MEETING THE HEALTH CARE NEEDS OF LONG BEACH: Findings and Recommendations

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South Nassau Communities Hospital
February, 2016

Privileged and Confidential
The barrier island comprises four political subdivisions: the City of Long Beach, the Village of Atlantic Beach, and the hamlets of Lido Beach and Point Lookout. Approximately 90% of the residents of the barrier island live within the City of Long Beach, so the term “Long Beach” will be used to describe the entire barrier island, except when explicitly noted otherwise.
OUTLINE OF PRESENTATION

I. LONG BEACH DEMOGRAPHY

II. HEALTH CARE NEEDS OF LONG BEACH’S POPULATION

III. DOES LONG BEACH NEED A GENERAL HOSPITAL?

IV. RECOMMENDATIONS

V. FINAL OBSERVATIONS
LONG BEACH - DEMOGRAPHY
## POPULATION (2015 est.)

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-17</td>
<td>6,770</td>
<td>16.2%</td>
</tr>
<tr>
<td>18-44</td>
<td>13,909</td>
<td>33.2%</td>
</tr>
<tr>
<td>45-64</td>
<td>12,905</td>
<td>30.8%</td>
</tr>
<tr>
<td>65+</td>
<td>8,728*</td>
<td>19.5%*</td>
</tr>
<tr>
<td>Total</td>
<td>42,312</td>
<td></td>
</tr>
</tbody>
</table>

*Does not include roughly 600 long-stay nursing home residents.

Source: New Solutions/Nielsen

In general, the population of Long Beach is somewhat older than that of Nassau County as a whole, with fewer young people and more of the elderly, especially if nursing home residents are counted. There is a belief among many Long Beach residents that more young families are moving to the island as many of the elderly “age out,” but no hard data on the extent to which that may be occurring.
## RACE/ETHNICITY (2015 est.)

<table>
<thead>
<tr>
<th></th>
<th>Long Beach</th>
<th>Nassau County</th>
</tr>
</thead>
<tbody>
<tr>
<td>White non-Hispanic</td>
<td>78.1%</td>
<td>61.9%</td>
</tr>
<tr>
<td>Black or African-American</td>
<td>5.1%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>12.5%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>2.5%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Other</td>
<td>1.0%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

Source: New Solutions/Nielsen
### Household Income (2015 est.)

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Long Beach</th>
<th>Nassau County</th>
<th>New York State</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤$15,000</td>
<td>8.4%</td>
<td>5.4%</td>
<td>13.1%</td>
</tr>
<tr>
<td>$15,000 - $24,999</td>
<td>7.2%</td>
<td>5.7%</td>
<td>9.9%</td>
</tr>
<tr>
<td>$25,000 - $49,999</td>
<td>12.8%</td>
<td>14.6%</td>
<td>20.6%</td>
</tr>
<tr>
<td>$50,000 - $99,999</td>
<td>27.8%</td>
<td>26.4%</td>
<td>28.4%</td>
</tr>
<tr>
<td>$100,000 - $499,999</td>
<td>41.4%</td>
<td>44.2%</td>
<td>26.1%</td>
</tr>
<tr>
<td>$500,000+</td>
<td>2.5%</td>
<td>3.6%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

Source: New Solutions/Nielsen

Compared to the rest of extremely-affluent Nassau County, Long Beach residents are somewhat poorer, but by State or national standards, they are relatively affluent.

Similarly, 6.2% of Long Beach households (619 households) are below the poverty level, as compared to 4.5% for Nassau County as a whole and 12.1% for New York State.
## Education

<table>
<thead>
<tr>
<th>Highest Degree</th>
<th>Long Beach</th>
<th>Nassau County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>6.4%</td>
<td>9.8%</td>
</tr>
<tr>
<td>High School</td>
<td>22.5%</td>
<td>25.1%</td>
</tr>
<tr>
<td>Some College w/o degree</td>
<td>17.2%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>7.7%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Bachelors Degree</td>
<td>26.0%</td>
<td>23.0%</td>
</tr>
<tr>
<td>Masters, Professional, or Doctorate</td>
<td>20.2%</td>
<td>18.3%</td>
</tr>
</tbody>
</table>

Source: New Solutions/Nielsen

Even though it is somewhat less affluent than that of Nassau County as a whole, the population of Long Beach is extremely well-educated, suggesting that the income distribution may be at least partially skewed by the large number of older retirees with limited cash incomes.
Long Beach – Health Care Needs
In 2013, approximately 85% of the non-elderly adult population of Long Beach had public or private health insurance (source: US Census Bureau/New Solutions). With the implementation of the Affordable Care Act, that proportion is likely to have grown.

