# CERTIFICATE OF NEED Department Staff Project Summary, Analysis & Recommendations

Name of Facility: Hackensack University Medical CN# FR 110603-02-01

Center (HUMC) North

Name of Applicant: PV Joint Ventures Project Cost: \$39,590,409

Location: Westwood Equity Contribution: \$39,590,409

Service Area: Bergen County

### **Applicant's Project Description:**

This application is in response to the certificate of need (CN) call issued by the Department of Health and Senior Services (Department) on February 18, 2011, for a new general hospital in Bergen County. PV Joint Venture is the applicant whose sole members are HUMC, a not for profit hospital, and LHP Hospital Group, Inc. (LHP), a privately held Delaware corporation that provides essential capital and expertise to not-for-profit hospitals and health care systems.

HUMC North, the proposed hospital, would be located on the former site of Pascack Valley Hospital (PVH) in Westwood. The overall acute care bed capacity at HUMC North would consist of 128 acute care beds, of which 87 would be medical/surgical beds, 18 obstetric beds, 18 ICU/CCU beds and 5 intermediate bassinets with a Community Perinatal Center - Intermediate designation as well as a new low risk catheterization laboratory. The hospital's service complement would include Inpatient and Same Day Surgery Operating rooms, Cystoscopy rooms, MRI services, CT services, and Acute Hemodialysis services.

The applicant has considerably reduced the total bed capacity at HUMC North in comparison to the previous provider PVH. HUMC North's entire bed inventory totals 128 including intermediate bassinets while PVH had 280 beds including intermediate bassinets. The applicant is committed to operating HUMC North as a general acute care hospital to serve area residents and indigent patients without any disruption to the other health care providers in the neighboring communities.

### **Applicant's Justification of Need:**

PV Joint Venture, the applicant, demonstrated its eligibility in the certificate of need filing addressing how establishing HUMC North as the new general hospital in Bergen County would meet and exceed the five specific criteria contained in the CN call. The first criteria in the call notice requires the applicant to demonstrate its compliance with N.J.A.C. 8:33-4.4(a) that it has or will have control or authority over the proposed location of the new general hospital. As a result of a bankruptcy auction, substantially all the assets of PVH, including property, plant and equipment were purchased by a

limited liability company formed by Hackensack University Medical Center (HUMC) and Touro University College of Medicine (Touro). In 2011, Touro sold its interest in the limited liability company to HUMC making HUMC in control of the entire property. When the CN is approved, HUMC North would be conveyed to Pascack Valley Health System, LLC, a New Jersey limited liability company (PV Joint Venture), the applicant whose members are HUMC and LHP. The applicant holds that its full control of the entire property has been established and the criteria met.

With respect to the second criteria, which requires the applicant demonstrate that this new general hospital in Bergen County will enhance and increase physician education and retention in New Jersey and provide additional residency slots, the applicant believes the opening of the new hospital would create a unique opportunity to address the critical and growing physician shortage problem in New Jersey by adding vital residency slots that can be funded by the Centers for Medicare and Medicaid Services. The new facility is capable of providing a venue at which physicians could be trained in four specialties: family medicine, emergency medicine, obstetrics/gynecology, and general surgery. The applicant estimates that 18 family practice residents could be supported, along with up to four residents in each of the other three specialties, for a total of up to 30 residency positions at HUMC North. This would be a significant increase in training slots and provide training opportunities for residents in areas where New Jersey's shortage is most serious, i.e., family medicine, obstetrics/gynecology, and general surgery.

In addition, the applicant would implement the same physician employment model at HUMC North that has been used at HUMC over the past few years for retaining physicians in this state. Under this model, the hospital may support the retention of the newly graduated physician by financing the physician and other staff salaries (in part or in full), employee benefits, malpractice insurance and lease costs. This employment model could provide the economic incentives sufficient for newly graduated physicians to remain in the state to practice primary care while they develop their practices. This employment model might also be utilized to support new graduates in underserved areas and place new graduates in practices of retiring physicians, so these new physicians would become financially self supporting over time. The applicant believes this criterion has been successfully satisfied.

The third criterion requires that the project will enhance quality of care and promote integration within the overall system of service provided in Bergen County. HUMC ranks among the top hospitals in the United States in quality measures and is nationally known for its standard of care. HUMC was the first hospital in the United States to receive Magnet Designation for Nursing Excellence (after the demonstration hospital); appears routinely in <u>U.S. News and World Report</u>, <u>HealthGrades</u>, and other top hospital lists. It has an outstanding medical staff, many of whom are recognized by <u>Castle Connolly</u> each year. The applicant is confident that this superior level of clinical and service excellence will be replicated at HUMC North. The applicant envisions the medical staffs at HUMC and HUMC North working closely together promoting clinical integration. The new hospital as planned would have a minimal impact on other local hospitals. The applicant is confident criteria #3 has been satisfied.

The fourth criterion stipulates the applicant has the ability to license the project within two years of any CN approval. Despite HUMC establishing a satellite emergency department (SED) subsequent to the closure of PVH, elected officials, local physicians, emergency responders, local residents, and other community groups have consistently appealed for a replacement hospital at the Westwood site. HUMC North, the proposed hospital at this location, would be comprised of 128 beds (medical/surgical, ICU/CCU, obstetrics, and intermediate bassinets) along with services very similar in scope to those provided previously at this location. It will be renovated at a total project cost of \$39,590,409 and will open in late 2012, much sooner than the CN call for applications requires. The applicant's plan to implement the new hospital satisfies criteria #4.

The fifth criteria specifics that the applicant will limit its total number of licensed beds and bassinets to the lowest number of beds and bassinets required to meet the need identified in its application. HUMC North plans to serve the same "core market" of 14 municipalities as the former PVH and like its predecessor HUMC North will be the only hospital convenient to those rural communities in the far northeastern corner of Bergen County as well as nearby communities in Rockland County, New York. At 128 licensed beds including five intermediate bassinets, HUMC North would be a considerably smaller hospital than its predecessor, which operated 280 beds including intermediate bassinets. The reduction in bed capacity from 280 to 128 will adequately serve the local communities and ensure no negative impact on other existing hospitals in Bergen County. The applicant believes criteria #5 is satisfied.

The applicant is locating HUMC North at the former PVH location because PVH did not close as a result of community need for its health care services but rather due to poor management and careless overexpansion. HUMC's current efforts to establish a satellite emergency department (SED) and a seamless transition for MICU services were implemented to preserve critical health services in the area and stabilize the institutional environment.

The applicant believes that the need for HUMC North is justified. Population growth for Bergen County in the age cohort 65 and over according to the Department of Labor and Workforce Development will increase 37.7 percent between 2008 and 2028 creating additional demand for the core market area of HUMC North. This need will be exacerbated for this aging population since there is no primary road system in the Pascack Valley or Northern Valley. The applicant also points out that the cost of this new hospital is well below the national figure of \$1.6 million per bed, and the total project cost is \$39,590,409 represents a cost saving of over 80 percent to construct these 128 beds.

