital mortality” figures. Data about in-hospital mortality are expressed as either numbers of deaths, or percentages of deaths. Both the frequencies and percentages are presented, as each statistic provides a different perspective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

Frequencies

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

- septicemia (except in labor);
- other aftercare;
- acute cerebrovascular disease.

Figure 25. Diagnoses with the Greatest Numbers of In-Hospital Deaths Delaware Hospitals, 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

The most frequent causes of in-hospital mortality varied by age group. Cardiac and circulatory congenital anomalies accounted for the largest number of deaths to those under one, while septicemia (except in labor) caused the highest number of deaths to those ages 1 and over.

Patients ages 65 and older accounted for 66.7 percent of all in-hospital mortality. For more information see Appendices G and H.

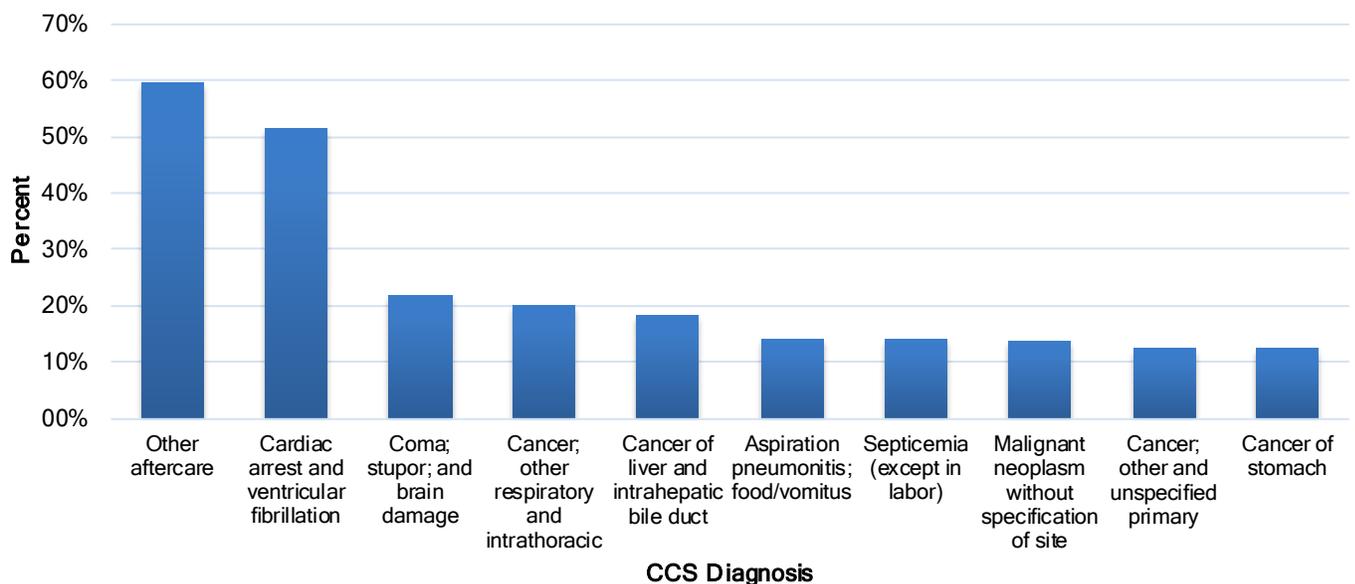
HOW PATIENTS WERE DISCHARGED

Percentages

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

- other aftercare;
- cardiac arrest and ventricular fibrillation;
- coma; stupor; and brain damage;
- cancer; other respiratory and intrathoracic.

Figure 26. CCS Diagnoses with the Greatest Percent of In-Hospital Mortality Delaware Hospitals, 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Patients who left against medical advice:

Less than 1 percent of patients left the hospital against medical advice. Males were twice as likely as females to leave the hospital against medical advice; uninsured patients were about 9 times as likely when compared to privately insured patients.

The three most frequent diagnoses of patients who left the hospital against medical advice were skin and subcutaneous tissue infections, alcohol-related disorders, and diabetes mellitus with complications.

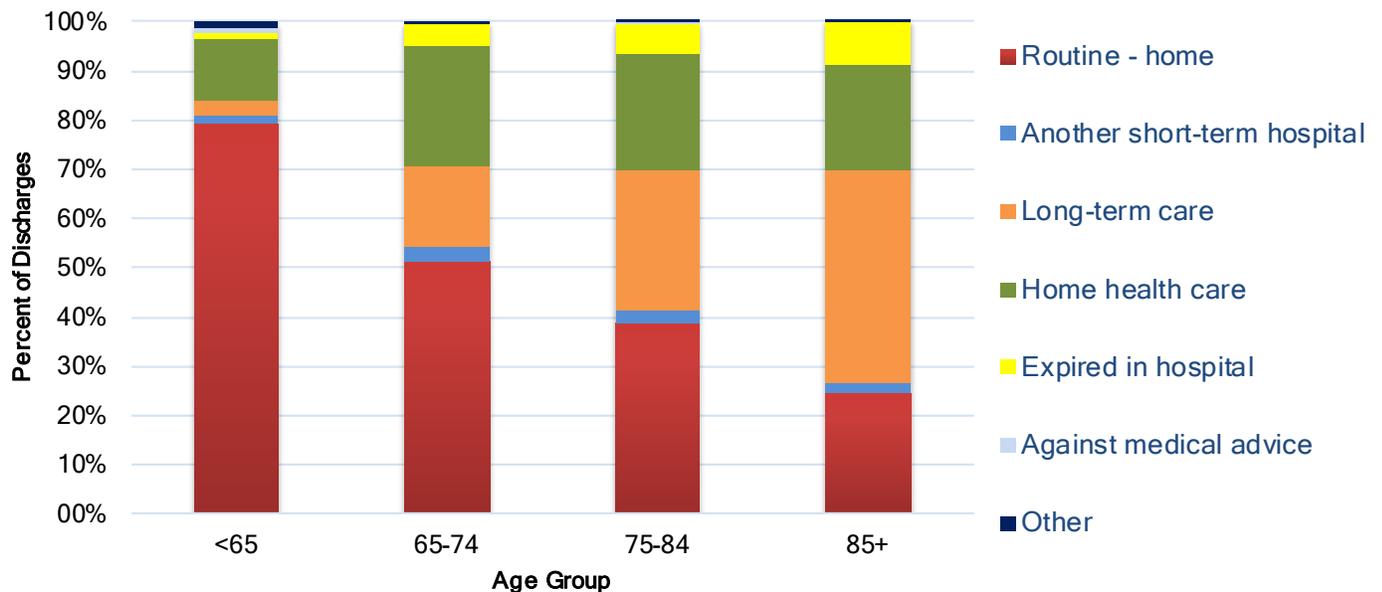
- For women, skin and subcutaneous tissue infections, diabetes mellitus with complications, and pneumonia (except that caused by tuberculosis or a sexually transmitted disease) made up the top three.
- For men, alcohol-related disorders, skin and subcutaneous tissue infections, and diabetes mellitus with complications 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 2012, around 3 percent of those under 65 were discharged to long-term care facilities, compared to 17.1 percent of those ages 65-74, 28.3 percent of those ages 75-84, and 44.7 percent of those 85 and older.

Figure 27. Distribution of Discharge Status by Age Group Delaware Hospitals, 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

In 2012, the most common diagnoses for patients discharged to LTC facilities were; septicemia (except in labor), acute cerebrovascular disease, and osteoarthritis.

- The three most common diagnoses for patients under 65 (excluding liveborn infants) were septicemia (except in labor), osteoarthritis, and complication of device; implant or graft.
- For patients ages 65-74, septicemia (except in labor), osteoarthritis, and acute cerebrovascular disease were the three most common diagnoses.
- For patients ages 75-84, septicemia (except in labor), osteoarthritis, and acute cerebrovascular disease were the three most common diagnoses.
- For patients 85 and older, fracture of neck of femur (hip), pneumonia (except that caused by tuberculosis or a sexually transmitted disease), and congestive heart failure; nonhypertensive were the three most common diagnoses.

HOSPITAL SPECIFIC DATA

A.I. duPont Hospital for Children

2012 Discharge Distribution

Zip / State	Number	%
PA	2,535	29.4%
NJ	1,198	13.9%
19720	421	4.9%
19805	412	4.8%
MD	409	4.7%
19702	327	3.8%
19802	237	2.7%
19701	213	2.5%
19713	199	2.3%
19709	187	2.2%
19808	181	2.1%
19801	166	1.9%
Other State	160	1.9%
19711	153	1.8%
19901	123	1.4%
19804	107	1.2%
19904	104	1.2%
19947	100	1.2%
19803	96	1.1%
19973	93	1.1%
19809	91	1.1%
19810	89	1.0%
19963	89	1.0%
19703	88	1.0%
19977	73	0.8%
19707	61	0.7%
19956	58	0.7%
19966	58	0.7%
19734	55	0.6%
19958	52	0.6%
19938	41	0.5%
19962	40	0.5%
19934	34	0.4%
19960	34	0.4%
19943	33	0.4%
19952	31	0.4%
19968	29	0.3%
19950	27	0.3%
19933	26	0.3%
19807	23	0.3%
19945	21	0.2%
19971	21	0.2%
19806	17	0.2%
19939	16	0.2%
19975	16	0.2%
19940	12	0.1%
19706	11	0.1%
19946	11	0.1%
19953	11	0.1%
Undisclosed*	43	0.5%
Total	8,632	100.0%

*Zip codes with less than 10 cases

Utilization Characteristics

	2010	2011	2012
Aggregate charges	\$390,496,749	\$415,836,086	\$453,606,539
Average charges	\$38,284	\$47,628	\$52,549
Average charge per day	\$7,960	\$8,250	\$9,047
Number of Discharges	10,200	8,731	8,632
Total All-listed Procedures¹	10,352	10,814	10,986
<i>Non-operating room procedures²</i>	5,474	5,780	6,041
<i>Valid operating room procedures²</i>	4,878	5,034	4,945
Average Length of Stay	4.8	5.5	5.5
Primary Payer Distribution			
<i>Medicare</i>	0.1%	0.2%	0.3%
<i>Medicaid</i>	43.4%	43.0%	42.3%
<i>Private Insurance</i>	52.8%	54.9%	52.6%
<i>Uninsured</i>	1.3%	0.0%	2.7%
<i>Other</i>	2.4%	1.9%	2.1%
Admission Source Distribution			
<i>Routine</i>	26.1%	30.6%	30.2%
<i>Other short-term hospital</i>	10.0%	9.9%	10.4%
<i>Long-term care facility</i>	0.5%	0.8%	0.8%
<i>ER</i>	62.6%	57.8%	57.6%
<i>Other</i>	0.8%	0.8%	1.1%
Discharge Status Distribution			
<i>Routine - home</i>	92.1%	90.2%	91.1%
<i>Another short-term hospital</i>	0.5%	0.7%	0.7%
<i>Long-term care facility</i>	1.0%	1.2%	1.3%
<i>Home health care</i>	4.8%	6.6%	5.4%
<i>Expired in hospital</i>	0.5%	0.5%	0.6%
<i>Left against medical advice</i>	0.1%	0.1%	0.2%
<i>Other/Unknown</i>	1.0%	0.7%	0.7%
Sex			
<i>Male</i>	53.9%	54.7%	52.5%
<i>Female</i>	46.1%	45.3%	47.5%
Age			
<i><1</i>	23.6%	23.5%	21.2%
<i>1-4</i>	26.9%	25.5%	24.8%
<i>5-9</i>	17.0%	16.7%	17.6%
<i>10-14</i>	16.7%	18.3%	19.1%
<i>15-19</i>	14.7%	15.2%	16.5%
<i>20-24</i>	0.7%	0.8%	0.8%
<i>25-34</i>	0.0%	0.0%	0.0%
<i>35-44</i>	0.0%	0.0%	0.0%
<i>45-54</i>	0.0%	0.0%	0.0%
<i>55-64</i>	0.0%	0.0%	0.0%
<i>65-74</i>	0.0%	0.0%	0.0%
<i>75+</i>	0.0%	0.0%	0.0%
<i>Unknown</i>	0.4%	0.0%	0.0%

Notes:

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

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

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

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOSPITAL SPECIFIC DATA

BayHealth Medical Center (includes both Milford Memorial and Kent General Hospitals)