It is reasonable to infer that the proportions of both the elderly and child populations of Long Beach who have health insurance is even higher – close to 100% in both instances.
Payer Mix by Select Areas, 2013

Source: New Solutions
### HEALTH SERVICES UTILIZATION - 2013

<table>
<thead>
<tr>
<th>Rate/1000 Population</th>
<th>Long Beach</th>
<th>Nassau County</th>
<th>New York State</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Admissions</td>
<td>126.78</td>
<td>111.00</td>
<td>121.56</td>
<td>112.60</td>
</tr>
<tr>
<td>ED Visits</td>
<td>277.91</td>
<td>292.07</td>
<td>404.54</td>
<td>428.19</td>
</tr>
<tr>
<td>Ambulatory Surgeries</td>
<td>39.88</td>
<td>42.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health IP Admissions</td>
<td>4.83</td>
<td>4.09</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: New Solutions, AHRQ HCUP-Net, NYSDOH

Given that Long Beach’s population is somewhat older than that of the County as a whole, and that nursing home residents are counted in the utilization figures but not the population denominators, these figures suggest that, post-Sandy, medical services – *other than inpatient hospitalization* – may have become less available to Long Beach residents.
About half of all hospitalizations of barrier island residents in 2014 were at South Nassau Communities Hospital. Use of other hospitals was widely diffused, with Mercy Hospital in Rockville Centre accounting for 7% of hospitalizations in second place.

Even before Long Beach Memorial Hospital closed, South Nassau was the largest provider of general medical/surgical inpatient services to barrier island residents.

Long Beach residents are the most numerous customers of South Nassau’s inpatient services, slightly exceeding the number from Freeport, in second place.
## PHYSICIAN SUPPLY - DATA

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total active physicians</td>
<td>90</td>
<td>350</td>
<td>260</td>
</tr>
<tr>
<td>Active primary care physicians</td>
<td>52.5</td>
<td>109</td>
<td>91</td>
</tr>
<tr>
<td>Active specialists</td>
<td>37.5</td>
<td>240</td>
<td>169</td>
</tr>
</tbody>
</table>

Source: AAMC Databook; SNCH physician count
Most Long Beach residents report a usual source of medical care:
- 83% vs. US average of 77%;

About the same proportion report having a primary care physician:
- 79%.

But only 55% report being able to get an appointment when they need one on the same or next day;

And only 60% report being able to reach a physician by phone or other methods after hours or on weekends.

Source: Long Beach Community Survey/Commonwealth Fund
There are *no* physicians currently practicing in Long Beach in the following specialties:
- Endocrinology
- Nephrology
- Neurology
- Physical Medicine and Rehabilitation

But the most severe shortages are in specialties where there are some, but too few physicians currently in practice:
- Family Practice/General Internal Medicine
- Psychiatry
- Gynecology
- Urology
- Orthopedics
The shortage of practicing endocrinologists and nephrologists is associated with the absence of any renal dialysis facilities on the barrier island, despite a need for as many as 10,000 treatment sessions per year.

Similarly, the shortage of physiatrists and orthopedists is associated with the severe shortage of outpatient physical therapy and related rehabilitation services in Long Beach.
HEALTH STATUS

- A review of the exhaustive data compiled by New Solutions produces very little information about health status that distinguishes Long Beach from the rest of Nassau County, especially because it is difficult to age-adjust the data or appropriately account for the nursing home population. There does appear to be a lower incidence of some cancers and a somewhat higher incidence of heart disease, stroke, and other cerebrovascular disease, but it is hard to evaluate those data without adjusting for the nursing home population.

