# DELAWARE HOSPITAL DISCHARGE SUMMARY REPORT • 2018

Issued June 2022



# **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 2018 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 Hospital.

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 2017 to 2018 increasing from 112,423 in 2017 to 112,898 in 2018. Total aggregate charges decreased by 0.8 percent between 2017 and 2018. (see page 20).
- Women accounted for 56.1 percent of all discharges compared to 43.9 percent for men. In the 25 to 34 year age group, four out of every five discharges were women.
- Inpatient hospitalizations in 2018 generated total charges of \$3.98 billion; 47.4 percent of that total (\$1.88 billion) was billed to Medicare.
- In 2018, the average length of stay (ALOS) was 5.2 days and the mean charge for a hospitalization was \$35,236.
- The most frequent reasons for hospitalization included hypertension with complications and secondary hypertension, septicemia (except in labor), osteoarthritis, pneumonia (except that caused by tuberculosis or std), and acute cerebrovascular disease.
- The point of origin for 23.6 percent of hospitalizations was a clinic or physician's office.
- Non-residents accounted for 12.2 percent of all discharges from Delaware hospitals, most of whom came from Pennsylvania, Maryland, and New Jersey.

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

### **EXECUTIVE SUMMARY**

- Hospital stays for previous C-sections represented 11.7 percent of pregnancy related discharges compared to 3.7 percent for normal deliveries.
- The average length of stay for premature and low birth weight babies was 31.9 days compared to 3.9 days for all deliveries.
- Around two-thirds of patients underwent a procedure while hospitalized; 25.0 percent had only one procedure, 12.4 had two procedures, and 19.7 had three or more during their stay.
- Patients who were uninsured and those covered by Medicare were more likely to be classified as emergency/trauma at time of admission; 73.1 percent of uninsured patients and 78.1 percent of Medicare patients were classified as emergency/trauma at admission in 2018.
- Medicare and private insurers were the primary payers at 43.3 and 27.7 percent, respectively, of all hospital
  discharges in 2018. Medicaid was the primary payer in 24.8 percent of all hospital stays, and uninsured
  hospitalizations accounted for 0.9 percent of the total stays. The remaining 3.2 percent of hospitalizations were
  covered by other specified or unknown programs.

Patients under one year old accounted for 11.7 percent of all discharges in 2018; the majority of these discharges were infants hospitalized by virtue of being born in the hospital. Patients 65 and older were responsible for 38.5 percent of all discharges in 2018.

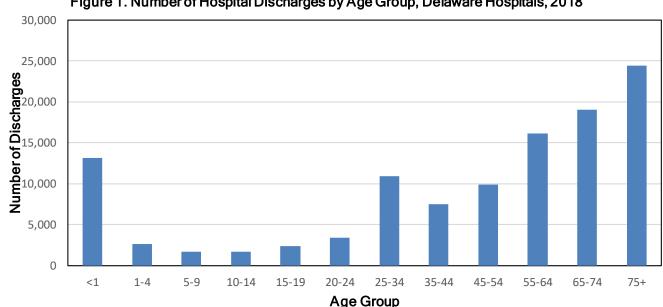


Figure 1. Number of Hospital Discharges by Age Group, Delaware Hospitals, 2018

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

Males made up the majority of discharges in the age groups under 10. 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 2018, 56.1 percent of total discharges were women.

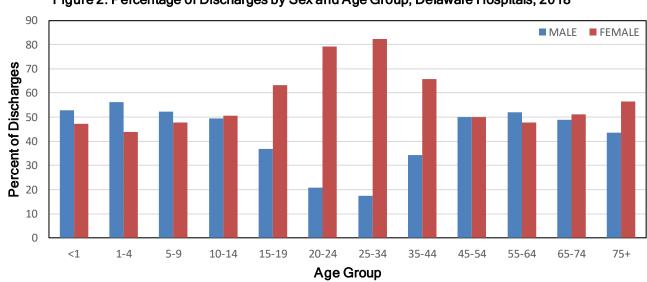


Figure 2. Percentage of Discharges by Sex and Age Group, Delaware Hospitals, 2018

Non-residents accounted for 12.2 percent of all discharges from Delaware hospitals, most of whom came from Pennsylvania, Maryland, and New Jersey. Close to half of the patients at A.I. duPont Hospital for Children were non-residents (44.8 percent).

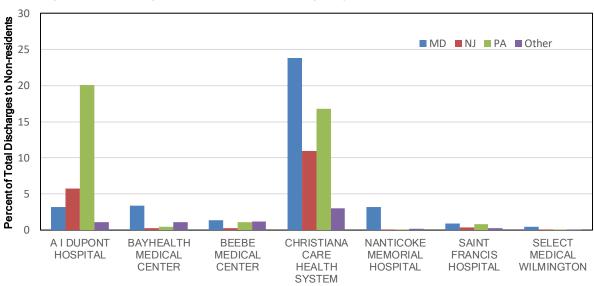


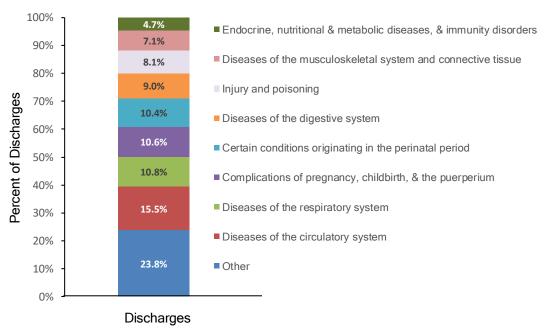
Figure 3. Percentage of Non-Resident Discharges by State, Delaware Hospitals, 2018

Hospital System

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

Hospital admissions increased slightly between 2016 and 2018. Total admissions rose 0.7 percent moving from 112,120 in 2016 to 112,898 in 2018. The two hospitals with the greatest percent change were Bayhealth Medical Center, which increased 8.0 percent; and Saint Francis Hospital, which increased 12.8 percent.





Average length of stay (ALOS) increased from 5.0 to 5.2 days between 2004 and 2018. There was a 7.3 percent increase in patients staying four to seven days that was balanced by a 3.5 percent decrease in patients staying three days or less between 2004 and 2018. In 2018, 58.3 percent of patients stayed three or fewer days in the hospital.

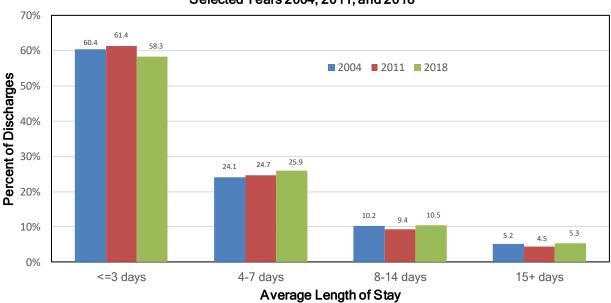


Figure 5. Percentage of Hospital Discharges by Average Length of Stay, Delaware, Selected Years 2004, 2011, and 2018

Source: Delaware Department of 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 2018, 77.7 percent of patients under 18 had hospital stays of three days or less, compared to 46.8 percent for patients 65 and over. Patients aged 65 and over were three and a half times as likely to have stays of 8 to 14 days when compared to patients under the age of 18.

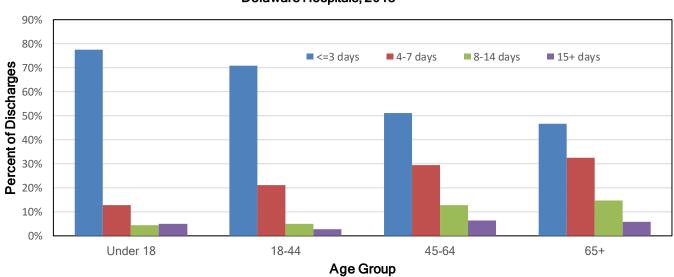


Figure 6. Percentage of Hospital Discharges by Average Length of Stay and Age Group, Delaware Hospitals, 2018

### Gender:

Between 2004 and 2018, the average length of stay (ALOS) increased 6.1 percent for male patients and 0.2 percent for female patients. When female obstetrical patients were excluded from the calculation of average length of stay, female patients had slightly lower ALOS figures compared to males in all time periods. During the period from 2004 to 2018 non-obstetrical female patients saw a decrease in length of stay of 1.4 percent while both obstetric females and males saw an increase in length of stay of around 6 percent.

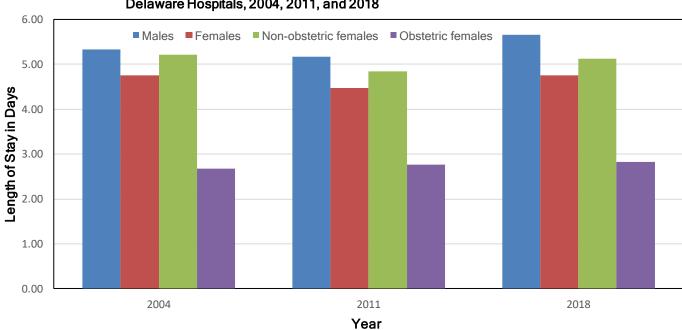


Figure 7. Mean Length of Hospital Stay by Patient Type and Year, Delaware Hospitals, 2004, 2011, and 2018

# WHY PATIENTS WERE HOSPITALIZED

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

Diseases of the circulatory system accounted for 15.4 percent of the total discharges in 2018 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. Diseases of the respiratory system accounted for 11.0 percent of the total discharges. Complications of pregnancy, childbirth, & the puerperium comprised 10.1 percent of discharges, while another 10.0 percent of discharges were related to certain conditions originating in the perinatal period. Together these two diagnoses accounted for 20.1 percent of total discharges. The above four categories accounted for 46.5 percent of all hospitalizations.

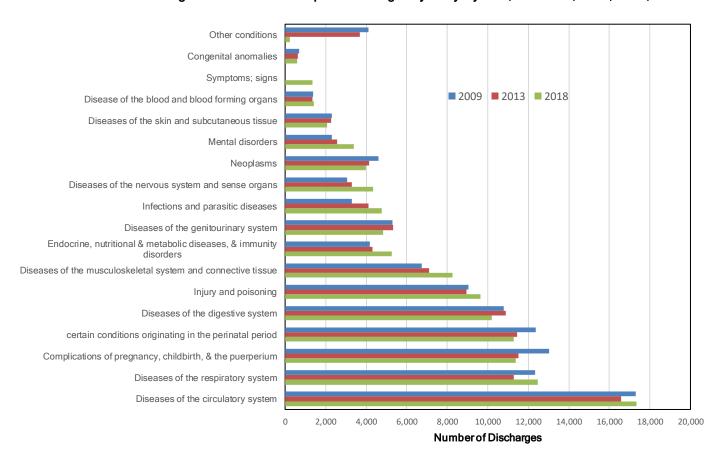


Figure 8. Number of Hospital Discharges by Body System, Delaware, 2009, 2013, and 2018

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

The largest percent increase (47.5 percent) in hospitalizations from 2009 to 2018 occurred in mental disorders. Infections and parasitic diseases also demonstrated a large percentage increase (44.5 percent) from 2009 to 2018. At 42.5 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 (94.0 percent), followed by neoplasms (13.4 percent).

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

### WHY PATIENTS WERE HOSPITALIZED

### Most frequent reasons for hospitalization by 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; seven 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, septicemia, osteoarthritis, and hypertension. Table 1 shows the most frequent diagnoses for both men and women, by number, percent, and rank of discharges by gender.

Table 1. Number, Rank, and Percentage of the Most Frequent Diagnoses (CCS Defined) by Gender, Delaware Hospitals, 2018

CCC Bringing Diagnosis		MALE		FEMALE		
CCS Principal Diagnosis	#	%	Rank	#	%	Rank
All diagnoses	49,530	100		63,335	100	
Pregnancy & childbirth				11,387	18.0	1
Liveborn Infant	5,526	11.2	1	5,196	8.2	2
Hypertension with complications and secondary hypertension	2,310	4.7	2	2,058	3.2	5
Osteoarthritis	1,753	3.5	4	2,569	4.1	3
Septicemia (except in labor)	2,127	4.3	3	2,069	3.3	4
Pneumonia (except that caused by tuberculosis or STD)	1,433	2.9	5	1,568	2.5	6
Acute cerebrovascular disease	1,301	2.6	6	1,294	2.0	9
Chronic obstructive pulmonary disease and bronchiectasis	916	1.8	14	1,354	2.1	7
Diabetes mellitus with complications	1,239	2.5	7	957	1.5	15
Complication of device; implant or graft	1,104	2.2	9	912	1.4	17
Respiratory failure; insufficiency; arrest (adult)	980	2.0	11	1,023	1.6	11
Spondylosis; intervertebral disc disorders; other back problems	935	1.9	12	988	1.6	13
Urinary tract infections	596	1.2	23	1,308	2.1	8
Other nervous system disorders	881	1.8	16	987	1.6	14
Complications of surgical procedures or medical care	845	1.7	17	1,018	1.6	12

Source: Delaware Department of 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, acute bronchitis, and epilepsy convulsions made up the top three diagnoses.
- For those ages 18-44, most of the top 10 diagnoses were associated with pregnancy and childbirth. If
  pregnancy and childbirth were excluded, diabetes mellitus with complications, other nutritional; endocrine;
  and metabolic disorders, and septicemia became the three most common reasons for hospitalization.
- For those ages 45-64, osteoarthritis, septicemia (except in labor), and hypertension with complications and secondary hypertension, comprised the top three diagnoses.
- For those over 65, hypertension with complications and secondary hypertension, osteoarthritis, and septicemia (except in labor) were the top three diagnoses.

Though the most common reasons for hospitalization differed by age, pneumonia appeared in the 10 most frequent diagnoses for nearly all five age groups. Hypertension with complications and secondary hypertension was the single most frequent reason for hospitalization followed by osteoarthritis.

### Injury hospitalizations:

Injury hospitalizations accounted for 8.5 percent of the total number of discharges and \$420 million in aggregate charges in 2018. The majority of patients were admitted through the emergency department, and the average charge for an injury stay ranged from \$19,458 for superficial injury; contusion to \$91,068 for joint disorders and dislocations; trauma-related, with an overall average charge of \$43,565 (see Appendix A).

The most common primary diagnosis for an injury hospitalization in 2018 was complication of device; implant or graft, which accounted for 20.9 percent of injury hospitalizations. Complications of surgical procedures or medical care were responsible for another 19.3 percent of injury hospitalizations, followed by other fractures (10.4 percent), fracture of neck of femur (hip) (9.7 percent), and intracranial injury (8.2 percent).

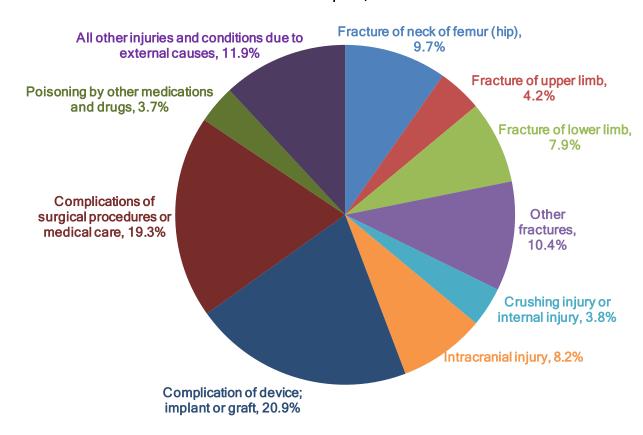


Figure 9. Percentage of the Most Frequent Accident Related Injury Diagnoses, Delaware Hospitals, 2018

Source: Delaware Department of 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). The most frequently occurring injury resulting from a fall was a hip fracture (22.3 percent), followed by other fractures (21.9 percent) and fracture of lower limb (18.0 percent). Adverse effects of medical care were the second most frequently specified external cause of injury. The most frequently occurring injury resulting from adverse effects of medical care were complication of device; implant or graft (71.8 percent) and complications of surgical procedures or medical care (26.6 percent). Motor vehicle accidents were the third most frequently specified external cause of injury. The most frequently occurring injury resulting from a motor vehicle accident was other fractures (29.5 percent), followed by fracture of lower limb (18.0 percent) and intracranial injury (14.4 percent). Firearms accounted for 0.4 percent of all accident related 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 fractures of upper limb, joint disorders and dislocations; trauma-related, and complications of surgical procedures or medical care. Men were more likely to have been hospitalized for open wounds of head, neck, and trunk, open wounds of extremities, skull and face fractures, and spinal cord injuries.

90% ■ Male ■ Female 80% 70% Percent of Injuries 60% 50% 40% 30% 20% 10% Open wounds Open wounds Skull and face Spinal cord Crushing injury Fracture of Fracture of Poisoning by Joint disorders Intracranial of head; neck; of extremities fractures injury or internal neck of femur upper limb nonmedicinal and injury dislocations; and trunk injury (hip) substances trauma-related **CCS Injury Categories** 

Figure 10. Percentage of Selected Primary Injury Diagnoses by Gender, Delaware Hospitals, 2018

# WHY PATIENTS WERE HOSPITALIZED - PROCEDURES

### Most frequent reasons for hospitalization by procedure:

In 2018, 57.1 percent of discharges had at least one associated procedure. Of the 64,500 hospital stays with an accompanying procedure, 43.8 percent had only a principal procedure performed; the remaining 56.2 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 respiratory intubation and mechanical ventilation; other procedures to assist delivery, diagnostic cardiac catheterization; coronary arteriography, and other vascular catheterization; not heart.

Table 2. Number of Most Frequent All-listed Inpatient Procedures, Delaware Hospitals, 2018

	# of All	-listed Prod	cedures	% of Discharges
CCS Procedure	MALE	FEMALE	Total	with a Procedure
Respiratory intubation and mechanical ventilation	5,937	5,186	11,123	7.6
Other procedures to assist delivery	0	6,926	6,926	4.7
Diagnostic cardiac catheterization; coronary arteriography	4,254	2,507	6,761	4.6
Other vascular catheterization; not heart	3,127	3,087	6,214	4.2
Other therapeutic procedures	964	3,570	4,534	3.1
Circumcision	4,217	0	4,217	2.9
Upper gastrointestinal endoscopy; biopsy	1,731	1,948	3,679	2.5
Spinal fusion	1,704	1,906	3,610	2.5
Cesarean section	0	3,361	3,361	2.3
Other therapeutic procedures on muscles and tendons	821	2,475	3,296	2.2
Other OR procedures on vessels other than head and neck	1,921	1,265	3,186	2.2
Other non-OR therapeutic procedures; female organs	0	3,059	3,059	2.1
Artificial rupture of membranes to assist delivery	0	2,950	2,950	2.0
Arthroplasty knee	1,108	1,823	2,931	2.0
Blood transfusion	1,420	1,367	2,787	1.9

Source: Delaware Department of 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. Table ordered based upon total procedures.

Males most frequently underwent respiratory intubation and mechanical ventilation, diagnostic cardiac catheterization; coronary arteriography; and circumcision. Females most frequently underwent other procedures to assist delivery, respiratory intubation and mechanical ventilation, and other therapeutic procedures.

3

See the definition of Procedure Classes in the Definitions section of the Technical Notes.

A major component of obstetrical procedures is related to cesarean delivery of newborn infants. Cesarean deliveries can vary significantly by hospital. In 2018 cesarean deliveries accounted for 31.3 percent of all births. Nanticoke Memorial Hospital and Christiana Care Health System showed the greatest increases between 2003 and 2018, rising 12.9 percent and 10.6 percent respectively. In 2018, Bayhealth Medical Center and Saint Francis Hospital had the highest rates, with 32.4 and 32.1 percent of all births being delivered by cesareans. Nanticoke Memorial Hospital had the lowest percentage of births delivered by cesarean (27.7 percent).

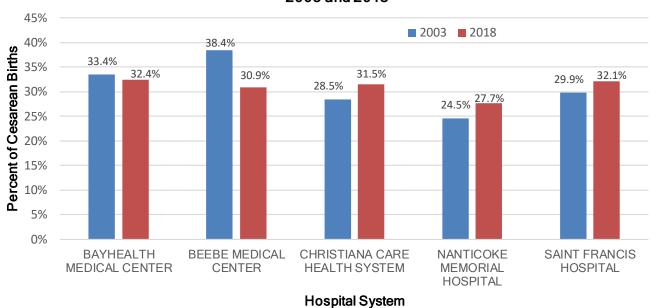


Figure 11. Percentage of Annual Cesarean Delivery Rates by Delaware Hospital, 2003 and 2018

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

### Gender:

In 2018, obstetrical procedures accounted for one in four all-listed procedures performed on females and included other procedures to assist delivery, cesarean sections, fetal monitoring, repair of current obstetrical laceration, and artificial rupture of membranes to assist delivery.

For males, respiratory intubation and mechanical ventilation accounted for 9.1 percent of the total procedures, followed by diagnostic cardiac catheterization; coronary arteriography (6.6 percent), and circumcision (6.5 percent).

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

- respiratory intubation and mechanical ventilation
- diagnostic cardiac catheterization; coronary arteriography spinal fusion
- upper gastrointestinal endoscopy; biopsy
- other vascular catheterization: not heart.