2012 Discharge Distribution

Zip / State	Number	%
19901	3,744	18.5%
19904	2,977	14.7%
19963	1,971	9.8%
19977	1,538	7.6%
19943	1,164	5.8%
19934	1,139	5.6%
19952	1,033	5.1%
19962	899	4.5%
19960	587	2.9%
19946	479	2.4%
19938	452	2.2%
19950	429	2.1%
MD	411	2.0%
19953	390	1.9%
19947	304	1.5%
19968	257	1.3%
19966	229	1.1%
Other State	227	1.1%
19954	160	0.8%
19941	153	0.8%
19973	148	0.7%
19734	147	0.7%
19709	143	0.7%
19958	138	0.7%
19933	136	0.7%
19964	123	0.6%
19971	86	0.4%
19979	79	0.4%
19956	73	0.4%
PA	68	0.3%
19936	66	0.3%
19903	51	0.3%
NJ	49	0.2%
19980	36	0.2%
19955	28	0.1%
19939	24	0.1%
19970	23	0.1%
19720	22	0.1%
19701	21	0.1%
19945	20	0.1%
19713	17	0.1%
19902	17	0.1%
19951	16	0.1%
19702	12	0.1%
19808	11	0.1%
19940	11	0.1%
Undisclosed*	90	0.4%
Total	20,198	100.0%

*Zip codes with less than 10 cases

Utilization Characteristics

	2010	2011	2012
Aggregate charges	\$413,935,557	\$417,751,170	\$472,916,209
Average charges	\$20,902	\$21,642	\$23,414
Average charge per day	\$5,362	\$5,388	\$6,095
Number of Discharges	19,804	19,303	20,198
Total All-listed Procedures¹	19,987	18,246	19,934
<i>Non-operating room procedures²</i>	13,185	12,104	13,017
<i>Valid operating room procedures²</i>	6,802	6,142	6,917
Average Length of Stay	4.9	4.8	5.0
Primary Payer Distribution			
<i>Medicare</i>	43.4%	43.4%	45.6%
<i>Medicaid</i>	24.0%	24.4%	24.3%
<i>Private Insurance</i>	23.1%	23.1%	21.3%
<i>Uninsured</i>	3.2%	3.4%	2.5%
<i>Other</i>	6.3%	5.8%	6.3%
Admission Source Distribution			
<i>Routine</i>	32.1%	31.9%	30.3%
<i>Other short-term hospital</i>	0.3%	0.4%	0.5%
<i>Long-term care facility</i>	11.2%	11.1%	11.1%
<i>ER</i>	56.3%	55.7%	57.8%
<i>Other</i>	.1%	.9%	.4%
Discharge Status Distribution			
<i>Routine - home</i>	68.3%	68.3%	67.7%
<i>Another short-term hospital</i>	2.4%	2.7%	3.0%
<i>Long-term care facility</i>	12.2%	13.2%	13.7%
<i>Home health care</i>	13.1%	12.0%	11.5%
<i>Expired in hospital</i>	1.8%	1.9%	2.1%
<i>Left against medical advice</i>	1.2%	0.9%	1.2%
<i>Other/Unknown</i>	1.0%	1.0%	0.9%
Sex			
<i>Male</i>	41.0%	41.1%	42.0%
<i>Female</i>	59.0%	58.9%	58.0%
Age			
<i><1</i>	12.8%	13.1%	12.2%
<i>1-4</i>	1.0%	1.1%	0.7%
<i>5-9</i>	0.5%	0.4%	0.4%
<i>10-14</i>	0.4%	0.4%	0.3%
<i>15-19</i>	2.2%	1.9%	1.7%
<i>20-24</i>	5.1%	5.1%	5.0%
<i>25-34</i>	10.0%	10.2%	9.7%
<i>35-44</i>	7.6%	6.4%	6.2%
<i>45-54</i>	10.7%	11.1%	11.6%
<i>55-64</i>	13.2%	13.0%	13.0%
<i>65-74</i>	15.3%	15.6%	16.7%
<i>75+</i>	21.3%	21.9%	22.5%

Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to six 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.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOSPITAL SPECIFIC DATA

Beebe Medical Center

2012 Discharge Distribution

Zip / State	Number	%
19966	2,209	22.4%
19958	1,839	18.7%
19947	909	9.2%
19971	904	9.2%
19968	678	6.9%
19970	412	4.2%
19945	342	3.5%
19939	303	3.1%
19975	254	2.6%
19963	238	2.4%
MD	198	2.0%
19973	170	1.7%
Other State	140	1.4%
PA	131	1.3%
19956	128	1.3%
19930	127	1.3%
19960	126	1.3%
19951	109	1.1%
19933	84	0.9%
19941	80	0.8%
19950	64	0.7%
19952	50	0.5%
19943	38	0.4%
19904	26	0.3%
19901	25	0.3%
19940	23	0.2%
19967	22	0.2%
19934	17	0.2%
NJ	17	0.2%
19962	14	0.1%
19969	13	0.1%
19946	12	0.1%
19709	11	0.1%
19711	11	0.1%
19944	11	0.1%
19977	11	0.1%
Undisclosed*	94	1.0%
Total	9,840	100.0%

*Zip codes with less than 10 cases

Utilization Characteristics

	2010	2011	2012
Aggregate charges	\$294,962,669	\$300,087,820	\$324,736,166
Average charges	\$29,552	\$31,672	\$33,002
Average charge per day	\$8,533	\$9,165	\$9,724
Number of Discharges	9,981	9,475	9,840
Total All-listed Procedures¹	14,120	13,850	14,468
<i>Non-operating room procedures²</i>	9,058	8,545	9,075
<i>Valid operating room procedures²</i>	5,062	5,305	5,393
Average Length of Stay	4.0	4.0	3.9
Primary Payer Distribution			
<i>Medicare</i>	52.2%	52.6%	52.0%
<i>Medicaid</i>	17.5%	18.1%	18.5%
<i>Private Insurance</i>	26.0%	25.5%	25.3%
<i>Uninsured</i>	3.3%	2.6%	2.8%
<i>Other</i>	1.0%	1.2%	1.4%
Admission Source Distribution			
<i>Routine</i>	29.7%	30.7%	31.2%
<i>Other short-term hospital</i>	0.1%	0.0%	0.1%
<i>Long-term care facility</i>	8.8%	8.4%	9.2%
<i>ER</i>	61.4%	60.9%	59.5%
<i>Other</i>	0.0%	0.0%	0.0%
Discharge Status Distribution			
<i>Routine - home</i>	60.6%	58.9%	58.4%
<i>Another short-term hospital</i>	1.6%	1.4%	1.8%
<i>Long-term care facility</i>	16.0%	16.7%	17.2%
<i>Home health care</i>	18.2%	19.1%	19.1%
<i>Expired in hospital</i>	2.0%	2.3%	2.0%
<i>Left against medical advice</i>	0.6%	0.6%	0.6%
<i>Other/Unknown</i>	1.0%	1.0%	0.9%
Sex			
<i>Male</i>	43.4%	45.3%	44.8%
<i>Female</i>	56.6%	54.7%	55.2%
Age			
<1	9.1%	9.1%	9.5%
1-4	0.2%	0.2%	0.2%
5-9	0.2%	0.3%	0.1%
10-14	0.2%	0.1%	0.1%
15-19	1.4%	1.0%	1.1%
20-24	3.4%	3.4%	3.5%
25-34	6.5%	7.6%	7.3%
35-44	5.7%	5.6%	5.1%
45-54	9.9%	9.8%	9.6%
55-64	14.5%	15.0%	14.7%
65-74	20.6%	20.3%	20.3%
75+	28.2%	27.7%	28.5%

Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to six 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.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOSPITAL SPECIFIC DATA

Christiana Care Health System (includes both Wilmington and Christiana Hospitals)

2012 Discharge Distribution

Zip / State	Number	%
19720	6,233	10.6%
19702	4,272	7.3%
19808	3,927	6.7%
19805	3,791	6.5%
19711	3,446	5.9%
19713	3,307	5.6%
19701	3,265	5.6%
MD	2,918	5.0%
19802	2,671	4.5%
19709	2,501	4.3%
PA	2,479	4.2%
19804	2,006	3.4%
19801	1,988	3.4%
NJ	1,817	3.1%
19803	1,761	3.0%
19810	1,675	2.9%
19707	1,226	2.1%
19809	1,209	2.1%
19703	1,188	2.0%
19806	974	1.7%
19734	809	1.4%
19977	702	1.2%
19807	598	1.0%
Other State	371	0.6%
19904	368	0.6%
19901	331	0.6%
19706	283	0.5%
19938	232	0.4%
19966	202	0.3%
19973	195	0.3%
19958	163	0.3%
19963	149	0.3%
19947	131	0.2%
19934	124	0.2%
19956	112	0.2%
19971	110	0.2%
19943	101	0.2%
19952	85	0.1%
19899	71	0.1%
19962	69	0.1%
19933	66	0.1%
19950	62	0.1%
19953	62	0.1%
19968	60	0.1%
19960	58	0.1%
19730	53	0.1%
19733	45	0.1%
19945	41	0.1%
19970	37	0.1%
19714	34	0.1%
19946	32	0.1%
19731	30	0.1%
19975	26	0.0%
Unknown	25	0.0%
19940	24	0.0%
19939	21	0.0%
19964	18	0.0%
19708	17	0.0%
19710	17	0.0%
19850	17	0.0%
19941	17	0.0%
19936	14	0.0%
19954	14	0.0%
19951	13	0.0%
19736	12	0.0%
19930	12	0.0%
19955	12	0.0%
Undisclosed*	72	0.1%
Total	58,771	100.0%

*Zip codes with less than 10 cases

Utilization Characteristics

	2010	2011	2012
Aggregate charges	\$1,283,388,855	\$1,359,896,660	\$1,296,911,416
Average charges	\$21,926	\$23,066	\$22,067
Average charge per day	\$5,642	\$6,078	\$5,716
Number of Discharges	58,534	58,957	58,771
Total All-listed Procedures¹	126,855	129,667	125,901
<i>Non-operating room procedures²</i>	96,097	99,491	95,950
<i>Valid operating room procedures²</i>	30,758	30,176	29,951
Average Length of Stay	4.9	4.9	4.8
Primary Payer Distribution			
<i>Medicare</i>	41.4%	42.3%	42.4%
<i>Medicaid</i>	21.7%	22.1%	21.3%
<i>Private Insurance</i>	33.1%	31.7%	30.8%
<i>Uninsured</i>	2.3%	2.3%	2.4%
<i>Other</i>	1.5%	1.6%	3.2%
Admission Source Distribution			
<i>Routine</i>	39.2%	31.2%	45.9%
<i>Other short-term hospital</i>	0.9%	1.2%	1.3%
<i>Long-term care facility</i>	4.9%	11.4%	10.9%
<i>ER</i>	53.9%	54.9%	40.7%
<i>Other</i>	1.1%	1.4%	1.2%
Discharge Status Distribution			
<i>Routine - home</i>	63.1%	63.9%	64.0%
<i>Another short-term hospital</i>	2.0%	1.7%	1.3%
<i>Long-term care facility</i>	10.2%	10.4%	10.9%
<i>Home health care</i>	20.2%	19.2%	19.5%
<i>Expired in hospital</i>	3.1%	3.4%	2.6%
<i>Left against medical advice</i>	0.6%	0.6%	0.7%
<i>Other/Unknown</i>	0.9%	0.8%	1.0%
Sex			
<i>Male</i>	41.2%	40.6%	40.9%
<i>Female</i>	58.8%	59.4%	59.1%
Age			
<i><1</i>	11.8%	11.8%	11.2%
<i>1-4</i>	0.1%	0.1%	0.1%
<i>5-9</i>	0.1%	0.1%	0.1%
<i>10-14</i>	0.1%	0.1%	0.1%
<i>15-19</i>	1.9%	1.7%	1.5%
<i>20-24</i>	4.5%	4.2%	4.1%
<i>25-34</i>	11.9%	11.8%	11.8%
<i>35-44</i>	9.2%	9.0%	8.4%
<i>45-54</i>	12.5%	12.3%	12.8%
<i>55-64</i>	13.7%	14.4%	14.5%
<i>65-74</i>	13.0%	13.5%	14.2%
<i>75+</i>	21.1%	21.0%	21.1%

Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to six 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.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOSPITAL SPECIFIC DATA

Nanticoke Memorial Hospital

2012 Discharge Distribution

Zip / State	Number	%
19973	2,185	36.3%
19956	1,040	17.3%
19947	674	11.2%
19933	646	10.7%
MD	334	5.5%
19966	267	4.4%
19950	211	3.5%
19940	210	3.5%
19945	71	1.2%
19963	57	0.9%
19975	38	0.6%
19968	32	0.5%
19939	29	0.5%
19941	24	0.4%
19904	20	0.3%
19971	18	0.3%
19931	16	0.3%
19952	16	0.3%
Other State	15	0.2%
PA	15	0.2%
19960	14	0.2%
19901	11	0.2%
19943	11	0.2%
Undisclosed*	66	1.1%
Total	6,020	100.0%