The applicant believes that it is appropriately sized and will not negatively impact the other regional providers because it will allow HUMC to shift some of its volume from its main campus to the Westwood facility. Long range, the applicant has conservatively estimated that without adversely impacting any of the existing hospitals, 8,378 projected cases would be generated at HUMC North by its second year of operation, resulting in an 80.7% occupancy rate based on a 128 bed inventory. This application is made with the intent to

meet current and future demands in the area based on the applicant's forecasted population projections showing sufficient growth to support these additional beds and the needed care generated from this population growth.

The applicant projects that HUMC North will generate 8,378 cases per year in its second year of operation while not disturbing "...the traditional markets of any other hospitals in Bergen County." Aside from the mathematic calculations in the application, the applicant drew this conclusion based on a number of driving community forces. First, patients living in the northeastern region of Bergen County have consistently maintained that travel to more distant hospitals is difficult and that they "prefer to be treated closer to home." The recent massive flooding has made travel from northeastern region of Bergen County to Valley Hospital all but impossible in case of a true emergency. Second, residents of the Pascack Valley and Northern Valley towns have consistently supported the reopening of their hospital and the results of a November 2009 referendum vote shows approximately 75 percent of the voters in northeastern Bergen County support the reopening of this hospital. Third, HUMC has a national reputation for providing superior clinical care, and this reputation will draw patients to utilize HUMC North. Fourth, HUMC North is located within three miles of the Rockland County, New York border making it very accessible to New York residents. Fifth, the applicant has concluded that excluding the 8,378 cases per year as referenced above that will be generated by HUMC North, there will be 4,187 cases left for other providers. The applicant believes these cases are sufficient to maintain the existing service levels at the other area hospitals.

First and foremost, the establishment of a new hospital would be of benefit to the patient community adding closer services without any disruption to the delivery of the existing health care services. The applicant views this transaction as an opportunity to provide more consumer choice and for the sharing of services, administrative coordination and other benefits between HUMC and HUMC North to achieve improved efficiencies and better integrated care for their communities.

With respect to charity care, the applicant has estimated that HUMC during 2011 will provide \$5.4 million in charity care to residents of the 14 core market towns. The applicant points out that according to the 2000 US Census, approximately three percent of the residents of the core market towns are living below the poverty level. The applicant will adopt and implement at HUMC North the policies for uncompensated care presently utilized at HUMC. HUMC North will not discriminate based on ability to pay for services and will provide care to the indigent consistent with the needs of the local population. This will avoid service delivery gaps and incongruous care for the underinsured and uninsured of the region.

# <u>Applicant's Statement of Compliance with Statutory and Regulatory Requirements:</u>

The applicant has stated the following to demonstrate its compliance with the statutory criteria contained in the Health Care Facilities Planning Act, as amended at, <u>N.J.S.A.</u> 26:2H-1 et seq. and <u>N.J.A.C.</u> 8:33-1.1 et seq. as follows:

## 1. The availability of facilities or services which may serve as alternatives or substitutes:

According to the Applicant

HUMC is among the 10 highest volume hospitals in the United States despite the addition of over 200 medical/surgical beds during the last three decades. HUMC's occupancy rate has remained consistently over the State's upper occupancy target of 85 percent. According to the New Jersey Fast Report, the occupancy rate for HUMC was at 87.1% for 2010. The closures of the combined Passaic Beth Israel hospitals in the City of Passaic, Barnert in Paterson, and PVH in Westwood have exacerbated this problem. HUMC North will help to relieve the strain of excess volume which can be accomplished in a very economical way. There is no other economical substitute to accommodate the needs of the population residing in the far northeastern corner of Bergen County.

The addition of 128 acute care beds at Pascack Valley will have minimal impact on other hospitals in Bergen County. The applicant contends that there will be minimal (if any) impact on Englewood Hospital, since there will be 4,187 cases available from Bergen County for other inpatient care providers after the opening of HUMC North. Furthermore, Valley Hospital, which is undergoing a major expansion project to address increasing volume, has already eliminated its inpatient acute psychiatry unit and converted it for medical/surgical use to address the high bed demand being experienced there. Therefore, HUMC North will not have a negative impact on Valley Hospital, either.

The applicant acknowledges that there are other hospitals in Bergen County; however, the Pascack Valley and Northern Valley regions are supported only by a secondary road system of local streets making travel extremely difficult and time consuming especially during morning and evening peak hours to reach these other hospitals. Without a primary road system, access into and travel around the region is extremely cumbersome, especially in the event of an emergency. The applicant believes that availability of HUMC North will have an immediate and positive impact on the delivery of care for residents of these regions.

### 2. The need for special equipment and services in the area:

#### According to the Applicant:

Residents of the local communities of Westwood and environs, local elected officials, local practicing physicians, first responders, health related professional organizations, labor, and others have long been in agreement regarding the need to reopen an acute care hospital in Westwood. The applicant believes that the need to open HUMC North has been thoroughly documented throughout this CN application. The approval of HUMC North would provide better community access and more manageable county wide occupancy rates. In addition, the

> opening of HUMC North will help to address the critical physician shortage in New Jersey, which is considered among the top priorities of the NJDHSS.

## 3. The adequacy of financial resources and sources of present and future revenues:

#### According to the Applicant:

In contrast with many New Jersey hospitals, HUMC has maintained a net surplus and is in excellent financial condition. The partnership with LHP, which has the financial backing of CCMP Capital Advisors, LLC, as well as the CPP (Canada Pension Plan) Investment Board, ensures that adequate financial resources will be available for HUMC North. In contrast with many recent hospitals in New Jersey, HUMC North will require no infusion of public dollars whatsoever to guarantee its success.

## 4. The availability of sufficient manpower in the several professional disciplines:

#### According to the Applicant:

HUMC was the second hospital in the United States to receive the Magnet Award for Nursing Excellence and has a long and distinguished history of full staffing, even during periods when other hospitals were experiencing nursing shortage crises. The annual nursing turnover rate at HUMC during 2010 was 12.4 percent, versus a national nursing turnover rate of 13.8 percent. The HUMC's general recognition within the community as one of the top hospitals in the US has raised visibility among health care professionals. This visibility has contributed to our consistent success in attracting and retaining top talent in the health care professions.

5. Will not have an adverse economic or financial impact on the delivery of health care services in the region or statewide and will contribute to the orderly development of adequate and effective health care services:

#### According to the Applicant:

The applicant believes that establishing HUMC North as a new general hospital, in and of itself, would not have an adverse impact on the health care delivery system in Bergen County. However, the applicant is convinced that non-approval of the CN to establish HUMC North as a new general hospital would result in dire consequences for health care delivery in Bergen County.

#### **Public Hearing:**

On October 19, 2011, a public hearing was held at Westwood Regional Junior Senior High School located at 701 Ridgewood Road in the Township of Washington from 6:00

p.m. to 8:00 p.m. Approximately 1,000 people were in attendance. Public comment was divided 18 to one in support of the application, with 36 people speaking in favor and two opposing. The majority of speakers support the new hospital because it provides needed health care services for this area, creates jobs, and relieves taxpayers from the burden of millions of dollars in debt payments. A number of supporting comments praised the track record of HUMC crediting it for financial solvency. Those opposing the transfer commented that HUMC North would be short lived and advocated for more stringent oversight conditions on the transfer. The Department also received hundreds of letters from members of the public in support of the application.