# WHY PATIENTS WERE HOSPITALIZED - PROCEDURES

# Age:

- For patients under 1 year, circumcision, respiratory intubation and mechanical ventilation, and prophylactic vaccinations and inoculations were the most common procedures.
- For patients ages 1 to 17, respiratory intubation and mechanical ventilation, blood transfusion, and spinal fusion were the most frequently performed procedures.
- Obstetric procedures, specifically other procedures to assist delivery, cesarean section, and other non-or therapeutic procedures; female organs, were the most common procedures for those ages 18-44.
- Respiratory intubation and mechanical ventilation, diagnostic cardiac catheterization; coronary arteriography, and other vascular catheterization; not heart were the most frequently performed procedures for those 45-64.
- The most commonly performed principal procedures on patients 65 and older were respiratory intubation and mechanical ventilation, diagnostic cardiac catheterization; coronary arteriography, and other vascular catheterization; not heart.

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 dip in the rates for females 35-44, 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 4.8 times that of males.

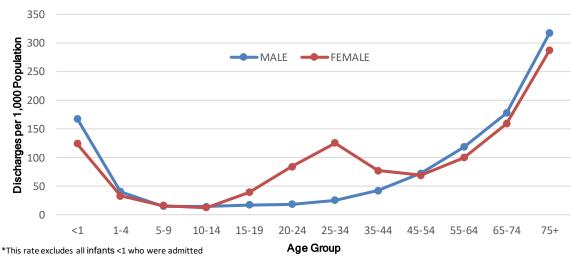


Figure 12. Resident Discharge Rates\* by Sex and Age, Delaware Hospitals, 2018

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

In 2018, Delawareans were discharged most frequently for diseases of the circulatory system, accounting for 15.5 percent of resident hospital stays. The most common diagnoses for diseases of the circulatory system included heart failure. coronary artery disease, and irregular heartbeat. Diseases of the respiratory system was the second most common diagnosis. Pregnancy and childbirth: and certain conditions originating in the perinatal period were the third and fourth most common reasons for resident hospital stays, followed by diseases of the digestive system, which included biliary tract

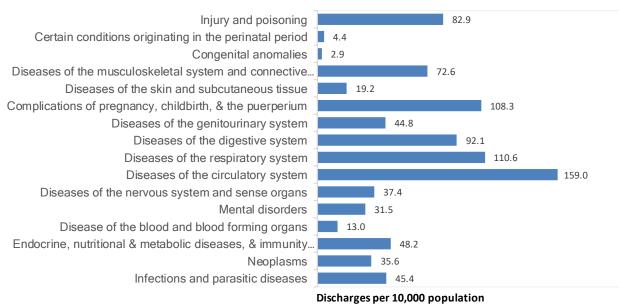
100% 4.7% ■ Endocrine, nutritional & metabolic diseases, & immunity disorders 7.1% 90% ■ Diseases of the musculoskeletal system and connective tissue 8.1% 80% 9.0% ■ Injury and poisoning Percent of Discharges 70% 10.4% Diseases of the digestive system 60% 10.6% Certain conditions originating in the perinatal period 50% 10.8% ■ Complications of pregnancy, childbirth, & the puerperium 40% ■ Diseases of the respiratory system 15.5% 30% ■ Diseases of the circulatory system 20% 23.8% Other 10% 0% Discharges

Figure 13. Percentage of Resident Hospital Discharges by Body System, Delaware, 2018

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

disease, gastrointestinal hemorrhage, and intestinal obstruction and asthma, then injury and poisoning.

Figure 14. Resident Hospitalization Rates by Body System, Delaware, 2018

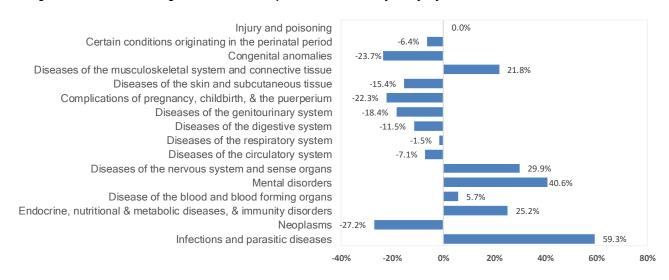


\* Excluding hospitalizations related to pregnancy and liveborn infants.

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

High hospital discharge rates in 2018 were not necessarily indicative of large rate increases over the previous 10 years. In some categories, like diseases of the circulatory system, high 2018 rates were maintained in spite of declines over the prior 10-year period. In others, such as infectious and parasitic diseases, 2018 rates were comparatively low, despite significant rate increases over the prior 10-year period.

Figure 15. Percent Change in Resident Hospitalization Rates by Body System, Delaware, 2008 versus 2018



\*Excluding hospitalizations related to pregnancy and liveborn infants.

# 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 2018.

Table 3. Top 25 CCS Diagnoses with the Highest Hospital Discharge Rates\* for Residents, Delaware, 2008, 2013, and 2018

	2008		<u>2013</u>		<u>2018</u>		% Change from
	Number	Rate	Number	Rate	Number	Rate	2008 to 2018
Hypertension with complications and secondary hypertension	601	6.8	630	6.8	4,065	42.0	517.6%
Septicemia (except in labor)	1,778	20.1	3,164	34.2	3,918	40.5	101.5%
Osteoarthritis	2,539	28.7	2,877	31.1	3,836	39.7	38.3%
Pneumonia (except that caused by tuberculosis or STD)	2,519	28.5	2,940	31.8	2,644	27.3	-4.2%
Acute cerebrovascular disease	1,571	17.8	1,885	20.4	2,294	23.7	33.1%
Chronic obstructive pulmonary disease and bronchiectasis	1,759	19.9	2,069	22.4	2,163	22.4	12.6%
Diabetes mellitus with complications	1,481	16.8	1,622	17.5	2,017	20.9	24.4%
Complication of device; implant or graft	1,446	16.4	1,546	16.7	1,752	18.1	10.4%
Acute and unspecified renal failure	1,375	15.6	1,634	17.7	1,717	17.8	14.1%
Urinary tract infections	1,478	16.7	1,634	17.7	1,695	17.5	4.8%
Other nervous system disorders	837	9.5	807	8.7	1,664	17.2	81.1%
Spondylosis; intervertebral disc disorders; other back problems	1,343	15.2	1,665	18.0	1,658	17.1	12.5%
Skin and subcutaneous tissue infections	1,735	19.6	1,770	19.1	1,634	16.9	-13.8%
Respiratory failure; insufficiency; arrest (adult)	1,831	20.7	1,248	13.5	1,632	16.9	-18.4%
Cardiac dysrhythmias	1,729	19.6	1,731	18.7	1,625	16.8	-14.3%
Complications of surgical procedures or medical care	1,105	12.5	1,227	13.3	1,561	16.1	28.8%
Acute myocardial infarction	1,533	17.3	1,444	15.6	1,385	14.3	-17.3%
Hypertension complicating pregnancy; childbirth and the puerperium	726	8.2	655	7.1	1,229	12.7	54.9%
Other nutritional; endocrine; and metabolic disorders	432	4.9	716	7.7	1,157	12.0	144.9%
Gastrointestinal hemorrhage	828	9.4	1,061	11.5	1,111	11.5	22.3%
Alcohol-related disorders	283	3.2	537	5.8	1,097	11.3	253.1%
Diverticulosis and diverticulitis	832	9.4	901	9.7	1,025	10.6	12.8%
Fluid and electrolyte disorders	1,154	13.1	942	10.2	1,013	10.5	-19.8%
Polyhydramnios and other problems of amniotic cavity	582	6.6	571	6.2	951	9.8	48.5%
Epilepsy; convulsions	688	7.8	798	8.6	941	9.7	24.4%

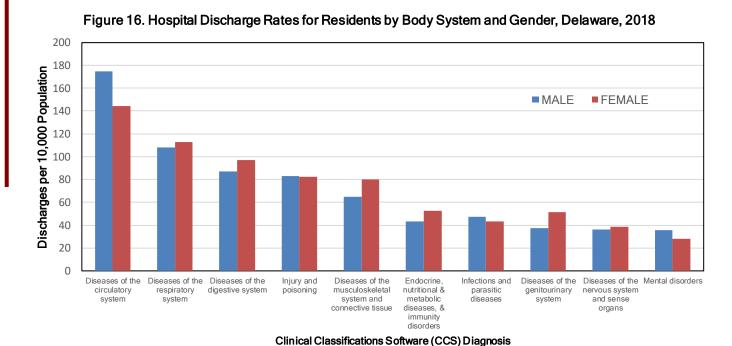
<sup>\*</sup>Hospitalization rate per 10,000, ranked by 2018 figures. Excluding pregnancy-related discharges and liveborn infants.

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

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

- hypertension with complications and secondary hypertension (high blood pressure);
- cardiac dysrhythmias (irregular heartbeat);
- acute cerebrovascular disease (stroke);
- acute myocardial infarction (heart attack).

Hospitalization rates for hypertension with complications and secondary hypertension, alcohol-related disorders, and other nutritional; endocrine; and metabolic disorders demonstrated the greatest increases between 2008 and 2018.



Source: Delaware Department of 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. Males were nearly three times more likely to be discharged for alcohol-related disorders.

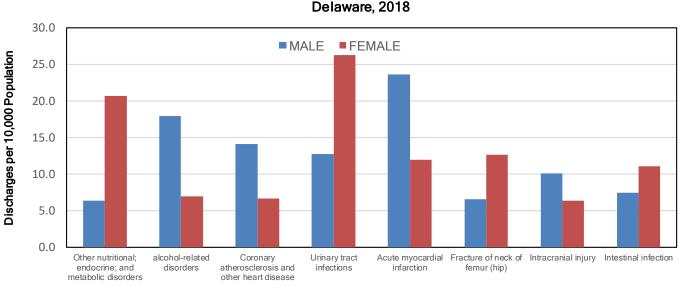


Figure 17. Hospital Discharge Rates for Residents by Gender and Selected Primary Diagnoses, Delaware, 2018

Clinical Classifications Software (CCS) Diagnosis

### Point of Origin:

Non-health facilities and clinic/physician offices accounted for 84.0 percent of all hospital discharges in 2018. 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) 8.2 percent, and other hospitals, 6.0 percent.

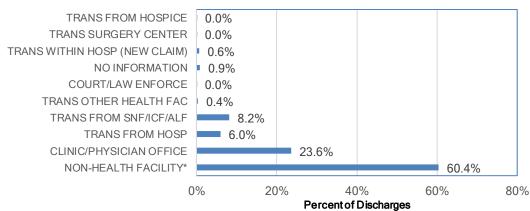


Figure 18. Patient Point of Origin, Delaware Hospitals, 2018

Between 2008 and 2018, the majority of admissions continued to be classified as emergency in nature. In 2008, emergency admissions accounted for 65.0 percent of all admissions. By 2018, the proportion of emergency admissions had decreased to 63.1 percent, while urgent admissions increased from 12.4 percent to 14.7 percent between 2008 and 2018.

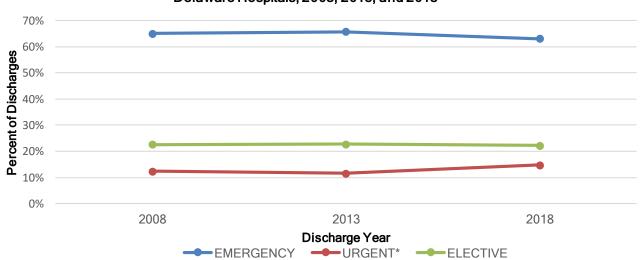


Figure 19. Percentage of Hospital Discharges by Type of Admission, Delaware Hospitals, 2008, 2013, and 2018

<sup>\*</sup> Non-Health Care Facility includes walk-ins, auto accidents, and ambulance runs Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

<sup>\*</sup> Urgent encompasses situations that require immediate attention due to a physical or mental disorder but are not life threatening Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Most primary payers experienced a decrease in the percent of discharges classified as emergency/trauma at admission, Medicare patients had the largest proportion of their discharges classified as emergency/trauma. In 2018, 73.1 percent of uninsured admissions, 78.1 percent of Medicare admissions, 50.4 percent of private admissions, and 57.4 percent of Medicaid admissions were classified as emergency/trauma.

90 80 70 Percent of Discharges 60 50 40 30 20 10 Medicare Medicaid --- Private Uninsured 0 2004 2018 2011

Figure 20. Percentage of Hospitals Discharges classified as Emergency/Trauma at Admission by Payer, Delaware, 2004, 2011, and 2018

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

The most common diagnoses of patients admitted through the Emergency Department (ED) were septicemia, hypertension, and pneumonia.

Table 4. Number and Percentage of Most Common Diagnoses for Emergency Admissions,

Discharge Year

Delaware Hospitals, 2018	Frequency	Percent *
Hypertension with complications and secondary hypertension	3,532	5.5
Septicemia (except in labor)	3,440	5.3
Pneumonia (except that caused by tuberculosis or STD)	2,567	4.0
Acute cerebrovascular disease	2,170	3.4
Chronic obstructive pulmonary disease and bronchiectasis	1,904	3.0
Diabetes mellitus with complications	1,760	2.7
Urinary tract infections	1,687	2.6
Skin and subcutaneous tissue infections	1,479	2.3
Acute and unspecified renal failure	1,461	2.3
Cardiac dysrhythmias	1,331	2.1
Respiratory failure; insufficiency; arrest (adult)	1,324	2.1
Acute myocardial infarction	1,232	1.9
Complications of surgical procedures or medical care	1,188	1.8

<sup>\*</sup> Refers to the percent of discharges that originated in the ED.

- The biggest changes in the most common diagnoses originating in the ED from 2017 to 2018 was skin and subcutaneous tissue infections moving up two places and respiratory failure moving down two places.
- Three of the most common ED diagnoses were related to circulatory conditions: heart failure, stroke, and irregular heartbeat.
- Another four of the most common ED diagnoses were primarily due to infections: pneumonia, skin infections, septicemia, and urinary tract infections.

### 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 anesthesiology), and services of resident physicians.

In 2018, total aggregate charges for all hospitalizations in Delaware equaled \$3.98 billion, a 48.2 percent increase in aggregate charges from 2010. The number of discharges were basically unchanged at 112,130 in 2010 and 112,898 in 2018. Total aggregate charges decreased by \$31,586,835 between 2017 and 2018.

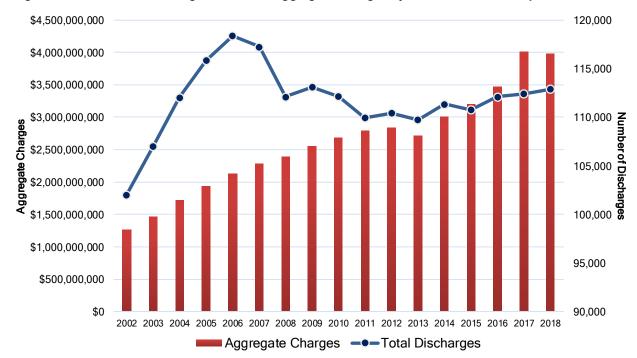


Figure 21. Number of Discharges and Total Aggregate Charges by Year, Delaware Hospitals, 2002 - 2018

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

The average charge for a hospital stay rose in 2018 to \$35,236 compared to \$23,937 in 2010, while the median charge per stay was \$18,019 in 2018 compared to \$13,542 in 2010.

The diagnostic groups with the highest average charges per hospital stay were congenital anomalies, infections and parasitic diseases, and neoplasms, with average charges ranging from \$50,860 to \$237,864. The first two of these three diagnostic groups also had the longest average stays, ranging from 8.3 to 12.3 days.

Looking at specific diagnoses within groups showed that the most expensive diagnoses were cardiac and circulatory congenital anomalies, short gestation; low birth weight; and fetal growth retardation, respiratory distress syndrome, and leukemias. However, the ten most expensive diagnoses occurred relatively rarely and accounted for just 1.2 percent of all discharges in 2018. In comparison, the 10 diagnoses that occurred most frequently accounted for 33.7 percent of the total discharges in 2018 (see Appendix E for more information).

From 2008 to 2018, the average charges rose for each of the 10 highest volume diagnoses. The highest volume diagnoses whose average charges increased the most were:

- congestive heart failure; nonhypertensive (167 percent);
- spondylosis; intervertebral disc disorders; other back problems (105 percent);
- liveborn (101 percent).

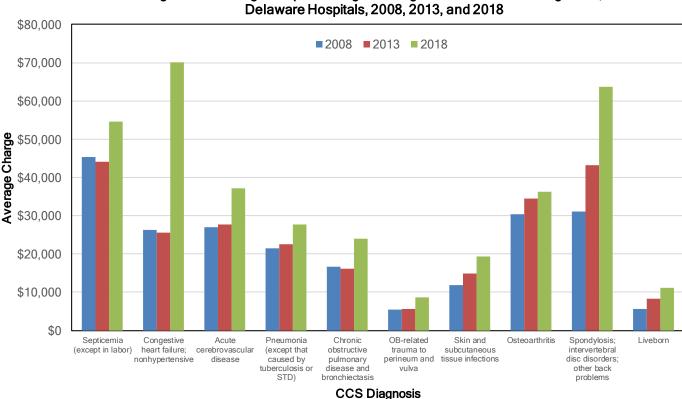


Figure 22. Average Hospital Charges for Highest\* Volume CCS Diagnoses,

\*Based on 10 most common diagnoses in 2018.

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

Though the average charges of the high-volume diagnoses tended to increase over time, the proportion of total aggregate charges represented by them experienced much less growth.

- In 2008, the aggregate charges for 2018's highest volume diagnoses totaled \$503.4 million and accounted for 21.1 percent of the total aggregate charges for all diagnoses.
- By 2018, the aggregate charges for those same diagnoses had more than doubled to \$1,126.1 million, which accounted for 28.3 percent of the total aggregate charges.

In 2018, the 10 conditions with the highest total billed charges accounted for 35.0 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 \$228.8 million. Although hospital stays for newborns had relatively low average charges, their high frequency resulted in liveborn infants having the sixth highest aggregate charges (see Appendix E for more information).

### 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 2018, 68.2 percent of hospitalizations were billed to Medicare (43.3 percent) and Medicaid (24.8 percent), 27.7 percent were billed to private insurance, and the remaining 4.1 percent was billed to other types of coverage (2.4 percent) or to the patient (1.8 percent uninsured).

Patients whose care was primarily billed to Medicare had both the highest average charges (\$38,495) and the greatest aggregate charges (\$1.9 billion).

In 2018, Select Specialty - Wilmington had the highest percent of charges billed to Medicare. A. I. Dupont Hospital had the highest percentage billed to both privately insured and Medicaid covered patients, and Bayhealth Medical Center had the highest percent of charges with no coverage.

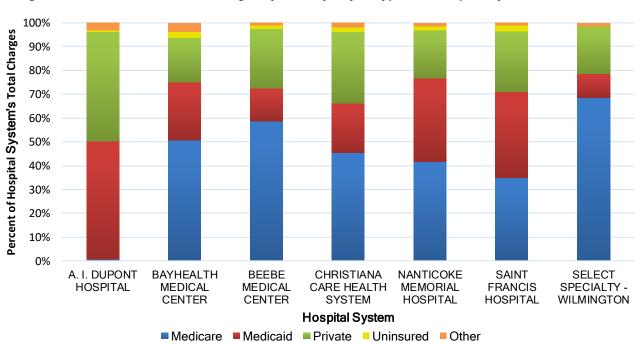


Figure 23. Distribution of Total Charges by Primary Payer Type and Hospital System, Delaware, 2018

### Medicare:

From 2008 to 2018, the percent of hospital stays whose primary payer was Medicare increased from 37.5 to 43.3 percent. Over the same time period, the proportion of aggregate charges billed to Medicare remained stable at around 47 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 17.9 percent of Medicare hospitalizations. The three most frequent diagnoses for Medicare patients in 2018 were<sup>7</sup>:

- hypertension with complications and secondary hypertension;
- septicemia (except in labor);
- osteoarthritis.

### Medicaid:

From 2008 to 2018, Medicaid covered hospitalizations increased from 23.5 to 24.8 percent. Over the same time period, the proportion of aggregate charges billed to Medicaid increased from 18.9 to 23.9 percent.

Five of the 10 most frequent diagnoses for Medicaid patients were related to pregnancy and childbirth. The three most frequent diagnoses accounted for 24.9 percent of Medicaid stays. The three most frequent diagnoses for Medicaid patients in 2018 were<sup>7</sup>:

- liveborn infants:
- other complications of birth; puerperium affecting management of mother;
- septicemia (except in labor).

### **Private Insurers:**

From 2008 to 2018, privately insured stays decreased from 34.1 to 27.7 percent. Over the same time period, the proportion of aggregate charges billed to private insurance decreased from 29.7 to 24.7 percent.

Five 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 16.0 percent of all stays covered by private insurers. The three most frequent diagnoses for privately insured patients in 2018 were<sup>7</sup>:

- liveborn infants:
- osteoarthritis;
- other complications of birth; puerperium affecting management of mother.

### Uninsured:

From 2008 to 2018, uninsured hospitalizations decreased from 2.9 to 1.8 percent. Over the same time period, the proportion of aggregate charges billed to uninsured patients decreased from 2.4 to 1.4 percent. The three most frequent diagnoses accounted for 19.4 percent of uninsured stays.

The three most frequent diagnoses for uninsured patients in 2018 were<sup>7</sup>:

- liveborn;
- alcohol-related disorders;
- diabetes mellitus with complications.

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 2018 the majority of patients (62.1 percent) were discharged to their homes, less than two percent of patients died in the hospital, and around one percent left against medical advice.

