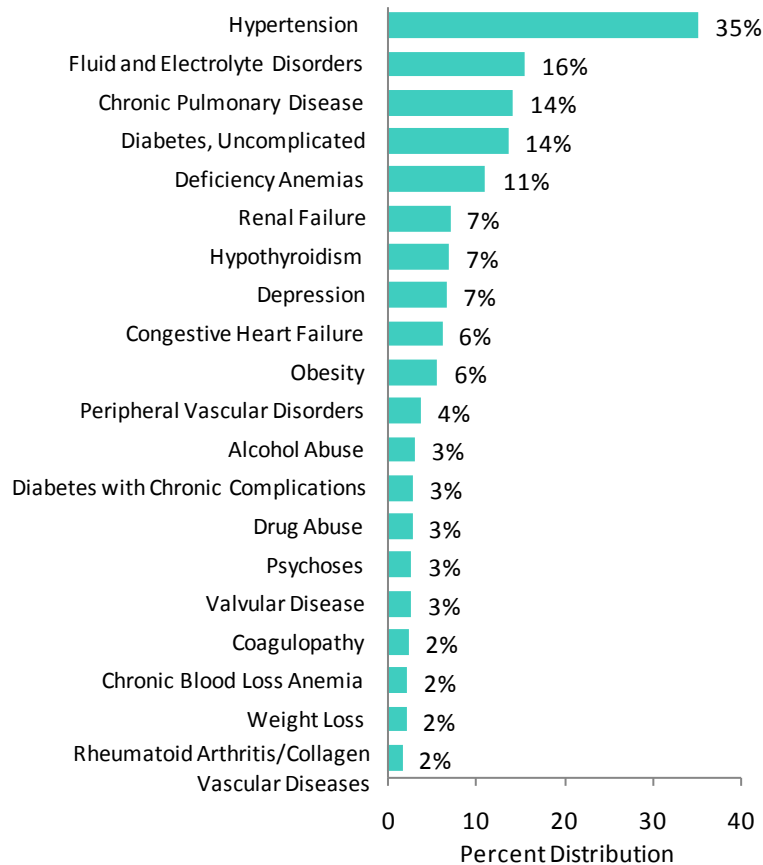


## EXHIBIT 2.4 Most Frequent Comorbidities

**Top Comorbidities and Percent of Discharges with Specific Comorbidity,\* 2007**



\*Comorbidities are based on a classification of ICD-9-CM codes which is distinct from the Clinical Classification System.

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

Comorbidities<sup>5</sup> are chronic disorders that are not the primary reason for hospitalization, but which may influence the course of hospitalization.

- Hypertension was a comorbidity in 35 percent of all hospital stays in 2007.
- Fluid and electrolyte disorders were comorbidities in 16 percent of hospital stays.
- Mental health conditions were among the top comorbidities in 2007, occurring singly or in combination with other mental health conditions. Depression occurred as a comorbid condition in 7 percent of stays in 2007 and alcohol abuse, drug abuse, and/or psychoses were each present in 3 percent of stays.

<sup>5</sup> Comorbidities are different from secondary conditions, as secondary conditions may be directly related to the principal reason for hospitalization while comorbidities are not. For example, retinopathy may be a secondary condition in a hospital stay in which the principal diagnosis is diabetes. However, retinopathy would not be considered a comorbidity of diabetes, as it is a related condition.

- Diabetes, both uncomplicated and with chronic complications, were comorbidities in 17 percent of all stays.
- Other notable comorbidities included chronic pulmonary disease, anemia, renal failure, hypothyroidism, congestive heart failure, and obesity.