It is also noted in the application that HUMC North provided letters of support from state, county and local elected government officials, including State Senator Gerald Cardinale, Assemblywoman Charlotte Vandervalk, Bergen County Executive Dennis McNerney, Woodcliff Lakes Councilwoman Josephine Higgens, Westwood Mayor John Birkner, Rockland County Executive C. Scott Vanderhoef and Park Ridge Mayor Donald Ruschmann. The application also contains resolutions of support from the Bergen County Board of Chosen Freeholders, Bergen County League of Municipalities, Northern Valley Mayors' Association, Passaic Valley Mayors' Association, Mayor and Council of the Borough of Bergenfield, Borough of Closter, Borough of Emerson, Borough of Harrington, Borough of Hillsdale, Borough of Norwood, Borough of Old Tappan, Borough of Park Ridge, River Vale Township, Borough of Rockleigh, Washington Twp., Borough of Westwood, and Borough of Woodcliff Lakes. In addition, letters from the following health care and professional organizations were filed in support of the applications: New Jersey Council of Teaching Hospitals, Greater New York Hospital Association, Pascack Valley Volunteer Ambulance Association, Bergen County Economic Development Corporation, Bergen Community College, Commercial Real Estate Services and Meadowlands Regional Chamber.

Additional documents were filed after the CN application was submitted for review. Valley Hospital filed an official response in opposition to HUMC North's CN application in the form of a presentation to the Department dated September 14, 2011. Beattie Padovano, LLC, counsel representing the Westwood Taxpayers Alliance filed comments in support of HUMC North's CN application dated September 8, 2011. Englewood Hospital and Medical Center filed an official response in opposition to the reopening of the former Pascack Valley Hospital as a general acute care hospital dated September 21, 2011, and met with the Department on that same date.

#### **Department Staff Analysis:**

#### Introduction:

Based on the staff analysis, this project is being recommended to the State Health Planning Board (SHPB) for approval. Department staff concluded that the CN provides adequate justification for a recommendation to approve based on the applicable administrative rules at N.J.A.C. 8:33-1.1 et seq. and the general statutory standards at N.J.S.A. 26:2H-1 et seq.

Staff consulted the following data sources to reach its conclusions:

- Summary Inpatient Utilization (B2) data for licensed and maintained beds for the service categories that HUMC North proposes to offer;
- Total admissions to the six area hospitals and total admissions to the former PVH in the service categories that HUMC North proposes to offer; and
- Population projections for Bergen County.

### **Adequacy of Services:**

As part of its analysis, the Department assessed the availability of facilities or services which may serve as alternatives or substitutes, as set forth at N.J.S.A. 26:2H-8, to the proposed new hospital in the CN application seeking to operate at the former PVH site in Westwood. There are five neighboring hospitals in Bergen County that are within a 12-mile radius of the former PVH. Two of these hospitals, Bergen Regional in Paramus and Valley in Ridgewood, are within six miles of the former PVH site. The other hospitals in the region include Englewood, HUMC and Holy Name in Teaneck. Department staff, in reviewing the geographic distribution of services in the region, found a wide range of inpatient services available in the region. However, it also found that the travel time for the residents in this area to reach these other hospitals especially in an emergency situation would be impeded by the lack of a primary road system making these alternatives difficult to reach. Morning and evening rush hour further compounds travel to these alternative hospitals for care. Area residents have documented their travel problems and the need for more accessible care (see Appendix A).

It is noted that the expansion of any beds in the categories proposed by the applicant (i.e., medical/surgical, OB, ICU/CCU beds or cardiac catheterization laboratories) at any of the region's existing hospitals does not require a CN. Since these hospitals are not constrained from expanding their current bed capacity in any of these bed categories to meet unanticipated future need, the issue is not the availability of services but more the lack of accessibility to such services due to the increased travel times.

#### **Department Staff Bed Need Analysis**

#### **Bed Occupancy Overview:**

The CN application to establish HUMC North shows that this hospital proposes to restrict its bed categories to medical/surgical, obstetric and OB/GYN, ICU/CCU beds and intermediate bassinets. Staff focused its assessment efforts primarily on the first three bed categories. Staff reviewed B-2 data for licensed and maintained beds to assess historical occupancy rates and admissions data for these bed categories both prior to and after PVH's closure in 2007. This review evaluates the data in the context of the Department's statutory and regulatory authority in order to gain a fuller

understanding of the impact that HUMC North may have on the region's hospitals. The years selected were 2006, 2007, 2008, 2009, 2010 and the first two quarters of 2011. Please note that PVH ceased operation in November of 2007 and only reported data for the first two quarters of that year.

### <u>Licensed Beds – Occupancy:</u>

The Department analysis relies on an 83% occupancy rate for maintained beds used by the New Jersey Commission on Rationalizing Health Care Resources, which stated that this 83% rate is widely considered among experts to be "full occupancy" for hospitals. While the 83% was applied to maintained beds in the Commission's Report, staff has applied it as a standard of efficiency to both licensed beds and maintained beds.

The overall annual occupancy figures for 2008 for all three licensed bed categories collectively applying the 83% desired target occupancy established in the Commission's report showed that only Valley Hospital met and exceeded the 83% rate for its licensed beds, although HUMC would also have exceeded the 83% rate had it not increased its number of licensed beds from 600 to 683 in 2007.

The B-2 data for Valley Hospital's licensed medical/surgical beds in 2008 showed that Valley Hospital, at the same licensed bed capacity of 331 as in 2006, had an annual occupancy rate increase of 10 percent (to 97.24%), but the rate in subsequent years had returned to a level only slightly higher than it had been in 2006<sup>1</sup>. HUMC's annual occupancy rate decreased by nearly 10% (to 83.38%) after increasing its licensed medical/surgical bed capacity from 496 in the second quarter of 2007 to 555 in the third quarter of 2007. Had HUMC not increased its licensed bed capacity, the occupancy rate would have jumped to 93.29% in 2008 and would have remained around 90% in subsequent years. In 2008, the other existing area hospitals were operating at lower occupancy rates for this bed category, with Holy Name having the next highest annual occupancy rate at 65.99%.

The trend for licensed beds seen in 2008, the year after the closure of PVH, did not continue in subsequent years. The B-2 inpatient utilization for Englewood Medical Center showed a return to the 2007 rates in 2009 and subsequent years. Valley Hospital also showed lower rates in 2009 and subsequent years, but not quite as low as the rates had been in 2008. Holy Name and Bergen Regional showed relatively small changes in the rates for the three service categories of Med/Surg, OB/GYN and ICU/CCU in 2009 and 2010. Generally, the utilization changes that occurred in 2008 indicate that the gains associated with the closing of PVH were considered a one-time event. The data shows that only HUMC sustained its utilization gains regardless of its increase in licensed beds, and Valley retained some of its utilization gains.