*Zip codes with less than 10 cases

Utilization Characteristics

	2010	2011	2012
Aggregate charges	\$96,915,476	\$97,696,138	\$95,314,614
Average charges	\$16,988	\$16,469	\$15,833
Average charge per day	\$5,033	\$5,058	\$5,034
Number of Discharges	5,705	5,932	6,020
Total All-listed Procedures¹	11,227	11,649	11,498
<i>Non-operating room procedures²</i>	9,404	9,937	9,818
<i>Valid operating room procedures²</i>	1,823	1,712	1,680
Average Length of Stay	3.8	3.6	3.4
Primary Payer Distribution			
<i>Medicare</i>	40.1%	42.7%	43.8%
<i>Medicaid</i>	36.0%	34.5%	34.4%
<i>Private Insurance</i>	16.5%	16.6%	16.7%
<i>Uninsured</i>	2.9%	2.5%	3.0%
<i>Other</i>	4.5%	3.6%	2.1%
Admission Source Distribution			
<i>Routine</i>	40.5%	36.6%	37.1%
<i>Other short-term hospital</i>	0.0%	0.0%	0.0%
<i>Long-term care facility</i>	0.0%	0.0%	0.0%
<i>ER</i>	59.5%	63.3%	62.9%
<i>Other</i>	0.0%	0.0%	0.0%
Discharge Status Distribution			
<i>Routine - home</i>	67.9%	66.7%	67.6%
<i>Another short-term hospital</i>	3.1%	3.2%	3.3%
<i>Long-term care facility</i>	13.2%	14.5%	13.9%
<i>Home health care</i>	12.6%	12.6%	11.9%
<i>Expired in hospital</i>	1.6%	1.4%	1.2%
<i>Left against medical advice</i>	0.7%	0.7%	0.8%
<i>Other/Unknown</i>	0.9%	0.9%	1.3%
Sex			
<i>Male</i>	40.7%	41.6%	39.5%
<i>Female</i>	59.3%	58.4%	60.5%
Age			
<i><1</i>	16.3%	15.2%	15.6%
<i>1-4</i>	0.6%	0.5%	0.7%
<i>5-9</i>	0.2%	0.4%	0.5%
<i>10-14</i>	0.1%	0.2%	0.2%
<i>15-19</i>	2.6%	2.1%	2.1%
<i>20-24</i>	6.3%	5.9%	5.4%
<i>25-34</i>	10.3%	9.4%	10.2%
<i>35-44</i>	6.4%	6.5%	6.3%
<i>45-54</i>	9.9%	9.3%	9.7%
<i>55-64</i>	12.2%	13.6%	13.1%
<i>65-74</i>	12.7%	13.8%	14.1%
<i>75+</i>	22.3%	23.1%	22.0%

Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to six 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.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOSPITAL SPECIFIC DATA

St. Francis Hospital

2012 Discharge Distribution

Zip / State	Number	%
19805	1,784	26.8%
19802	630	9.5%
19801	580	8.7%
19720	560	8.4%
19806	377	5.7%
19810	272	4.1%
19803	271	4.1%
19804	248	3.7%
19703	246	3.7%
19808	241	3.6%
19809	214	3.2%
PA	185	2.8%
19702	131	2.0%
19711	128	1.9%
19701	124	1.9%
19713	114	1.7%
19707	91	1.4%
19709	72	1.1%
Other State	72	1.1%
19807	56	0.8%
NJ	54	0.8%
MD	44	0.7%
19901	23	0.3%
19977	21	0.3%
19904	15	0.2%
19734	13	0.2%
19938	13	0.2%
19899	12	0.2%
19706	10	0.2%
19963	10	0.2%
Undisclosed*	48	0.7%
Total	6,659	100.0%

*Zip codes with less than 10 cases

Utilization Characteristics

	2010	2011	2012
Aggregate charges	\$174,216,422	\$161,634,644	\$159,643,186
Average charges	\$22,905	\$22,368	\$23,974
Average charge per day	\$7,217	\$7,174	\$7,519
Number of Discharges	7,606	7,226	6,659
Total All-listed Procedures¹	8,241	7,275	6,996
<i>Non-operating room procedures²</i>	5,397	4,789	4,724
<i>Valid operating room procedures²</i>	2,844	2,486	2,272
Average Length of Stay	4.2	3.9	3.8
Primary Payer Distribution			
<i>Medicare</i>	39.8%	37.2%	36.1%
<i>Medicaid</i>	27.5%	20.3%	28.5%
<i>Private Insurance</i>	27.6%	37.4%	29.2%
<i>Uninsured</i>	2.7%	3.1%	5.6%
<i>Other</i>	2.3%	1.9%	0.6%
Admission Source Distribution			
<i>Routine</i>	38.2%	34.2%	32.5%
<i>Other short-term hospital</i>	3.4%	3.0%	2.9%
<i>Long-term care facility</i>	0.6%	0.3%	0.5%
<i>ER</i>	57.1%	61.8%	62.0%
<i>Other</i>	.8%	.7%	2.0%
Discharge Status Distribution			
<i>Routine - home</i>	64.3%	64.5%	62.9%
<i>Another short-term hospital</i>	1.7%	1.3%	1.5%
<i>Long-term care facility</i>	12.0%	12.1%	12.1%
<i>Home health care</i>	15.7%	13.8%	15.3%
<i>Expired in hospital</i>	3.8%	5.4%	5.2%
<i>Left against medical advice</i>	1.6%	1.7%	2.0%
<i>Other/Unknown</i>	0.9%	1.2%	1.1%
Sex			
<i>Male</i>	38.0%	38.8%	39.4%
<i>Female</i>	62.0%	61.2%	60.6%
Age			
<i><1</i>	11.2%	10.0%	11.1%
<i>1-4</i>	0.0%	0.0%	0.0%
<i>5-9</i>	0.0%	0.0%	0.0%
<i>10-14</i>	0.1%	0.0%	0.0%
<i>15-19</i>	1.6%	1.5%	1.3%
<i>20-24</i>	4.2%	4.3%	4.1%
<i>25-34</i>	10.4%	10.8%	12.1%
<i>35-44</i>	9.4%	10.7%	9.7%
<i>45-54</i>	13.2%	14.4%	14.9%
<i>55-64</i>	14.0%	14.1%	13.7%
<i>65-74</i>	13.0%	11.9%	12.2%
<i>75+</i>	22.9%	22.3%	20.9%

Notes:

- Total all-listed procedures represents the total number of procedures performed; up to six procedures may be recorded per discharge, as a result the total number of all-listed procedures can exceed the total number of discharges.
 - 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>.
 - Percentages may not sum to 100 due to rounding.
 - St. Francis hospital does not operate a pediatric service. ER patients are admitted at Al Dupont.
- Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

HOSPITAL SPECIFIC DATA

Select Specialty Hospital - Wilmington

2012 Discharge Distribution

Zip / State	Number	%
19805	25	8.1%
19720	23	7.5%
MD	21	6.8%
19904	16	5.2%
NJ	16	5.2%
19703	13	4.2%
19801	13	4.2%
19808	13	4.2%
19701	12	3.9%
PA	12	3.9%
19702	10	3.3%
Undisclosed*	133	43.3%
Total	307	100.0%

*Zip codes with less than 10 cases

Utilization Characteristics

	2010	2011	2012
Aggregate charges	\$30,161,973	\$35,663,288	\$39,836,974
Average charges	\$100,540	\$104,584	\$129,762
Average charge per day	\$3,466	\$3,746	\$3,910
Number of Discharges	300	341	307
Total All-listed Procedures¹	578	630	541
<i>Non-operating room procedures²</i>	505	579	467
<i>Valid operating room procedures²</i>	73	51	74
Average Length of Stay	29.4	28.0	32.1
Primary Payer Distribution			
<i>Medicare</i>	83.7%	80.1%	76.5%
<i>Medicaid</i>	1.0%	0.6%	0.3%
<i>Private Insurance</i>	13.7%	18.5%	21.5%
<i>Uninsured</i>	0.0%	0.0%	0.0%
<i>Other</i>	1.7%	0.9%	1.6%
Admission Source Distribution			
<i>Routine</i>	0.7%	0.3%	0.0%
<i>Other short-term hospital</i>	98.0%	98.8%	98.7%
<i>Long-term care facility</i>	1.3%	0.9%	0.7%
<i>ER</i>	0.0%	0.0%	0.0%
<i>Other</i>	0.0%	0.0%	0.7%
Discharge Status Distribution			
<i>Routine - home</i>	5.3%	5.6%	5.5%
<i>Another short-term hospital</i>	11.3%	11.7%	10.4%
<i>Long-term care facility</i>	49.7%	49.0%	50.8%
<i>Home health care</i>	24.0%	24.3%	24.8%
<i>Expired in hospital</i>	9.0%	8.8%	6.8%
<i>Left against medical advice</i>	0.7%	0.6%	1.3%
<i>Other/Unknown</i>	0.0%	0.0%	0.3%
Sex			
<i>Male</i>	44.7%	47.5%	49.8%
<i>Female</i>	55.3%	52.5%	50.2%
<i>Unknown</i>	0.0%	0.0%	0.0%
Age			
<1	0.0%	0.0%	0.0%
1-4	0.0%	0.0%	0.0%
5-9	0.0%	0.0%	0.0%
10-14	0.0%	0.0%	0.0%
15-19	0.0%	0.6%	0.0%
20-24	0.7%	0.3%	0.3%
25-34	2.7%	0.9%	2.6%
35-44	5.7%	3.5%	4.2%
45-54	10.7%	12.9%	15.3%
55-64	19.7%	18.8%	24.4%
65-74	27.7%	26.7%	26.4%
75+	33.0%	36.4%	26.7%

Notes:

1. Total all-listed procedures represents the total number of procedures performed; up to six 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.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

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 Emergency Department , by Principal Diagnosis, Delaware Hospitals, 2012

Clinical Classifications Software Categories and Chapter Headings		Number of Discharges	Percent of Discharges	Length of Stay	Mean Total Charges	Percent Expired	Percent Admitted from ED
Infections and parasitic diseases	Tuberculosis	10	0.3%	14.3	\$37,397	0.0%	70.0%
	Septicemia (except in labor)	2,884	78.5%	8.3	\$44,717	14.1%	81.3%
	Bacterial infection; unspecified site	42	1.1%	6.8	\$91,179	2.4%	76.2%
	Mycoses	88	2.4%	6.8	\$29,822	5.7%	69.3%
	HIV infection	158	4.3%	9.1	\$37,283	4.4%	76.6%
	Hepatitis	87	2.4%	4.9	\$21,111	5.7%	77.0%
	Viral infection	323	8.8%	3.2	\$15,491	0.3%	74.3%
	Other infections; including parasitic	68	1.9%	4.6	\$23,863	2.9%	76.5%
	Sexually transmitted infections (not HIV or hepatitis)	12	0.3%	7.0	\$32,086	0.0%	75.0%
	Immunizations and screening for infectious disease	3	0.1%	4.0	\$11,912	0.0%	33.3%
	Total	3,675	100.0%	7.7	\$40,970	11.7%	79.8%
Neoplasms	Cancer of head and neck	58	1.3%	6.3	\$31,335	1.7%	25.9%
	Cancer of esophagus	32	0.7%	8.4	\$43,257	9.4%	28.1%
	Cancer of stomach	64	1.5%	9.4	\$48,032	12.5%	40.6%
	Cancer of colon	251	5.8%	7.6	\$42,433	2.0%	27.9%
	Cancer of rectum and anus	99	2.3%	8.2	\$46,485	2.0%	21.2%
	Cancer of liver and intrahepatic bile duct	49	1.1%	5.3	\$37,777	18.4%	49.0%
	Cancer of pancreas	102	2.3%	7.5	\$39,454	9.8%	44.1%
	Cancer of other GI organs; peritoneum	69	1.6%	7.3	\$35,202	7.2%	37.7%
	Cancer of bronchus; lung	411	9.4%	6.6	\$37,558	11.4%	49.6%
	Cancer; other respiratory and intrathoracic	5	0.1%	6.6	\$16,871	20.0%	20.0%
	Cancer of bone and connective tissue	30	0.7%	5.9	\$52,490	3.3%	10.0%
	Melanomas of skin	12	0.3%	3.1	\$17,692	0.0%	8.3%
	Other non-epithelial cancer of skin	26	0.6%	4.7	\$25,078	0.0%	11.5%
	Cancer of breast	100	2.3%	2.9	\$23,158	5.0%	16.0%
	Cancer of uterus	131	3.0%	3.1	\$22,772	0.8%	6.1%
	Cancer of cervix	37	0.9%	4.9	\$26,582	0.0%	8.1%
	Cancer of ovary	72	1.7%	9.1	\$47,844	8.3%	31.9%
	Cancer of other female genital organs	22	0.5%	4.1	\$24,228	0.0%	22.7%
	Cancer of prostate	83	1.9%	3.6	\$31,596	2.4%	15.7%
	Cancer of testis	7	0.2%	12.0	\$63,004	0.0%	0.0%
	Cancer of other male genital organs	1	0.0%	5.0	\$24,296	0.0%	0.0%
	Cancer of bladder	74	1.7%	7.3	\$45,091	2.7%	29.7%
	Cancer of kidney and renal pelvis	134	3.1%	5.2	\$33,036	1.5%	14.2%
	Cancer of other urinary organs	8	0.2%	3.5	\$31,761	0.0%	0.0%
	Cancer of brain and nervous system	109	2.5%	9.6	\$74,762	8.3%	40.4%
	Cancer of thyroid	38	0.9%	4.8	\$24,875	0.0%	7.9%
	Hodgkin's disease	14	0.3%	9.4	\$77,346	0.0%	14.3%