Routine - home, 62.1%

Home health care, 18.6%

Expired in hospital, 1.7%
Against medical advice, 1.2%

Other, 1.2%

Figure 24. Percentage of Discharges by Discharge Status, Delaware Hospitals, 2018

# **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);
- respiratory failure; insufficiency; arrest (adult);
- acute cerebrovascular disease.

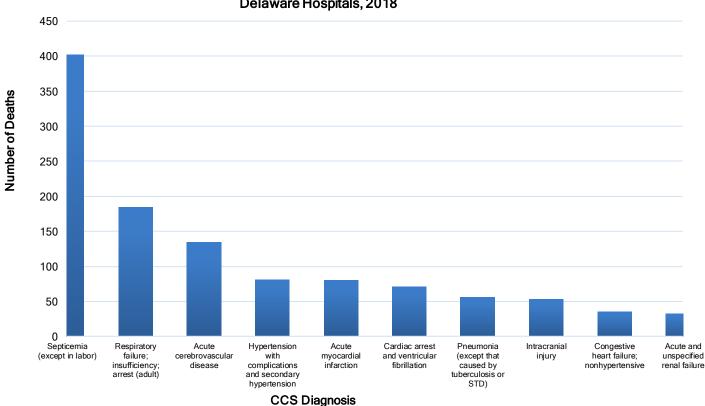


Figure 25. Number of Diagnoses with the Greatest Numbers of In-Hospital Deaths, Delaware Hospitals, 2018

Source: Delaware Department of 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 respiratory failure; insufficiency; arrest (adult) caused the highest number of deaths to those ages 1 to 17. Substance-related disorders was the most frequent cause of death for ages 18 to 44 and septicemia (except in labor) was the most frequent cause of death for those aged 45 and over.

Patients ages 65 and older accounted for 67.3 percent of all in-hospital mortality. For more information see Appendices G and H.

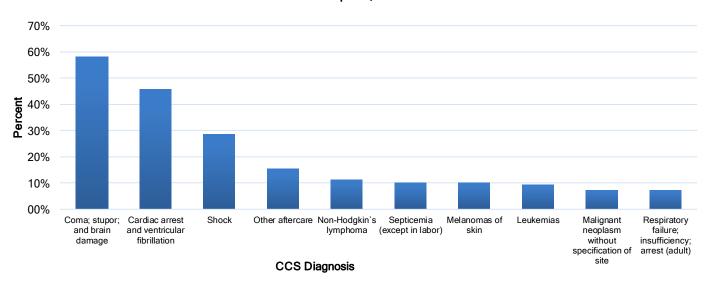
# HOW PATIENTS WERE DISCHARGED

### Percentages:

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

- coma; stupor; and brain damage;
- cardiac arrest and ventricular fibrillation;
- shock;
- other aftercare.

Figure 26. Percentages of CCS Diagnoses with the Greatest Percentage of In-Hospital Mortality, Delaware Hospitals, 2018



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

### Patients who left against medical advice:

Around 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 8 times as likely when compared to privately insured patients.

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

- For women, skin and subcutaneous tissue infections, alcohol-related disorders, and septicemia (except in labor) made up the top three.
- For men, alcohol-related disorders, hypertension with complications and secondary hypertension, and diabetes mellitus with complications made up the top three.

# 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 saw at least a 10 percent increase in the likelihood of being transferred to LTC facilities. In 2018, around 5 percent of those under 65 were discharged to long-term care facilities, compared to 18.0 percent of those ages 65-74, 29.9 percent of those ages 75-84, and 46.1 percent of those 85 and older.

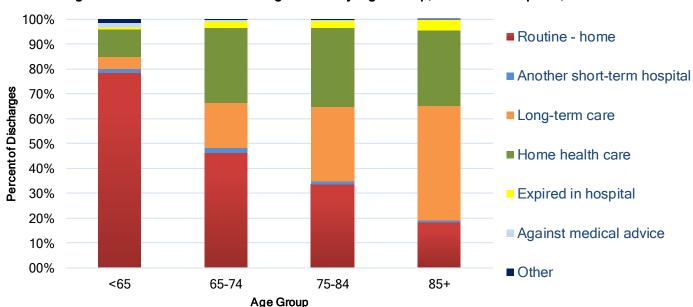


Figure 27. Distribution of Discharge Status by Age Group, Delaware Hospitals, 2018

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

In 2018, the most common diagnoses for patients discharged to LTC facilities were; septicemia (except in labor), acute cerebrovascular disease, and hypertension with complications and secondary hypertension.

- The three most common diagnoses for patients under 65 (excluding liveborn infants) were septicemia (except in labor), acute cerebrovascular disease, and respiratory failure; insufficiency; arrest (adult).
- For patients ages 65-74, septicemia (except in labor), acute cerebrovascular disease, and hypertension with complications and secondary hypertension were the three most common diagnoses.
- For patients ages 75-84, septicemia (except in labor), acute cerebrovascular disease, and hypertension with complications and secondary hypertension were the three most common diagnoses.
- For patients 85 and older, hypertension with complications and secondary hypertension, fracture of neck of femur (hip), and septicemia (except in labor) were the three most common diagnoses.

# HOSPITAL SPECIFIC DATA

# A.I. duPont Hospital for Children

2018 Discharge Distribution

2018 Discharge Distribution									
Zip / State	Number	<u>%</u>							
PA	2,769	29.9%							
NJ	799	8.6%							
19720	514	5.5%							
19805	500	5.4%							
MD	445	4.8%							
19702	353	3.8%							
19802	280	3.0%							
19709	248	2.7%							
19713	237	2.6%							
19701	228	2.5%							
19801	219	2.4%							
19808	199	2.1%							
19901	186	2.0%							
19711	172	1.9%							
19804	162	1.7%							
Other State	134	1.4%							
19904	131	1.4%							
19977	120	1.3%							
19703	117	1.3%							
19810	103	1.1%							
19809	100	1.1%							
19803	97	1.0%							
19973	96	1.0%							
19963	86	0.9%							
19966	80	0.9%							
19947	77	0.8%							
19734	72	0.8%							
19962	71	0.8%							
19938	67	0.7%							
19707	63	0.7%							
19956	53	0.6%							
19934	48	0.5%							
19943	44	0.5%							
19952	43	0.5%							
19933	39	0.4%							
19960	37	0.4%							
19958	33	0.4%							
19968	29	0.3% 0.3%							
19953	26								
19807	23	0.2% 0.2%							
19806	18								
19940	18 10	0.2%							
19946 19950	18 15	0.2% 0.2%							
19950	15 14	0.2% 0.2%							
19975	13	0.2% 0.1%							
19941	13	0.1% 0.1%							
	11	0.1% 0.1%							
19939 Undisclosed*		0.1% 0.6%							
Unuisclosed"	53	0.0%							

**Utilization Characteristics** 

Utilizatio	<u>on Characteris</u>	stics	
	2016	2017	2018
Aggregate charges	\$626,917,555	\$679,200,141	\$737,663,145
Average charges	\$64,945	\$73,324	\$79,558
Average charge per day	\$11,746	\$12,352	\$13,953
Number of Discharges	9,653	9,263	9,272
Total All-listed Procedures <sup>1</sup>	12,279	11,743	11,854
Non-operating room procedures 2	7,319	7,076	7,229
Valid operating room procedures 2	4,960	4,667	4,625
Average Lenth of Stay	5.3	5.7	5.7
Primary Payer Distribution	·	·	
Medicare	0.4%	0.6%	0.6%
Medicaid	47.4%	47.8%	49.8%
Private Insurance	49.9%	48.6%	45.7%
Uninsured	0.1%	0.1%	0.8%
Other	2.3%	2.9%	3.2%
Point of Origin Distribution		•	
Home-Work-etc.	59.3%	58.4%	58.9%
Clinic/Physician Office	21.4%	23.1%	22.3%
Transfers-Health Facility	17.3%	17.4%	17.7%
Newborn	0.0%	0.0%	0.0%
Other/Unknown	2.0%	1.2%	1.0%
Discharge Status Distribution			
Routine - home	95.5%	90.1%	95.4%
Another short-term hospital	0.6%	0.7%	0.6%
Long-term care facility	0.7%	0.9%	1.4%
Home health care	1.7%	1.0%	0.7%
Expired in hospital	0.5%	0.5%	0.7%
Left against medical advice	0.0%	0.1%	0.0%
Other/Unknown	1.0%	6.7%	1.2%
Sex			
Male	52.4%	53.8%	53.1%
Female	47.6%	46.2%	46.9%
Age			
<1	23.2%	22.8%	22.3%
1-4	24.8%	24.0%	26.9%
<i>5-9</i>	17.9%	18.2%	17.2%
10-14	17.5%	18.4%	17.3%
15-19	15.4%	15.4%	15.1%
20-24	1.0%	1.1%	1.1%
25-34	0.1%	0.2%	0.1%
35-44	0.0%	0.0%	0.0%
<i>45-54</i>	0.0%	0.0%	0.0%
55-64	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%
Unknown	0.0%	0.0%	0.0%
Notes:			

<sup>1.</sup> 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.

Percentages may not sum to 100 due to rounding.

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

Total 9,272 100.0%

\*Zip codes with less than 10 cases

Undisclosed\*

Total

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

2018 Dise	charge Dis	tribution				
Zip / State	Number	<u>%</u>		2016	2017	2018
19901	3,964	18.0%	Aggregate charges	\$622,882,503	\$726,708,896	\$816,780,580
19904	3,441	15.7%	Average charges	\$30,810	\$34,632	\$37,172
19963	1,952	8.9%	Average charge per day	\$7,892	\$8,616	\$9,073
19977	1,622	7.4%	Number of Discharges	20,217	20,984	21,973
19943	1,344	6.1%	Total All-listed Procedures <sup>1</sup>	19,501	19,962	20,406
19934	1,236	5.6%	Non-operating room procedures 2	12,534	12,932	13,670
19952	1,181	5.4%	Valid operating room procedures <sup>2</sup>	6,967	7,030	6,736
19962	1,127	5.1%	Average Lenth of Stay	5.1	5.0	5.2
19938	578	2.6%	Primary Payer Distribution			
19960	550	2.5%	Medicare	47.0%	50.0%	50.6%
MD	466	2.1%	Medicaid	24.4%	23.0%	24.3%
19946	443	2.0%	Private Insurance	21.2%	20.5%	18.8%
19950	440	2.0%	Uninsured	1.8%	2.4%	2.5%
19953	405	1.8%	Other	5.6%	4.1%	3.8%
19947	286	1.3%	Point of Origin Distribution			
19941	282	1.3%	Home-Work-etc.	71.3%	61.6%	63.5%
19968	273	1.2%	Clinic/Physician Office	9.8%	9.7%	8.0%
19966	247	1.1%	Transfers-Health Facility	6.6%	17.3%	17.5%
19973	180	0.8%	Newborn	11.6%	11.0%	10.7%
19954	177	0.8%	Other/Unknown	.7%	.5%	.4%
19933	168	0.8%	Discharge Status Distribution	.,,,	.070	.170
19964	161	0.7%	Routine - home	60.2%	58.2%	58.4%
19958	155	0.7%	Another short-term hospital	2.3%	2.4%	2.9%
19709	146	0.7%	Long-term care facility	15.2%	15.8%	15.1%
19734	141	0.6%	Home health care	16.7%	19.1%	18.9%
Other State	141	0.6%	Expired in hospital	2.3%	2.1%	2.3%
19956	112	0.5%	Left against medical advice	1.1%	1.2%	1.5%
19971	89	0.4%	Other/Unknown	2.0%	1.2%	1.0%
PA	66	0.3%	Sex	2.070	1.2.70	1.070
19936	59	0.3%	Male	42.7%	42.9%	43.7%
19979	58	0.3%	rivale Female	57.3%	57.1%	56.3%
19903	48	0.2%	Age	37.370	37.170	30.376
19955	36	0.2%	/ / / / / / / / / / / / / / / / / / /	12.5%	11.6%	11.3%
19701	35	0.2%	1-4	0.5%	0.4%	0.4%
19945	31	0.1%	7- <del>4</del> 5-9	0.2%	0.4%	0.4%
NJ	31	0.1%	10-14	0.2%	0.1%	0.2%
19720	29	0.1%	15-19	1.3%	1.2%	0.1%
19702	27	0.1%				
19939	27	0.1%	20-24 25-24	4.2%	3.7%	3.6%
19970	21	0.1%	<i>25-34</i>	10.4%	9.9%	10.3%
19980	20	0.1%	35-44	6.0%	6.1%	6.6%
19951	19	0.1%	45-54	9.6%	9.3%	9.1%
19975	19	0.1%	55-64 65-74	15.0%	14.8%	14.9%
19940	18	0.1%	65-74 75 :	17.8%	18.3%	17.9%
19713	17	0.1%	75+	22.5%	24.5%	24.7%
19805	14	0.1%	Notes:			
19711	11	0.1%	Total all-listed procedures represents the total number of the control of th			•
11 12 1 14			recorded per discharge, as a result the total number of	f all lietad procedures can	avecand the total number	nf .

<sup>1.</sup> 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.

0.4%

100.0%

21,973

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

<sup>3.</sup> Percentages may not sum to 100 due to rounding.

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

### Beebe Medical Center 2018 Discharge Distribution

2016 Discharge Distribution								
Zip / State	Number	<u>%</u>						
19966	2,511	22.8%						
19958	2,150	19.5%						
19971	1,192	10.8%						
19947	941	8.5%						
19968	857	7.8%						
19970	496	4.5%						
19939	359	3.3%						
19945	342	3.1%						
19975	235	2.1%						
MD	194	1.8%						
19963	191	1.7%						
Other State	169	1.5%						
19960	150	1.4%						
PA	146	1.3%						
19973	144	1.3%						
19930	141	1.3%						
19951	134	1.2%						
19956	107	1.0%						
19967	77	0.7%						
19933	62	0.6%						
19941	48	0.4%						
19950	47	0.4%						
NJ	35	0.3%						
19952	33	0.3%						
19901	25	0.2%						
19943	24	0.2%						
19944	20	0.2%						
19904	16	0.1%						
19969	16	0.1%						
19962	15	0.1%						
19940	14	0.1%						
19720	13	0.1%						
19946	13	0.1%						
19711	10	0.1%						
19934	10	0.1%						
19977	10	0.1%						
Undisclosed*	90	0.8%						
Total	11,037	100.0%						

<sup>\*</sup>Zip codes with less than 10 cases

# **Utilization Characteristics**

	2016	2017	2018
Aggregate charges	\$471,645,540	\$477,417,783	\$455,507,757
Average charges	\$40,913	\$40,119	\$41,271
Average charge per day	\$12,649	\$12,316	\$14,566
Number of Discharges	11,528	11,900	11,037
Total All-listed Procedures <sup>1</sup>	15,946	14,822	14,328
Non-operating room procedures 2	9,988	9,549	8,841
Valid operating room procedures 2	5,958	5,273	5,487
Average Lenth of Stay	4.2	4.2	4.0
Primary Payer Distribution			
Medicare	58.0%	57.1%	58.7%
Medicaid	16.1%	15.5%	13.8%
Private Insurance	23.5%	24.5%	25.0%
Uninsured	1.2%	1.4%	1.3%
Other	1.2%	1.5%	1.2%
Point of Origin Distribution			
Home-Work-etc.	26.3%	22.9%	24.3%
Clinic/Physician Office	66.2%	69.8%	69.5%
Transfers-Health Facility	0.0%	0.0%	0.0%
Newborn	7.5%	7.3%	6.2%
Other/Unknown	0.0%	0.0%	0.0%
Discharge Status Distribution  Routine - home	51.5%	51.4%	49.1%
	1.6%	1.4%	1.7%
Another short-term hospital  Long-term care facility	16.2%	15.7%	15.0%
Home health care	26.8%	28.2%	30.7%
Expired in hospital	2.3%	28.2 %	2.1%
Left against medical advice	1.0%	0.8%	0.9%
Other/Unknown	0.7%	0.4%	0.5%
Sex	0.7.70	070	0.070
Male	46.7%	46.8%	47.2%
Female	53.3%	53.2%	52.8%
Age		<del></del>	
<1	7.6%	7.2%	6.4%
1-4	0.1%	0.0%	0.1%
<i>5-9</i>	0.1%	0.0%	0.1%
<i>10-14</i>	0.1%	0.1%	0.0%
<i>15-19</i>	0.5%	0.7%	0.6%
20-24	2.4%	1.7%	1.9%
<i>25-34</i>	6.8%	6.6%	6.1%
<i>35-44</i>	4.7%	5.0%	4.2%
45-54	7.8%	7.1%	6.7%
<i>55-64</i>	14.9%	14.9%	14.7%
<i>65-74</i>	24.7%	25.0%	25.9%
<i>75+</i>	30.3%	31.7%	33.4%

# Notes:

<sup>1.</sup> 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

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

<sup>3.</sup> Percentages may not sum to 100 due to rounding.

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

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

2018 Dis	charge Dis	tribution	Utilizat	Utilization Characteristics						
Zip / State	Number	<u>%</u>		2016	2017	2018				
19720	5,758	10.0%	Aggregate charges	\$1,425,735,665	\$1,488,668,800	\$1,586,679,97				
19702	4,100	7.1%	Average charges	\$24,196	\$25,728	\$27,53				
9808 9713	3,432 3,379	6.0% 5.9%	Average charge per day	\$6,070	\$6,766	\$6,94				
9701	3,345	5.8%	Number of Discharges	58,924	57,862	57,62				
9805	3,340	5.8%	_							
ИD	3,292	5.7%	Total All-listed Procedures <sup>1</sup>	89,206	86,680	84,23				
19711	3,084	5.4%	Non-operating room procedures <sup>2</sup>	51,684	49,471	48,41				
19709 19802	3,049 2,617	5.3% 4.5%	Valid operating room procedures 2	37,522	37,209	35,82				
PA	2,319	4.0%	Average Lenth of Stay	5.2	5.2	5.				
9801	1,871	3.2%	Primary Payer Distribution	<del>.</del>						
9804	1,859	3.2%	Medicare	44.4%	38.4%	45.49				
9803 9810	1,696 1,651	2.9% 2.9%	Medicaid	19.2%	11.9%	20.8%				
1J	1,506	2.9%	Private Insurance	32.5%	42.7%	29.9%				
9707	1,168	2.0%	Uninsured	1.7%	1.5%	1.79				
9809	1,144	2.0%	Other	2.1%	5.4%	2.2%				
9703	1,057	1.8%	Point of Origin Distribution	2.170	0.470	2.27				
9734 9806	928 880	1.6% 1.5%	Home-Work-etc.	62.8%	62.60/	64.40				
19977	878	1.5%			63.6%	64.49				
19807	569	1.0%	Clinic/Physician Office	22.6%	22.1%	21.79				
19904	478	0.8%	Transfers-Health Facility	3.6%	3.4%	3.4%				
19901	372	0.6%	Newborn	11.0%	10.9%	10.5%				
Other State 19938	370 303	0.6% 0.5%	Other/Unknown	.0%	.0%	.0%				
9966	303	0.5%	Discharge Status Distribution	<del>.</del>						
9973	245	0.4%	Routine - home	62.1%	61.4%	59.9%				
9958	218	0.4%	Another short-term hospital	0.5%	0.5%	0.5%				
19706 19971	202 163	0.4% 0.3%	Long-term care facility	14.2%	14.6%	15.4%				
19963	160	0.3%	Home health care	19.7%	19.8%	20.3%				
19947	154	0.3%	Expired in hospital	1.4%	1.5%	1.5%				
19934	151	0.3%								
19943	141	0.2%	Left against medical advice	0.8%	1.0%	1.19				
19968 19956	128 112	0.2% 0.2%	Other/Unknown	1.3%	1.2%	1.3%				
19933	110	0.2%	Sex							
19962	105	0.2%	Male	42.4%	42.2%	42.5%				
19952	102	0.2%	<u>Female</u>	57.6%	57.8%	57.5%				
9960 9953	70 68	0.1% 0.1%	Age							
19730	54	0.1%	<1	11.2%	11.1%	10.7%				
9946	52	0.1%	1-4	0.0%	0.0%	0.0%				
9939	49	0.1%	<i>5-9</i>	0.0%	0.0%	0.0%				
19970	48	0.1%	10-14	0.0%	0.0%	0.0%				
9950 9733	44 42	0.1% 0.1%	15-19	1.0%	0.9%	1.09				
19945	42	0.1%	20-24	3.4%	3.3%	3.0%				
9975	36	0.1%	25-34							
9714	33	0.1%		11.4%	11.3%	11.19				
9899	29	0.1%	35-44	7.7%	7.8%	7.8%				
9941 9940	25 24	0.0% 0.0%	<i>45-54</i>	10.7%	10.2%	10.19				
9930	21	0.0%	<i>55-64</i>	16.1%	15.7%	16.0%				
9964	21	0.0%	<i>65-74</i>	17.4%	17.9%	17.9%				
9967	18	0.0%		21.1%	21.6%	22.4%				
9710	14	0.0%	Notes:							
19712 19732	14 14	0.0% 0.0%	Total all-listed procedures represents the total nun	nber of procedures perform	ed; up to six procedures i	may be				
9731	13	0.0%	recorded per discharge, as a result the total number	·		•				
9736	12	0.0%	discharges.	2. 2. notos processios cari		<del>-</del> :				
19903	12	0.0%	·	wa aa duwa alas tuu- O	an ALIDOloviii tii ti	ana informacticus				
19951	11	0.0%	<ol><li>Procedures were classified using AHRQ's HCUP r</li></ol>	nocedure class software. S	ee AHKU'S WEDSITE FOR IT	iore information:				

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

19951

19718

Total

Undisclosed\*

11

10

112

57,627

\*Zip codes with less than 10 cases

0.0%

0.0%

0.2%

100.0%

<sup>3.</sup> Percentages may not sum to 100 due to rounding.

