Excess obstetrics beds cost $26 million a year

What is the cost of an empty hospital bed? A new study of staffed-bed capacity in New York City hospital obstetrics units found a significant excess number of beds that collectively cost an estimated $26.4 million annually. The authors conclude that as new health care delivery and payment models take hold in the city, they will decrease demand for hospital beds. But the methodology used in the study may be helpful to hospitals and policymakers in identifying excess bed capacity in inpatient units.

“The traditional guideline is using average occupancy levels—you design so no more than 75% of beds are used,” said Nan Liu, assistant professor of Health Policy and Management at the Mailman School of Public Health and an author of the study. “We feel that is not the best way to go. Occupancy doesn’t measure care as experienced by patients. The better way is a patient-centered metric” that matches bed count to demand.

The Mailman School researchers used a systems-modeling methodology for capacity planning—queuing theory—to estimate how many obstetrics beds were needed to provide a desired level of access to care.

The study looked at obstetrics capacity in 40 city hospitals during 2008 and 2009, and relied on SPARCS data. It concluded there were 129 excess beds, about 9% of the entire city’s obstetrics capacity. The 40 units had an average capacity of 34.5 beds, and a total capacity of 1,381 beds. They collectively accommodated some 240,000 maternal admissions in 2008 and 2009.

Mr. Liu said that in many obstetrics units there was a mismatch between bed capacity and patient demand. In about 30% of the hospitals studied, usage was heavy, and 10% of patients experienced a delay in getting an OB bed after giving birth. But more than a fifth of the OB units were “significantly underutilized, with beds empty almost at all times.”

Demand for obstetrics beds is falling, driven by an aging population, a declining birthrate and payment models that take hold in the city, they will decrease demand for hospital beds. But the methodology used in the study may be helpful to hospitals and policymakers in identifying excess bed capacity in inpatient units.

The study found that for every 1% drop in the C-section rate, the city’s hospitals could eliminate seven beds citywide. If the overall C-section rate fell to 25% from the current rate of 33%, 54 beds could be cut.

The study was published in the journal Medical Care Research and Review.

At a Glance

WHO’S NEWS: Dr. Theodore Kastner started this week as co-director of the Kennedy Intellectual and Developmental Disabilities Research Center and director of its primary clinical arm, the Children’s Evaluation and Rehabilitation Center.

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