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Clinical Classifications Software Categories and Chapter Headings		Number of Discharges	Percent of Discharges	Length of Stay	Mean Total Charges	Percent Expired	Percent Admitted from ED
	Non-Hodgkin's lymphoma	118	2.7%	9.5	\$61,581	6.8%	53.4%
	Leukemias	173	4.0%	16.6	\$124,352	9.2%	43.9%
	Multiple myeloma	50	1.1%	11.2	\$58,598	8.0%	40.0%
	Cancer, other and unspecified primary	16	0.4%	5.8	\$41,477	12.5%	37.5%
	Secondary malignancies	638	14.7%	6.8	\$32,922	11.8%	51.9%
	Malignant neoplasm without specification of site	22	0.5%	7.2	\$61,594	13.6%	63.6%
	Neoplasms of unspecified nature or uncertain behavior	146	3.4%	4.8	\$38,052	1.4%	37.7%
	Maintenance chemotherapy; radiotherapy	399	9.2%	5.9	\$39,908	0.3%	0.8%
	Benign neoplasm of uterus	305	7.0%	2.4	\$18,400	0.0%	3.9%
	Other and unspecified benign neoplasm	446	10.3%	5.3	\$32,182	0.7%	17.9%
	Total	4,351	100.0%	6.6	\$40,338	5.4%	29.1%
	Endocrine, nutritional & metabolic diseases, & immunity disorders	Thyroid disorders	138	3.3%	3.2	\$14,516	0.7%
Diabetes mellitus without complication		85	2.0%	2.5	\$10,486	0.0%	83.5%
Diabetes mellitus with complications		1,859	44.0%	4.9	\$20,725	0.8%	73.9%
Other endocrine disorders		152	3.6%	5.8	\$24,232	1.3%	74.3%
Nutritional deficiencies		34	0.8%	9.5	\$37,549	2.9%	58.8%
Disorders of lipid metabolism		6	0.1%	3.8	\$11,237	0.0%	0.0%
Gout and other crystal arthropathies		72	1.7%	3.9	\$13,281	0.0%	77.8%
Fluid and electrolyte disorders		1,173	27.8%	4.0	\$17,475	2.7%	78.2%
Cystic fibrosis		44	1.0%	7.8	\$70,203	0.0%	22.7%
Immunity disorders		1	0.0%	9.0	\$76,222	0.0%	0.0%
Other nutritional; endocrine; and metabolic disorders		663	15.7%	3.4	\$27,704	1.2%	19.0%
Total		4,227	100.0%	4.4	\$21,158	1.4%	64.7%
Disease of the blood and blood forming organs	Deficiency and other anemia	605	42.0%	4.1	\$22,870	2.1%	70.7%
	Acute posthemorrhagic anemia	150	10.4%	4.0	\$21,526	2.7%	75.3%
	Sickle cell anemia	383	26.6%	4.4	\$19,649	0.3%	79.9%
	Coagulation and hemorrhagic disorders	133	9.2%	5.0	\$44,698	1.5%	53.4%
	Diseases of white blood cells	149	10.3%	5.6	\$31,356	1.3%	49.7%
	Other hematologic conditions	22	1.5%	5.0	\$28,743	0.0%	59.1%
	Total	1,442	100.0%	4.4	\$24,855	1.5%	69.7%
Mental disorders	Adjustment disorders	5	0.2%	1.8	\$8,302	0.0%	80.0%
	Anxiety disorders	46	1.7%	3.5	\$15,658	2.2%	69.6%
	Attention-deficit	1	0.0%	3.0	\$19,612	0.0%	0.0%
	Delirium	224	8.4%	8.5	\$18,138	2.7%	75.9%
	Developmental disorders	7	0.3%	5.7	\$17,185	0.0%	85.7%
	Disorders usually diagnosed in infancy	4	0.2%	2.5	\$9,994	0.0%	50.0%
	Impulse control disorders	1	0.0%	105.0	\$128,959	0.0%	0.0%
	Mood disorders	885	33.3%	6.2	\$10,678	1.5%	62.3%
	Personality disorders	3	0.1%	8.0	\$25,361	0.0%	100.0%
	Schizophrenia and other psychotic disorders	167	6.3%	7.3	\$12,294	0.6%	65.3%
	Alcohol-related disorders	554	20.8%	5.0	\$17,082	1.1%	78.5%
	Substance-related disorders	409	15.4%	4.4	\$17,938	2.4%	71.4%
	Screening and history of mental health and substance abuse codes	201	7.6%	5.4	\$22,441	5.0%	75.1%
	Miscellaneous disorders	154	5.8%	3.3	\$11,691	0.6%	45.5%
	Total	2,661	100.0%	5.7	\$14,966	1.8%	68.6%
Diseases of the nervous system and sense organs	Meningitis (except that caused by tuberculosis or STD)	145	4.5%	5.2	\$38,524	1.4%	77.2%
	Encephalitis (except that caused by tuberculosis or STD)	39	1.2%	18.9	\$125,448	0.0%	76.9%
	Other CNS infection and poliomyelitis	42	1.3%	15.9	\$67,124	4.8%	45.2%
	Parkinson's disease	29	0.9%	5.6	\$17,091	3.4%	82.8%
	Multiple sclerosis	98	3.0%	3.9	\$16,366	0.0%	68.4%
	Other hereditary and degenerative nervous system	150	4.6%	5.3	\$32,589	1.3%	48.0%
	Paralysis	56	1.7%	5.2	\$77,027	0.0%	21.4%
	Epilepsy; convulsions	931	28.6%	4.5	\$20,486	1.3%	71.5%
	Headache; including migraine	309	9.5%	2.5	\$12,447	0.0%	72.8%
	Coma; stupor; and brain damage	50	1.5%	9.7	\$68,637	22.0%	68.0%

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Clinical Classifications Software Categories and Chapter Headings		Number of Discharges	Percent of Discharges	Length of Stay	Mean Total Charges	Percent Expired	Percent Admitted from ED	
	Cataract	3	0.1%	1.3	\$12,650	0.0%	66.7%	
	Retinal detachments; defects; vascular occlusion; and retinopathy	12	0.4%	3.7	\$18,316	0.0%	58.3%	
	Glaucoma	2	0.1%	4.5	\$10,277	0.0%	0.0%	
	Blindness and vision defects	28	0.9%	2.6	\$12,658	0.0%	60.7%	
	Inflammation; infection of eye (except that caused by tuberculosis or sexually transmitted disease)	84	2.6%	3.2	\$13,513	0.0%	67.9%	
	Other eye disorders	30	0.9%	2.6	\$14,177	0.0%	63.3%	
	Otitis media and related conditions	54	1.7%	2.5	\$14,153	0.0%	50.0%	
	Conditions associated with dizziness or vertigo	194	6.0%	2.4	\$11,986	0.0%	80.9%	
	Other ear and sense organ disorders	37	1.1%	3.1	\$18,545	2.7%	59.5%	
	Other nervous system disorders	960	29.5%	4.8	\$30,808	1.9%	65.2%	
	Total	3,253	100.0%	4.6	\$26,589	1.5%	67.5%	
Diseases of the circulatory system	Heart valve disorders	363	2.2%	7.4	\$92,010	4.1%	21.5%	
	Peri-, endo-, and myocarditis; cardiomyopathy (except that caused by tuberculosis or STD)	312	1.9%	7.6	\$71,047	3.2%	59.6%	
	Essential hypertension	132	0.8%	2.4	\$11,942	0.0%	76.5%	
	Hypertension with complications and secondary	560	3.4%	4.9	\$25,940	2.0%	74.3%	
	Acute myocardial infarction	1,808	11.1%	4.6	\$55,397	4.3%	73.0%	
	Coronary atherosclerosis and other heart disease	1,437	8.8%	3.7	\$52,222	0.9%	48.9%	
	Nonspecific chest pain	906	5.5%	2.1	\$14,785	0.2%	81.5%	
	Pulmonary heart disease	591	3.6%	5.6	\$27,382	4.9%	77.7%	
	Other and ill-defined heart disease	24	0.1%	2.7	\$28,071	8.3%	50.0%	
	Conduction disorders	172	1.1%	4.1	\$48,670	1.7%	69.8%	
	Cardiac dysrhythmias	1,912	11.7%	3.7	\$26,382	1.6%	74.1%	
	Cardiac arrest and ventricular fibrillation	66	0.4%	6.8	\$60,729	51.5%	81.8%	
	Congestive heart failure; nonhypertensive	2,916	17.8%	5.4	\$26,253	2.9%	78.6%	
	Acute cerebrovascular disease	1,965	12.0%	6.4	\$33,729	7.9%	77.6%	
	Occlusion or stenosis of precerebral arteries	372	2.3%	2.3	\$27,111	0.0%	16.9%	
	Other and ill-defined cerebrovascular disease	124	0.8%	3.8	\$55,254	1.6%	25.8%	
	Transient cerebral ischemia	607	3.7%	2.4	\$14,093	0.0%	79.1%	
	Late effects of cerebrovascular disease	62	0.4%	5.3	\$18,696	4.8%	77.4%	
	Peripheral and visceral atherosclerosis	527	3.2%	5.2	\$41,834	4.4%	34.5%	
	Aortic; peripheral; and visceral artery aneurysms	270	1.7%	4.5	\$71,272	5.9%	24.8%	
	Aortic and peripheral arterial embolism or thrombosis	124	0.8%	7.3	\$63,795	5.6%	47.6%	
	Other circulatory disease	429	2.6%	3.9	\$20,384	0.5%	80.0%	
	Phlebitis; thrombophlebitis and thromboembolism	516	3.2%	4.8	\$22,293	1.7%	67.2%	
Varicose veins of lower extremity	6	0.0%	5.7	\$15,892	0.0%	83.3%		
Hemorrhoids	90	0.6%	2.9	\$11,097	0.0%	60.0%		
Other diseases of veins and lymphatics	67	0.4%	6.5	\$30,957	3.0%	67.2%		
	Total	16,358	100.0%	4.7	\$35,581	3.3%	68.1%	
Diseases of the respiratory system	Pneumonia (except that caused by tuberculosis or STD)	3,488	31.2%	5.1	\$23,888	2.6%	79.9%	
	Influenza	104	0.9%	3.4	\$15,471	0.0%	66.3%	
	Acute and chronic tonsillitis	214	1.9%	1.7	\$11,985	0.0%	27.6%	
	Acute bronchitis	752	6.7%	3.3	\$17,355	0.1%	77.4%	
	Other upper respiratory infections	335	3.0%	2.7	\$15,498	0.3%	76.7%	
	Chronic obstructive pulmonary disease and bronchiectasis	2,063	18.5%	4.3	\$17,263	1.9%	79.6%	
	Asthma	1,375	12.3%	3.0	\$14,937	0.3%	78.7%	
	Aspiration pneumonitis; food/ vomitus	654	5.9%	7.6	\$36,040	14.2%	78.3%	
	Pleurisy; pneumothorax; pulmonary collapse	386	3.5%	7.3	\$32,402	3.9%	74.1%	
	Respiratory failure; insufficiency; arrest (adult)	1,296	11.6%	10.3	\$61,080	11.3%	76.2%	
	Lung disease due to external agents	17	0.2%	5.7	\$28,113	0.0%	52.9%	
	Other lower respiratory disease	308	2.8%	4.1	\$22,548	6.2%	57.8%	
	Other upper respiratory disease	170	1.5%	4.5	\$27,030	0.0%	64.1%	
		Total	11,162	100.0%	5.2	\$25,904	3.7%	76.7%