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

# **Nanticoke Memorial Hospital**

	_		 _	

2018 Discharge Distribution				
Zip / State	Number	<u>%</u>		
19973	2,263	34.1%		
19956	1,120	16.9%		
19933	721	10.9%		
19947	692	10.4%		
MD	437	6.6%		
19966	306	4.6%		
19950	247	3.7%		
19940	203	3.1%		
19945	96	1.4%		
19963	72	1.1%		
19975	64	1.0%		
19939	57	0.9%		
19960	36	0.5%		
19958	33	0.5%		
19941	32	0.5%		
19968	29	0.4%		
19943	28	0.4%		
19952	28	0.4%		
Other State	26	0.4%		
19971	20	0.3%		
19904	17	0.3%		
19931	14	0.2%		
19970	14	0.2%		
19951	12	0.2%		
19962	11	0.2%		
19934	10	0.2%		
Undisclosed*	48	0.7%		
Total	6,636	100.0%		
ıotai	0,030	100.070		

<sup>\*</sup>Zip codes with less than 10 cases

# **Utilization Characteristics**

	2016	2017	2018
Aggregate charges	\$115,157,155	\$122,934,715	\$125,980,307
Average charges	\$18,601	\$19,206	\$18,984
Average charge per day	\$6,654	\$6,977	\$6,772
Number of Discharges	6,191	6,401	6,636
Total All-listed Procedures <sup>1</sup>	7,300	7,992	8,749
Non-operating room procedures 2	5,006	5,563	6,433
Valid operating room procedures 2	2,294	2,429	2,316
Average Lenth of Stay	3.3	3.3	3.5
Primary Payer Distribution		·	
Medicare	43.5%	42.7%	41.7%
Medicaid	34.3%	34.5%	35.1%
Private Insurance	19.1%	20.0%	20.0%
Uninsured	1.8%	1.6%	1.8%
Other	1.2%	1.2%	1.4%
Point of Origin Distribution			
Home-Work-etc.	59.9%	59.0%	59.7%
Clinic/Physician Office	26.1%	27.2%	26.1%
Transfers-Health Facility	0.0%	0.0%	0.0%
Newborn	14.0%	13.8%	14.1%
Other/Unknown	0.0%	0.0%	0.0%
Discharge Status Distribution	00.40/	22 -21	0= 00/
Routine - home	62.1%	63.5%	65.2%
Another short-term hospital	2.7%	2.5%	3.1%
Long-term care facility	14.5%	12.5%	12.2%
Home health care	17.2%	17.7%	15.5%
Expired in hospital	1.6%	1.6%	2.0%
Left against medical advice	1.0%	1.3%	1.0%
Other/Unknown	0.9%	0.8%	0.9%
Sex Male	39.8%	39.0%	40.4%
rvaie Female	60.2%	61.0%	40.4% 59.6%
Age	00.270	01.070	33.070
<1 ×1	15.1%	14.8%	15.3%
1-4	0.4%	0.5%	0.7%
<i>5-9</i>	0.4%	0.2%	0.4%
10-14	0.2%	0.3%	0.3%
<i>15-19</i>	1.7%	1.7%	1.4%
20-24	4.3%	4.6%	4.6%
25-34	10.9%	10.2%	11.5%
<i>35-44</i>	6.7%	6.9%	6.7%
<i>45-54</i>	9.2%	8.9%	8.8%
<i>55-64</i>	13.0%	14.2%	13.4%
<i>65-74</i>	17.1%	17.3%	16.3%
<i>75+</i>	20.9%	20.5%	20.5%

# 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.

<sup>3.</sup> Percentages may not sum to 100 due to rounding.

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

# HOSPITAL SPECIFIC DATA

### St. Francis Hospital

# 2018 Discharge Distribution

2018 Discharge Distribution					
Zip / State	Number	<u>%</u>			
19805	1,460	24.2%			
19720	610	10.1%			
19801	567	9.4%			
19802	553	9.2%			
19806	336	5.6%			
19808	230	3.8%			
19810	228	3.8%			
19703	227	3.8%			
19803	214	3.5%			
19804	211	3.5%			
19702	210	3.5%			
19809	165	2.7%			
19701	124	2.1%			
19711	124	2.1%			
MD	122	2.0%			
PA	114	1.9%			
19713	108	1.8%			
19709	75	1.2%			
NJ	47	0.8%			
19707	39	0.6%			
19807	36	0.6%			
Other State	36	0.6%			
19904	25	0.4%			
19977	25	0.4%			
19901	23	0.4%			
19734	22	0.4%			
Undisclosed*	98	1.6%			

Total
 6,029
 100.0%

 \*Zip codes with less than 10 cases

# **Utilization Characteristics**

	2016	2017	2018
Aggregate charges	\$140,240,492	\$156,152,244	\$186,585,855
Average charges	\$26,677	\$27,594	\$30,948
Average charge per day	\$8,187	\$9,696	\$10,746
Number of Discharges	5,257	5,659	6,029
Total All-listed Procedures <sup>1</sup>	4,475	5,871	6,560
Non-operating room procedures 2	2,660	3,654	4,171
Valid operating room procedures 2	1,815	2,217	2,389
Average Lenth of Stay	4.2	3.7	3.8
Primary Payer Distribution	·	·	
Medicare	31.0%	30.7%	35.0%
Medicaid	20.0%	32.7%	35.8%
Private Insurance	45.3%	32.8%	25.6%
Uninsured	2.6%	3.3%	2.4%
Other	1.1%	0.4%	1.2%
Point of Origin Distribution	·	·	
Home-Work-etc.	81.4%	68.8%	67.6%
Clinic/Physician Office	0.5%	11.3%	14.7%
Transfers-Health Facility	4.8%	2.6%	1.5%
Newborn	12.4%	13.3%	12.3%
Other/Unknown	.9%	4.0%	3.9%
Discharge Status Distribution			
Routine - home	67.1%	72.3%	69.7%
Another short-term hospital	1.8%	2.3%	2.2%
Long-term care facility	12.5%	10.9%	10.6%
Home health care	9.2%	7.8%	11.4%
Expired in hospital	6.8%	3.0%	1.5%
Left against medical advice	1.7%	2.1%	3.3%
Other/Unknown	1.0%	1.6%	1.4%
Sex			
Male	38.8%	38.4%	40.0%
Female	61.2%	61.6%	60.0%
Age			
<1	12.6%	13.5%	12.4%
1-4	0.0%	0.0%	0.0%
<i>5-9</i>	0.0%	0.0%	0.0%
10-14	0.1%	0.0%	0.0%
15-19	1.2%	1.4%	1.2%
20-24	4.0%	4.3%	4.2%
<i>25-34</i>	12.3%	13.4%	13.1%
35-44	9.8%	11.3%	10.9%
45-54	11.8%	13.1%	12.5%
<i>55-64</i>	15.8%	15.5%	17.3%
<i>65-74</i>	12.8%	11.6%	13.2%
75+ <b>Notes:</b>	19.7%	15.9%	15.1%

### Notes:

<sup>1.</sup> 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

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

 $<sup>3. \, \</sup>mbox{Percentages}$  may not sum to 100 due to rounding.

<sup>4.</sup> St. Francis hospital does not operate a pediatric service. ER patients are admitted at Al Dupont.

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

#### Select Specialty Hospital - Wilmington

#### 2018 Discharge Distribution

Zip / State	Number	<u>%</u>
MD	65	20.2%
19805	21	6.5%
19720	19	5.9%
NJ	17	5.3%
19701	10	3.1%
19713	10	3.1%
19802	10	3.1%
PA	10	3.1%
Undisclosed*	160	49.7%

Total	322	100.0%

<sup>\*</sup>Zip codes with less than 10 cases

### **Utilization Characteristics**

	2016	2017	2018
Aggregate charges	\$68,624,955	\$65,090,391	\$67,615,962
Average charges	\$196,633	\$187,041	\$209,987
Average charge per day	\$5,727	\$6,306	\$6,880
Number of Discharges	349	348	322
Total All-listed Procedures <sup>1</sup>	544	466	705
Non-operating room procedures 2	374	374	578
Valid operating room procedures <sup>2</sup>	170	92	127
Average Lenth of Stay	32.9	29.3	30.4
Primary Payer Distribution			
Medicare	84.2%	81.6%	68.6%
Medicaid	1.4%	0.6%	9.9%
Private Insurance	13.2%	16.4%	19.9%
Uninsured	0.0%	0.0%	0.0%
Other	1.1%	1.4%	1.6%
Point of Origin Distribution	·	•	
Home-Work-etc.	0.6%	0.0%	0.0%
Clinic/Physician Office	0.0%	0.0%	0.0%
Transfers-Health Facility	99.4%	100.0%	100.0%
Newborn	0.0%	0.0%	0.0%
Other/Unknown	0.0%	0.0%	0.0%
Discharge Status Distribution	<del>.</del>	•	
Routine - home	6.9%	2.9%	2.5%
Another short-term hospital	6.6%	14.4%	10.9%
Long-term care facility	61.0%	58.6%	57.1%
Home health care	12.3%	13.2%	14.0%
Expired in hospital	9.2%	9.5%	10.2%
Left against medical advice	0.6%	0.6%	1.9%
Other/Unknown	3.4%	0.9%	3.4%
Sex	·	•	
Male	55.0%	51.1%	59.0%
Female	45.0%	48.9%	41.0%
Unknown	0.0%	0.0%	0.0%
Age	·	·	
<1	0.0%	0.0%	0.0%
1-4	0.0%	0.0%	0.0%
<i>5-9</i>	0.0%	0.0%	0.0%
<i>10-14</i>	0.0%	0.0%	0.0%
<i>15-19</i>	0.6%	0.0%	0.0%
20-24	0.6%	0.3%	1.6%
<i>25-34</i>	0.9%	0.9%	2.5%
<i>35-44</i>	1.7%	1.4%	4.3%
<i>45-54</i>	12.6%	12.6%	15.8%
<i>55-64</i>	23.8%	24.7%	23.9%
<i>65-74</i>	35.0%	32.2%	26.4%
<i>75+</i>	24.9%	27.9%	25.5%

#### Notes:

<sup>1.</sup> 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.

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

<sup>3.</sup> Percentages may not sum to 100 due to rounding.

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

#### 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.

Table A1. Number and Percent of Discharges, Mean Length of Stay, Mean Charges, Percent Expired, and Percent with an Emergency Priority at Admission by Principal Diagnosis

Delaware Hospitals, 2018

Clinical Class	ifications Software Categories and Chapter Headings	Number of Discharges	Percent of Discharges	Length of Stay	Mean Total	Percent Expired	Percent Emergency
		Discharges	Discharges	Glay	Charges	Lxpiieu	Priority
Infections and	Tuberculosis	14	0.3%	14.9	\$69,460	7.1%	78.69
parasitic	Septicemia (except in labor)	4,196	88.2%	8.5	\$54,522	9.6%	82.0
diseases	Bacterial infection; unspecified site	111	2.3%	9.2	\$51,392	2.7%	67.6
	Mycoses	47	1.0%	8.6	\$47,141	2.1%	89.4
	HIV infection	118	2.5%	10.2	\$60,329	4.2%	92.4
	Hepatitis	43	0.9%	4.1	\$37,011	2.3%	79.1
	Viral infection	183	3.8%	3.6	\$25,375	0.5%	84.2
	Other infections; including parasitic	28	0.6%	3.9	\$22,623	3.6%	75.0
	Sexually transmitted infections (not HIV or hepatitis)	17	0.4%	2.9	\$17,621	0.0%	76.5
	Immunizations and screening for infectious disease	2	0.0%	5.0	\$22,810	0.0%	50.0
	Total	4,759	100.0%	8.3	\$52,952	8.7%	81.9
Noonloome	Cancer of head and neck	73	1.8%	10.0	\$49,927	0.0%	34.2
Neoplasms	Cancer of esophagus	30	0.8%	8.4	\$44,435	3.3%	73.3
	Cancer of stomach	73	1.8%	8.9	\$55,041	8.2%	56.2
	Cancer of colon	286	7.2%	7.1	\$50,681	1.7%	30.8
	Cancer of rectum and anus	109	2.7%	6.6	\$52,088	1.8%	29.4
	Cancer of liver and intrahepatic bile duct	59	1.5%	7.2	\$43,560	5.1%	78.0
	Cancer of pancreas	96	2.4%	6.4	\$35,149	5.2%	63.5
	Cancer of other GI organs; peritoneum	50	1.3%	8.3	\$53,350	6.0%	46.0
	Cancer of bronchus; lung	368	9.2%	5.4	\$43,403	4.6%	53.0
	Cancer; other respiratory and intrathoracic	8	0.2%	7.3	\$27,875	0.0%	62.5
	Cancer of bone and connective tissue	31	0.8%	6.7	\$89,801	3.2%	22.6
	Melanomas of skin	4	0.1%	3.5	\$11,678	0.0%	75.0
	Other non-epithelial cancer of skin	25	0.6%	3.6	\$16,533	0.0%	24.0
	Cancer of breast	72	1.8%	4.6	\$26,474	2.8%	51.4
	Cancer of uterus	87	2.2%	2.8	\$24,160	0.0%	13.8
	Cancer of cervix	18	0.5%	4.5	\$34,389	0.0%	27.8
	Cancer of ovary	47	1.2%	8.5	\$51,901	2.1%	25.5
	Cancer of other female genital organs	14	0.4%	2.9	\$20,833	0.0%	7.1
	Cancer of prostate	115	2.9%	2.6	\$26,419	0.0%	18.3
	Cancer of testis	3	0.1%	4.0	\$61,805	0.0%	33.3
	Cancer of other male genital organs	1	0.0%	3.0	\$12,861	0.0%	100.0
	Cancer of bladder	84	2.1%	6.5	\$40,109	3.6%	47.6
	Cancer of kidney and renal pelvis	114	2.9%	3.7	\$33,202	0.0%	17.5
	Cancer of other urinary organs	13		4.6	\$36,653	0.0%	7.7
	Cancer of brain and nervous system	83		11.2	\$76,860	2.4%	57.8
	Cancer of thyroid	23		1.9	\$16,465	0.0%	4.3
	Hodgkin's disease	13		8.1	\$73,284	0.0%	23.1
	Houghin a diacase	13	0.5%	0.1	Ψ73,∠64	0.0%	

Clinical Classi	fications Software Categories and Chapter Headings	Number of	Percent of	Length of	Mean Total	Percent	Percent Emergency
JJul Olddol		Discharges	Discharges	Stay	Charges	Expired	Priority
	Non-Hodgkin`s lymphoma	103	2.6%	11.6	\$93,861	5.8%	68.09
	Leukemias	140	3.5%	18.2	\$194,520	7.1%	62.99
	Multiple myeloma	46	1.2%	10.0	\$67,977	4.3%	60.99
	Cancer; other and unspecified primary	23	0.6%	10.8	\$93,559	4.3%	39.19
	Secondary malignancies	525	13.2%	6.6	\$37,935	5.1%	69.19
	Malignant neoplasm without specification of site	38	1.0%	7.3	\$46,790	10.5%	65.89
	Neoplasms of unspecified nature or uncertain behavior	118	3.0%	5.5	\$50,703	0.8%	44.99
	Maintenance chemotherapy; radiotherapy	463	11.6%	6.2	\$53,648	0.4%	0.49
	Benign neoplasm of uterus	224	5.6%	2.4	\$26,725	0.0%	6.3
	Other and unspecified benign neoplasm	413	10.3%	5.0	\$46,481	0.7%	18.4
	Total	3,992	100.0%	6.5	\$50,860	2.7%	37.2
	Thyroid disorders	72	1.4%	4.2	\$28,995	1.4%	66.7
Endocrine, nutritional &	Diabetes mellitus without complication	23	0.4%	2.9	\$19,046	0.0%	73.9
metabolic	Diabetes mellitus with complications	2,196	41.8%	6.1	\$37,194	0.6%	80.1
diseases, &	Other endocrine disorders	275	5.2%	5.3	\$27,841	1.5%	68.7
immunity	Nutritional deficiencies	67	1.3%	10.9	\$48,051	1.5%	64.2
disorders	Disorders of lipid metabolism	3	0.1%	5.0	\$34,469	0.0%	100.0
	Gout and other crystal arthropathies	47	0.9%	4.8	\$19,668	0.0%	95.7
	Fluid and electrolyte disorders	1,149	21.9%	4.1	\$20,661	1.3%	87.2
	Cystic fibrosis	50	1.0%	10.2	\$140,589	0.0%	34.0
	Immunity disorders	33	0.6%	9.3	\$89,538	0.0%	81.8
	Other nutritional; endocrine; and metabolic disorders	1,334	25.4%	2.6	\$32,091	0.1%	14.2
	Total	5,249	100.0%	4.8	\$32,890	0.7%	63.6
	Deficiency and other anemia	454	32.2%	4.5	\$34,426	0.0%	82.4
Disease of the	Acute posthemorrhagic anemia	192	13.6%	4.2	\$24,093	1.6%	81.3
blood and blood	Sickle cell anemia	389	27.6%	4.0	\$26,917	0.0%	83.8
forming organs	Coagulation and hemorrhagic disorders	205	14.5%	4.4	\$54,502	1.0%	72.2
	Diseases of white blood cells	145	10.3%	5.2	\$35,701	0.7%	66.9
	Other hematologic conditions	25	1.8%	4.6	\$32,658	4.0%	76.0°
	Total	1,410	100.0%	4.4	\$33,966	0.5%	79.49
	Adjustment disorders	9		2.6	\$18,103	0.0%	100.0
Mental disorders	· ·	34	1.0%	3.7	\$14,459	0.0%	91.2
montal alcordoro	Attention-deficit	3		2.3	\$3,772	0.0%	100.0
	Delirium	152	4.5%	13.9	\$29,870	0.7%	92.8
	Developmental disorders	0		N/A	Ψ23,676 N/A	0.776 N/A	32.0 N
	Disorders usually diagnosed in infancy	6	0.2%	5.3	\$28.429	0.0%	50.0
	Impulse control disorders	0	0.2 %	N/A	\$26,429 N/A	0.0 % N/A	30.0 N
	Mood disorders	894		7.3	\$15,491	0.1%	77.7
	Personality disorders	2	0.1%	3.0	\$7,730	0.1%	100.0
	Schizophrenia and other psychotic disorders	128		9.0	\$21,986	0.0%	83.6
	Alcohol-related disorders	1,183	34.8%	5.7	\$21,960	0.0%	90.3
	Substance-related disorders	486	14.3%	4.8	\$22,665	5.6%	82.3
	Screening and history of mental health and substance abuse						
	codes	382	11.2%	4.4	\$24,448	1.0%	77.5
	Miscellaneous disorders	119	3.5%	5.3	\$23,907	0.0%	73.1
	Total	3,398	100.0%	6.3	\$21,211	1.2%	83.6
	Meningitis (except that caused by tuberculosis or STD)	79		6.1	\$41,743	0.0%	68.4
Diseases of the		39	0.9%	12.0	\$155,983	5.1%	76.9
Diseases of the nervous system	Encephalitis (except that caused by tuberculosis or STD)	39			, ,		
Diseases of the nervous system and sense	Encephalitis (except that caused by tuberculosis or STD)  Other CNS infection and poliomyelitis	49	1.1%	19.8	\$82,401	4.1%	67.3
nervous system				19.8 7.7	\$82,401 \$20,864	4.1% 2.2%	
nervous system and sense	Other CNS infection and poliomyelitis	49	1.1%	7.7	\$20,864	2.2%	65.2
nervous system and sense	Other CNS infection and poliomyelitis Parkinson's disease	49 46	1.1% 2.5%		\$20,864 \$32,935		65.2 73.8
nervous system and sense	Other CNS infection and poliomyelitis Parkinson's disease Multiple sclerosis	49 46 107 78	1.1% 2.5% 1.8%	7.7 6.2 6.7	\$20,864 \$32,935 \$33,111	2.2% 0.0% 2.6%	65.2 73.8 62.8
nervous system and sense	Other CNS infection and poliomyelitis  Parkinson's disease  Multiple sclerosis  Other hereditary and degenerative nervous system conditions  Paralysis	49 46 107 78 111	1.1% 2.5% 1.8% 2.6%	7.7 6.2 6.7 11.9	\$20,864 \$32,935 \$33,111 \$83,344	2.2% 0.0% 2.6% 0.0%	67.3 65.2 73.8 62.8 30.6 70.6
nervous system and sense	Other CNS infection and poliomyelitis Parkinson's disease Multiple sclerosis Other hereditary and degenerative nervous system conditions	49 46 107 78	1.1% 2.5% 1.8%	7.7 6.2 6.7	\$20,864 \$32,935 \$33,111	2.2% 0.0% 2.6%	65.2° 73.8° 62.8°