<sup>1</sup> Note: Beginning in 2009, Valley Hospital did not include Same Day Caths and Endoscopies in its B-2

reports. Those numbers have been added back to give a proper comparison of admissions and patient days with those of the other hospitals which did include this type of data in their B-2 reports.

Historically, even when PVH was operational, HUMC has always been the hospital with the highest occupancy and average length of stay. HUMC numbers indicate that it has not had a negative effect on the other providers, and its plans to open HUMC North with fewer beds than previously operated at PVH site does not seem to place the other hospitals at any further significant risk. Thus, the application complies with N.J.S.A. 26:2H-8 and N.J.A.C. 8:33-4.9(a), 4.9(a)1, 4.10(a)1, 4.10(a)2 and 4.10(a)4 (see Appendix B).

### **Maintained Beds - Occupancy:**

Staff reviewed the 2006-2010 B-2 data for maintained beds in terms of total annual occupancy rates for the three service categories of medical/surgical, OB/GYN and ICU/CCU, which are inpatient services HUMC North proposes to offer. In 2006, only HUMC and Valley Hospital met or exceeded the 83% occupancy target with annual rates respectively of 98.3% and 87.3%. The remaining four hospitals had annual occupancy rates of between 78.2% (Englewood) to 54.7% (Bergen Regional). In 2008, the occupancy rates for maintained beds in the noted categories increased from 2006 for all hospitals except HUMC (95.9%) and Englewood (76.0%). Both of these hospitals increased their medical/surgical bed capacities in 2008 which lowered their occupancy rates.

Application of the annualized rate derived from using the last two quarters of 2010 and the first two quarters of 2011 disclosed that the occupancy rates for maintained beds in the noted categories were down from 2008 for Valley Hospital, Englewood Medical Center and Holy Name and up for Bergen Regional and HUMC. However, HUMC and Valley Hospital remained the only hospitals in the area meeting or exceeding the 83% target. For the three bed categories proposed at HUMC North, HUMC's annual occupancy rate was at 91.01% for 602 beds while Valley's rate was at 90.39% with 417 beds. A closer look at the medical/surgical beds in 2010 at these two hospitals showed Valley at 93.69% for 331 beds compared to HUMC at 92.13% for 489 beds. Even though HUMC is further away from the PVH location, its utilization at a higher number of beds collectively and by medical/surgical beds is comparable (see Appendix C).

#### Total Bergen County Hospital Admissions and Average Daily Census (ADC):

It is also noted that for the period of 2006 to 2008, the combined ADC increased at all hospitals except HUMC. When the B-2 data was annualized using the last two quarters of 2010 and the first two quarters of 2011, the trend showed that HUMC had the highest ADC with most beds in the county compared to other operating hospitals. Total combined ADC for all hospitals decreased from 1,460 in 2006 to 1,426 in 2008 and to 1,373 in 2010, while medical/surgical ADC remained essentially stable decreasing slightly from 1,223 to 1,211 in 2008 and 1,147 in 2010. However, the B-2 data also showed for medical/surgical beds for 2010 that HUMC had the highest ADC in the county compared to the other operating hospitals and maintained the most beds (see Appendix C).

Total admissions for the three bed categories at all Bergen County hospitals actually decreased from 133,823 in 2006 to 133,329 in 2008 then to 133,168 in 2011 (when

annualized using the last two quarters of 2010 and the first two quarters of 2011). Total medical/surgical admissions for these hospitals decreased from 117,716 in 2006 to 116,301 in 2008 and fell further to 116,155 in 2011 (when annualized using the last two quarters of 2010 and the first two quarters of 2011). By hospital, total and medical/surgical admissions increased at all hospitals except HUMC in 2008 from 2006 and 2007. When admissions are examined closer, the B-2 data shows that admissions for medical/surgical beds and for the three bed categories collectively were highest at HUMC. This trend continues and is reflected into 2011 (using an annualized rate comprised of the last two quarters of 2010 and the first two quarters of 2011) when the rate fell to 116,155 (see Appendix D).

The above data on admissions and ADC indicates a temporary increase in utilization in 2008 from 2006 and 2007 but does not show any of these increases are sustained in 2010 and 2011. The data clearly depicts HUMC as having the most admissions and the highest ADC, but these figures are lower than its 2008 reported numbers.

### **Outpatient and Same Day Surgery:**

Outpatient surgery in the county steadily declined from 2006 (25,888) to 2010 (9,951). However, these totals are mostly reflective of HUMC's decline (16,223 in 2006 to 8,452 in 2010), as HUMC had the vast majority of outpatient surgeries of all the Bergen County Hospitals. Of the remaining hospitals' outpatient surgeries, Valley Hospital and Holy Name remained fairly stable (although Holy Name had a temporary rise in 2008); Bergen Regional and Englewood showed a significant decrease (see Appendix E).

Same day surgery in the county dropped considerably with the PVH closure but increased from that drop in the years following (44,169 in 2006, 40,871 in 2008, and 42,197 in 2010). HUMC, Bergen Regional, Holy Name and Englewood showed a slight increase over the years while Valley Hospital showed a decrease in the years following the initial increase after PVH's closure. In all, the elimination of same day surgeries performed at PVH did not significantly affect the numbers performed at the other hospitals in the county (see Appendix E).

The statewide trends appear to have illustrated an increase in surgeries at ambulatory surgery centers accounting for this overall decline at the operational hospitals. Despite the decline, HUMC still remains first in the county for generating the most patients in either of these areas.

### Adequancy of financial resources and sources of present and future revenue:

HUMC North is a new corporation, and it does not have historical financial information. Projections included with the CN application forecast 4,400 and 7,402 inpatient admissions in 2013 and 2014 respectively. Based on these volume projections, HUMC North forecasts positive operating margins of 2.3% and 14.0% in 2013 and 2014, respectively. Although days cash on hand is projected to be only four days at the end of 2013, the applicant has stated that it will have access to working capital through a revolving credit and cash management agreement with an affiliate of LHP Hospital Group. Days cash on hand is projected to rise to 45 days in 2014.

### **Demographics:**

With respect to the population growth, for this service area and the county, the New Jersey Department of Labor and Workforce Development projects continued steady population growth in Bergen County through 2028 as well as population growth in Passaic and Hudson counties. The population of Bergen County is expected to increase from 889,900 in 2008 to 895,300 in 2018 and 903,100 in 2028. Likewise, the senior population in Bergen County will increase from 132,900 in 2008 to 152,500 in 2018 and 183,000 in 2028. This means that the population cohort age 65 and over in Bergen County will increase by 37.7% between 2008 and 2028. According to New Jersey hospital resource utilization data, seniors are admitted to the hospital 3.7 times more frequently than younger age cohorts, and when admitted, they utilize far more hospital resources. Future demand for a new hospital would be generated as a result of the growth in the county wide population and population cohort age 65 and over. This projected demographic growth to the same degree more or less would also be experienced in the HUMC North area supporting the proposal for the additional 128 beds in the area (see Appendix F).

### **Department Staff Recommendations and Rationale:**

Department staff has concluded that the applicant has adequately documented proposed compliance with the applicable CN rules at N.J.A.C. 8:33-1.1 et seq. and general statutory standards at N.J.S.A. 26:2H-1 et seq. as well as demonstrated need as set forth in the Certificate of Need Call for a Proposed New General Hospital to Serve Bergen County.