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Clinical Classifications Software Categories and Chapter Headings		Number of Discharges	Percent of Discharges	Length of Stay	Mean Total Charges	Percent Expired	Percent Admitted from ED
Diseases of the digestive system	Intestinal infection	1,039	9.1%	4.7	\$18,286	2.4%	81.4%
	Disorders of teeth and jaw	93	0.8%	2.6	\$19,280	0.0%	32.3%
	Diseases of mouth; excluding dental	67	0.6%	4.3	\$18,868	0.0%	62.7%
	Esophageal disorders	394	3.5%	4.1	\$22,322	0.5%	65.7%
	Gastroduodenal ulcer (except hemorrhage)	134	1.2%	6.0	\$31,931	3.7%	70.1%
	Gastritis and duodenitis	319	2.8%	3.6	\$17,261	0.6%	80.6%
	Other disorders of stomach and duodenum	283	2.5%	5.1	\$21,881	0.0%	65.7%
	Appendicitis and other appendiceal conditions	766	6.7%	3.1	\$22,964	0.4%	81.2%
	Abdominal hernia	741	6.5%	5.0	\$30,986	1.2%	29.6%
	Regional enteritis and ulcerative colitis	280	2.5%	5.6	\$25,859	0.0%	62.9%
	Intestinal obstruction without hernia	1,105	9.7%	6.7	\$32,295	2.1%	79.2%
	Diverticulosis and diverticulitis	1,075	9.5%	4.7	\$22,240	0.5%	64.7%
	Anal and rectal conditions	127	1.1%	5.1	\$22,912	0.0%	59.1%
	Peritonitis and intestinal abscess	123	1.1%	7.3	\$36,378	5.7%	63.4%
	Biliary tract disease	1,313	11.6%	3.6	\$22,454	0.5%	61.2%
	Other liver diseases	406	3.6%	6.3	\$30,790	7.4%	75.4%
	Pancreatic disorders (not diabetes)	957	8.4%	5.2	\$23,029	0.7%	80.9%
	Gastrointestinal hemorrhage	1,100	9.7%	4.4	\$23,861	3.3%	78.9%
	Noninfectious gastroenteritis	326	2.9%	3.3	\$13,818	0.6%	78.5%
	Other gastrointestinal disorders	718	6.3%	5.4	\$26,829	1.4%	53.2%
Total	11,366	100.0%	4.8	\$24,251	1.5%	69.0%	
Diseases of the genitourinary system	Nephritis; nephrosis; renal sclerosis	50	0.9%	4.9	\$30,666	0.0%	60.0%
	Acute and unspecified renal failure	1,819	33.3%	5.7	\$23,566	3.3%	80.4%
	Chronic renal failure	44	0.8%	6.4	\$63,817	0.0%	27.3%
	Urinary tract infections	1,867	34.2%	4.4	\$15,563	1.6%	78.3%
	Calculus of urinary tract	541	9.9%	2.2	\$13,935	0.6%	69.3%
	Other diseases of kidney and ureters	145	2.7%	3.9	\$26,011	0.0%	33.1%
	Other diseases of bladder and urethra	54	1.0%	7.2	\$57,248	0.0%	48.1%
	Genitourinary symptoms and ill-defined conditions	86	1.6%	4.1	\$17,673	2.3%	74.4%
	Hyperplasia of prostate	70	1.3%	3.1	\$17,161	1.4%	40.0%
	Inflammatory conditions of male genital organs	68	1.2%	3.6	\$13,943	0.0%	70.6%
	Other male genital disorders	28	0.5%	4.5	\$26,414	0.0%	71.4%
	Nonmalignant breast conditions	43	0.8%	4.0	\$19,143	0.0%	58.1%
	Inflammatory diseases of female pelvic organs	106	1.9%	3.0	\$15,654	0.0%	63.2%
	Endometriosis	59	1.1%	2.3	\$16,005	0.0%	6.8%
	Prolapse of female genital organs	116	2.1%	1.5	\$18,372	0.0%	0.0%
	Menstrual disorders	116	2.1%	2.8	\$21,066	0.0%	16.4%
	Ovarian cyst	107	2.0%	2.9	\$18,748	0.0%	36.4%
	Menopausal disorders	25	0.5%	2.0	\$15,271	0.0%	28.0%
	Female infertility	0	0.0%	N/A	N/A	N/A	N/A
	Other female genital disorders	113	2.1%	3.3	\$20,964	0.0%	17.7%
Total	5,457	100.0%	4.4	\$19,761	1.7%	68.8%	
Complications of pregnancy, childbirth, & the puerperium	Contraceptive and procreative management	2	0.0%	1.5	\$12,647	0.0%	0.0%
	Spontaneous abortion	14	0.1%	1.4	\$7,864	0.0%	57.1%
	Induced abortion	14	0.1%	2.1	\$7,281	0.0%	21.4%
	Postabortion complications	5	0.0%	4.0	\$16,403	0.0%	60.0%
	Ectopic pregnancy	29	0.2%	1.7	\$14,854	0.0%	93.1%
	Other complications of pregnancy	1,244	10.4%	2.4	\$7,947	0.0%	21.3%
	Hemorrhage during pregnancy; abruptio placenta; placenta previa	155	1.3%	4.5	\$12,126	0.0%	23.9%
	Hypertension complicating pregnancy; childbirth and the puerperium	724	6.0%	3.7	\$11,457	0.0%	16.9%
	Early or threatened labor	547	4.6%	3.4	\$8,226	0.0%	21.6%
	Prolonged pregnancy	613	5.1%	2.6	\$7,683	0.0%	0.8%
	Diabetes or abnormal glucose tolerance complicating pregnancy; childbirth; or the puerperium	248	2.1%	2.7	\$7,915	0.0%	3.6%

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Clinical Classifications Software Categories and Chapter Headings		Number of Discharges	Percent of Discharges	Length of Stay	Mean Total Charges	Percent Expired	Percent Admitted from ED
	Malposition; malpresentation	449	3.7%	3.2	\$11,291	0.0%	2.0%
	Fetopelvic disproportion; obstruction	108	0.9%	2.6	\$9,398	0.0%	3.7%
	Previous C-section	1,484	12.4%	2.8	\$10,967	0.0%	1.3%
	Fetal distress and abnormal forces of labor	589	4.9%	3.0	\$10,129	0.0%	3.9%
	Polyhydramnios and other problems of amniotic cavity	572	4.8%	3.8	\$9,993	0.0%	7.5%
	Umbilical cord complication	486	4.1%	2.9	\$8,135	0.0%	5.8%
	OB-related trauma to perineum and vulva	2,549	21.3%	2.2	\$6,718	0.0%	3.8%
	Forceps delivery	51	0.4%	2.4	\$7,970	0.0%	2.0%
	Other complications of birth; puerperium affecting management of mother	1,616	13.5%	3.2	\$9,884	0.1%	10.7%
	Normal pregnancy and/or delivery	488	4.1%	2.2	\$7,086	0.0%	5.7%
	Total	11,987	100.0%	2.8	\$8,921	0.0%	8.5%
Diseases of the skin and subcutaneous tissue	Skin and subcutaneous tissue infections	1,914	88.2%	3.9	\$13,989	0.5%	72.4%
	Other inflammatory condition of skin	33	1.5%	4.9	\$20,439	0.0%	72.7%
	Chronic ulcer of skin	190	8.8%	12.1	\$43,527	0.0%	38.9%
	Other skin disorders	33	1.5%	2.8	\$14,724	0.0%	36.4%
	Total	2,170	100.0%	4.6	\$16,685	0.5%	68.9%
Diseases of the musculo-skeletal system and connective tissue	Infective arthritis and osteomyelitis (except that caused by tuberculosis or STD)	319	4.5%	10.9	\$48,871	0.9%	52.4%
	Rheumatoid arthritis and related disease	37	0.5%	4.8	\$28,126	0.0%	56.8%
	Osteoarthritis	3,153	44.4%	2.9	\$34,025	0.0%	0.8%
	Other non-traumatic joint disorders	156	2.2%	3.4	\$30,421	0.6%	41.0%
	Spondylosis; intervertebral disc disorders; other back	2,107	29.7%	2.8	\$40,681	0.0%	17.1%
	Osteoporosis	2	0.0%	2.5	\$16,184	0.0%	0.0%
	Pathological fracture	189	2.7%	6.5	\$35,871	2.1%	61.4%
	Acquired foot deformities	55	0.8%	3.2	\$36,259	0.0%	0.0%
	Other acquired deformities	260	3.7%	3.6	\$68,022	0.4%	1.2%
	Systemic lupus erythematosus and connective tissue	73	1.0%	7.4	\$36,278	2.7%	60.3%
	Other connective tissue disease	469	6.6%	4.7	\$25,843	0.6%	61.2%
	Other bone disease and musculoskeletal deformities	278	3.9%	3.5	\$60,393	0.4%	14.4%
Total	7,098	100.0%	3.5	\$38,380	0.2%	15.9%	
Congenital anomalies	Cardiac and circulatory congenital anomalies	240	35.9%	19.4	\$306,848	4.2%	6.7%
	Digestive congenital anomalies	107	16.0%	13.2	\$113,862	0.9%	38.3%
	Genitourinary congenital anomalies	64	9.6%	2.8	\$28,043	0.0%	9.4%
	Nervous system congenital anomalies	43	6.4%	10.8	\$105,452	0.0%	7.0%
	Other congenital anomalies	214	32.0%	6.8	\$78,343	0.0%	7.5%
	Total	668	100.0%	12.2	\$163,056	1.6%	12.3%
Certain conditions originating in the perinatal period	Short gestation; low birth weight; and fetal growth	44	8.0%	25.0	\$70,327	0.0%	0.0%
	Intrauterine hypoxia and birth asphyxia	14	2.5%	27.7	\$199,853	0.0%	0.0%
	Respiratory distress syndrome	39	7.1%	18.0	\$69,133	2.6%	0.0%
	Hemolytic jaundice and perinatal jaundice	130	23.6%	2.4	\$8,876	0.0%	37.7%
	Birth trauma	5	0.9%	5.8	\$57,104	0.0%	0.0%
	Other perinatal conditions	320	58.0%	10.4	\$72,985	1.6%	43.8%
	Total	552	100.0%	10.6	\$60,477	1.1%	34.2%
Injury and poisoning	Joint disorders and dislocations; trauma-related	64	0.7%	3.4	\$29,663	0.0%	46.9%
	Fracture of neck of femur (hip)	784	8.8%	5.4	\$36,193	1.9%	82.9%
	Spinal cord injury	76	0.8%	11.6	\$86,076	6.6%	61.8%
	Skull and face fractures	191	2.1%	4.2	\$25,970	1.0%	65.4%
	Fracture of upper limb	400	4.5%	3.7	\$23,460	0.5%	74.0%
	Fracture of lower limb	694	7.7%	4.8	\$32,440	0.4%	77.5%
	Other fractures	808	9.0%	5.0	\$26,272	1.6%	73.4%
	Sprains and strains	87	1.0%	3.1	\$16,776	0.0%	55.2%
	Intracranial injury	824	9.2%	6.4	\$34,895	8.1%	72.8%

APPENDIX A

Clinical Classifications Software Categories and Chapter Headings		Number of Discharges	Percent of Discharges	Length of Stay	Mean Total Charges	Percent Expired	Percent Admitted from ED
	Crushing injury or internal injury	329	3.7%	7.4	\$45,790	5.8%	79.6%
	Open wounds of head; neck; and trunk	119	1.3%	3.4	\$21,708	0.8%	79.8%
	Open wounds of extremities	103	1.1%	4.3	\$21,024	0.0%	72.8%
	Complication of device; implant or graft	1,829	20.4%	6.2	\$44,392	2.0%	42.2%
	Complications of surgical procedures or medical care	1,481	16.5%	6.0	\$28,278	1.4%	53.2%
	Superficial injury; contusion	113	1.3%	3.7	\$15,594	0.0%	75.2%
	Burns	15	0.2%	4.5	\$18,026	0.0%	73.3%
	Poisoning by psychotropic agents	277	3.1%	3.5	\$17,180	0.7%	74.4%
	Poisoning by other medications and drugs	463	5.2%	2.9	\$15,234	2.2%	81.2%
	Poisoning by nonmedicinal substances	39	0.4%	4.3	\$28,369	2.6%	69.2%
	Other injuries and conditions due to external causes	264	2.9%	4.3	\$26,378	3.0%	78.0%
	Total	8,960	100.0%	5.4	\$32,357	2.3%	65.1%
Liveborn	Liveborn	11,124	100.0%	3.6	\$7,550	0.5%	0.0%
	Total	11,124	100.0%	3.6	\$7,550	0.5%	0.0%
Other conditions	Syncope	613	16.3%	2.5	\$14,274	0.3%	77.5%
	Fever of unknown origin	152	4.0%	3.7	\$15,610	0.7%	71.7%
	Lymphadenitis	71	1.9%	2.9	\$13,819	0.0%	74.6%
	Gangrene	114	3.0%	10.7	\$53,546	4.4%	39.5%
	Shock	5	0.1%	4.4	\$32,458	0.0%	100.0%
	Nausea and vomiting	77	2.0%	3.6	\$14,080	0.0%	67.5%
	Abdominal pain	364	9.7%	3.0	\$12,591	0.5%	67.0%
	Malaise and fatigue	44	1.2%	2.6	\$10,352	0.0%	75.0%
	Allergic reactions	102	2.7%	3.0	\$13,235	0.0%	78.4%
	Rehabilitation care; fitting of prostheses; and adjustment of devices	1,511	40.1%	12.6	\$29,693	0.1%	0.6%
	Administrative/ social admission	4	0.1%	1.5	\$1,951	0.0%	25.0%
	Medical examination/ evaluation	24	0.6%	3.2	\$32,960	0.0%	0.0%
	Other aftercare	417	11.1%	6.6	\$5,748	59.5%	3.1%
	Other screening for suspected conditions (not mental disorders or infectious disease)	12	0.3%	2.8	\$12,500	0.0%	50.0%
	Residual codes; unclassified	255	6.8%	2.7	\$13,361	1.6%	60.4%
	Total	3,765	100.0%	7.4	\$20,574	7.0%	34.0%
Total All CCS Diagnostic Codes		110,276	100.0%	4.7	\$25,768	2.4%	49.2%

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.