Clinical Classi	fications Software Categories and Chapter Headings	Number of	Percent of	Length of	Mean Total	Percent	Percent Emergency
		Discharges	Discharges	Stay	Charges	Expired	Priority
	Cataract	0	0.0%	N/A	N/A	N/A	N/A
	Retinal detachments; defects; vascular occlusion; and retinopathy	18	0.4%	12.7	\$130,219	0.0%	66.7%
	Glaucoma	2	0.0%	3.0	\$7,452	0.0%	100.0%
	Blindness and vision defects	30	0.7%	2.6	\$15,793	0.0%	83.3%
	Inflammation; infection of eye (except that caused by tuberculosis or sexually transmitteddisease)	47	1.1%	5.3	\$35,879	0.0%	68.19
	Other eye disorders	31	0.7%	4.0	\$22,489	0.0%	77.49
	Otitis media and related conditions	58	1.3%	2.8	\$19,903	0.0%	82.89
	Conditions associated with dizziness or vertigo	193	4.4%	2.2	\$9,049	0.0%	94.89
	Other ear and sense organ disorders	38	0.9%	3.9	\$27,619	0.0%	78.99
	Other nervous system disorders	1,868	42.9%	7.6	\$44,050	0.9%	39.89
	Total	4,350	100.0%	6.3	\$38,288	1.2%	58.89
Diagona of the	Heart valve disorders	413	2.4%	6.5	\$136,701	2.4%	15.79
Diseases of the circulatory system	Peri-; endo-; and myocarditis; cardiomyopathy (except that caused by tuberculosis or STD)	262	1.5%	12.6	\$81,045	3.1%	66.49
System	Essential hypertension	28	0.2%	2.1	\$13,100	0.0%	96.49
	Hypertension with complications and secondary hypertension	4,368	25.2%	5.9	\$40,658	1.9%	80.99
	Acute myocardial infarction	1,699	9.8%	4.7	\$62,574	4.7%	72.59
	Coronary atherosclerosis and other heart disease	996	5.7%	4.8	\$65,647	0.8%	42.49
	Nonspecific chest pain	319	1.8%	2.2	\$15,382	0.0%	87.19
	Pulmonary heart disease	757	4.4%	4.8	\$29,696	2.9%	82.29
	Other and ill-defined heart disease	42	0.2%	4.6	\$28,956	7.1%	73.89
	Conduction disorders	257	1.5%	4.4	\$60,807	0.8%	71.69
	Cardiac dysrhythmias	1,832	10.6%	3.9	\$34,381	1.4%	72.79
	Cardiac arrest and ventricular fibrillation	137	0.8%	8.3	\$74,665	51.8%	75.29
	Congestive heart failure; nonhypertensive	663	3.8%	6.5	\$70,038	5.3%	79.89
	Acute cerebrovascular disease	2,595	15.0%	6.8	\$37,086	5.2%	83.69
	Occlusion or stenosis of precerebral arteries	384	2.2%	1.8	\$25,814	0.3%	10.29
	Other and ill-defined cerebrovascular disease	105	0.6%	5.9	\$61,947	0.0%	48.69
	Transient cerebral ischemia	364	2.1%	2.4	\$14,866	0.0%	90.99
	Late effects of cerebrovascular disease	530	3.1%	13.3	\$39.120	0.6%	15.89
	Peripheral and visceral atherosclerosis	387	2.2%	6.1	\$49,533	3.9%	51.49
	Aortic; peripheral; and visceral artery aneurysms	231	1.3%	5.7	\$100,915	5.6%	40.39
	Aortic and peripheral arterial embolism or thrombosis	88	0.5%	6.9	\$69,380	5.7%	69.3
	Other circulatory disease	409	2.4%	4.3	\$22,912	1.0%	86.39
	Phlebitis; thrombophlebitis and thromboembolism	347	2.0%	4.6		1.2%	79.59
	Varicose veins of lower extremity	14	0.1%	3.4	\$29,267	0.0%	57.19
	Hemorrhoids	58	0.3%	3.7	\$15,207	0.0%	84.59
	Other diseases of veins and lymphatics	64	0.4%	14.2	\$186,560	1.6%	78.19
	Total	17,349	100.0%	5.7	\$47,028	3.0%	70.99
Discours of Altri	Pneumonia (except that caused by tuberculosis or STD)	3,001	24.1%	5.3	\$27,777	1.9%	85.59
Diseases of the respiratory	Influenza	942	7.6%	4.5	\$20,563	1.2%	86.69
system	Acute and chronic tonsillitis	88	0.7%	1.9	\$16,308	0.0%	64.89
•	Acute bronchitis	1,158	9.3%	2.8	\$10,308	0.0%	85.19
	Other upper respiratory infections	384	3.1%	3.3	\$20,443	0.1%	78.19
	Chronic obstructive pulmonary disease and bronchiectasis	2,270	18.2%	4.6	\$24,947	0.0%	83.99
	Asthma	1,119	9.0%	2.2	\$23,939	0.9%	88.69
	Aspiration pneumonitis; food/vomitus						
	Pleurisy; pneumothorax; pulmonary collapse	608	4.9%	6.6	\$38,231	4.1%	69.69
		380	3.0%	6.5	\$36,810	2.6%	72.99
	Respiratory failure; insufficiency; arrest (adult)	2,003	16.1%	9.8	\$90,810	9.2%	66.19
	Lung disease due to external agents	27	0.2%	6.3	\$40,759	7.4%	88.99
	Other lower respiratory disease	333	2.7%	4.2	\$25,688	1.2%	73.99
	Other upper respiratory disease	156	1.3%	5.4	\$108,494	0.0%	72.49
	Total	12,469	100.0%	5.3	\$36,953	2.5%	80.49

Clinical Classi	fications Software Categories and Chapter Headings	Number of Discharges	Percent of Discharges	Length of Stay	Mean Total Charges	Percent Expired	Percent Emergency Priority
	Intestinal infection	900	8.8%	4.6	\$24,001	0.6%	81.0%
Diseases of the	Disorders of teeth and jaw	84	0.8%	3.4	\$31,920	0.0%	59.5%
digestive system	Diseases of mouth; excluding dental	97	1.0%	4.6	\$26.124	1.0%	75.3%
	Esophageal disorders	347	3.4%	5.3	\$27,727	0.9%	77.5%
	Gastroduodenal ulcer (except hemorrhage)	115	1.1%	5.4	\$32,799	0.9%	80.9%
	Gastritis and duodenitis	254	2.5%	4.4	\$22,712	0.4%	90.2%
	Other disorders of stomach and duodenum	234	2.3%	5.9	\$29,630	0.4 %	85.1%
	Appendicitis and other appendiceal conditions	443	4.3%	3.9	\$31,019	0.2%	70.9%
	Abdominal hernia	534	5.2%	4.9	\$34,374	0.7%	41.6%
	Regional enteritis and ulcerative colitis	335	3.3%	6.5	\$39,009	0.3%	73.4%
	Intestinal obstruction without hernia	1,024	10.0%	5.8	\$29,511	1.5%	80.2%
	Diverticulosis and diverticulitis	1,136	11.1%	5.2	\$28,583	0.3%	66.0%
	Anal and rectal conditions	110	1.1%	5.2	\$26,982	0.0%	52.7%
	Peritonitis and intestinal abscess	95	0.9%	6.4	\$34,018	0.0%	75.8%
	Biliary tract disease	909	8.9%	3.9	\$28,593	0.6%	71.9%
	Other liver diseases	339	3.3%	7.5	\$41,091	4.1%	78.5%
	Pancreatic disorders (not diabetes)	980	9.6%	4.9	\$24,989	0.2%	80.8%
	Gastrointestinal hemorrhage	1,243	12.2%	4.5	\$27,806	2.0%	79.2%
	Noninfectious gastroenteritis	322	3.2%	4.0	\$19,634	0.0%	82.0%
	Other gastrointestinal disorders	719	7.0%	5.7	\$38,681	1.4%	57.4%
	Total	10,207	100.0%	5.0	\$29,361	0.9%	73.4%
	Nephritis; nephrosis; renal sclerosis	57	1.2%	5.1		0.0%	61.4%
Diseases of the	Acute and unspecified renal failure				\$40,614		
genitourinary		1,835	38.0%	5.6	\$25,595	1.7%	79.6%
system	Chronic renal failure	40	0.8%	5.8	\$108,168	2.5%	35.0%
	Urinary tract infections	1,904	39.4%	5.0	\$21,165	0.5%	88.6%
	Calculus of urinary tract	105	2.2%	3.0	\$23,321	1.0%	67.6%
	Other diseases of kidney and ureters	271	5.6%	3.2	\$25,626	0.4%	67.9%
	Other diseases of bladder and urethra	61	1.3%	5.7	\$40,340	0.0%	54.1%
	Genitourinary symptoms and ill-defined conditions	73	1.5%	4.9	\$22,114	1.4%	84.9%
	Hyperplasia of prostate	43	0.9%	4.1	\$17,748	0.0%	60.5%
	Inflammatory conditions of male genital organs	71	1.5%	5.0	\$22,027	0.0%	85.9%
	Other male genital disorders	13	0.3%	6.1	\$24,499	0.0%	92.3%
	Nonmalignant breast conditions	50	1.0%	3.8	\$20,214	0.0%	66.0%
	Inflammatory diseases of female pelvic organs	70	1.4%	3.8	\$22,673	0.0%	74.3%
	Endometriosis	25	0.5%	2.8	\$23,760	0.0%	16.0%
	Prolapse of female genital organs	63	1.3%	1.4	\$13,314	0.0%	3.2%
	Menstrual disorders	20		2.2	\$13,314	0.0%	35.0%
	Ovarian cyst  Monopolycol disorders	47	1.0%	2.1	\$21,620	0.0%	46.8%
	Menopausal disorders	8	0.2%	3.0	\$22,637	0.0%	62.5%
	Female infertility	0	0.0%	N/A	N/A	N/A	N/A
	Other female genital disorders	73	1.5%	3.0	\$26,920	0.0%	53.4%
	Total	4,829	100.0%	4.9	\$24,386	0.9%	78.9%
Complications of	Contraceptive and procreative management	1	0.0%	2.0	\$16,519	0.0%	0.0%
pregnancy,	Spontaneous abortion	23	0.2%	2.3	\$14,312	0.0%	78.3%
childbirth, & the	Induced abortion	6	0.1%	2.7	\$12,108	0.0%	33.3%
puerperium	Postabortion complications	2	0.0%	4.0	\$15,727	0.0%	50.0%
	Ectopic pregnancy	14	0.1%	1.5	\$11,255	0.0%	100.0%
	Other complications of pregnancy	1,105	9.7%	3.1	\$10,832	0.0%	43.1%
	Hemorrhage during pregnancy; abruptio placenta; placenta previa	121	1.1%	4.5	\$14,495	0.0%	52.9%
	Hypertension complicating pregnancy; childbirth and the puerperium	1,345	11.8%	3.6	\$12,517	0.0%	40.0%
	Early or threatened labor	336	3.0%	2.9	\$9,684	0.0%	64.9%
	Prolonged pregnancy	708	6.2%	2.8	\$8,888	0.0%	10.7%
	Diabetes or abnormal glucose tolerance complicating pregnancy; childbirth; or the puerperium	596	5.2%	2.8	\$10,157	0.0%	22.8%

Clinical Classi	fications Software Categories and Chapter Headings	Number of Discharges	Percent of Discharges	Length of Stay	Mean Total Charges	Percent Expired	Percent Emergency Priority
	Malposition; malpresentation	284	2.5%	2.8	\$12,171	0.0%	20.4%
	Fetopelvic disproportion; obstruction	53	0.5%	2.8	\$12,696	0.0%	24.5%
	Previous C-section	1,334	11.7%	2.7	\$10,595	0.0%	15.9%
	Fetal distress and abnormal forces of labor	314	2.8%	2.4	\$8,884	0.0%	59.9%
	Polyhydramnios and other problems of amniotic cavity	1,045	9.2%	3.4	\$10,596	0.0%	55.0%
	Umbilical cord complication	458	4.0%	2.4	\$8,644	0.0%	38.0%
	OB-related trauma to perineum and vulva	823	7.2%	2.2	\$8,620	0.0%	35.6%
	Forceps delivery	1	0.0%	3.0	\$23,636	0.0%	0.0%
	Other complications of birth; puerperium affecting management of mother	2,393	21.0%	2.5	\$9,069	0.0%	46.1%
	Normal pregnancy and/or delivery	425	3.7%	2.0	\$7,543	0.0%	37.6%
	Total	11,387	100.0%	2.8	\$10,088	0.0%	37.9%
Diseases of the	Skin and subcutaneous tissue infections	1,829	88.3%	4.7	\$19,401	0.3%	80.9%
skin and	Other inflammatory condition of skin	42	2.0%	3.8	\$23,008	0.0%	66.7%
subcutaneous	Chronic ulcer of skin	163	7.9%	15.1	\$65,791	2.5%	64.4%
tissue	Other skin disorders	37	1.8%	5.1	\$29,326	0.0%	64.9%
	Total	2,071	100.0%	5.5	\$23,302	0.4%	79.0%
Diseases of the	Infective arthritis and osteomyelitis (except that caused by tuberculosis or STD)	417	5.0%	12.8	\$59,603	0.2%	71.5%
musculo-	Rheumatoid arthritis and related disease	44	0.5%	5.3	\$55,735	2.3%	54.5%
skeletal system and connective	Osteoarthritis	4,322	52.3%	1.4	\$36,278	0.0%	0.4%
tissue	Other non-traumatic joint disorders	126	1.5%	3.7	\$44,793	0.0%	34.1%
	Spondylosis; intervertebral disc disorders; other back problems	1,923	23.3%	3.3	\$63,712	0.0%	17.6%
	Osteoporosis	0	0.0%	N/A	N/A	N/A	N/A
	Pathological fracture	282	3.4%	6.8	\$38,017	1.4%	83.3%
	Acquired foot deformities	36	0.4%	10.0	\$85,405	0.0%	5.6%
	Other acquired deformities	282	3.4%	7.0	\$148,218	0.4%	3.5%
	Systemic lupus erythematosus and connective tissue disorders	99	1.2%	8.8	\$58,538	2.0%	74.7%
	Other connective tissue disease	504	6.1%	5.2	\$35,407	0.4%	68.3%
	Other bone disease and musculoskeletal deformities	224	2.7%	3.6	\$91,580	0.0%	9.4%
	Total	8,259	100.0%	3.2	\$49,886	0.1%	17.1%
Congenital	Cardiac and circulatory congenital anomalies	238	39.9%	19.6	\$407,890	2.1%	13.0%
anomalies	Digestive congenital anomalies	69	11.6%	7.9	\$93,686	0.0%	30.4%
	Genitourinary congenital anomalies	26	4.4%	4.5	\$57,501	0.0%	19.2%
	Nervous system congenital anomalies	57	9.6%	10.3		0.0%	7.0%
	Other congenital anomalies	206	34.6%	6.7	\$143,248	1.9%	8.7%
	Total	596	100.0%	12.3	237,864	1.5%	13.3%
Certain	Liveborn	10,722	94.9%	3.9	\$11,190	0.3%	0.0%
conditions originating in the	Short gestation; low birth weight; and fetal growth retardation	48	0.4%	31.9	\$259,371	10.4%	2.1%
perinatal period	Intrauterine hypoxia and birth asphyxia	22	0.2%	16.2	\$180,237	9.1%	4.5%
	Respiratory distress syndrome	34	0.3%	29.5	\$250,858	8.8%	2.9%
	Hemolytic jaundice and perinatal jaundice	191	1.7%	1.7	\$9,466	0.0%	31.4%
	Birth trauma	3	0.0%	2.0	\$24,161	0.0%	33.3%
	Other perinatal conditions	280	2.5%	12.1	\$162,427	1.4%	34.3%
	Total	11,300	100.0%	4.3	\$17,016	0.4%	1.5%
Injury and	Joint disorders and dislocations; trauma-related	71	0.7%	7.6	\$91,068	1.4%	64.8%
poisoning	Fracture of neck of femur (hip)	940	9.7%	6.4	\$44,654	1.7%	73.4%
	Spinal cord injury	50	0.5%	14.6	\$64,404	2.0%	58.0%
	Skull and face fractures	125	1.3%	5.7	\$40,037	2.4%	90.4%
	Fracture of upper limb	406	4.2%	4.1	\$35,211	0.5%	75.6%
	Fracture of lower limb	761	7.9%	5.9	\$50,174	0.5%	74.6%
	Other fractures	1,004	10.4%	5.8	\$30,321	0.6%	82.7%
	Sprains and strains	45	0.5%	3.3	\$27,819	0.0%	55.6%

### APPENDIX A

Clinical Classi	fications Software Categories and Chapter Headings	Number of Discharges	Percent of Discharges	Length of Stay	Mean Total Charges	Percent Expired	Percent Emergency Priority
	Intracranial injury	792	8.2%	9.2	\$51,256	6.7%	88.6%
	Crushing injury or internal injury	364	3.8%	6.7	\$43,322	2.5%	84.6%
	Open wounds of head; neck; and trunk	120	1.2%	4.8	\$35,703	0.8%	94.2%
	Open wounds of extremities	92	1.0%	5.0	\$29,655	0.0%	84.8%
	Complication of device; implant or graft	2,016	20.9%	6.3	\$52,378	1.5%	53.4%
	Complications of surgical procedures or medical care	1,863	19.3%	7.3	\$44,072	1.1%	63.8%
	Superficial injury; contusion	110	1.1%	4.1	\$19,458	0.0%	88.2%
	Burns	14	0.1%	3.0	\$20,853	0.0%	71.4%
	Poisoning by psychotropic agents	82	0.8%	4.2	\$22,584	2.4%	82.9%
	Poisoning by other medications and drugs	353	3.7%	4.8	\$28,807	5.1%	83.9%
	Poisoning by nonmedicinal substances	71	0.7%	4.4	\$20,892	0.0%	97.2%
	Other injuries and conditions due to external causes	369	3.8%	5.8	\$33,790	1.9%	88.1%
	Total	9,648	100.0%	6.4	\$43,565	1.8%	71.9%
Other conditions	Syncope	298	22.2%	2.7	\$14,646	0.0%	86.9%
Other conditions	Fever of unknown origin	84	6.3%	3.8	\$18,582	1.2%	66.7%
	Lymphadenitis	51	3.8%	2.8	\$18,425	0.0%	76.5%
	Gangrene	96	7.1%	9.4	\$63,737	0.0%	54.2%
	Shock	32	2.4%	5.4	\$49,647	25.0%	71.9%
	Nausea and vomiting	66	4.9%	3.6	\$19,217	0.0%	77.3%
	Abdominal pain	155	11.5%	3.7	\$19,289	0.6%	81.9%
	Malaise and fatigue	90	6.7%	4.5	\$18,641	2.2%	74.4%
	Allergic reactions	80	6.0%	2.4	\$13,574	0.0%	85.0%
	Rehabilitation care; fitting of prostheses; and adjustment of	30	2.2%	10.5	\$44,775	0.0%	0.0%
	Administrative/social admission	0	0.0%	N/A	N/A	N/A	N/A
	Medical examination/evaluation	1	0.1%	1.0	\$1,686	0.0%	0.0%
	Other aftercare	304	22.6%	9.4	\$35,975	2.0%	3.0%
	Other screening for suspected conditions (not mental disorders or infectious disease)	57	4.2%	3.4	\$14,099	0.0%	54.4%
	Total	1,344	100.0%	5.3	\$25,803	1.3%	58.2%
Total All CCS Dia	gnostic Codes	112,865	100.0%	5.2	\$35,238	1.7%	57.0%

Note: Total All CSS Diagnostic Codes includes three unknown Diagnoses.

Total

#### 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, Tenth Revision, Clinical Modification (ICD-10-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.