After carefully reviewing the available data from the B-2 reports, staff believes that the additional beds at HUMC North would not have a significant negative impact on the ability of the existing hospitals to continue providing their current service levels or financial stability. Staff recognizes that after the closure of PVH, most of the hospitals in Bergen County experienced a growth spurt in later months of 2007 and 2008, but B-2 data shows this growth to have leveled off. These patient gains were unsustainable moving into 2010 and the early part 2011. Moreover, staff realizes that the health care service landscape is constantly changing due to new technologies, physician practice and consumer preferences.

This does not mean that staff believes there will be no impact to other hospitals in the county. Clearly, some patients will, in fact, choose to use the new facility rather than any other hospital in the county. The application projects that the new hospital will attract about half of the patients from the 14 town core market area who formerly used the PVH. However, staff believes that the new hospital will at least partly serve as an overflow of HUMC's main campus where occupancy is high. In addition, the small size of the new hospital will be limiting factor on the number of patients that can be served. It is noted that Condition #4 below prohibits the addition of beds at the new hospital for three years after licensing which will provide all hospitals in the county with time to adjust to the new facility. Thus, staff believes that any negative impact on other hospitals will be limited.

It appears that the closure of PVH has had very little effect on HUMC since its utilization has generally remained stable. HUMC had the most beds in the three categories with higher occupancy, admissions, patient days and utilization of outpatient services. HUMC has increased its number of licensed beds to coincide with market conditions. HUMC has historically attracted more patients than the other hospitals and its forecasts show that this will continue. The projections made by HUMC show that its intention is to use HUMC North as a pressure relief valve for the overflow of patients at HUMC.

Department staff acknowledges HUMC presently has little or no room to expand on site. The addition of beds at its present location to lower its occupancy rate to an 83% target is not realistic. Reactivating the existing PVH site into functioning community hospital again would solve HUMC's high occupancy problem while bringing back services into Westwood and the surrounding communities. The creation of HUMC North would provide greater accessibility to hospital services for this area, especially in an emergency situation. Due to the lack of a primary road system, residents have complained of reduced access to inpatient and outpatient health care services. The additional traffic at the morning and evening rush hour further compounds the travel time for residents from the 14 towns surrounding PVH to reach any of the existing hospitals.

Department staff believes that the patient forecast for HUMC North is a realistic assessment of the geographic service area for this hospital. The major source of patients for HUMC North would be HUMC. It is only logical that HUMC could also draw 50% of its patients from the 14 towns surrounding the former PVH site since the residents have spearheaded this initiative for a new hospital. These patient numbers certainly are not so large that the existing hospitals would be adversely affected causing them financial hardship. HUMC–North's location within three miles of the Rockland County border would have at least the same appeal to these Rockland patients as PVH, if not more given HUMC's reputation. The 538 patients projected by the applicant, based on the number of Rockland County residents presently treated at HUMC, does not appear to be overstated. HUMC North will serve as an expansion of HUMC similar to that which could have been served by the hospital adding these beds at its main site if its property could support the addition of these beds.

HUMC already has control of the property on which PVH was located and is operating a Satellite Emergency Department (SED) and providing outpatient services. The projected cost for HUMC–North is \$39,590,409, which includes renovation, design, and upgrading the facility to meet life safety codes. This cost is viewed as an economical approach when compared to other ongoing projects for bed additions throughout the state. The implementation of HUMC North is seen as a practical solution to serving a specific area of Bergen County that now has reduced access to health care services and has developed some service gaps in the care available.

Two indicators that Department staff examined to determine whether HUMC North would successfully be integrated into the area without disrupting other services are the utilization of the SED and the admissions from the SED to HUMC. Since the opening of the SED at the former PVH site in September 2008, the reporting data showed 23,135

residents from the core market towns have been treated at this facility. The applicant reported that the total volume of patients treated at the SED through August 2011 was 33,779. This number included patients within and outside of the core market area of the former PVH. The largest percentage of patients (42.4%) treated at SED is derived from Westwood, Old Tappan and River Vale. The towns making up the remaining 57.6% in descending order are Hillsdale (11.6%), Emerson (11.0%), Park Ridge (7.3%), Closter (5.9%), Northvale/Rockleigh (5.2%), Harrington Park (5.1%), Norwood (5.0%), Montvale (4.4%), Washington Township (1.5%), and Woodcliff Lake (0.5%).

With respect to the patients transferred from the SED to area hospitals for admission, between October 2008 and August 28, 2011, a total of 2,298 were transferred to a full service hospital. More than half of those patients (1,295) transferred were then admitted to the HUMC's main campus. The remaining numbers of patients were transferred to the other hospitals within and outside of Bergen County. Of the other receiving hospitals, the two hospitals with the most patient transfers after HUMC were Valley Hospital at 725 patients and Englewood at 281 patients. Department staff believes that if HUMC North were licensed as a relatively small community general acute care hospital at least 50% or more of the patients would still select HUMC as the data clearly indicates. Department staff believes that this market share would remain constant among these hospitals with little variation.

In essence, Department staff is recommending the approval of this CN on the basis that implementation of HUMC North would not adversely impact other hospitals in Bergen County nor detract from the health care delivery in Bergen County. Its implementation will strengthen health care resources and improve access in the PVH core area. The evidence is clear that after the closure of PVH, there was no long lasting significant increase in the number of patients treated at any of the remaining hospitals. The downsized HUMC North in comparison to the former PVH should not disrupt or place at risk any of the operating hospitals in Bergen County.

In addition, Department staff looked to Department of Labor and Workforce Development Population projections, which showed an increase over the next several years. Department staff reviewed the population projections and used them as a basis for the projection of future admissions and patient days at HUMC. Those projections indicate that HUMC's occupancy rates would rise beyond capacity without some adjustment. In order for HUMC to maintain a target 83% occupancy rate, it would need to increase the number of beds by an estimated 84 to 123 beds by 2020. Adding those beds at HUMC could be done without a CN if HUMC had the room to expand. Adding those beds at HUMC North, would relieve this volume strain and better serve the medical needs of the core area residents (see Appendix F).

It is noted that for convenience the above staff analysis used an 83% occupancy for all beds. Since OB, Adult ICU/CCU and intermediate bassinets are, in all hospitals, significantly fewer in number than medical/surgical beds, occupancy standards for these are lower than for medical/surgical. It is noted that in the maintained bed data described above, only HUMC has consistently had OB occupancies over 80% and only HUMC and Valley Hospital have ever had ICU/CCU occupancies over 80%.

The establishment of a low risk diagnostic cardiac catheterization laboratory is an expedited review CN service set forth at N.J.A.C. 8:33-5.1, which does not require State Health Planning Board (SHPB) review. Since the applicant incorporated the establishment of a low risk diagnostic cardiac catheterization laboratory within its full review CN for the establishment of an acute care hospital, the Department provides the SHPB with the applicant's completeness responses for the cardiac service under review. It is noted that all other hospitals in Bergen County except Bergen Regional have full catheterization labs. The minimum volume for a full service catheterization lab is 400 annually. In 2010, each of these four full service catheterization labs had volume over 400.

