

## EXHIBIT 2.2 Most Frequent Principal Diagnoses by Age

Number of Discharges, Percent Distribution, and Growth of the Most Frequent Principal CCS Diagnoses for Inpatient Hospital Stays by Age, 1997 and 2007

AGE GROUP AND PRINCIPAL CCS DIAGNOSIS	NUMBER OF DISCHARGES IN THOUSANDS		PERCENT OF AGE-SPECIFIC TOTAL DISCHARGES		CUMULATIVE GROWTH
	1997	2007	1997	2007	1997-2007
<b>All ages, total discharges*</b>	<b>34,679</b>	<b>39,542</b>			<b>14%</b>
<b>&lt; 1 year, total discharges</b>	<b>4,426</b>	<b>5,125</b>	<b>100.0%</b>	<b>100.0%</b>	<b>16</b>
Liveborn (newborn infant)	3,776	4,539	85.3	88.6	20
Acute bronchitis	108	92‡	2.4	1.8	-15
Hemolytic jaundice and perinatal jaundice (infant jaundice following birth)	33	43	0.7	0.8	31
Pneumonia	55	34	1.3	0.7	-39
Short gestation, low birth weight, and fetal growth retardation (premature birth and low birth weight)	22	25‡	0.5	0.5	12
<b>1-17 years, total discharges</b>	<b>1,821</b>	<b>1,658‡</b>	<b>100.0</b>	<b>100.0</b>	<b>-9</b>
Asthma	159	114	8.7	6.9	-28
Pneumonia	135	109	7.4	6.6	-19
Mood disorders (depression and bipolar disorder)	64	81‡	3.5	4.9	27
Appendicitis and other appendiceal conditions	65	78	3.6	4.7	20
Fluid and electrolyte disorders (primarily dehydration or fluid overload)	64	61‡	3.5	3.7	-5
<b>18-44 years, total discharges</b>	<b>9,444</b>	<b>10,354</b>	<b>100.0</b>	<b>100.0</b>	<b>10</b>
Trauma to external female genitals (vulva) and area between anus and vagina (perineum) due to childbirth	676	833	7.2	8.0	23
Previous C-section	270	558	2.9	5.4	107
Mood disorders (depression and bipolar disorder)	335	386‡	3.5	3.7	15
Normal pregnancy and/or delivery	511	299	5.4	2.9	-41
Prolonged pregnancy	§	264	§	2.6	§
<b>45-64 years, total discharges</b>	<b>6,496</b>	<b>9,135</b>	<b>100.0</b>	<b>100.0</b>	<b>41</b>
Coronary atherosclerosis (coronary artery disease)	526	405	8.1	4.4	-23
Non-specific chest pain	242	381	3.7	4.2	57
Osteoarthritis (degenerative joint disease)	105	323	1.6	3.5	206
Disorders of intervertebral discs and bones in spinal column (back problems)	190	269	2.9	2.9	42
Pneumonia	199	261	3.1	2.9	31
<b>65-84 years, total discharges</b>	<b>10,121</b>	<b>10,277‡</b>	<b>100.0</b>	<b>100.0</b>	<b>2</b>
Congestive heart failure	581	515	5.7	5.0	-11
Coronary atherosclerosis (coronary artery disease)	741	466	7.3	4.5	-37
Pneumonia	514	465	5.1	4.5	-9
Osteoarthritis (degenerative joint disease)	281	442	2.8	4.3	57
Cardiac dysrhythmias (irregular heart beat)	333	379	3.3	3.7	14
<b>85+ years, total discharges</b>	<b>2,362</b>	<b>2,953</b>	<b>100.0</b>	<b>100.0</b>	<b>25</b>
Congestive heart failure	202	234	8.6	7.9	16
Pneumonia	197	193‡	8.3	6.5	-2
Septicemia (blood infection)	76	126	3.2	4.3	64
Urinary tract infections	75	118	3.2	4.0	58
Fracture of neck of femur (hip fracture)	125	117‡	5.3	4.0	-6

\* Includes a small number of discharges (less than 41,000 or 0.1 percent) with missing age.

‡ 2007 discharges are not statistically different from 1997 discharges at  $p < 0.05$ .

§ Consistent data are not available for this diagnosis due to coding changes that took place between 1997 and 2007.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997 and 2007.

The principal diagnoses for hospitalizations generally varied by age, although some conditions were frequent among all ages.

#### Infants, children and young adults:

- Pregnancy, childbirth, and newborns:
  - In 2007, most discharges for children under one year old (89 percent) were for liveborn infants, which increased 20 percent between 1997 and 2007.
  - Bronchitis accounted for another 1.8 percent and jaundice for another 0.8 percent of infant stays. Jaundice stays in infants increased 31 percent between 1997 and 2007.
  - Among 18-44 year olds, previous C-sections more than doubled between 1997 and 2007, while normal pregnancy and/or delivery fell 41 percent.
- Asthma among children 1-17 declined by 28 percent between 1997 and 2007.
- Appendicitis, also a common reason for hospital stays for children 1-17 in 2007, accounted for 5 percent of discharges in this age group, increasing 20 percent between 1997 and 2007.
- Depression and bipolar disorders (mood disorders) were the 3rd most common diagnoses for children 1–17 and adults 18–44.

#### Older adults:

- Cardiovascular conditions were the most common diagnoses for adults over 44 years old. However, specific diagnoses differed somewhat between age groups for older adults:
  - Coronary atherosclerosis (coronary artery disease) accounted for 4 percent of all discharges for adults 45-64; these stays declined by 23 percent between 1997 and 2007. This condition also ranked 2nd for 65-84 year olds (4.5 percent of stays in 2007), with stays declining 37 percent between 1997 and 2007.
  - Hospitalizations for non-specific chest pain in 45-64 year olds increased 57 percent between 1997 and 2007 and comprised 4 percent of stays in 2007.
  - Congestive heart failure (CHF) was the most common condition for adults 65-84 and 85 and older. In 2007, CHF accounted for 5 percent of all stays among adults 65-84 and 8 percent of all stays among adults 85 and older.
  - Irregular heart beat was the reason for 379,000 hospitalizations (3.7 percent) in 2007 among 65-84 year olds, an increase of 14 percent since 1997.
- Among adults 85 and older, hospitalizations for septicemia (up 64 percent) and urinary tract infections (up 58 percent) increased at more than twice the rate of all hospitalizations for this age group between 1997 and 2007.
- Musculoskeletal conditions:
  - Degenerative joint disease (osteoarthritis) more than tripled among adults 45-64 and increased 57 percent among adults 65-84.
  - Back problems increased 42 percent for 45-64 year olds between 1997 and 2007.
  - Hospital stays for hip fractures changed very little between 1997 and 2007 for patients 85 and older.

#### All patients:

- Pneumonia was a top five condition for all age groups except 18-44 year olds:
  - Hospital stays for pneumonia declined among children (a drop of 39 percent for children less than one and a 19-percent decline for children 1-17 years).
  - Pneumonia stays rose among adults 45-64 years (31 percent), but fell among adults 65-84 years (down 9 percent).
  - Stays remained relatively stable for adults 85 years and older.