B1. Number and Percent of Discharges, Mean Length of Stay, Mean Charges, Percent Expired, and Percent Admitted from the Emergency Department, by Ecode, Delaware Hospitals, 2012

Clinical Classifications Software Categories for Ecodes	Number of Discharges	Percent of Discharges	Mean LOS	Mean Total Charges	Percent Expired	Percent Admitted from ED
E Codes: Cut/pierce	120	1.3%	4.4	\$21,534	1.7	95.0
E Codes: Drowning/submersion	8	0.1%	2.9	\$27,706	0.0	75.0
E Codes: Fall	3,255	34.3%	5.2	\$28,566	3.3	93.8
E Codes: Fire/burn	27	0.3%	9.6	\$37,636	0.0	81.5
E Codes: Firearms	113	1.2%	8.6	\$56,798	8.8	90.3
E Codes: Machinery	23	0.2%	6.0	\$28,286	0.0	95.7
E Codes: Motor vehicle traffic (MVT)	759	8.0%	5.8	\$39,808	3.3	94.7
E Codes: Pedal cyclist; not MVT	60	0.6%	3.0	\$20,518	0.0	85.0
E Codes: Pedestrian; not MVT	11	0.1%	5.7	\$34,855	0.0	100.0
E Codes: Transport; not MVT	105	1.1%	5.4	\$40,195	1.9	96.2
E Codes: Natural/environment	178	1.9%	3.5	\$17,542	0.6	88.2
E Codes: Overexertion	83	0.9%	3.8	\$24,367	0.0	81.9
E Codes: Poisoning	709	7.5%	3.8	\$19,373	1.0	91.4
E Codes: Struck by; against	229	2.4%	4.1	\$22,834	0.9	85.6
E Codes: Suffocation	54	0.6%	10.7	\$81,916	20.4	90.7
E Codes: Adverse effects of medical care	1,378	14.5%	14.2	\$115,257	3.0	36.3
E Codes: Adverse effects of medical drugs	1,522	16.0%	6.7	\$48,224	1.3	72.4
E Codes: Other specified and classifiable	301	3.2%	8.8	\$42,204	2.3	56.1
E Codes: Other specified; NEC	171	1.8%	10.5	\$55,076	1.2	72.5
E Codes: Unspecified	376	4.0%	6.4	\$36,430	4.0	74.5
E Codes: Place of occurrence	19	0.2%	3.5	\$28,090	10.5	94.7
Total	9,501	100.0%	6.9	\$45,998	2.7	79.1

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

APPENDIX C

C1. Number of All-listed Procedures Performed during the Inpatient Stay, by Procedure and Sex of Patient, Delaware Hospitals, 2012

Single level CCS Procedure Categories and Chapter Headings		Male	Female	Total
Operations on the nervous system	Incision and excision of CNS	254	206	460
	Insertion; replacement; or removal of extracranial ventricular shunt	74	52	126
	Laminectomy; excision intervertebral disc	890	864	1,754
	Diagnostic spinal tap	530	560	1,090
	Insertion of catheter or spinal stimulator and injection into spinal canal	135	90	225
	Decompression peripheral nerve	22	23	45
	Other diagnostic nervous system procedures	18	28	46
	Other non-OR or closed therapeutic nervous system procedures	37	57	94
	Other OR therapeutic nervous system procedures	358	300	658
Total	2,318	2,180	4,498	
Operations on the endocrine system	Thyroidectomy; partial or complete	20	89	109
	Diagnostic endocrine procedures	7	11	18
	Other therapeutic endocrine procedures	104	87	191
Total	131	187	318	
Operations on the eye	Glaucoma procedures	1	3	4
	Lens and cataract procedures	0	2	2
	Repair of retinal tear; detachment	0	0	0
	Destruction of lesion of retina and choroid	1	2	3
	Diagnostic procedures on eye	2	1	3
	Other therapeutic procedures on eyelids; conjunctiva; cornea	72	43	115
	Other intraocular therapeutic procedures	4	5	9
	Other extraocular muscle and orbit therapeutic procedures	9	14	23
Total	89	70	159	
Operations on the ear	Tympanoplasty	1	1	2
	Myringotomy	102	71	173
	Mastoidectomy	6	2	8
	Diagnostic procedures on ear	12	7	19
	Other therapeutic ear procedures	35	28	63
Total	156	109	265	
Operations on the nose, mouth, and pharynx	Control of epistaxis	53	49	102
	Plastic procedures on nose	33	28	61
	Dental procedures	162	117	279
	Tonsillectomy and/or adenoidectomy	93	83	176
	Diagnostic procedures on nose; mouth and pharynx	40	29	69
	Other non-OR therapeutic procedures on nose; mouth and pharynx	106	55	161
	Other OR therapeutic procedures on nose; mouth and pharynx	185	117	302
Total	672	478	1,150	
Operations on the respiratory system	Tracheostomy; temporary and permanent	159	112	271
	Tracheoscopy and laryngoscopy with biopsy	114	101	215
	Lobectomy or pneumonectomy	129	114	243
	Diagnostic bronchoscopy and biopsy of bronchus	459	408	867
	Other diagnostic procedures on lung and bronchus	17	13	30
	Incision of pleura; thoracentesis; chest drainage	844	692	1,536
	Other diagnostic procedures of respiratory tract and mediastinum	68	50	118
	Other non-OR therapeutic procedures on respiratory system	171	103	274
	Other OR Rx procedures on respiratory system and mediastinum	171	87	258
Total	2,132	1,680	3,812	
Operations on the cardiovascular system	Heart valve procedures	278	207	485
	Coronary artery bypass graft (CABG)	780	275	1,055
	Percutaneous transluminal coronary angioplasty (PTCA)	1,266	607	1,873
	Coronary thrombolysis	0	0	0
	Diagnostic cardiac catheterization; coronary arteriography	5,527	3,772	9,299
	Insertion; revision; replacement; removal of cardiac pacemaker or	680	666	1,346
	Other OR heart procedures	392	289	681
Extracorporeal circulation auxiliary to open heart procedures	610	318	928	

APPENDIX C

Single level CCS Procedure Categories and Chapter Headings		Male	Female	Total
	Endarterectomy; vessel of head and neck	184	119	303
	Aortic resection; replacement or anastomosis	109	38	147
	Varicose vein stripping; lower limb	1	0	1
	Other vascular catheterization; not heart	3,088	3,309	6,397
	Peripheral vascular bypass	141	106	247
	Other vascular bypass and shunt; not heart	29	22	51
	Creation; revision and removal of arteriovenous fistula or vessel-to-vessel cannula for dialysis	68	66	134
	Hemodialysis	1,298	955	2,253
	Other OR procedures on vessels of head and neck	142	148	290
	Embolectomy and endarterectomy of lower limbs	81	73	154
	Other OR procedures on vessels other than head and neck	3,203	1,973	5,176
	Other diagnostic cardiovascular procedures	160	140	300
	Other non-OR therapeutic cardiovascular procedures	1,171	655	1,826
	Total	19,208	13,738	32,946
Operations on the hemic and lymphatic system	Bone marrow transplant	38	16	54
	Bone marrow biopsy	171	125	296
	Procedures on spleen	41	40	81
	Other therapeutic procedures; hemic and lymphatic system	338	521	859
	Total	588	702	1,290
Operations on the digestive system	Injection or ligation of esophageal varices	3	1	4
	Esophageal dilatation	29	32	61
	Upper gastrointestinal endoscopy; biopsy	1,637	1,905	3,542
	Gastrostomy; temporary and permanent	247	222	469
	Colostomy; temporary and permanent	70	93	163
	Ileostomy and other enterostomy	77	69	146
	Gastrectomy; partial and total	68	211	279
	Small bowel resection	173	212	385
	Colonoscopy and biopsy	611	746	1,357
	Proctoscopy and anorectal biopsy	105	105	210
	Colorectal resection	489	569	1,058
	Local excision of large intestine lesion (not endoscopic)	6	11	17
	Appendectomy	442	461	903
	Hemorrhoid procedures	13	8	21
	Endoscopic retrograde cannulation of pancreas (ERCP)	37	44	81
	Biopsy of liver	112	94	206
	Cholecystectomy and common duct exploration	428	767	1,195
	Inguinal and femoral hernia repair	108	33	141
	Other hernia repair	318	602	920
	Laparoscopy (GI only)	68	67	135
	Abdominal paracentesis	503	472	975
	Exploratory laparotomy	22	23	45
	Excision; lysis peritoneal adhesions	259	742	1,001
	Peritoneal dialysis	37	56	93
	Other bowel diagnostic procedures	17	20	37
	Other non-OR upper GI therapeutic procedures	381	274	655
	Other OR upper GI therapeutic procedures	232	429	661
	Other non-OR lower GI therapeutic procedures	349	268	617
	Other OR lower GI therapeutic procedures	449	505	954
	Other gastrointestinal diagnostic procedures	81	160	241
	Other non-OR gastrointestinal therapeutic procedures	391	517	908
	Other OR gastrointestinal therapeutic procedures	338	462	800
	Total	8,100	10,180	18,280
Operations on the urinary system	Endoscopy and endoscopic biopsy of the urinary tract	182	305	487
	Transurethral excision; drainage; or removal urinary obstruction	237	151	388
	Ureteral catheterization	312	496	808
	Nephrotomy and nephrostomy	66	77	143

APPENDIX C

Single level CCS Procedure Categories and Chapter Headings		Male	Female	Total
	Nephrectomy; partial or complete	126	73	199
	Kidney transplant	20	14	34
	Genitourinary incontinence procedures	2	52	54
	Extracorporeal lithotripsy; urinary	15	9	24
	Indwelling catheter	169	94	263
	Procedures on the urethra	61	2	63
	Other diagnostic procedures of urinary tract	46	50	96
	Other non-OR therapeutic procedures of urinary tract	79	162	241
	Other OR therapeutic procedures of urinary tract	161	215	376
	Total	1,476	1,700	3,176
Operations on the male genital organs	Transurethral resection of prostate (TURP)	74	0	74
	Open prostatectomy	68	0	68
	Circumcision	4,482	22	4,504
	Diagnostic procedures; male genital	10	0	10
	Other non-OR therapeutic procedures; male genital	53	0	53
	Other OR therapeutic procedures; male genital	98	0	98
	Total	4,785	22	4,807
Operations on the female genital organs	Oophorectomy; unilateral and bilateral	0	656	656
	Other operations on ovary	0	107	107
	Ligation or occlusion of fallopian tubes	0	729	729
	Other operations on fallopian tubes	0	115	115
	Hysterectomy; abdominal and vaginal	0	780	780
	Other excision of cervix and uterus	0	108	108
	Abortion (termination of pregnancy)	0	7	7
	Dilatation and curettage (D&C); aspiration after delivery or abortion	0	46	46
	Diagnostic dilatation and curettage (D&C)	0	27	27
	Repair of cystocele and rectocele; obliteration of vaginal vault	0	65	65
	Other diagnostic procedures; female organs	0	72	72
	Other non-OR therapeutic procedures; female organs	0	40	40
	Other OR therapeutic procedures; female organs	0	272	272
	Total	0	3,024	3,024
Obstetrical procedures	Removal of ectopic pregnancy	0	23	23
	Episiotomy	0	249	249
	Cesarean section	1	3,631	3,632
	Forceps; vacuum; and breech delivery	0	730	730
	Artificial rupture of membranes to assist delivery	0	3,162	3,162
	Other procedures to assist delivery	0	9,590	9,590
	Diagnostic amniocentesis	0	2	2
	Fetal monitoring	2	5,651	5,653
	Repair of current obstetric laceration	0	3,845	3,845
	Other therapeutic obstetrical procedures	0	228	228
	Total	3	27,111	27,114
Operations on the musculoskeletal system	Partial excision bone	610	548	1,158
	Bunionectomy or repair of toe deformities	8	8	16
	Treatment; facial fracture or dislocation	103	28	131
	Treatment; fracture or dislocation of radius and ulna	104	138	242
	Treatment; fracture or dislocation of hip and femur	426	601	1,027
	Treatment; fracture or dislocation of lower extremity (other than hip or femur)	460	380	840
	Other fracture and dislocation procedure	312	296	608
	Arthroscopy	10	14	24
	Division of joint capsule; ligament or cartilage	26	32	58
	Excision of semilunar cartilage of knee	9	12	21
	Arthroplasty knee	928	1,504	2,432
	Hip replacement; total and partial	925	1,209	2,134