The Department finds that the applicant has satisfied the statutory criteria (which are the same for all CN applicants) for establishing a low risk diagnostic cardiac catheterization laboratory contained in the Health Care Facilities Planning Act (N.J.S.A. 26:2H-1.1 et seq.), the regulatory criteria for Low Risk Adult Diagnostic Cardiac Catheterization as set forth at N.J.A.C. 8:33E, including minimum facility (200 annually) and physician volumes, staffing, training, quality improvement and community access requirements, and the CN administrative process rules as set forth at N.J.A.C. 8:33. Department staff recommends approval of the establishment of a low risk diagnostic cardiac catheterization laboratory for HUMC North with conditions set forth below.

### **Staff Recommendations:**

- The staff believes that HUMC North is appropriately sized and will not significantly impact the other regional providers because it will allow HUMC to shift some of its volume from its main campus to the HUMC North in Westwood. In addition, the applicant's projections contained in the application are not unreasonable.
- Staff agrees that the applicant will promote clinical integration between HUMC and HUMC North thereby enhancing quality of care at both facilities.
- 3. HUMC's current efforts in operating a satellite emergency department (SED) at HUMC North and the seamless transition for MICU services that were implemented to preserve emergency health services in the area should serve as a model for the same kind of seamless transition that will occur when implementing inpatient services.
- 4. Hackensack University Medical Center's occupancy rate for its maintained beds has remained consistently over 85 percent. The closures of the combined Passaic Beth Israel hospitals in the City of Passaic, Barnert in Paterson, and PVH in Westwood have exacerbated this problem. HUMC North will help to relieve the strain of excess volume and can be accomplished in a very economical way. There is no other economical substitute to accommodate the needs of the population residing in the far northeastern corner of Bergen County.

- 5. The approval of HUMC North would provide better community access and more manageable county wide occupancy rates. The opening of HUMC North will help to address the critical physician shortage in New Jersey.
- 6. The proposed project serves in meeting the health related needs of members of medically underserved communities and the medically indigent. (N.J.A.C. 8:33-4.9(a), 4.9(a)1, 4.10(a)1, 4.10(a)2 and 4.10(a)4.)
- 7. Failure to establish HUMC North would place the residents of the Pascack Valley and Northern Valley at greater risk when health care emergencies arise and immediate care is essential.
- 8. Department of Labor and Workforce Development Population projections, reviewed by Department staff and used as a basis for projection of future admissions and patient days at HUMC, indicate that in order for HUMC to maintain a target 83% occupancy rate, an estimated 84 to 123 beds would be needed to be added by 2020. Adding those beds at HUMC could be done without a CN if HUMC had the room to expand. Adding those beds at HUMC North would relieve this volume strain and better serve the medical needs of the core area residents and at a relatively low cost.

### **Conditions:**

Based on this documentation of compliance with regulatory and statutory criteria, Department staff recommends approving HUMC North as a new general hospital in Bergen County with following conditions:

- The applicant shall file a licensing application with the Department's Certificate
  of Need and Healthcare Facility Licensure Program (CNHCFL) to execute the
  licensure of the new hospital.
- 2. HUMC North shall comply with <u>N.J.A.C.</u> 8:43G-5.21(a), which requires, "[a]ll hospitals . . . provide on a regular and continuing basis, out-patient and preventive services, including clinical services for medically indigent patients, for those services provided on an in-patient basis."
- 3. In accordance with N.J.S.A. 26:2H-18.64 and N.J.A.C. 8:43G-5.2(c), HUMC North shall not only comply with federal EMTALA requirements but also provide care for all patients who present themselves at HUMC North without regard to its ability to pay or payment source and with no upper limit on the amount of charity care to be provided.
- 4. HUMC North shall not add additional beds to its approved CN bed inventory of 128 on a permanent basis until at least three years after licensure.

- 5. Within 30 days of the issuance of the hospital's new license, HUMC North shall provide the Department with an organizational chart of the hospital and each service that shows lines of authority, responsibility, and communication and an explanation of any changes from the chart presented in the application.
- 6. HUMC North shall hold an annual public Board meeting pursuant to N.J.S.A. 26:2H-12.50 and develop mechanisms for the meeting that address the following:
  - a. An opportunity for members of the local community to present their concerns regarding local health care needs and hospital operations and how HUMC North should address these and
  - b. A method for HUMC North to publicly respond to the concerns expressed by community members at the annual public board meeting.

HUMC North shall develop these mechanisms within 90 days of this approval and share them with the Department's CNHCFL Program.

- 7. An outreach plan shall be placed into effect to ensure that all residents of the hospital service area, especially the medically indigent, have access to the available services at the location. A self-evaluation of this effort shall be conducted on a yearly basis beginning the first full year after licensure and for six years thereafter to measure its effectiveness including any payments accounted for activities, including but not limited to, outreach, community programs, and health professional education and shall be submitted to the Department every year for review and comment and presented to the public at the hospital's annual public Board meeting.
- 8. HUMC North shall for five years annually submit a written report to measure its progress on establishing and maintaining a residency program supporting up to 30 residency positions, which includes 18 family practice residents along with four residents in each of the three specialties (emergency medicine, obstetrics/gynecology, and general surgery) to address New Jersey's physician shortage in these areas. The first report shall be due one year from the initialing licensing date.
- Within 30 days of the date of approval, the applicant shall contact the Office of Health Care Quality Assessment at (609) 341-5558 to ensure accurate and timely reporting of low risk diagnostic cardiac catheterization data.
- 10. Prior to the commencement of low risk diagnostic cardiac catheterization services at HUMC North, the applicant shall file a licensing amendment application and obtain licensure approval from the Office of Certificate of Need and Healthcare Facility Licensure.

- 11. Prior to licensure of low risk diagnostic cardiac catheterization services at HUMC North, the applicant shall provide a signed and dated transfer agreement with Hackensack University Medical Center.
- 12. HUMC North shall report annually and/or as required by a specific condition to the Department's CNHCFL Program.
- 13. All the above conditions shall also apply to any successor organization to HUMC North which acquires HUMC North within five years from the date of the CN approval.