Table B1. Number and Percent of Discharges, Mean Length of Stay, Mean Charges, Percent Expired, and Percent with an Emergency Priority at Admission by Ecode Delaware Hospitals, 2018

Clinical Classifications Software Categories for Ecodes	Number of Discharges	Percent of Discharges	Mean LOS	Mean Total Charges	Percent Expired	Percent Emergency Admission
Cut/pierce	67	1.0%	4.0	\$16,813	0.0	94.0
Drowning/submersion	1	0.0%	11.0	\$115,656	0.0	100.0
Fall	978	14.4%	4.5	\$22,979	0.5	89.9
Fire/bum	7	0.1%	6.9	\$39,308	0.0	85.7
Firearm	45	0.7%	4.3	\$26,848	2.2	93.3
Machinery	9	0.1%	4.2	\$18,927	0.0	88.9
Motor vehicle traffic (MVT)	352	5.2%	4.1	\$26,317	0.3	88.4
Pedal cyclist; not MVT	14	0.2%	3.2	\$24,240	7.1	85.7
Pedestrian; not MVT	9	0.1%	3.0	\$19,094	N/A	88.9
Transport; not MVT	51	0.8%	2.7	\$16,426	0.0	94.1
Natural/environment	90	1.3%	3.6	\$18,688	0.0	76.7
Overexertion	4	0.1%	4.3	\$18,301	0.0	100.0
Struck by; against	114	1.7%	3.8	\$18,770	0.9	93.0
Adverse effects of medical care	534	7.9%	3.7	\$31,881	0.0	39.9
Adverse effects of medical drugs	2,440	36.0%	4.9	\$33,752	0.2	60.7
Other specified and classifiable	25	0.4%	5.5	\$22,906	0.0	80.0
Other specified; NEC	2	0.0%	6.5	\$11,055	0.0	100.0
Unspecified	1,213	17.9%	4.4	\$20,107	0.2	91.3

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

6,778

100.0%

4.4

\$27,027

0.3

75.9

Table C1. Number of All-listed Procedures Performed during the Inpatient Stay by Procedure and Sex of Patient Delaware Hospitals, 2018

Single level CCS	Delaware Hospitals, 2018	Male	Female	Tata
Single level CCS	Procedure Categories and Chapter Headings Incision and excision of CNS			Total
Operations on		182	171	3
the nervous	Insertion; replacement; or removal of extracranial ventricular shunt	63	73	1
system	Laminectomy; excision intervertebral disc	652	700	1,3
-	Diagnostic spinal tap	430	426	8
	Insertion of catheter or spinal stimulator and injection into spinal canal	53	101	1
	Decompression peripheral nerve	533	541	1,0
	Other diagnostic nervous system procedures	83	106	1
	Other non-OR or closed therapeutic nervous system procedures	81	115	1
	Other OR therapeutic nervous system procedures	682	584	1,2
	Total	2,759	2,817	5,5
Operations on	Thyroidectomy; partial or complete	17	40	
the endocrine system	Diagnostic endocrine procedures	10	15	
	Other therapeutic endocrine procedures	49	62	1
	Total	76	117	1
Operations on	Corneal transplant	0	0	
the eye	Glaucoma procedures	2	1	
	Lens and cataract procedures	0	0	
	Repair of retinal tear; detachment	7	4	
	Destruction of lesion of retina and choroid	0	0	
	Diagnostic procedures on eye	11	14	
	Other therapeutic procedures on eyelids; conjunctiva; cornea	37	29	
	Other intraocular therapeutic procedures	3	1	
	Other extraocular muscle and orbit therapeutic procedures	6	8	
	Total	66	57	•
Operations on	Tympanoplasty	1	1	
the ear	Myringotomy	37	40	
tile eai	Mastoidectomy	2	5	
	Diagnostic procedures on ear	29	26	
	Other therapeutic ear procedures	108	104	2
	Total	177	176	3
Operations on	Control of epistaxis	36	38	
the nose,	Plastic procedures on nose	1	1	
mouth, and	Dental procedures	105	66	
pharynx	Tonsillectomy and/or adenoidectomy	29	27	
	Diagnostic procedures on nose; mouth and pharynx	213	151	;
	Other non-OR therapeutic procedures on nose; mouth and pharynx	157	107	2
	Other OR therapeutic procedures on nose; mouth and pharynx	165	123	
	Total	706	513	1,:
>	Tracheostomy; temporary and permanent	210	135	• •
Operations on	Tracheoscopy and laryngoscopy with biopsy	39	25	
he respiratory	Lobectomy or pneumonectomy	114	126	
system	Diagnostic bronchoscopy and biopsy of bronchus	709	566	1,:
	Other diagnostic procedures on lung and bronchus	6	4	
	Incision of pleura; thoracentesis; chest drainage	931	873	1,
	Other diagnostic procedures of respiratory tract and mediastinum	68	35	
	Other non-OR therapeutic procedures on respiratory system	306	244	
	Other OR Rx procedures on respiratory system and mediastinum	281	432	
	Total	2,664	2,440	5,
	Heart valve procedures	309	228	,
Operations on	Coronary artery bypass graft (CABG)	851	266	1,
the	Percutaneous transluminal coronary angioplasty (PTCA)	1,136	558	
ardiovascular		1,130		1,
system	Coronary thrombolysis	1 051	0	
	Diagnostic cardiac catheterization; coronary arteriography	4,254	2,507	6,
	Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator	1,235	809	2,
	Other OR heart procedures	480	290	
	Extracorporeal circulation auxiliary to open heart procedures	544	267	

Single level CCS	Procedure Categories and Chapter Headings	Male	Female	Total
	Endarterectomy; vessel of head and neck	354	230	584
	Aortic resection; replacement or anastomosis	5	6	1
	Varicose vein stripping; lower limb	0	0	
	Other vascular catheterization; not heart	3,127	3,087	6,21
	Peripheral vascular bypass	179	90	26
	Other vascular bypass and shunt; not heart	18	22	4(
	Creation; revision and removal of arteriovenous fistula or vessel-to-vessel cannula for dialysis	0	0	
	Hemodialysis	1,257	949	2,20
	Other OR procedures on vessels of head and neck	329	262	59
	Embolectomy and endarterectomy of lower limbs	294	237	53
	Other OR procedures on vessels other than head and neck	1,921	1,265	
	•			3,180
	Other diagnostic cardiovascular procedures	480	418	898
	Other non-OR therapeutic cardiovascular procedures	587	507	1,094
	Total	17,361	11,998	29,359
Operations on	Bone marrow transplant	14	23	37
the hemic and	Bone marrow biopsy	105	102	20
lymphatic	Procedures on spleen	29	47	76
system	Other therapeutic procedures; hemic and lymphatic system	550	570	1,120
	Total	698	742	1,440
Oneretiene en	Injection or ligation of esophageal varices	0	0	(
Operations on	Esophageal dilatation	42	63	10
the digestive	Upper gastrointestinal endoscopy; biopsy	1,731	1,948	3,679
system	Gastrostomy; temporary and permanent	237	185	422
	Colostomy; temporary and permanent	112	117	229
	lleostomy and other enterostomy	97	102	199
	Gastrectomy; partial and total	183	685	868
	Small bowel resection	22	28	50
	Colonoscopy and biopsy	319	346	66
	Proctoscopy and anorectal biopsy	97	80	177
	Colorectal resection	341	459	800
	Local excision of large intestine lesion (not endoscopic)	160	182	342
	Appendectomy	255	243	498
	Hemorrhoid procedures	4	243	430
	Endoscopic retrograde cannulation of pancreas (ERCP)	33	41	74
	Biopsy of liver	98	99	
	Cholecystectomy and common duct exploration			197
		335	490	825
	Inguinal and femoral hernia repair	90	23	113
	Other hemia repair	129	182	31
	Laparoscopy (Gl only)	84	84	168
	Abdominal paracentesis	479	380	859
	Exploratory laparotomy	14	4	18
	Excision; lysis peritoneal adhesions	322	615	93
	Peritoneal dialysis	63	84	14
	Other bowel diagnostic procedures	340	432	77
	Other non-OR upper GI therapeutic procedures	324	273	59
	Other OR upper GI therapeutic procedures	229	530	759
	Other non-OR lower GI therapeutic procedures	281	275	55
	Other OR lower GI therapeutic procedures	566	899	1,46
	Other gastrointestinal diagnostic procedures	338	346	684
	Other non-OR gastrointestinal therapeutic procedures	757	712	1,469
	Other OR gastrointestinal therapeutic procedures	500	630	1,130
	Total	8,582	10,539	19,12
	Endoscopy and endoscopic biopsy of the urinary tract	98	94	19:
Operations on	Transurethral excision; drainage; or removal urinary obstruction	241	110	35
the urinary	Ureteral catheterization	241	42	
system				60
*	Nephrotomy and nephrostomy	7	12	19

Single level CCS	Procedure Categories and Chapter Headings	Male	Female	Total
	Nephrectomy; partial or complete	92	67	159
	Kidney transplant	26	10	36
	Genitourinary incontinence procedures	0	7	7
	Extracorporeal lithotripsy; urinary	17	9	26
	Indwelling catheter	261	109	370
	Procedures on the urethra	72	37	109
	Other diagnostic procedures of urinary tract	66	70	136
	Other non-OR therapeutic procedures of urinary tract	286	267	553
	Other OR therapeutic procedures of urinary tract	445	553	998
	Total	1,635	1,387	3,022
	Transurethral resection of prostate (TURP)	47	0	47
Operations on	Open prostatectomy	104	0	104
the male	Circumcision	4,217	0	4,217
genital organs	Diagnostic procedures; male genital	40	0	40
	Other non-OR therapeutic procedures; male genital	38	0	38
	Other OR therapeutic procedures; male genital	107	0	107
	Total	4,553	0	4,553
	Oophorectomy; unilateral and bilateral	0	373	373
Operations on	Other operations on ovary	0	72	72
the female	Ligation or occlusion of fallopian tubes	0	81	81
genital organs	Other operations on fallopian tubes	0	1,160	1,160
	Hysterectomy; abdominal and vaginal	0	460	460
	Other excision of cervix and uterus	0	322	322
	Abortion (termination of pregnancy)	0	9	322
	Dilatation and curettage (D&C); aspiration after delivery or abortion	0	32	32
	Diagnostic dilatation and curettage (D&C)	0	24	24
	Repair of cystocele and rectocele; obliteration of vaginal vault	0	24 5	
	Other diagnostic procedures; female organs	0	78	5
	Other non-OR therapeutic procedures; female organs			78
	Other OR therapeutic procedures; female organs  Other OR therapeutic procedures; female organs	0	3,059	3,059
	Total	0	246 F 024	246
		0	5,921	5,921
Ob statuis al	Removal of ectopic pregnancy	0	11 151	11
Obstetrical	Episiotomy  Congress section			151
procedures	Cesarean section	0	3,361	3,361
	Forceps; vacuum; and breech delivery  Artificial rupture of membranes to assist delivery	0	356	356
		0	2,950	2,950
	Other procedures to assist delivery	0	6,926	6,926
	Diagnostic amniocentesis  Fotal monitoring	0	4	4
	Fetal monitoring	0	164	164
	Repair of current obstetric laceration	0	0	000
	Other therapeutic obstetrical procedures	0	222	222
	Total	0	14,145	14,145
	Partial excision bone	565	343	908
Operations on the	Bunionectomy or repair of toe deformities	0	0	C
musculoskeletal	Treatment; facial fracture or dislocation	67	29	96
system	Treatment; fracture or dislocation of radius and ulna	116	144	260
	Treatment; fracture or dislocation of hip and femur	516	811	1,327
	Treatment; fracture or dislocation of lower extremity (other than hip or femur)	546	637	1,183
	Other fracture and dislocation procedure	370	400	770
	Arthroscopy	2	1	3
	Division of joint capsule; ligament or cartilage	19	23	42
	Excision of semilunar cartilage of knee	0	0	C
	Arthroplasty knee	1,108	1,823	2,931
	Hip replacement; total and partial	906	1,159	2,065

Single level CCS	Procedure Categories and Chapter Headings	Male	Female	Total
	Arthroplasty other than hip or knee	178	296	474
	Arthrocentesis	108	65	173
	Injections and aspirations of muscles; tendons; bursa; joints and soft tissue	136	218	354
	Amputation of lower extremity	675	271	946
	Spinal fusion	1,704	1,906	3,610
	Other diagnostic procedures on musculoskeletal system	479	329	808
	Other therapeutic procedures on muscles and tendons	821	2,475	3,296
	Other OR therapeutic procedures on bone	365		768
	Other OR therapeutic procedures on joints	796		1,621
	Other non-OR therapeutic procedures on musculoskeletal system	102	97	199
	Other OR therapeutic procedures on musculoskeletal system	109		163
	Total	9,688		21,997
	Breast biopsy and other diagnostic procedures on breast	2,000		36
Operations on	Lumpectomy; quadrantectomy of breast	0		24
the	Mastectomy	1	25	26
integumentary	Incision and drainage; skin and subcutaneous tissue	101		
system	Debridement of wound; infection or burn	461	347	808
	<u> </u>	0		100
	Excision of skin lesion	112	77	189
	Suture of skin and subcutaneous tissue	440		2,249
	Skin graft	105		153
	Other diagnostic procedures on skin and subcutaneous tissue	130		278
	Other non-OR therapeutic procedures on skin and breast	1,081	1,232	2,313
	Other OR therapeutic procedures on skin and breast	651	567	1,218
	Total	2,983	4,311	7,294
Missellanseus	Other organ transplantation	2	0	2
Miscellaneous diagnostic and	Computerized axial tomography (CT) scan head	5	9	14
therapeutic	CT scan head and neck	0	0	C
procedures	CT scan abdomen	4	5	ç
	Other CT scan	14	5	19
	Myelogram	15	15	30
	Mammography	0	0	C
	Routine chest X-ray	0	1	1
	Intraoperative cholangiogram	1	3	4
	Upper gastrointestinal X-ray	12	5	17
	Lower gastrointestinal X-ray	0	0	C
	Intravenous pyelogram	68	99	167
	Cerebral arteriogram	285		529
	Contrast aortogram	145		245
	Contrast arteriogram of femoral and lower extremity arteries	174		288
	Arterio- or venogram (not heart and head)	427	374	801
	Diagnostic ultrasound of head and neck	54		110
	Diagnostic ultrasound of heart (echocardiogram)	374		591
	Diagnostic ultrasound of gastrointestinal tract	5/4	5	10
	Diagnostic ultrasound of gradienticative tract	1	4	5
	Diagnostic ultrasound of abdomen or retroperitoneum	6		8
	Other diagnostic ultrasound	183		317
	Magnetic resonance imaging	151		
	Electroencephalogram (EEG)		166	317
		81	97	178
	Nonoperative urinary system measurements and monitoring	0	-	(
	Cardiac stress tests	0	-	(
	Electrocardiogram	111	82	193

### APPENDIX C

ingle level CCS Procedure Categories and Chapter Headings	Male	Female	Total
Electrographic cardiac monitoring	7	2	
Swan-Ganz catheterization for monitoring	83	70	15
Arterial blood gases	0	0	(
Radioisotope scan and function studies	0	1	
Nuclear medicine imaging bone	0	0	(
Other radioisotope scan	2	1	3
Other nuclear medicine imaging	0	0	(
Therapeutic radiology for cancer treatment	5	9	14
Diagnostic physical therapy	0	0	(
Physical therapy exercises; manipulation; and other procedures	2	4	6
Traction; splints; and other wound care	100	159	259
Other physical therapy and rehabilitation	0	1	1
Respiratory intubation and mechanical ventilation	5,937	5,186	11,123
Other respiratory therapy	110	97	207
Psychological and psychiatric evaluation and therapy	11	27	38
Ophthalmologic and otologic diagnosis and treatment	22	16	38
Alcohol and drug rehabilitation/detoxification	0	0	(
Nasogastric tube	71	62	133
Blood transfusion	1,420	1,367	2,787
Enteral and parenteral nutrition	313	399	712
Cancer chemotherapy	259	217	476
Conversion of cardiac rhythm	531	391	922
Other diagnostic radiology and related techniques	194	223	417
Other diagnostic procedures (interview; evaluation; consultation)	290	266	556
Prophylactic vaccinations and inoculations	395	484	879
Nonoperative removal of foreign body	115	96	211
Other therapeutic procedures	964	3,570	4,534
Total	12,949	14,385	27,334

Figure D1. Annual Hospitalization Rates for the 20 Most Frequent Diagnoses\* of Male Residents, Delaware, 20 10 20 30 Hypertension with complications and secondary hypertension Septicemia (except in labor) Osteoarthritis Pneumonia (except that caused by tuberculosis or STD) Acute cerebrovascular disease Diabetes mellitus with complications Complication of device; implant or graft Skin and subcutaneous tissue infections Acute myocardial infarction Chronic obstructive pulmonary disease and bronchiectasis Acute and unspecified renal failure Cardiac dysrhythmias Spondylosis; intervertebral disc disorders; other back problems Other nervous system disorders Alcohol-related disorders Respiratory failure; insufficiency; arrest (adult) Complications of surgical procedures or medical care Coronary atherosclerosis and other heart disease Discharges per 10,000 population Gastrointestinal hemorrhage Urinary tract infections

Note: Calculations based on total population.

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

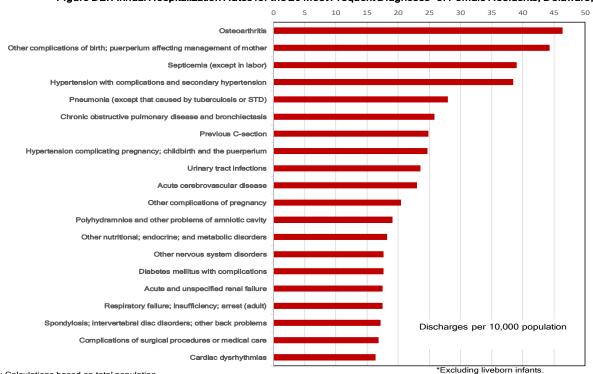


Figure D2. Annual Hospitalization Rates for the 20 Most Frequent Diagnoses\* of Female Residents, Delaware,

Excluding liveborn infants.

Note: Calculations based on total population.

Table E1. Number and Percentage of Conditions with the 10 Highest Total Charges, Delaware Hospitals, 2018

Rank	CCS Principal Diagnoses	Total Billed Charges	% of Total Charges	Number of Discharges
1	Septicemia (except in labor)	\$228,773,275	5.8%	4,196
2	Respiratory failure; insufficiency; arrest (adult)	\$181,891,836	4.6%	2,003
3	Hypertension with complications and secondary hypertension	\$177,596,027	4.5%	4,368
4	Osteoarthritis	\$156,794,674	3.9%	4,322
5	Spondylosis; intervertebral disc disorders; other back problems	\$122,518,358	3.1%	1,923
6	Liveborn	\$119,981,761	3.0%	10,722
7	Acute myocardial infarction	\$106,313,952	2.7%	1,699
8	Complication of device; implant or graft	\$105,594,507	2.7%	2,016
9	Cardiac and circulatory congenital anomalies	\$97,077,709	2.4%	238
10	Acute cerebrovascular disease	\$96,238,699	2.4%	2,595
Total for 10	) most expensive conditions	\$1,392,780,797	35.0%	34,082
Total aggre	egate charges for all discharges	\$3,977,109,194	100.0%	112,865

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

Table E2. Number and Percentage of Discharges with Highest Mean Charges, Delaware Hospitals, 2018

CCS Principal Diagnosco	Number Discharges		% of Total Discharges			Mean Charges			
CCS Principal Diagnoses	2008	2013	2018	2008	2013	2018	2008	2013	2018
Total All Discharges	112,107	109,751	112,865	100.0%	100.0%	100.0%	\$21,289	\$24,740	\$35,238
Cardiac and circulatory congenital anomalies	235	192	238	0.2%	0.2%	0.2%	\$159,516	\$370,634	\$407,890
Short gestation; low birth weight; and fetal	87	37	48	0.1%	0.0%	0.0%	\$74,688	\$134,252	\$259,371
Respiratory distress syndrome	37	41	34	0.0%	0.0%	0.0%	\$46,753	\$247,618	\$250,858
Leukemias	132	122	140	0.1%	0.1%	0.1%	\$124,844	\$143,480	\$194,520
Other diseases of veins and lymphatics	67	76	64	0.1%	0.1%	0.1%	\$24,922	\$25,405	\$186,560
Intrauterine hypoxia and birth asphyxia	4	19	22	0.0%	0.0%	0.0%	\$14,640	\$120,999	\$180,237
Other perinatal conditions	284	317	280	0.3%	0.3%	0.2%	\$59,981	\$71,366	\$162,427
Encephalitis (except that caused by	25	39	39	0.0%	0.0%	0.0%	\$41,571	\$32,454	\$155,983
Other acquired deformities	286	242	282	0.3%	0.2%	0.2%	\$73,957	\$72,970	\$148,218
Other congenital anomalies	315	222	206	0.3%	0.2%	0.2%	\$56,803	\$74,885	\$143,248

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

Table E3. Number, Percentage and Mean Charges for the Highest Volume of Hospital Discharges, Delaware, 2018

CCS Principal Diagnoses		Number Discharges			% of Total Discharges			Mean Charges		
		2013	2018	2008	2013	2018	2008	2013	2018	
Total All Discharges	112,107	109,751	112,865	100.0%	100.0%	100.0%	\$21,289	\$24,740	\$35,238	
Liveborn	12,218	10,916	10,722	10.9%	9.9%	9.5%	\$5,574	\$8,224	\$11,190	
Hypertension with complications and secondary hypertension	634	689	4,368	0.6%	0.6%	3.9%	\$21,911	\$26,559	\$40,658	
Osteoarthritis	2,857	3,280	4,322	2.5%	3.0%	3.8%	\$30,369	\$34,504	\$36,278	
Septicemia (except in labor)	1,910	3,409	4,196	1.7%	3.1%	3.7%	\$45,309	\$44,139	\$54,522	
Pneumonia (except that caused by tuberculosis or STD)	2,854	3,296	3,001	2.5%	3.0%	2.7%	\$21,408	\$22,553	\$27,777	
Acute cerebrovascular disease	1,756	2,144	2,595	1.6%	2.0%	2.3%	\$27,029	\$27,626	\$37,086	
Other complications of birth; puerperium affecting	1,883	1,635	2,393	1.7%	1.5%	2.1%	\$7,936	\$8,658	\$9,069	
Chronic obstructive pulmonary disease and bronchiectasis	1,879	2,183	2,270	1.7%	2.0%	2.0%	\$16,574	\$16,111	\$23,939	
Diabetes mellitus with complications	1,636	1,793	2,196	1.5%	1.6%	1.9%	\$19,110	\$21,389	\$37,194	
Complication of device; implant or graft	1,777	1,833	2,016	1.6%	1.7%	1.8%	\$34,974	\$44,823	\$52,378	

#### 2018 Delaware Hospitalizations

Table F1. Number and Percentage of Top 10 Most Frequent Diagnoses for Medicare, Delaware Hospitals, 2018

CCS Diagnosis	Number of	Percent of hospitalizations for this
CC3 Diagnosis	Discharges	condition billed to Medicare
Hypertension with complications and secondary hypertension	3,302	6.7%
Septicemia (except in labor)	2,788	5.7%
Osteoarthritis	2,656	5.4%
Pneumonia (except that caused by tuberculosis or STD)	1,887	3.9%
Acute cerebrovascular disease	1,767	3.6%
Chronic obstructive pulmonary disease and bronchiectasis	1,646	3.4%
Cardiac dysrhythmias	1,361	2.8%
Urinary tract infections	1,324	2.7%
Acute and unspecified renal failure	1,302	2.7%
Complication of device; implant or graft	1,274	2.6%

