



**4B.**

### **INPATIENT DISCHARGES FROM SHORT-STAY HOSPITALS BY ALL-LISTED PROCEDURES AND PATIENT CHARACTERISTICS**

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The data on the number of procedures in this section are for inpatients only. Procedures include surgical and non-surgical operations, diagnostic procedures, and special treatments reported on the medical record. Up to six procedures were included for each discharge. These all-listed procedures include all occurrences of the procedure regardless of the order on the medical record. For comparability with the national data\*, the rates of all-listed procedures are presented per 10,000 population.

Beginning in 2008, Arizona hospitals may report up to 12 surgical and non-surgical procedures per record, doubling the previously required number. However, not all hospitals have been able to meet the revised requirements. This is one reason why, in our 2008-2015 reports, we only analyzed the top six procedures. Another reason is comparability with the previously published data for 2000-2007. Starting with the 2016 report, all the 12 listed procedures in the database are being taken into account in our analysis.

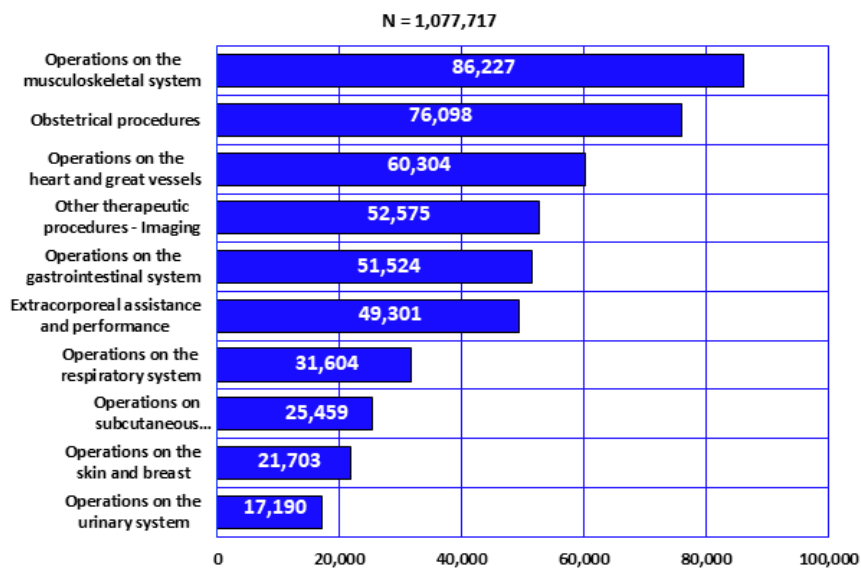
During 2015, all Arizona Hospitals transitioned to the International Classification of Diseases, 10th Revision, and Procedure Coding System (ICD-10-PCS) for coding inpatient procedures. ICD-10-PCS was implemented on October 1, 2015 in replacement of the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM).

In the current report, procedure groupings and codes are based on ICD-10-PCS. ICD-10-PCS is structurally different and far more detailed with about 72,000 procedure codes than ICD-9-CM, which includes only 3,824 procedure codes. Due to the fundamental differences in coding systems, caution should be exercised in comparing 2017 hospital discharge data with data from years prior 2016. For further explanation of ICD-10-CM transition, please refer to "The Implementation of the International Classification of Disease, Tenth Revision," Introduction page ix.

\*Findings of the National Hospital Discharge Survey, including estimates of the number of specific procedure categories, are available in bound reports of the National Center for Health Statistics and online at <http://www.cdc.gov/nchs/nhds.htm>. The survey collects the data on up to four surgical and non-surgical procedures.

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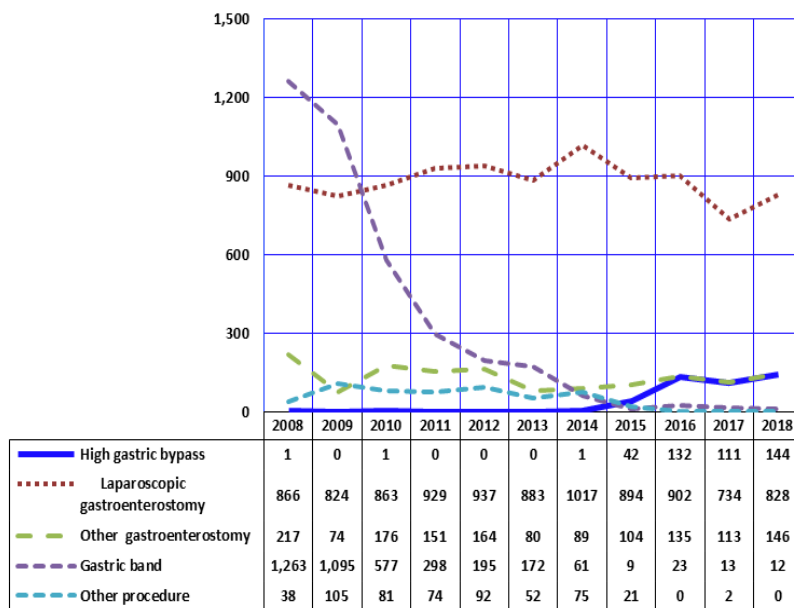
**Figure 4B-1**  
**Ten Leading Categories of All-listed Inpatient Procedures,**  
**Arizona Residents, 2018**



During 2018, 1,077,717 procedures were performed among the 650,010 total inpatient discharges to Arizona residents. The 2018 rate of procedures was 1,523.0 per 10,000 population, representing an increase from the 2017 rate of 1479.2 per 10,000.

No specific procedure was recorded for 40.3 percent of all inpatient discharges. Only 1.8 percent of inpatients had six procedures reported while 0.8 of inpatients had 12 procedures recorded. Among the inpatient discharges which had one or more specific procedures recorded, the most frequent were *operations on the musculoskeletal system*, followed by *obstetrical procedures*, and *operations on the heart and great vessels* (**Figure 4B-1, Table 4B1**).

**Figure 4B-2**  
**Trends in Types of Inpatient Procedures Performed in Treatment of Morbid Obesity, Arizona Residents, 2008-2018**



Bariatrics is a branch of medicine that deals with the surgical treatment of obesity. Bariatric surgery has seen a rather dramatic increase in its popularity. A typical candidate for gastrointestinal surgery has a body mass index (BMI) of 40 or more – about 100 pounds overweight for men and 80 pounds for women. Bariatric surgery may also be considered for someone whose BMI is between 35 and 39.9 and who has a serious obesity-related health problem (such as type 2-diabetes, heart disease, or severe sleep apnea).

In 2018, *morbid obesity* was the principal diagnosis for 3,555 inpatient hospitalizations (**Table 4A-1**). The number of *gastric bypass* surgeries, once the most common bariatric procedure, declined from a recent high of 2,123 in 2003 to fewer than 10 gastric bypass surgeries being completed collectively between 2007-2014. Since 2015, the number of *gastric bypass procedures* has seen a dramatic increase (**Figure 4B-2**). As in any years since 2010, *laparoscopic gastroenterostomy* remained the most popular procedure, with 828 surgeries performed in 2018.

Note: The frequency counts in Figure 4B-2 are based on the principal procedure. The tabulated data use all twelve listed procedures.