- Pre-Sandy utilization rates of mental health and substance abuse services among Long Beach residents was notably high, but it is not entirely clear how much of that was a function of “supply” as opposed to “demand.” Some of this may be a legacy of the “bad old days” when the barrier island was the location of a disproportionate number of Adult Homes and Single Room Occupancy Hotels, most of which are no longer in operation.
DOES LONG BEACH NEED A GENERAL HOSPITAL?
DOES LONG BEACH NEED A GENERAL HOSPITAL?: THE ISSUES

1. DEMAND/UTILIZATION

2. CLINICAL CONSIDERATIONS

3. FINANCIAL FEASIBILITY

4. REGULATORY/POLICY CONCERNS
Demand/Utilization

- In 2013, there were 5,543 admissions of residents of the barrier island to hospitals in New York State. The long-term downward trend in inpatient admissions (which is true throughout the United States) continued in 2014, when total admissions of residents to all New York hospitals fell to 4,921.

- Of the 5,543 admissions in 2013:
  - 726 were for deliveries or newborns
  - 493 were for tertiary services not appropriately delivered at a small community hospital (e.g., cardiac surgery, cardiac catheterization, burns, oncologic surgery, serious trauma, spinal surgery, strokes, transplants)
  - 368 were for psychiatry or substance abuse
  - Approximately 250 were for “avoidable” conditions – primarily those affecting nursing home and other frail elderly patients with inadequate care in the community; and
  - 81 were for rehabilitation, which can generally be provided in a skilled nursing facility, a freestanding rehabilitation hospital, or at home

- That leaves a balance of 3,625 admissions. Assuming that 80% of those patients chose to remain in Long Beach for inpatient care, that would produce an average census of roughly 40. At an average occupancy rate of 80%, that would require 50 inpatient beds.
Clinical Concerns

- A growing body of literature continues to reinforce the general principle that the more a particular physician or hospital sees of a specific condition, the better the outcomes.
  - This relationship is particularly strong for certain surgeries, including cardiac, cancer, GI, and prostate.
  - This relationship is also strong for both routine and high-risk maternity services, and for neonatal care, which is why hospitals performing fewer than 1500 deliveries a year are gradually closing those services.

- In May of this year, three leading health care systems – Johns Hopkins, Dartmouth-Hitchcock, and the University of Michigan – announced a “Take the Volume Pledge,” promising that they and their physicians would not perform specific surgical procedures unless they could insure a minimum annual volume. See the next slide...
“The Volume Pledge”

The number of cases from barrier island residents would meet minimum volumes for high quality outcomes only for hip and knee replacements.

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Minimum Volume Standards for Hospitals and Surgeons under the Volume Pledge.

Bariatric surgery refers to the number of “stapled procedures.”
# Financial Feasibility *(preliminary estimates from JL Consulting, LLC)*