APPENDIX C

Single level CCS Procedure Categories and Chapter Headings		Male	Female	Total
	Arthroplasty other than hip or knee	71	107	178
	Arthrocentesis	135	120	255
	Injections and aspirations of muscles; tendons; bursa; joints and soft tissue	33	23	56
	Amputation of lower extremity	309	115	424
	Spinal fusion	2,301	2,382	4,683
	Other diagnostic procedures on musculoskeletal system	131	163	294
	Other therapeutic procedures on muscles and tendons	937	633	1,570
	Other OR therapeutic procedures on bone	413	415	828
	Other OR therapeutic procedures on joints	269	200	469
	Other non-OR therapeutic procedures on musculoskeletal system	560	727	1,287
	Other OR therapeutic procedures on musculoskeletal system	85	57	142
	Total	9,165	9,712	18,877
Operations on the integumentary system	Breast biopsy and other diagnostic procedures on breast	1	16	17
	Lumpectomy; quadrantectomy of breast	0	19	19
	Mastectomy	2	71	73
	Incision and drainage; skin and subcutaneous tissue	466	391	857
	Debridement of wound; infection or burn	453	339	792
	Excision of skin lesion	71	97	168
	Suture of skin and subcutaneous tissue	359	246	605
	Skin graft	162	126	288
	Other diagnostic procedures on skin and subcutaneous tissue	21	31	52
	Other non-OR therapeutic procedures on skin and breast	340	408	748
	Other OR therapeutic procedures on skin and breast	110	258	368
	Total	1,985	2,002	3,987
Miscellaneous diagnostic and therapeutic procedures	Other organ transplantation	4	7	11
	Computerized axial tomography (CT) scan head	2	4	6
	CT scan chest	19	29	48
	CT scan abdomen	20	27	47
	Other CT scan	18	21	39
	Myelogram	5	3	8
	Intraoperative cholangiogram	43	35	78
	Upper gastrointestinal X-ray	4	6	10
	Intravenous pyelogram	3	4	7
	Cerebral arteriogram	118	155	273
	Contrast aortogram	290	232	522
	Contrast arteriogram of femoral and lower extremity arteries	894	580	1,474
	Arterio- or venogram (not heart and head)	825	565	1,390
	Diagnostic ultrasound of head and neck	11	12	23
	Diagnostic ultrasound of heart (echocardiogram)	799	653	1,452
	Diagnostic ultrasound of gastrointestinal tract	27	20	47
	Diagnostic ultrasound of urinary tract	5	5	10
	Diagnostic ultrasound of abdomen or retroperitoneum	11	7	18
	Other diagnostic ultrasound	45	204	249
	Magnetic resonance imaging	109	114	223
	Electroencephalogram (EEG)	56	59	115
	Nonoperative urinary system measurements	4	5	9
	Cardiac stress tests	10	10	20
	Electrocardiogram	0	2	2
	Swan-Ganz catheterization for monitoring	37	33	70
	Arterial blood gases	1	0	1
Microscopic examination (bacterial smear; culture; toxicology)	0	8	8	

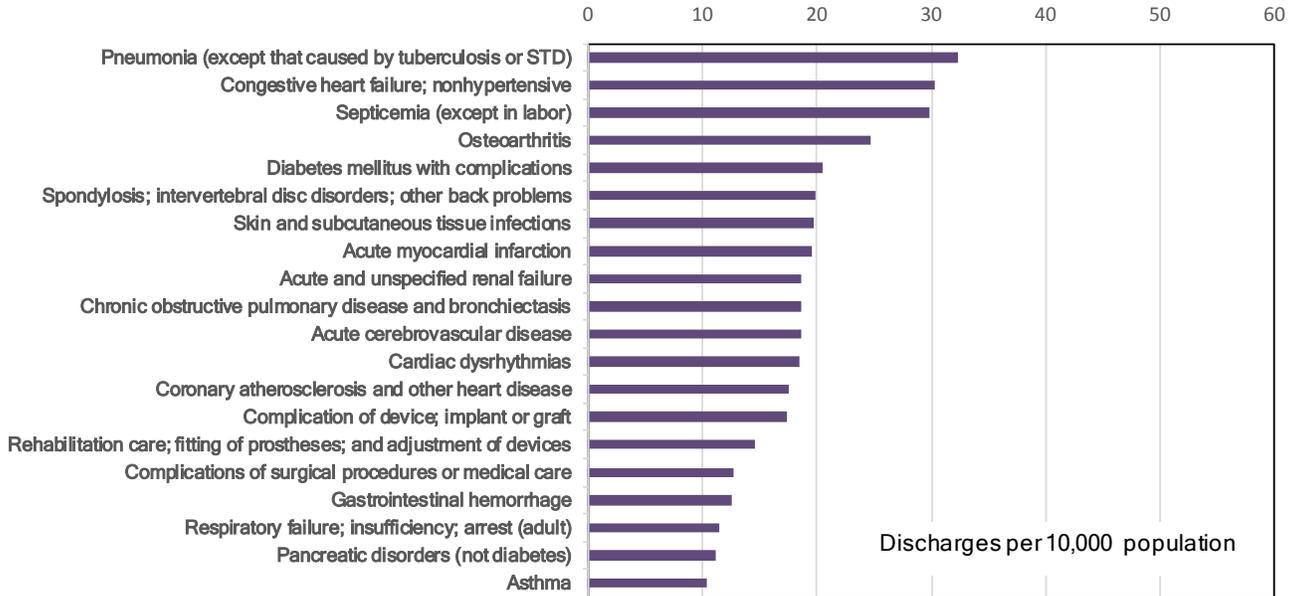
APPENDIX C

Single level CCS Procedure Categories and Chapter Headings	Male	Female	Total
Radioisotope bone scan	2	0	2
Radioisotope pulmonary scan	2	6	8
Radioisotope scan and function studies	9	12	21
Other radioisotope scan	2	6	8
Therapeutic radiology for cancer treatment	64	60	124
Diagnostic physical therapy	3	1	4
Physical therapy exercises; manipulation; and other procedures	304	338	642
Traction; splints; and other wound care	205	209	414
Other physical therapy and rehabilitation	407	435	842
Respiratory intubation and mechanical ventilation	4,778	4,530	9,308
Other respiratory therapy	4	3	7
Psychological and psychiatric evaluation and therapy	12	33	45
Alcohol and drug rehabilitation/detoxification	81	27	108
Ophthalmologic and otologic diagnosis and treatment	2,809	2,828	5,637
Nasogastric tube	111	121	232
Blood transfusion	4,254	4,757	9,011
Enteral and parenteral nutrition	420	468	888
Cancer chemotherapy	430	335	765
Conversion of cardiac rhythm	530	379	909
Other diagnostic radiology and related techniques	332	448	780
Other diagnostic procedures (interview; evaluation; consultation)	2,033	2,298	4,331
Prophylactic vaccinations and inoculations	3,477	3,941	7,418
Nonoperative removal of foreign body	62	35	97
Other therapeutic procedures	7,782	11,068	18,850
Total	31,473	35,138	66,611

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

APPENDIX D

D1. Annual Hospitalization Rates for 20 Most Frequent Diagnoses* of Males, All Delaware Residents, 2012

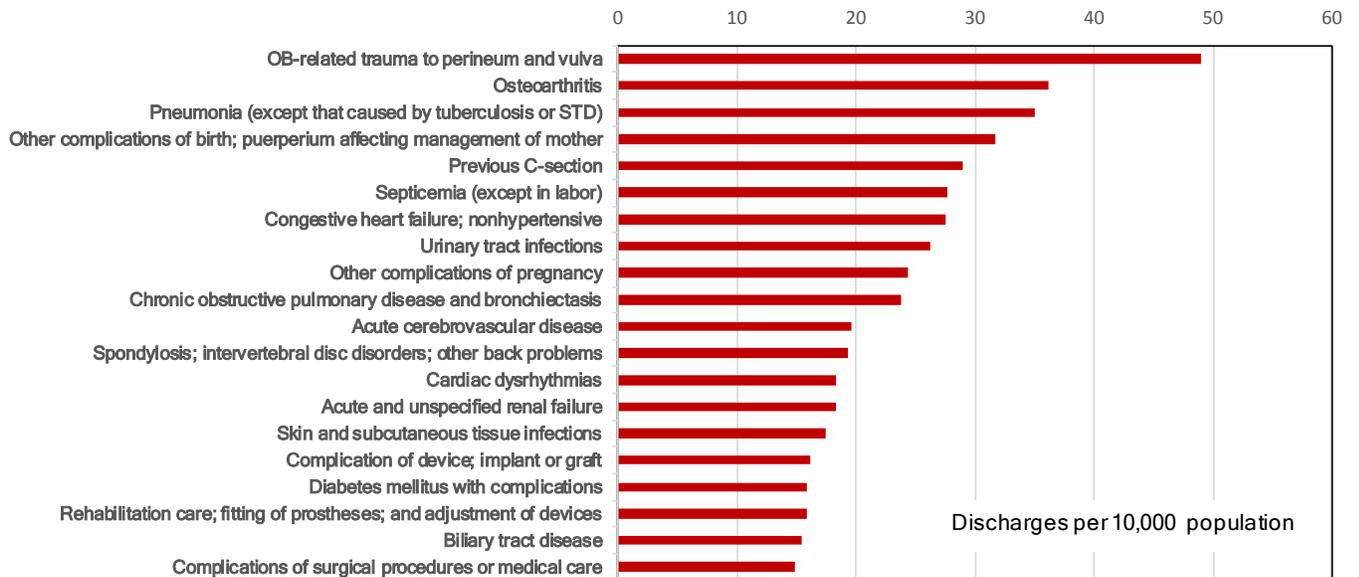


Note: Calculations based on total population.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

*Excluding liveborn infants.

D2. Annual Hospitalization Rates for 20 Most Frequent Diagnoses* of Females, All Delaware Residents, 2012



Note: Calculations based on total population.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

*Excluding liveborn infants.