### **APPENDIX A**

# Drive Time from proposed HUMC North to Area Hospitals Located in Bergen County within 12 Driving Miles of Proposed HUMC North

250 Old Hook Road Westwood, NJ 07675

Hospitals within 12 miles of PVH	Distance as per MapQuest	MapQuest drive time estimate	Estimated drive time 8:00AM	Estimated drive time noon	Estimated drive time after 5:00PM	Estimated drive time after 7:00PM
	(miles)	(minutes)	(minutes)	(minutes)	(minutes)	(minutes)
Bergen Regional Medical Center - 10201 230 East Ridgewood Avenue Paramus, NJ 07652	4.73	11	15	11	17	11
Valley Hospital - 10211 223 N Van Dien Avenue Ridgewood, NJ 07450	5.73	15	18	15	21	15
Englewood Hospital and Medical Center - 10202 350 Engle St Englewood, NJ 07631	8.45	20	30	21	32	21
Holy Name Hospital - 10205 718 Teaneck Road Teaneck, NJ 07666	9.23	22	28	21	30	21
Hackensack University Medical Center (HUMC) - 10204 30 Prospect Ave Hackensack, NJ 07601	9.51	22	27	21	29	21

Source: MapQuest, Application

Hospitals within 12 miles of HUMC North	Distance from HUMC North (miles)	8:00 AM Drive (minutes)	Noon Drive (minutes)	5:00 PM Drive (minutes)
Bergen	5	15	15	25
Regional				
Valley	6.1	18	17	20
Englewood	8.8	27	30	30
Holy Name	12.4	33	25	26
HUMC	12.4	27	25	46

Source: Department Survey Staff, 2009

### Appendix B Licensed Beds

		2006	5		
		Med/Surg	OB/GYN	ICU/CCU	Combined
Pascack	Beds	215	18	18	251
Valley	OccRt	37.35%	54.63%	63.11%	40.44%
Hospital	ADC	80.31	9.83	11.36	101.50
Bergen	Beds	164	0	9	173
Regional	OccRt	34.43%	0.00%	28.55%	34.12%
	ADC	56.47	0.00	2.60	59.04
Valley	Beds	331	38	48	417
Hospital	OccRt	86.85%	63.77%	74.07%	83.28%
	ADC	287.48	24.23	35.55	347.27
Englewood	Beds	397	30	42	469
	OccRt	40.27%	57.49%	39.97%	41.34%
	ADC	159.86	17.25	16.79	193.90
Holy Name	Beds	278	25	19	322
Hospital	OccRt	63.89%	43.25%	71.97%	62.76%
	ADC	177.61	10.81	13.67	202.10
Hackensack	Beds	496	50	54	600
University	OccRt	93.05%	104.97%	78.17%	92.70%
MC	ADC	461.51	52.48	42.21	556.21

2007							
		Med/Surg	OB/GYN	ICU/CCU	Combined		
Pascack	Beds	215	18	18	251		
Valley	OccRt	17.87%	22.68%	63.11%	19.01%		
Hospital	ADC	38.42	4.08	11.36	47.72		
Bergen	Beds	164	0	9	173		
Regional	OccRt	37.71%	0.00%	40.91%	37.88%		
	ADC	61.85	0.00	3.68	65.53		
Valley	Beds	331	38	48	417		
Hospital	OccRt	88.54%	65.21%	71.44%	84.44%		
	ADC	293.06	24.78	34.29	352.13		
Englewood	Beds	397	30	42	469		
_	OccRt	41.47%	55.05%	42.68%	42.45%		
	ADC	164.65	16.52	17.93	199.09		
Holy Name	Beds	278	25	19	322		
Hospital	OccRt	59.13%	43.05%	72.63%	58.68%		
	ADC	164.39	10.76	13.80	188.96		
Hackensack	Beds	526	58	59	643		
University	OccRt	89.83%	99.47%	67.78%	88.68%		
MC	ADC	472.52	57.69	39.99	570.20		

### **Licensed Beds**

	2008							
		Med/Surg	OB/GYN	ICU/CCU	Combined			
Pascack	Beds	0	0	0	0			
Valley	OccRt	0.00%	0.00%	0.00%	0.00%			
Hospital	ADC	0.00	0.00	0.00	0.00			
Bergen	Beds	164	0	9	173			
Regional	OccRt	39.55%	0.00%	51.76%	40.19%			
	ADC	64.87	0.00	4.66	69.52			
Valley	Beds	331	38	48	417			
Hospital	OccRt	97.24%	64.33%	80.20%	92.28%			
	ADC	321.88	24.45	38.50	384.82			
Englewood	Beds	397	30	42	469			
	OccRt	44.82%	54.84%	40.33%	45.06%			
	ADC	177.92	16.45	16.94	211.31			
Holy Name	Beds	278	25	19	322			
Hospital	OccRt	65.99%	47.06%	76.92%	65.17%			
	ADC	183.46	11.77	14.62	209.84			
Hackensack	Beds	555	65	63	683			
University	OccRt	83.38%	90.61%	46.07%	80.62%			
MC	ADC	462.74	58.90	29.03	550.67			

2009							
		Med/Surg	OB/GYN	ICU/CCU	Combined		
Pascack	Beds	0	0	0	0		
Valley	OccRt	0.00%	0.00%	0.00%	0.00%		
Hospital	ADC	0.00	0.00	0.00	0.00		
Bergen	Beds	164	0	9	173		
Regional	OccRt	39.71%	0.00%	55.59%	40.53%		
	ADC	65.12	0.00	5.00	70.12		
Valley	Beds	331	38	48	417		
Hospital	OccRt	93.74%	78.63%	80.09%	90.79%		
	ADC	310.27	29.88	38.44	378.59		
Englewood	Beds	397	30	42	469		
	OccRt	42.20%	55.83%	42.43%	43.09%		
	ADC	167.54	16.75	17.82	202.11		
Holy Name	Beds	278	25	19	322		
Hospital	OccRt	66.17%	49.01%	65.28%	64.79%		
	ADC	183.95	12.25	12.40	208.61		
Hackensack	Beds	555	65	63	683		
University	OccRt	79.86%	86.34%	65.98%	79.19%		
MC	ADC	443.2	56.12	41.56	540.88		

Beginning in 2009, Valley Hospital did not include Same Day Caths and Endoscopies in its B-2 reports. Those numbers have been added back to give a proper comparison of admissions and patient days with those of the other hospitals.

### **Licensed Beds**

	2010							
		Med/Surg	OB/GYN	ICU/CCU	Combined			
Pascack	Beds	0	0	0	0			
Valley	OccRt	0.00%	0.00%	0.00%	0.00%			
Hospital	ADC	0.00	0.00	0.00	0.00			
Bergen	Beds	164	0	9	173			
Regional	OccRt	40.54%	0.00%	54.43%	41.27%			
	ADC	66.49	0.00	4.90	71.39			
Valley	Beds	331	38	48	417			
Hospital	OccRt	93.69%	76.33%	78.77%	90.39%			
	ADC	310.11	29.01	37.81	376.93			
Englewood	Beds	397	30	42	469			
	OccRt	42.25%	49.63%	41.08%	42.62%			
	ADC	167.73	14.89	17.25	199.87			
Holy Name	Beds	278	25	19	322			
Hospital	OccRt	64.07%	46.22%	69.98%	63.03%			
	ADC	178.10	11.56	13.30	202.95			
Hackensack	Beds	555	65	63	683			
University	OccRt	81.17%	91.86%	59.80%	80.22%			
MC	ADC	450.52	59.71	37.67	547.90			