## LONG BEACH HOSPITAL

### Statements of Activities

For Projection Years 2020 - 2024

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Inpatient Service Revenue</td>
<td>$32,480,647</td>
<td>$32,692,065</td>
<td>$32,906,885</td>
<td>$33,085,689</td>
<td>$33,248,895</td>
</tr>
<tr>
<td>Net Outpatient Service Revenue</td>
<td>16,843,587</td>
<td>18,180,573</td>
<td>19,567,554</td>
<td>20,437,188</td>
<td>21,986,829</td>
</tr>
<tr>
<td>Total Net Patient Service Revenue</td>
<td>49,324,234</td>
<td>50,872,638</td>
<td>52,474,439</td>
<td>53,522,877</td>
<td>55,235,724</td>
</tr>
<tr>
<td>Physician Billing Revenue</td>
<td>2,622,527</td>
<td>2,674,978</td>
<td>2,728,478</td>
<td>2,783,047</td>
<td>2,838,708</td>
</tr>
<tr>
<td>Other Operating Revenue</td>
<td>100,000</td>
<td>102,000</td>
<td>104,040</td>
<td>106,121</td>
<td>108,243</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>52,046,762</td>
<td>53,649,616</td>
<td>55,306,957</td>
<td>56,412,045</td>
<td>58,182,675</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries</td>
<td>30,869,999</td>
<td>31,487,399</td>
<td>32,117,147</td>
<td>32,759,490</td>
<td>33,414,680</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>7,479,801</td>
<td>7,629,397</td>
<td>7,781,985</td>
<td>7,937,624</td>
<td>8,096,377</td>
</tr>
<tr>
<td>Supplies and Other Expenses</td>
<td>17,906,242</td>
<td>18,377,251</td>
<td>18,865,093</td>
<td>19,341,162</td>
<td>19,809,931</td>
</tr>
<tr>
<td>Insurance</td>
<td>2,294,718</td>
<td>2,342,086</td>
<td>2,390,438</td>
<td>2,439,795</td>
<td>2,490,178</td>
</tr>
<tr>
<td>Interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>4,835,742</td>
<td>4,835,742</td>
<td>4,835,742</td>
<td>4,835,742</td>
<td>4,835,742</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>63,386,502</td>
<td>64,671,875</td>
<td>65,990,405</td>
<td>67,313,813</td>
<td>68,646,908</td>
</tr>
<tr>
<td><strong>Operating Income/(Loss)</strong></td>
<td>($11,339,740)</td>
<td>($11,022,259)</td>
<td>($10,683,448)</td>
<td>($10,901,768)</td>
<td>($10,464,232)</td>
</tr>
</tbody>
</table>

Note: These preliminary estimates assume no ramp-up process – that the hospital is fully busy the day it opens.
Financial Feasibility - Conclusions

- Using relatively optimistic assumptions about inpatient utilization and relatively conservative assumptions about expense increases and reimbursement changes, and with no provisions for initial ramp-up costs or working capital expense, JL Consultants projected a cumulative, 5-year loss for a new hospital opening in Long Beach in 2020 at $54 million.

- In JL Consultants’ model, the operating margin is -22% in 2020, “falling” to -18% in 2024.

- As requested, JL Consultants’ model did not take into consideration the opportunity costs of expending almost $100 million on such a financially unproductive project.
Regulatory/Policy Concerns

- New York State policy calls for continued reduction in inpatient hospital capacity, especially downstate, including Nassau County.
- A single hospital to replace Brookdale, Interfaith, and Kingsbrook Hospitals in Brooklyn (which currently operate almost 1000 beds between them) is the only new hospital contemplated in current State planning.
- Stephen Berger:
  - “In stating that the city of Long Beach needed a health care facility, we pointed out that the focus should be on emergency and ambulatory care with a limited number of clinical services. We also talked about the concept that the local facility should focus on stabilizing patients and transferring them to appropriate facilities. It would be a mistake, at this point, to conclude that having access to health services automatically requires a hospital facility.”
    - Letter to Bruce Vladeck, October 30, 2015
RESPONDING TO LONG BEACH’S HEALTH CARE NEEDS
PRIORITY HEALTH CARE NEEDS FOR LONG BEACH

1. CONTINUED STRENGTHENING OF EMERGENCY SERVICES

2. MORE PHYSICIANS

3. MORE BEHAVIORAL HEALTH SERVICES

4. MORE AND BETTER GERIATRIC SERVICES
Under the leadership of the City Council and City Manager, and with significant assistance from South Nassau Communities Hospital, the City of Long Beach is well along in reorganizing its emergency medical services, to provide faster response times and – more importantly – more highly trained personnel for most ambulance calls.

The new South Nassau Communities Hospital Emergency Department in Long Beach is fully open and operating effectively.

Emergency services on the barrier island are still challenged by the enormous population surge in summer months and around special events, and will be further challenged by the planning construction on the Loop and Barnum Island Bridges over the next two years.

With its current capabilities and regulatory authorities, the Long Beach Emergency Department is currently receiving slightly fewer than half of all ambulance runs on the barrier island.
Long Beach ED Volume – 2015

[Bar chart showing monthly volumes for August to December 2015, including categories for overall volume, transfers to SNCH, transfers to ED SNCH, and ambulance arrivals.]
EMERGENCY SERVICES – THE RESPONSE

- South Nassau Communities Hospital should continue to work closely with the Nassau County Emergency Medical Advisory Board on plans for continuing improvement in emergency response and transport on the barrier island, and especially for addressing resource and transportation needs during peak visitor/traffic periods. On summer weekends, for example, it may be desirable to position additional ambulances in Long Beach, and non-vehicular forms of emergency transportation should also be explored.