Table F2. Number and Percentage of Top 10 Most Frequent Diagnoses for Medicaid, Delaware Hospitals, 2018

CCS Diagnosis	Number of	Percent of hospitalizations for this
CC3 Diagnosis	Discharges	condition billed to Medicaid
Liveborn	5,173	18.5%
Other complications of birth; puerperium affecting management of mother	1,107	4.0%
Septicemia (except in labor)	685	2.4%
Diabetes mellitus with complications	676	2.4%
Alcohol-related disorders	656	2.3%
Acute bronchitis	620	2.2%
Asthma	609	2.2%
Previous C-section	603	2.2%
Hypertension complicating pregnancy; childbirth and the puerperium	546	2.0%
Other complications of pregnancy	543	1.9%

Table F3. Number and Percentage of Top 10 Most Frequent Diagnoses for Privately Insured, Delaware Hospitals, 2018

<u> </u>		• •
CCS Diagnosis	Number of	Percent of hospitalizations for this
CC3 Diagnosis	Discharges	condition billed to Private Insurers
Liveborn	5,001	16.0%
Osteoarthritis	1,349	4.3%
Other complications of birth; puerperium affecting management of mother	1,188	3.8%
Other nutritional; endocrine; and metabolic disorders	755	2.4%
Hypertension complicating pregnancy; childbirth and the puerperium	727	2.3%
Previous C-section	689	2.2%
Septicemia (except in labor)	578	1.8%
Pneumonia (except that caused by tuberculosis or STD)	537	1.7%
Polyhydramnios and other problems of amniotic cavity	530	1.7%
Complications of surgical procedures or medical care	519	1.7%

Table F4. Number and Percentage of Top 10 Most Frequent Diagnoses for Uninsured, Delaware Hospitals, 2018

CCS Diagnosis	Number of	Percent of hospitalizations for this
CCS Diagnosis	Discharges	condition billed to Uninsured Patients
Liveborn	239	11.9%
Alcohol-related disorders	77	3.8%
Diabetes mellitus with complications	74	3.7%
Hypertension with complications and secondary hypertension	73	3.6%
Septicemia (except in labor)	70	3.5%
Pancreatic disorders (not diabetes)	60	3.0%
Skin and subcutaneous tissue infections	59	2.9%
Acute cerebrovascular disease	48	2.4%
Pneumonia (except that caused by tuberculosis or STD)	47	2.3%
Acute myocardial infarction	42	2.1%

### APPENDIX G

Table G1. Conditions with the Highest Number of In-Hospital Deaths by Age Group<sup>1</sup>, Delaware Hospitals, 2018

Diamonia		TOTAL				
Diagnosis	Under 1	0-17	18-44	45-64	65+	TOTAL
Septicemia (except in labor)	1	5	10	87	299	402
Respiratory failure; insufficiency; arrest (adult)	1	7	11	42	123	184
Acute cerebrovascular disease	0	0	2	28	105	135
Hypertension with complications and secondary hypertension	0	0	0	10	71	81
Acute myocardial infarction	0	0	0	24	56	80
Cardiac arrest and ventricular fibrillation	0	1	7	16	47	71
Pneumonia (except that caused by tuberculosis or STD)	0	0	2	6	48	56
Intracranial injury	1	4	10	11	27	53
Congestive heart failure; nonhypertensive	1	1	1	6	26	35
Acute and unspecified renal failure	0	0	0	7	25	32
Complication of device; implant or graft	0	1	1	12	17	31
Liveborn	30	0	0	0	0	30
Secondary malignancies	0	0	2	10	15	27
Substance-related disorders	0	0	17	9	1	27
Coma; stupor; and brain damage	1	3	5	5	5	19
Poisoning by other medications and drugs	0	0	11	7	0	18
Other nervous system disorders	0	0	4	2	10	16
Diabetes mellitus with complications	0	0	4	4	6	14
Leukemias	0	1	0	2	7	10
Epilepsy; convulsions	0	3	2	1	3	9
Other injuries and conditions due to external causes	0	2	3	2	0	7
Cardiac and circulatory congenital anomalies	5	0	0	0	0	5
Short gestation; low birth weight; and fetal growth retardation	5	0	0	0	0	5
Other congenital anomalies	4	0	0	0	0	4
Other perinatal conditions	4	0	0	0	0	4
Respiratory distress syndrome	3	0	0	0	0	3
Skull and face fractures	0	1	2	0	0	3
Encephalitis (except that caused by tuberculosis or STD)	0	1	0	0	1	2
Intrauterine hypoxia and birth asphyxia	2	0	0	0	0	2
All Discharges to Death	58	36	121	409	1,286	1,910

#### Notes:

<sup>1.</sup> Diagnoses selected by taking the top ten diagnoses for each age group.

#### APPENDIX H

Figure H1. Percentage of Patients who Died while Hospitalized by Age Group, Delaware Hospitals, 2018

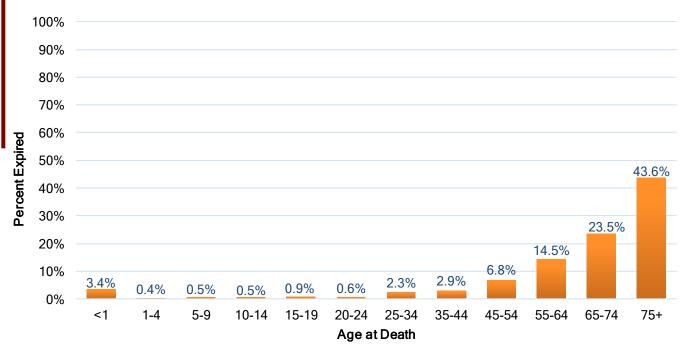


Table I1. Number of Discharges by ZIP Code and Delaware Hospital, 2018

				Discharges			
CODE	A I DUPONT HOSPITAL	BAYHEALTH MEDICAL CENTER	BEEBE MEDICAL CENTER	CHRISTIANA CARE HEALTH SYSTEM	NANTICOKE MEMORIAL HOSPITAL		SELECT MEDICAL WILIMINGTON
19701	228	35	*	3,345	*	124	10
19702	353	27	*	4,100	0	210	*
19703	117	*	*	1,057	0	227	*
19706	*	0	0	202	*	*	*
19707	63	0	*	1,168	0	39	*
19708	*	0	0	*	0	*	0
19709	248	146	*	3,049	*	75	*
19710	0	0	*	14	0	0	0
19711	172	11	10	3,084	*	124	*
19712	0	0	0	14	0	*	0
19713	237	17	*	3,379	0	108	10
19714	*	0	0	33	0	*	0
19715	0	0	0	*	0	0	0
19716	0	0	0	*	0	0	0
19717	0	0	0	*	0	0	0
19718	0	0	0	10	0	0	0
19720	514	29	13	5,758	0	611	19
19730	*	*	0	54	0	*	0
19731	0	*	0	13	0	*	0
19732	0	0	0	14	0	0	*
19733	*	0	0	42	0	0	0
19734	72	141	*	928	*	22	*
19735	0	0	0	0	0	*	0
19736	0	0	0	12	0	0	0
19760	0	0	0	0	0	*	0
19801	219	*	0	1,871	0	567	*
19802	280	*	0	2,617	0	554	10
19803	97	*	*	1,696	0	214	*
19804	162	*	*	1,859	*	211	*
19805	500	14	*	3,340	*	1,460	21
19806	18	*	*	880	0	336	*
19807	23	*	*	569	*	36	*
19808	199	*	*	3,432	0	230	*

19850		1	_					
19810	1		MEDICAL	MEDICAL	CARE HEALTH	MEMORIAL	FRANCIS	MEDICAL
1987   1987	19809	100	*	*	1,144	0	165	*
19850	19810	103	*	*	1,651	0	228	*
19899	19823	0	0	0	*	0	0	0
19901	19850	*	*	0	10	0	0	0
19902	19899		U					0
19903	19901			25			23	*
19904	19902	0	*	0	*	0	0	0
19905   0	19903			*	12	0		*
19930	19904			16	478	17	25	*
19931	19905	0	0		*	0	0	0
19933         39         168         62         110         721         0         0           19934         48         1,236         10         151         10         *         *         *         0 </td <td>19930</td> <td></td> <td>*</td> <td>141</td> <td>21</td> <td>*</td> <td>0</td> <td>*</td>	19930		*	141	21	*	0	*
19934       48       1,236       10       151       10       *       *         19936       *       59       *       *       *       0       0         19938       67       578       *       303       0       *       *         19939       11       27       359       49       57       0       *         19940       18       18       14       24       203       0       *         19941       13       282       48       25       32       *       *         19943       44       1,344       24       141       28       *       *         19944       0       0       20       0       *       0       0       0         19945       *       31       342       42       96       *       *       *         19946       18       443       13       52       *       *       *       *         19947       77       286       941       154       692       *       *       *         19950       15       440       47       44       247       *       *	19931	*	0	0	*	14	0	0
19936         *         59         *         *         0         0           19938         67         578         *         303         0         *         *           19939         11         27         359         49         57         0         *           19940         18         18         14         24         203         0         *           19941         13         282         48         25         32         *         *           19943         44         1,344         24         141         28         *         *           19944         0         0         20         0         *         0         0           19945         *         31         342         42         96         *         *           19946         18         443         13         52         *         *         *           19947         77         286         941         154         692         *         *           19950         15         440         47         44         247         *         *           19951         *         19	19933	39	168	62	110	721	0	0
19938       67       578       *       303       0       *       *         19939       11       27       359       49       57       0       *         19940       18       18       14       24       203       0       *         19941       13       282       48       25       32       *       *         19943       44       1,344       24       141       28       *       *         19944       0       0       20       0       *       0       0         19945       *       31       342       42       96       *       *         19946       18       443       13       52       *       *       *         19947       77       286       941       154       692       *       *       *         19950       15       440       47       44       247       *       *       *         19951       *       19       134       11       12       0       *       *         19952       43       1,181       33       102       28       *       *       *<	19934	48	1,236	10	151	10	*	*
19939         11         27         359         49         57         0         *           19940         18         18         14         24         203         0         *           19941         13         282         48         25         32         *         *           19943         44         1,344         24         141         28         *         *           19944         0         0         20         0         *         0         0           19945         *         31         342         42         96         *         *           19946         18         443         13         52         *         *         *           19947         77         286         941         154         692         *         *           19950         15         440         47         44         247         *         *           19951         *         19         134         11         12         0         *           19952         43         1,181         33         102         28         *         *           19953         26	19936	*	59	*	*	*	0	0
19940       18       18       14       24       203       0       *         19941       13       282       48       25       32       *       *         19943       44       1,344       24       141       28       *       *         19944       0       0       20       0       *       0       0         19945       *       31       342       42       96       *       *         19946       18       443       13       52       *       *       *       *         19947       77       286       941       154       692       *       *       *         19950       15       440       47       44       247       *       *       *         19951       *       19       134       11       12       0       *       *         19951       *       19       134       11       12       0       *       *         19952       43       1,181       33       102       28       *       *       *         19953       26       405       *       68       0 <td>19938</td> <td>67</td> <td>578</td> <td>*</td> <td>303</td> <td>0</td> <td>*</td> <td>*</td>	19938	67	578	*	303	0	*	*
19941       13       282       48       25       32       *       *         19943       44       1,344       24       141       28       *       *         19944       0       0       20       0       *       0       0         19945       *       31       342       42       96       *       *         19946       18       443       13       52       *       *       *       *         19947       77       286       941       154       692       *       *       *         19950       15       440       47       44       247       *       *       *         19951       *       19       134       11       12       0       *       *         19952       43       1,181       33       102       28       *       *       *         19953       26       405       *       68       0       *       *       *         19954       *       177       *       10       *       0       *       *         19955       0       36       0       *	19939	11	27	359	49	57	0	*
19943       44       1,344       24       141       28       *       *         19944       0       0       20       0       *       0       0         19945       *       31       342       42       96       *       *         19946       18       443       13       52       *       *       *         19947       77       286       941       154       692       *       *       *         19950       15       440       47       44       247       *       *       *         19951       *       19       134       11       12       0       *       *         19952       43       1,181       33       102       28       *       *       *         19953       26       405       *       68       0       *       *       *         19954       *       177       *       10       *       0       *       *         19955       0       36       0       *       0       0       0       0         19958       33       155       2,150       218	19940	18	18	14	24	203	0	*
19944         0         0         20         0         *         0         0           19945         *         31         342         42         96         *         *           19946         18         443         13         52         *         *         *         *           19947         77         286         941         154         692         *         *         *           19950         15         440         47         44         247         *         *         *           19951         *         19         134         11         12         0         *           19952         43         1,181         33         102         28         *         *           19953         26         405         *         68         0         *         *           19954         *         177         *         10         *         0         *           19955         0         36         0         *         0         0         0         0           19958         33         155         2,150         218         33         *         *	19941	13	282	48	25	32	*	*
19945         *         31         342         42         96         *         *           19946         18         443         13         52         *         *         *           19947         77         286         941         154         692         *         *           19950         15         440         47         44         247         *         *           19951         *         19         134         11         12         0         *           19952         43         1,181         33         102         28         *         *           19953         26         405         *         68         0         *         *           19954         *         177         *         10         *         0         *           19955         0         36         0         *         0         0         0           19956         53         112         107         112         1,120         *         0           19958         33         155         2,150         218         33         *         *           19960         37 <td>19943</td> <td>44</td> <td>1,344</td> <td>24</td> <td>141</td> <td>28</td> <td>*</td> <td>*</td>	19943	44	1,344	24	141	28	*	*
19946       18       443       13       52       *       *       *       *         19947       77       286       941       154       692       *       *         19950       15       440       47       44       247       *       *         19951       *       19       134       11       12       0       *         19952       43       1,181       33       102       28       *       *         19953       26       405       *       68       0       *       *         19954       *       177       *       10       *       0       *         19955       0       36       0       *       0       0       0         19956       53       112       107       112       1,120       *       0         19958       33       155       2,150       218       33       *       *         19960       37       550       150       70       36       *       *         19961       0       *       0       0       0       0       0         19962 <t< td=""><td>19944</td><td>0</td><td>0</td><td>20</td><td>0</td><td>*</td><td>0</td><td>0</td></t<>	19944	0	0	20	0	*	0	0
19947       77       286       941       154       692       *       *         19950       15       440       47       44       247       *       *         19951       *       19       134       11       12       0       *         19952       43       1,181       33       102       28       *       *         19953       26       405       *       68       0       *       *       *         19954       *       177       *       10       *       0       *       *         19955       0       36       0       *       0       0       0       0         19956       53       112       107       112       1,120       *       0         19958       33       155       2,150       218       33       *       *         19960       37       550       150       70       36       *       *         19961       0       *       0       0       0       0       0         19962       71       1,127       15       105       11       *       0	19945	*	31	342	42	96	*	*
19950       15       440       47       44       247       *       *         19951       *       19       134       11       12       0       *         19952       43       1,181       33       102       28       *       *         19953       26       405       *       68       0       *       *       *         19954       *       177       *       10       *       0       *       *         19955       0       36       0       *       0       0       0       0         19956       53       112       107       112       1,120       *       0         19958       33       155       2,150       218       33       *       *         19960       37       550       150       70       36       *       *         19961       0       *       0       0       0       0       0         19962       71       1,127       15       105       11       *       0         19963       86       1,952       191       160       72       *       *	19946	18	443	13	52	*	*	*
19951       *       19       134       11       12       0       *         19952       43       1,181       33       102       28       *       *         19953       26       405       *       68       0       *       *         19954       *       177       *       10       *       0       *         19955       0       36       0       *       0       0       0         19956       53       112       107       112       1,120       *       0         19958       33       155       2,150       218       33       *       *         19960       37       550       150       70       36       *       *         19961       0       *       0       0       0       0       0         19962       71       1,127       15       105       11       *       0         19963       86       1,952       191       160       72       *       *	19947	77	286	941	154	692	*	*
19952       43       1,181       33       102       28       *       *         19953       26       405       *       68       0       *       *         19954       *       177       *       10       *       0       *         19955       0       36       0       *       0       0       0         19956       53       112       107       112       1,120       *       0         19958       33       155       2,150       218       33       *       *         19960       37       550       150       70       36       *       *         19961       0       *       0       0       0       0       0         19962       71       1,127       15       105       11       *       0         19963       86       1,952       191       160       72       *       *	19950	15	440	47	44	247	*	*
19953       26       405       *       68       0       *       *         19954       *       177       *       10       *       0       *         19955       0       36       0       *       0       0       0         19956       53       112       107       112       1,120       *       0         19958       33       155       2,150       218       33       *       *         19960       37       550       150       70       36       *       *         19961       0       *       0       0       0       0       0         19962       71       1,127       15       105       11       *       0         19963       86       1,952       191       160       72       *       *	19951	*	19	134	11	12	0	*
19954       *       177       *       10       *       0       *         19955       0       36       0       *       0       0       0         19956       53       112       107       112       1,120       *       0         19958       33       155       2,150       218       33       *       *         19960       37       550       150       70       36       *       *         19961       0       *       0       0       0       0       0         19962       71       1,127       15       105       11       *       0         19963       86       1,952       191       160       72       *       *	19952	43	1,181	33	102	28	*	*
19955       0       36       0       *       0       0       0         19956       53       112       107       112       1,120       *       0         19958       33       155       2,150       218       33       *       *         19960       37       550       150       70       36       *       *         19961       0       *       0       0       0       0       0         19962       71       1,127       15       105       11       *       0         19963       86       1,952       191       160       72       *       *	19953	26	405	*	68	0	*	*
19956     53     112     107     112     1,120     *     0       19958     33     155     2,150     218     33     *     *     *       19960     37     550     150     70     36     *     *       19961     0     *     0     0     0     0     0       19962     71     1,127     15     105     11     *     0       19963     86     1,952     191     160     72     *     *	19954	*	177	*	10	*	0	*
19958       33       155       2,150       218       33       *       *         19960       37       550       150       70       36       *       *         19961       0       *       0       0       0       0       0         19962       71       1,127       15       105       11       *       0         19963       86       1,952       191       160       72       *       *	19955	0	36	0	*	0	0	0
19960     37     550     150     70     36     *     *       19961     0     *     0     0     0     0     0       19962     71     1,127     15     105     11     *     0       19963     86     1,952     191     160     72     *     *	19956	53	112	107	112	1,120	*	0
19961     0     *     0     0     0     0     0       19962     71     1,127     15     105     11     *     0       19963     86     1,952     191     160     72     *     *	19958	33	155	2,150	218	33	*	*
19962     71     1,127     15     105     11     *     0       19963     86     1,952     191     160     72     *     *	19960	37	550	150	70	36	*	*
19963 86 1,952 191 160 72 * *	19961	0	*	0	0	0	0	0
	19962	71	1,127	15	105	11	*	0
19964 * 161 0 21 * *	19963	86	1,952	191	160	72	*	*
	19964	*	161	0	21	*	*	*

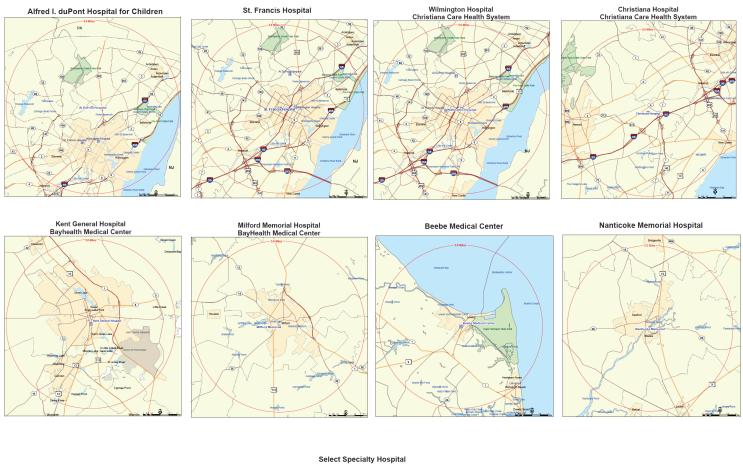
ZIP CODE	A I DUPONT HOSPITAL	BAYHEALTH MEDICAL CENTER	BEEBE MEDICAL CENTER	CHRISTIANA CARE HEALTH SYSTEM	NANTICOKE MEMORIAL HOSPITAL	SAINT FRANCIS HOSPITAL	SELECT MEDICAL WILIMINGTON
19966	80	247	2,511	303	306	*	*
19967	0	*	77	18	*	0	0
19968	29	273	857	128	29	*	*
19969	0	*	16	*	*	0	0
19970	*	21	496	48	14	0	*
19971	12	89	1,192	163	20	*	*
19973	96	180	144	245	2,263	*	*
19975	14	19	235	36	64	0	*
19976	0	0	0	0	*	0	0
19977	120	1,622	10	878	*	25	*
19979	*	58	0	*	*	0	0
19980	*	20	0	0	0	0	0
MD	445	466	194	3,292	437	122	65
NJ	799	31	35	1,506	*	47	17
Other State	134	141	169	370	26	36	*
PA	2,769	66	146	2,319	*	114	10
Unknown	11	*	*	50	0	*	0
Total	9,272	21,973	11,037	57,627	6,636	6,031	322

