As another wave of hospitals become too expensive to maintain or no longer meet the needs of their communities, how can health system executives plan new high-acuity facilities to serve their communities today and in the coming decades?
Leaders planning new high-acuity facilities must do all they can to ensure these buildings are as cost-effective as possible from the start and will remain useful and relevant long into the future. To do so, executives need a broad yet specific understanding of hospital demand—quantitative insight into which types of patients will be using which types of services. Sg2’s hospital forecast, which is based on our trusted Impact of Change® forecast, offers this insight.
Despite Declining Discharges, Hospital Use Will Increase

To provide clarity into hospital demand over the next 10 years, Sg2’s hospital forecast includes not only inpatient discharges but also hospital outpatient department (HOPD) visits and observation (obs) stays. Adding this utilization to the inpatient forecast changes the direction of the trend line for future volume growth from –2% (IP discharges only) to +9% (total hospital volumes).

The diagram on the left above includes only inpatient discharges. The dashed gray line indicates growth based on population change; the solid orange line shows Sg2’s forecast, which accounts not only for population but also for 5 other impact factors: epidemiology, the economy and consumerism, policy, innovation and technology, and Systems of CARE (ie, the effect of care coordination and provider integration across sites).

The diagram on the right above adds HOPD volumes (eg, same-day surgeries, diagnostic caths, pacemaker implants) and obs visits to IP discharges. Again, the dashed line shows a forecast based solely on population change, while the solid orange line shows Sg2’s forecast, with its adjustments for various impact factors.


**Short-Stay, Low-Pay Patients Will Predominate**

Many patients who are not billed for an inpatient stay actually do spend time in a hospital bed. In fact, the vast majority of hospital volumes—nearly 70%—are not inpatient discharges. Rather they are far less lucrative HOPD visits and obs stays. By 2027 just 28% of patients who occupy hospital beds will be billed as inpatients.

**Hospital Use Varies by Service Line**

At the service line level, the proportion of hospital patients who can be billed as inpatients varies widely, with surgery patients mostly using the HOPD and psychiatry patients predominantly in inpatient status. Cardiovascular patients have the highest percentage of obs use. Although these proportions will remain similar over the next 10 years, expect inpatient status to fall in every service line but the neurosciences.

**HOSPITAL USE BY SERVICE LINE**

**US MARKET, 2017**

<table>
<thead>
<tr>
<th>Service Line</th>
<th>Inpatient</th>
<th>HOPD</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>28.3M</td>
<td>36%</td>
<td>52%</td>
</tr>
<tr>
<td>Surgery</td>
<td>16.2M</td>
<td>17%</td>
<td>78%</td>
</tr>
<tr>
<td>CV</td>
<td>14.6M</td>
<td>25%</td>
<td>55%</td>
</tr>
<tr>
<td>Women's Health</td>
<td>9.3M</td>
<td>48%</td>
<td>48%</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>8.6M</td>
<td>28%</td>
<td>69%</td>
</tr>
<tr>
<td>Cancer</td>
<td>7.5M</td>
<td>17%</td>
<td>81%</td>
</tr>
<tr>
<td>Neurosciences</td>
<td>4.1M</td>
<td>44%</td>
<td>19%</td>
</tr>
<tr>
<td>Spine</td>
<td>3.9M</td>
<td>15%</td>
<td>76%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>2.8M</td>
<td>74%</td>
<td>15%</td>
</tr>
</tbody>
</table>

**Note:** Analysis excludes 0–17 age group. OP site of care = hospital OP. OP discharges = Procedures–Major, Procedures–Minor, Visits–Observation. Volumes are shown at the top of each column. **Sources:** Impact of Change®, 2017; HCUP National Inpatient Sample (NIS), Healthcare Cost and Utilization Project (HCUP) 2014. Agency for Healthcare Research and Quality, Rockville, MD; OptumInsight, 2015; The following 2015 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2017; Sg2 Analysis, 2017.
Sg2’s Hospital Forecast Helps Answer Strategic Questions

Health system executives and planners can use the forecast to address questions that are integral to the facility planning process, such as:

- Does our planning process have an outmoded bias toward inpatient units? What impact will this have on space planning by department: obs, HOPD, inpatient?
- How will changes in hospital utilization play out in our market(s)? How dramatically may bed need shift?
- Who will be utilizing the obs unit, and what are their needs? Where are obs beds best located?
- How will the critical care population change, and what does this mean for facility planning?
- How much will HOPD use grow? What does this mean for the efficiency and consumer orientation of the HOPD?
- What does the expansion of team-based care mean for facility design? How will population health and care redesign efforts shift hospital utilization?
- How will surgery patients be distributed among inpatient, HOPD and obs status?
- When will primary joint replacement procedures shift to outpatient settings in our market?
- How will cath lab use change in the future?
- Will our new hospital need a neurointerventional suite?

For a detailed look at this topic, see the full report, High-Acuity Facilities of the Future: Redefining Hospital Demand. For customized assistance, contact your Sg2 service team at 847.779.5300.
Anticipate the Impact of Change

Sg2, a Vizient company, is the health care industry’s premier authority on health care trends, insights and market analytics.

Our analytics and expertise help hospitals and health systems achieve sustainable growth and ensure ongoing market relevance through the development of an effective System of CARE.