APPENDIX E

E1. Conditions with the 10 Highest Total Charges, Delaware Hospitals, 2012

Rank	CCS Principal Diagnoses	Total Billed Charges	% of Total Charges	Number of Discharges
1	Septicemia (except in labor)	\$128,963,433	4.5%	2,884
2	Osteoarthritis	\$107,281,348	3.8%	3,153
3	Acute myocardial infarction	\$100,157,523	3.5%	1,808
4	Spondylosis; intervertebral disc disorders; other back problems	\$85,714,929	3.0%	2,107
5	Liveborn	\$83,991,072	3.0%	11,124
6	Pneumonia (except that caused by tuberculosis or STD)	\$83,322,840	2.9%	3,488
7	Complication of device; implant or graft	\$81,192,839	2.9%	1,829
8	Respiratory failure; insufficiency; arrest (adult)	\$79,159,393	2.8%	1,296
9	Congestive heart failure; nonhypertensive	\$76,555,091	2.7%	2,916
10	Coronary atherosclerosis and other heart disease	\$75,043,166	2.6%	1,437
Total for 10 most expensive conditions		\$901,381,633	31.7%	32,042
Total aggregate charges for all discharges		\$2,842,965,105	100.0%	110,427

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

E2. Discharges with Highest Mean Charges, Delaware Hospitals, 2012

CCS Principal Diagnoses	Number Discharges			Percent of Total Discharges			Mean Charges		
	2002	2007	2012	2002	2007	2012	2002	2007	2012
Total All Discharges	102,016	117,247	110,427	100.0%	100.0%	100.0%	\$12,439	\$19,519	\$25,745
Leukemias	107	104	173	0.1%	0.1%	0.2%	\$52,593	\$122,112	\$124,352
Digestive congenital anomalies	99	129	107	0.1%	0.1%	0.1%	\$33,338	\$52,044	\$113,862
Nervous system congenital anomalies	29	41	43	0.0%	0.0%	0.0%	\$35,210	\$69,870	\$105,452
Heart valve disorders	253	337	363	0.2%	0.3%	0.3%	\$56,152	\$82,714	\$92,010
Bacterial infection; unspecified site	33	40	42	0.0%	0.0%	0.0%	\$18,687	\$28,937	\$91,179
Spinal cord injury	45	49	76	0.0%	0.0%	0.1%	\$48,616	\$65,596	\$86,076
Other congenital anomalies	253	311	214	0.2%	0.3%	0.2%	\$37,679	\$56,418	\$78,343
Hodgkin's disease	30	12	14	0.0%	0.0%	0.0%	\$18,681	\$74,483	\$77,346
Paralysis	30	54	56	0.0%	0.0%	0.1%	\$14,164	\$32,355	\$77,027
Cancer of brain and nervous system	80	106	109	0.1%	0.1%	0.1%	\$25,558	\$50,533	\$74,762

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

E3. Number, Percent, and Mean Charges for the Highest Volume Discharges, Delaware Hospitals, 2012

CCS Principal Diagnoses	Number Discharges			Percent of Total Discharges			Mean Charges		
	2002	2007	2012	2002	2007	2012	2002	2007	2012
Total All Discharges	102,016	117,247	110,427	100.0%	100.0%	100.0%	\$12,439	\$19,519	\$25,745
Liveborn	11,098	12,213	11,124	10.9%	10.4%	10.1%	\$3,814	\$5,144	\$7,550
Pneumonia (except that caused by tuberculosis or STD)	3,050	3,227	3,488	3.0%	2.8%	3.2%	\$13,591	\$18,876	\$23,888
Osteoarthritis	1,679	2,724	3,153	1.6%	2.3%	2.9%	\$19,879	\$29,005	\$34,025
Congestive heart failure; nonhypertensive	2,921	2,851	2,916	2.9%	2.4%	2.6%	\$15,088	\$25,787	\$26,253
Septicemia (except in labor)	915	1,846	2,884	0.9%	1.6%	2.6%	\$23,401	\$38,923	\$44,717
OB-related trauma to perineum and vulva	2,194	2,626	2,549	2.2%	2.2%	2.3%	\$3,410	\$5,247	\$6,718
Spondylosis; intervertebral disc disorders; other back	1,802	1,704	2,107	1.8%	1.5%	1.9%	\$14,242	\$28,843	\$40,681
Chronic obstructive pulmonary disease and	1,551	1,773	2,063	1.5%	1.5%	1.9%	\$11,580	\$14,379	\$17,263
Acute cerebrovascular disease	1,649	1,713	1,965	1.6%	1.5%	1.8%	\$18,679	\$23,468	\$33,729
Skin and subcutaneous tissue infections	1,249	2,167	1,914	1.2%	1.8%	1.7%	\$8,901	\$12,294	\$13,989

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

2012 Delaware Hospitalizations

F1. Top 10 Most Frequent Diagnoses for Medicare, Delaware Hospitals, 2012

<i>CCS Diagnosis</i>	<i>Number of Discharges</i>	<i>Percent of hospitalizations for this condition billed to Medicare</i>
Congestive heart failure; nonhypertensive	2,391	5.4%
Pneumonia (except that caused by tuberculosis or STD)	2,055	4.6%
Septicemia (except in labor)	2,020	4.5%
Osteoarthritis	1,852	4.2%
Chronic obstructive pulmonary disease and bronchiectasis	1,509	3.4%
Cardiac dysrhythmias	1,348	3.0%
Acute and unspecified renal failure	1,345	3.0%
Acute cerebrovascular disease	1,333	3.0%
Urinary tract infections	1,255	2.8%
Rehabilitation care; fitting of prostheses; and adjustment of devices	1,133	2.5%

F2. Top 10 Most Frequent Diagnoses for Medicaid, Delaware Hospitals, 2012

<i>CCS Diagnosis</i>	<i>Number of Discharges</i>	<i>Percent of hospitalizations for this condition billed to Medicaid</i>
Liveborn	5,750	21.4%
OB-related trauma to perineum and vulva	1,021	3.8%
Other complications of birth; puerperium affecting management of mother	791	2.9%
Previous C-section	732	2.7%
Other complications of pregnancy	717	2.7%
Pneumonia (except that caused by tuberculosis or STD)	619	2.3%
Asthma	545	2.0%
Diabetes mellitus with complications	509	1.9%
Skin and subcutaneous tissue infections	485	1.8%
Septicemia (except in labor)	331	1.2%

F3. Top 10 Most Frequent Diagnoses for Privately Insured, Delaware Hospitals, 2012

<i>CCS Diagnosis</i>	<i>Number of Discharges</i>	<i>Percent of hospitalizations for this condition billed to Private Insurers</i>
Liveborn	4,811	14.8%
OB-related trauma to perineum and vulva	1,366	4.2%
Osteoarthritis	1,013	3.1%
Other complications of birth; puerperium affecting management of mother	737	2.3%
Spondylosis; intervertebral disc disorders; other back problems	720	2.2%
Previous C-section	665	2.1%
Pneumonia (except that caused by tuberculosis or STD)	654	2.0%
Skin and subcutaneous tissue infections	514	1.6%
Biliary tract disease	484	1.5%
Acute myocardial infarction	474	1.5%

F4. Top 10 Most Frequent Diagnoses for Uninsured, Delaware Hospitals, 2012

<i>CCS Diagnosis</i>	<i>Number of Discharges</i>	<i>Percent of hospitalizations for this condition billed to Uninsured Patients</i>
Mood disorders	131	4.4%
Skin and subcutaneous tissue infections	124	4.2%
Liveborn	121	4.1%
Diabetes mellitus with complications	103	3.5%
Acute myocardial infarction	99	3.3%
Alcohol-related disorders	81	2.7%
Pneumonia (except that caused by tuberculosis or STD)	73	2.5%
Biliary tract disease	67	2.3%
Pancreatic disorders (not diabetes)	65	2.2%
Asthma	62	2.1%

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

**G1. Conditions with the Highest Number of In-Hospital Deaths by Age Group¹
Delaware Hospitals, 2012**

Diagnosis	Age Group in Years					TOTAL
	Under 1	0-17	18-44	45-64	65+	
Septicemia (except in labor)	0	5	12	101	290	408
Other aftercare	0	0	7	61	180	248
Acute cerebrovascular disease	0	0	9	40	107	156
Respiratory failure; insufficiency; arrest (adult)	0	2	8	32	105	147
Aspiration pneumonitis; food/vomitus	0	1	1	8	83	93
Pneumonia (except that caused by tuberculosis or STD)	1	2	0	12	76	91
Congestive heart failure; nonhypertensive	0	0	1	9	75	85
Acute myocardial infarction	0	0	2	17	59	78
Secondary malignancies	0	1	3	27	44	75
Intracranial injury	0	3	10	12	42	67
Acute and unspecified renal failure	0	0	1	7	52	60
Cancer of bronchus; lung	0	0	1	12	34	47
Complication of device; implant or graft	0	2	3	8	24	37
Gastrointestinal hemorrhage	0	0	1	12	23	36
Cardiac arrest and ventricular fibrillation	1	0	2	8	23	34
Other liver diseases	0	0	2	20	8	30
Crushing injury or internal injury	0	2	5	7	5	19
Aortic; peripheral; and visceral artery aneurysms	0	1	0	3	12	16
Leukemias	0	3	3	4	6	16
Mood disorders	0	0	9	4	0	13
Cardiac and circulatory congenital anomalies	9	1	0	0	0	10
Poisoning by other medications and drugs	0	0	4	5	1	10
Substance-related disorders	0	0	6	4	0	10
Cancer of brain and nervous system	0	1	2	4	2	9
Other injuries and conditions due to external causes	1	1	0	3	3	8
HIV infection	0	0	4	2	1	7
Other perinatal conditions	5	0	0	0	0	5
Malignant neoplasm without specification of site	0	1	0	1	1	3
No diagnosis	3	0	0	0	0	3
Meningitis (except that caused by tuberculosis or STD)	1	1	0	0	0	2
Bacterial infection; unspecified site	1	0	0	0	0	1
Digestive congenital anomalies	1	0	0	0	0	1
All Discharges to Death	84	35	129	626	1,750	2,624

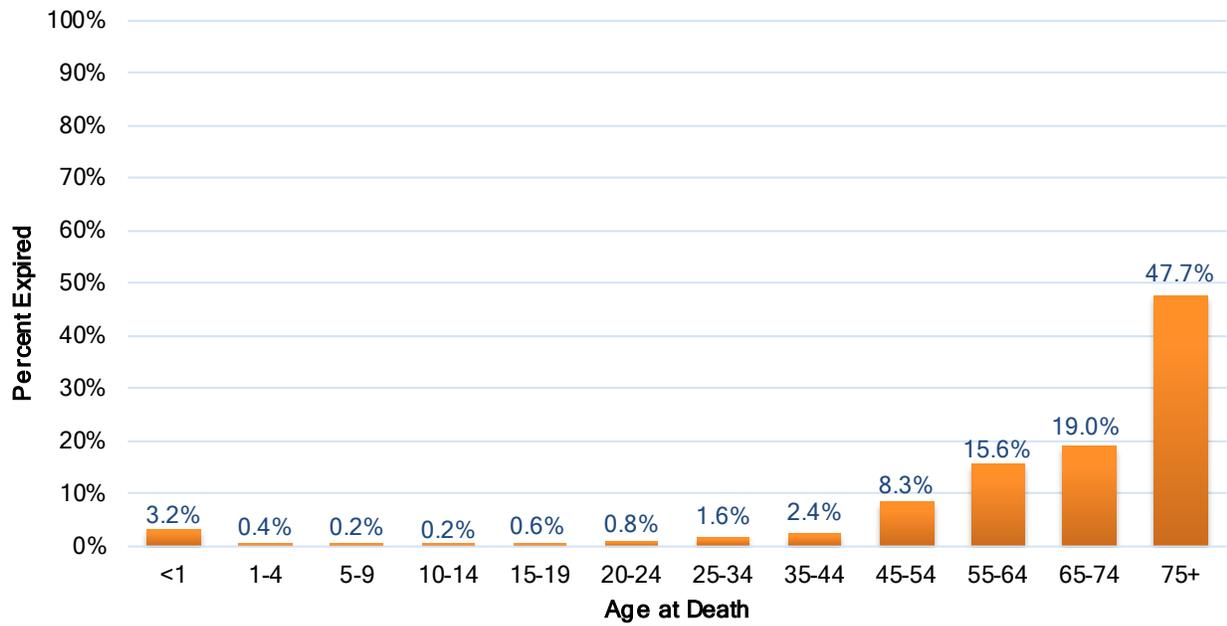
Notes:

1. Diagnoses selected by taking the top ten diagnoses for each age group.

Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

APPENDIX H

H1. Percent of Patients who Died while Hospitalized by Age Group, Delaware Hospitals, 2012



Source: Delaware Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Methods:

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

Rate calculations and significance testing:

Hospital Discharge Rates were calculated using the Delaware Population Consortium’s (DPC) October 2014 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

- R₁ = first rate
- R₂ = second rate
- N₁ = first number of discharges
- N₂ = 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

- N₁ = first denominator
- N₂ = second denominator

$$p = \frac{N_1 * p_1 + N_2 * p_2}{N_1 + N_2}$$

- p₁=the first percent
- p₂=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 2012 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 <https://www.ahrq.gov/research/data/hcup/index.html>.

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.

Ecodes - Indicate the external causes of injuries and poisonings as well as the adverse effects of drugs and substances. They are intended to provide data for injury research and evaluation of injury prevention strategies. These codes capture how the injury or health condition happened (cause), the intent (unintentional or accidental; or intentional, such as suicide or assault), the place where the event occurred, the activity of the patient at the time of the event, and the person's status (e.g. civilian, military).

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 insurance.
 - 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.

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- 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.
- 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 two 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: <https://www.cdc.gov/nchs/icd/icd9cm.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 those with intellectual disabilities.

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 (OB) - 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 2012 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.

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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.

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

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