\*Zip codes with less than 10 cases Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Health Statistics Center

Table J1. Selected Accident Events, Delaware Hospitals, 2018

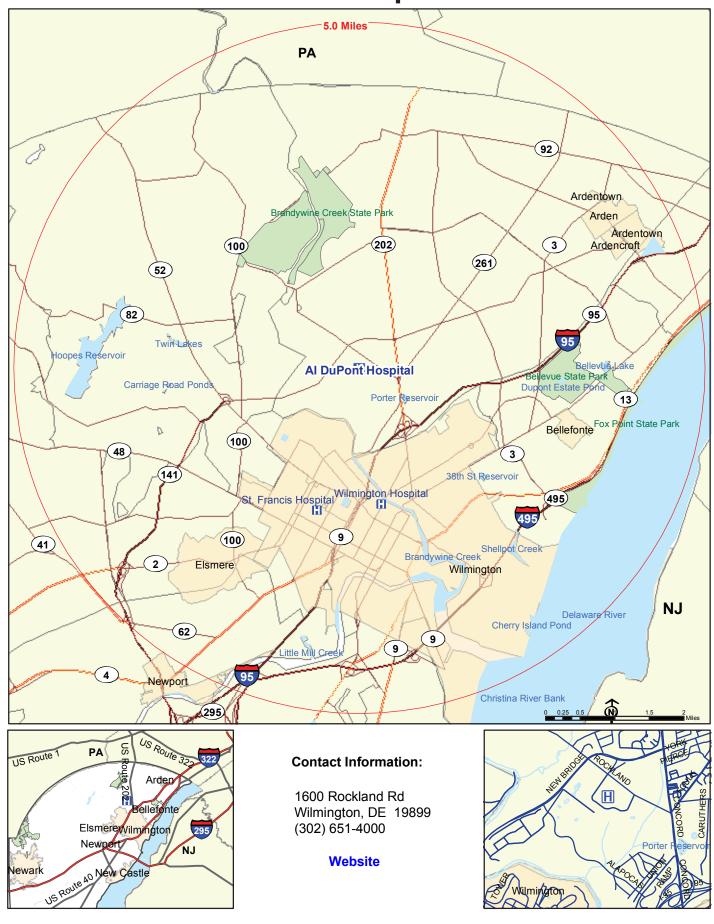
Selected Accident Events, 2018	
	Number
Adverse effect of antineoplastic and immunosup drugs, init	409
Adverse effect of glucocort/synth analog, init	344
Other external cause status	301
Prosth/oth implnt/mtrls orthopedic devices assoc w incdt	256
Unspecified fall, initial encounter	160
Nosocomial condition	157
Fall same lev from slip/trip w/o strike against object, init Adverse effect of other opioids, initial encounter	147 130
Advrs eff of crbnc-anhydr inhibtr, benzo/oth diuretc, init	118
Adverse effect of anticoagulants, initial encounter	104
Blood alcohol level of 240 mg/100 ml or more	102
Activity, walking, marching and hiking	80
Fall (on) (from) other stairs and steps, initial encounter	68
Adverse effect of angiotens-convert-enzyme inhibitors, init	68
Adverse effect of nonsteroidal anti-inflammatory drugs, init	66
Fall (on) (from) unspecified stairs and steps, init encntr	62
Adverse effect of other systemic antibiotics, init encntr	61
Adverse effect of antineopl and immunosup drugs, sequela	59
Adverse effect of loop diuretics, initial encounter	58
Fall on same level, unspecified, initial encounter	57
Prosth/oth implnt/mtrls cardiovascular devices assoc w incdt	57
Adverse effect of unspecified narcotics, initial encounter	56
Car driver injured in collision w car in traf, init	52
Adverse effect of beta-adrenoreceptor antagonists, init	48
Fall same lev from slip/trip w strike agnst oth object, init	45
Fall on and from ladder, initial encounter	44
Adverse effect of antiepileptic and sed-hypntc drugs, init	43
Adverse effect of diagnostic agents, initial encounter	43
Other fall from one level to another, initial encounter	40
Adverse effect of benzodiazepines, initial encounter	36
Fall from bed, initial encounter	35
Car driver injured in clsn with statnry object in traf, init	35 35
Adverse effect of antiasthmatics, initial encounter  Adverse effect of sulfonamides, initial encounter	34
Adverse effect of sunditainides, initial encounter	32
Fall on same level due to ice and snow, initial encounter	31
Driver injured in collision w unsp mv in traf, init	31
Implint of artif int dev cause abn react/compl, w/o misadvnt	31
Oth surgical procedures cause abn react/compl, w/o misadvnt	31
Adverse effect of other antihypertensive drugs, init encntr	31
Prosth/oth implnt/mtrls gastroent and urol dev assoc w incdt	30
Adverse effect of cephalospor/oth beta-lactm antibiot, init	29
Blood alcohol level of 120-199 mg/100 ml	29
Adverse effect of unsp systemic antibiotic, init encntr	28
Adverse effect of insulin and oral hypoglycemic drugs, init	27

## **HOSPITAL LOCATION MAPS**

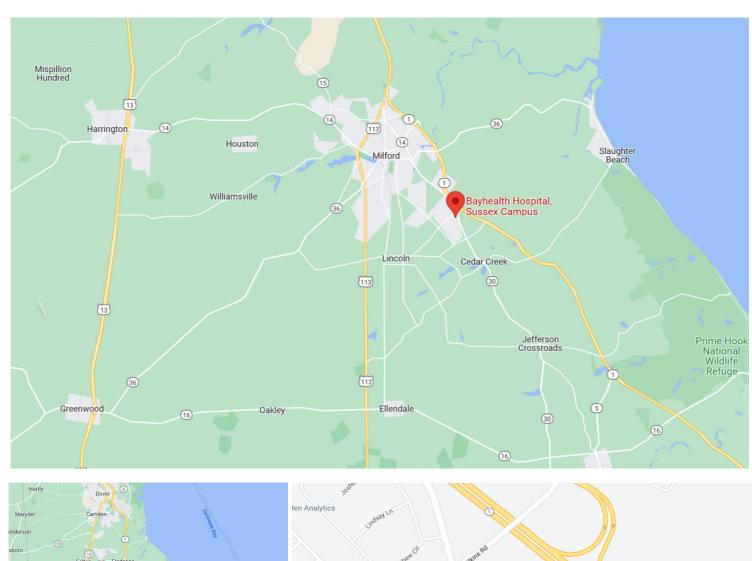


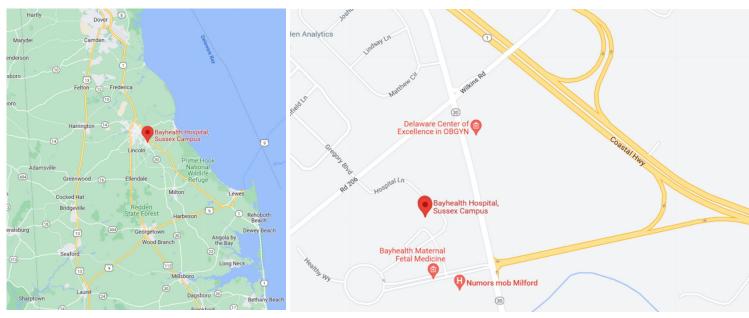


# Alfred I. duPont Hospital for Children



## **Bayhealth Hospital, Sussex Campus**





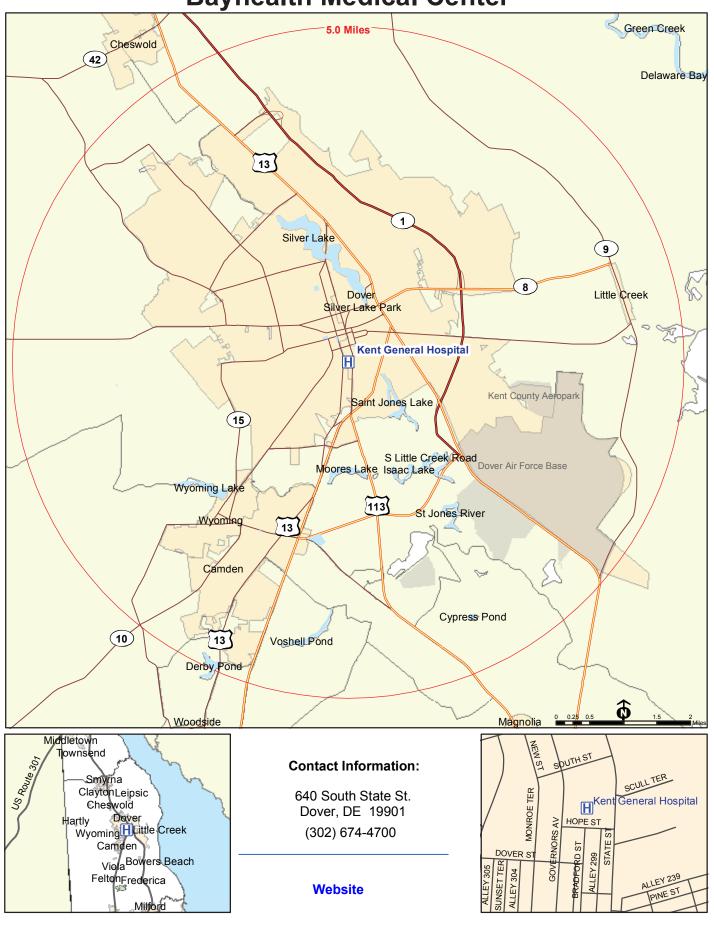
#### **Contact Information:**

100 Wellness Way Milford, DE 19963

(302) 422-3311

Website

**Kent General Hospital Bayhealth Medical Center** 



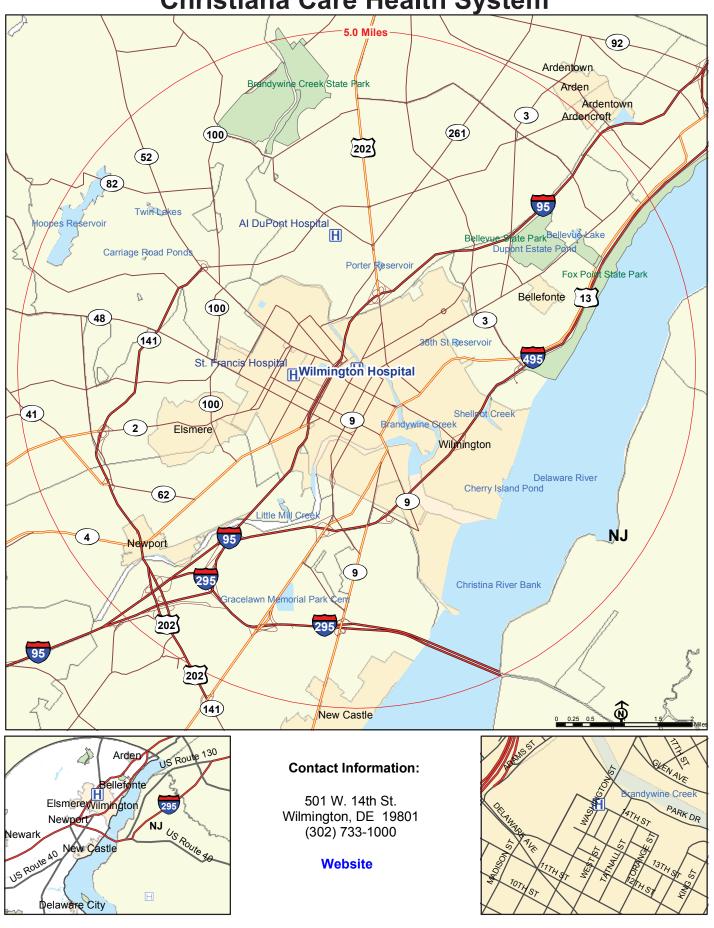
## **Beebe Medical Center**



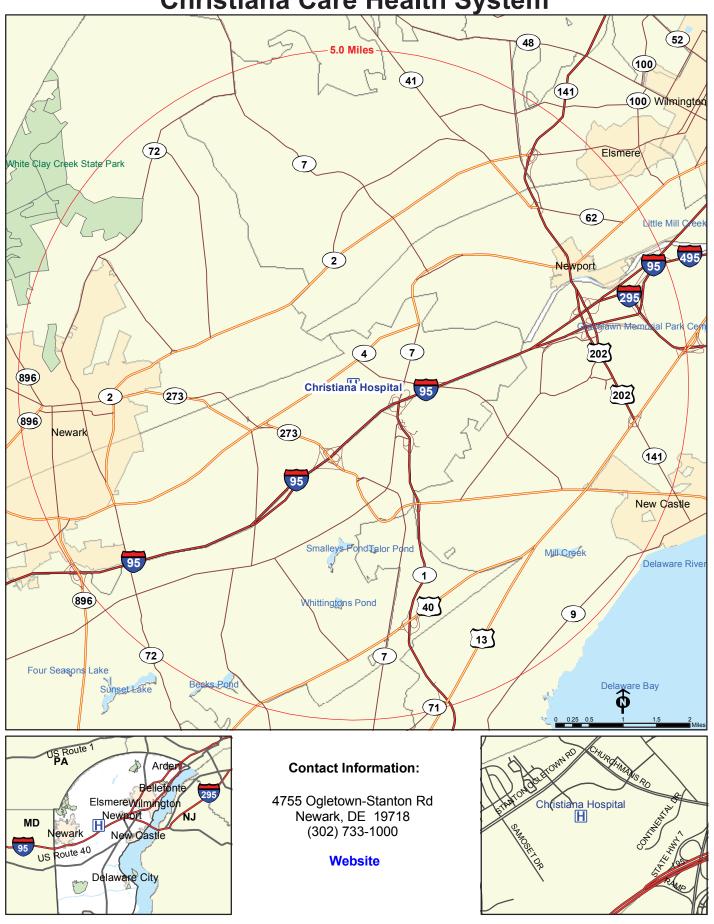
## St. Francis Hospital



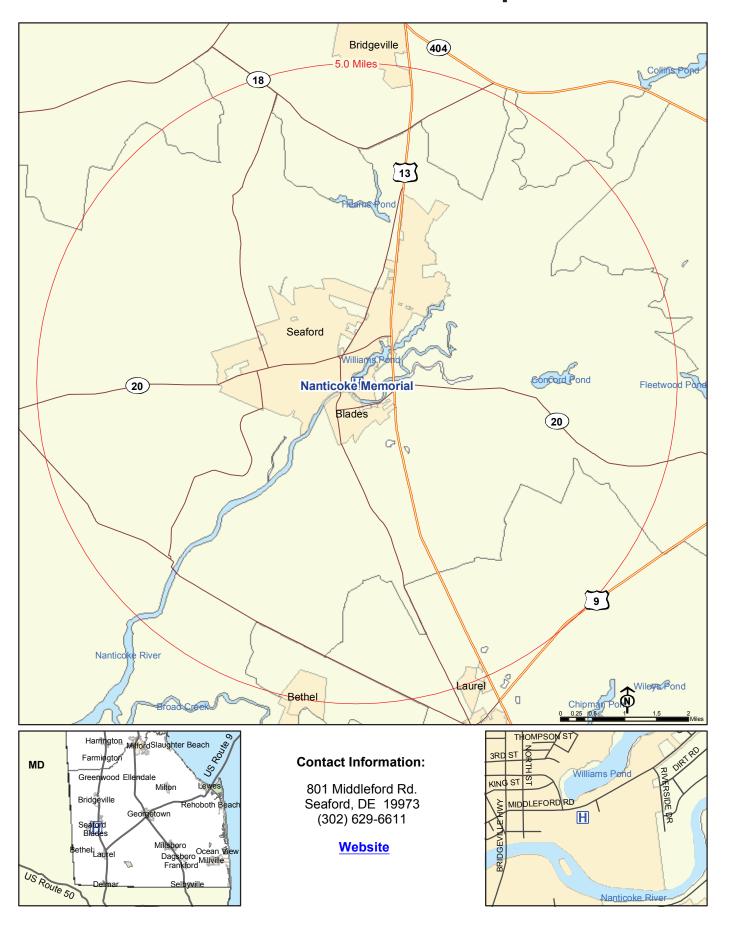
Wilmington Hospital
Christiana Care Health System



Christiana Hospital
Christiana Care Health System



# **Nanticoke Memorial Hospital**



## **Select Specialty Hospital**



#### 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 2015 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:

<u>Rates</u> - 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.

$$z = \frac{\frac{R}{1} - \frac{R}{2}}{\sqrt{\left(\frac{R^{2}}{N_{1}} + \frac{R^{2}}{N_{2}}\right)}}$$

where

R<sub>1</sub> = first rate

 $R_2$  = second rate

N<sub>1</sub> = first number of discharges

 $N_2$  = second number of discharges

<u>Percents</u> - 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.

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

$$N_1 \quad N_2$$

where

 $N_1$  = first denominator

N<sub>1</sub> = second denominator

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

p<sub>1</sub>=the first percent

p<sub>2</sub>=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 2018 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 <a href="https://www.ahrq.gov/research/data/hcup/index.html">https://www.ahrq.gov/research/data/hcup/index.html</a>.

**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.

- 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, Tenth Revision, Clinical Modification (ICD-10-CM) - The ICD-10-CM (International Classification of Diseases, Tenth Revision, Clinical Modification) is a system used by physicians and other healthcare providers to classify and code all diagnoses, symptoms and procedures recorded in conjunction with hospital care in the United States. It provides a level of detail that is necessary for diagnostic specificity and morbidity classification in the U.S. Like its predecessor ICD-9-CM, ICD-10-CM is based on the International Classification of Diseases, which is published by the World Health Organization (WHO) and which uses unique alphanumeric codes to identify known diseases and other health problems. According to WHO, physicians, coders, health information managers, nurses and other healthcare professionals also use ICD-10-CM to assist them in the storage and retrieval of diagnostic information. ICD records are also used in the compilation of national mortality and morbidity statistics. All Health Insurance Portability and Accountability Act (HIPAA)-covered entities must adhere to ICD-10-CM codes, as mandated by the U.S Department of Health and Human Services (HHS). More information can be found online at: <a href="https://www.cdc.gov/nchs/icd/icd-10-cm.htm">https://www.cdc.gov/nchs/icd/icd-10-cm.htm</a>.

**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. The Procedure Classes Refined for ICD-10-PCS is updated annually to coincide with fiscal year updates to the ICD-10-PCS coding system and retains procedure codes valid from the start of ICD-10-PCS in October 2015. More information can be found at: <a href="https://www.hcup-us.ahrq.gov/toolssoftware/procedureicd10/procedure\_icd10.jsp.">https://www.hcup-us.ahrq.gov/toolssoftware/procedureicd10/procedure\_icd10.jsp.</a>

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

**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:

(Five-year total number of discharges / 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.

#### REFERENCES

CMS National Health Expenditure Data. Accessed 3/24/2006. <a href="https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/nationalHealthAccountsHistorical.html">https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/nationalHealthAccountsHistorical.html</a>

DeFrances CJ, Hall MJ, Podogornik MN. *2003 National Hospital Discharge Survey*. Advance data from vital and health statistics; no 359. Hyattsville, MD: National Center for Health Statistics. 2005.

DHSC Hospital Discharge Summary Report, 1992-2000. Division of Public Health, Delaware Department of Health and Social Services, Jan 2002. Doc. No. 350520-020106.

Elixhauser A, Steiner C, Palmer L. Clinical Classifications Software (CCS), 2014. U.S. Agency for Healthcare Research and Quality. Available: https://www.hcup-us.ahrg.gov/toolssoftware/ccs/CCSUsersGuide.pdf

HCUPnet, Healthcare Cost and Utilization Project. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/HCUPnet/

Levit K, Ryan K, Elixhauser A, Stranges E, Kassed C, Coffey R. *HCUP Facts and Figures: Statistics on Hospital-based Care in the United States in 2005.* Rockville, MD: Agency for Healthcare Research and Quality, 2007. <a href="http://www.hcup-us.ahrq.gov/reports.jsp">http://www.hcup-us.ahrq.gov/reports.jsp</a>

Merrill CT, Elixhauser A. *Hospitalization in the United States, 2002.* Rockville, MD: Agency for Healthcare Research and Quality, 2005. HCUP Fact Book No. 6. AHRW Publication No. 05-0056. ISBN 1-58763-217-9.

National Center for Health Statistics. *Health, United States, 2005 with Chartbook on Trends in the Health of Americans.* Hyattsville, Maryland: 2005.

National Center for Health Statistics. *National Trends in Injury Hospitalizations 1979-2001*. Hyattsville, Maryland: 2005. https://www.cdc.gov/nchs/injury/injury\_chartbook.htm

The National Health Expenditure Accounts (NHEA). <a href="https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/nationalHealthAccountsHistorical.html">https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/nationalHealthAccountsHistorical.html</a>

Owens P, Myers M, Elixhauser A, Brach C. *Care of Adults With Mental Health and Substance Abuse Disorders in U.S. Community Hospitals*, 2004. Agency for Healthcare Research and Quality, 2007. HCUP Fact Book No.10. AHRQ Publication No.0 7-0008.I SBN 1-58763-229-2.

The National Association of Health Data Organizations. 2005. *Public Health Data Dissemination Guidelines: NAHDO Working Technical Paper Series.*<a href="https://www.nahdo.org/data-resources/data-dissemination">https://www.nahdo.org/data-resources/data-dissemination</a>