- The Emergency Department in Long Beach should continue the upgrading process until it is capable of fully handling 65-75% of all ambulance calls on the barrier island. Doing so would require:
  - Expanded laboratory capabilities (now awaiting regulatory approvals);
  - Adding ultrasound tech capabilities;
  - Receiving regulatory permission to stock appropriate controlled substances and narcotics;
  - Additional observation beds with appropriate regulatory approvals; and
  - Continuing public education on the Emergency Department’s capabilities.
PHYSICIAN AND RELATED SERVICES – RESPONSE TO THE PROBLEM

- As soon as practicable, South Nassau Communities Hospital should establish in Long Beach a physician practice that qualifies as a Primary Care Medical Home, with the necessary ancillary support services.
  - As a first step, the existing Family Practice site can move towards certification as a Primary Care Medical Home, with 24/7 telephone access for patients, Electronic Medical Records, and case management capabilities, among other capabilities
  - PCMH certification should be targeted to the opening of an appropriate facility in the renovated portion of the LBMH site
  - The expanded practice should have on-site laboratory and radiology capabilities
  - In keeping with current State and national policy priorities, the PCMH should also provide behavioral services, as they can be phased in to meet demand.

- Once a new practice is established, it should be expanded, as utilization and resources permit, to include:
  - Specialty geriatric services
  - Other specialty services as demand justifies
  - On-site physical and occupational therapy
  - Outpatient dialysis
  - Potentially, outpatient surgery
South Nassau Communities Hospital should immediately convene a formal workgroup, with representation from behavioral health providers in Long Beach, State and County agencies, and other stakeholders, to undertake more systematic behavioral health services planning for barrier island residents.

- That process should include planning for the development of residential detoxification services on or near the barrier island.

As an initial step, South Nassau Communities Hospital should enter into formal affiliation agreements with Long Beach behavioral health providers establishing referral protocols, shared professional education programs, and joint program development.

South Nassau Communities Hospital should conduct a formal feasibility study for expanding its partial hospitalization program, in Oceanside or another site, to accommodate perceived unmet need in Long Beach.
GERIATRIC SERVICES – RESPONSES TO THE PROBLEM

- South Nassau Communities Hospital should immediately begin exploration with the nursing homes in Long Beach on providing medical direction and other clinical support services, which could both build on its existing Geriatrics Fellowship and provide an economic base for expanding its complement of geriatrics-certified physicians. These development should be integrally linked to the development of the PCMH practice.

- As part of its practice-building activities, the South Nassau Communities Hospital PCMH should target outreach activities to the three senior housing sites operated by the Long Beach Housing Authority, and to other senior housing facilities on the barrier island.

- South Nassau Communities Hospital should convene a group of community-based geriatric services providers in Long Beach to develop a joint strategy for contracting with one or more Medicaid Managed Long-Term Care plans to improve the quality and availability of in home long-term care on the barrier island. This group should also work with state and local executive and elected officials on improving and expanding medical transportation in Long Beach.
CONCLUDING OBSERVATIONS

- The efforts to define the health care problems and solutions of Long Beach in terms of a replacement general hospital have diverted attention from two basic realities: first, that there is a significant shortage of physicians, ancillary services, and specialty geriatric and behavioral health services on the barrier island; but, second, that the barrier island is populated by a relatively affluent, extremely well-insured community which values its convenience as much - or even more – than residents of other communities. Taking these two realities together, South Nassau Communities Hospital has an opportunity to build an array of services that are both sorely needed and likely to be clinically and financially successful – over time.

- Most of the residents of Long Beach who are not now receiving health services on the barrier island are, presumably, receiving them elsewhere, in southern Nassau County or New York City. Transitioning many of them back to a pattern in which they receive most of their health care closer to home will be a difficult and inevitably slow process. But the possibility of doing so constitutes an enormous opportunity.