	2011 - 1st Quarter							
		Med/Surg	OB/GYN	ICU/CCU	Combined			
Pascack	Beds	0	0	0	0			
Valley	OccRt	0.00%	0.00%	0.00%	0.00%			
Hospital	ADC	0.00	0.00	0.00	0.00			
Bergen	Beds	164	0	9	173			
Regional	OccRt	44.48%	0.00%	53.09%	44.93%			
	ADC	72.94	0.00	4.78	77.72			
Valley	Beds	331	38	48	417			
Hospital	OccRt	90.83%	72.92%	81.50%	88.13%			
	ADC	300.66	27.71	39.12	367.49			
Englewood	Beds	397	30	42	469			
	OccRt	41.92%	51.67%	43.10%	42.65%			
	ADC	166.41	15.50	18.10	200.01			
Holy Name	Beds	278	25	19	322			
Hospital	OccRt	66.15%	43.16%	71.64%	64.69%			
	ADC	183.89	10.79	13.61	208.29			
Hackensack	Beds	555	65	63	683			
University	OccRt	97.57%	91.33%	40.00%	91.66%			
MC	ADC	541.49	59.37	25.20	626.06			

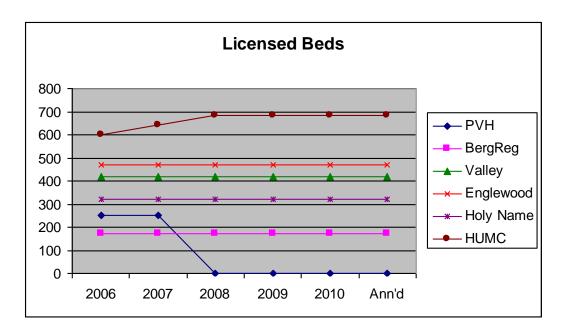
### **Licensed Beds**

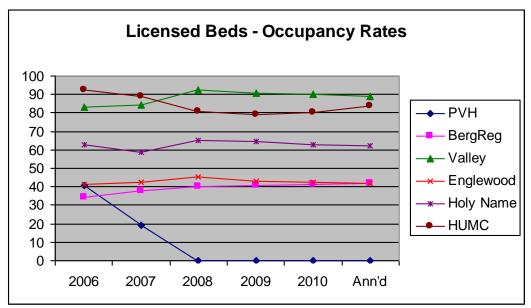
2011 – 2nd Quarter						
		Med/Surg	OB/GYN	ICU/CCU	Combined	
Pascack	Beds	0	0	0	0	
Valley	OccRt	0.00%	0.00%	0.00%	0.00%	
Hospital	ADC	0.00	0.00	0.00	0.00	
Bergen	Beds	164	0	9	173	
Regional	OccRt	39.51%	0.00%	47.13%	39.91%	
	ADC	64.80	0.00	4.24	69.04	
Valley	Beds	331	38	48	417	
Hospital	OccRt	90.79%	74.70%	75.27%	87.54%	
	ADC	300.52	28.39	36.13	365.03	
Englewood	Beds	397	30	42	469	
	OccRt	42.59%	56.70%	37.99%	43.08%	
	ADC	169.09	17.01	15.96	202.05	
Holy Name	Beds	278	25	19	322	
Hospital	OccRt	64.59%	45.10%	67.15%	63.23%	
	ADC	179.57	11.28	12.76	203.60	
Hackensack	Beds	555	65	63	683	
University	OccRt	90.51%	92.76%	36.40%	85.73%	
MC	ADC	502.32	60.30	22.93	585.55	

Anı	Annualized 2010-Last 2 Quarters – 2011 – 1 <sup>st</sup> 2 Quarters						
		Med/Surg	OB/GYN	ICU/CCU	Combined		
Pascack	Beds	0	0	0	0		
Valley	OccRt	0.00%	0.00%	0.00%	0.00%		
Hospital	ADC	0.00	0.00	0.00	0.00		
Bergen	Beds	164	0	9	173		
Regional	OccRt	41.60%	0.00%	51.51%	42.12%		
	ADC	68.23	0.00	4.64	72.86		
Valley	Beds	331	38	48	417		
Hospital	OccRt	92.66%	74.79%	76.11%	89.13%		
	ADC	306.72	28.42	36.53	371.68		
Englewood	Beds	397	30	42	469		
	OccRt	41.74%	51.91%	38.71%	42.12%		
	ADC	165.70	15.57	16.26	197.53		
Holy Name	Beds	278	25	19	322		
Hospital	OccRt	63.57%	44.67%	69.68%	62.46%		
	ADC	176.72	11.17	13.24	201.12		
Hackensack	Beds	555	65	63	683		
University	OccRt	87.05%	92.94%	45.35%	83.76%		
MC	ADC	483.13	60.41	28.57	572.10		

Source: DHSS Health Care Financing Systems Summary of Inpatient Utilization (B-2)

### **Licensed Beds**





### Appendix C Maintained Beds

	2006						
		Med/Surg	OB/GYN	ICU/CCU	Combined		
Pascack	Beds	103	18	18	139		
Valley	OccRt	37.35%	54.63%	63.11%	40.44%		
Hospital	ADC	80.31	9.83	11.36	101.50		
Bergen	Beds	99	0	9	108		
Regional	OccRt	57.04%	0.00%	28.55%	54.66%		
	ADC	56.46	0.00	2.60	59.04		
Valley	Beds	312	38	48	398		
Hospital	OccRt	94.14%	63.77%	74.07%	87.25%		
	ADC	287.48	24.23	35.55	347.27		
Englewood	Beds	193	30	25	248		
	OccRt	82.83%	57.49%	67.16%	78.18%		
	ADC	159.86	17.25	16.79	193.90		
Holy Name	Beds	220	29	19	268		
Hospital	OccRt	80.73%	37.29%	71.97%	75.41%		
	ADC	177.61	10.81	13.67	202.10		
Hackensack	Beds	457	61	48	566		
University	OccRt	100.99%	86.04%	87.94%	98.27%		
MC	ADC	461.51	52.48	42.21	556.21		

2007							
		Med/Surg	OB/GYN	ICU/CCU	Combined		
Pascack	Beds	51*	9*	9*	69*		
Valley	OccRt	75.34%*	45.36%*	57.93%*	69.16%*		
Hospital	ADC	38.42	4.08	11.36	47.72		
Bergen	Beds	91	0	9	100		
Regional	OccRt	67.96%	0.00%	40.91%	65.53%		
	ADC	61.85	0.00	3.68	65.53		
Valley	Beds	314	37	48	399		
Hospital	OccRt	93.33%	66.97%	71.44%	88.25%		
	ADC	293.06	24.78	34.29	352.13		
Englewood	Beds	196	30	26	252		
	OccRt	84.00%	55.05%	68.95%	79.00%		
	ADC	164.65	16.52	17.93	199.09		
Holy Name	Beds	220	29	19	268		
Hospital	OccRt	74.72%	37.11%	72.63%	70.51%		
	ADC	164.39	10.76	13.80	188.96		
Hackensack	Beds	457	65	48	570		
University	OccRt	103.40%	88.75%	83.31%	100.04%		
MC	ADC	472.52	57.69	39.99	570.20		

<sup>\*</sup>PVH reported for only the first two quarters of 2007. The B-2 calculated the average for those two quarters to reach an annual number.

### **Maintained Beds**

	2008						
		Med/Surg	OB/GYN	ICU/CCU	Combined		
Pascack	Beds	0	0	0	0		
Valley	OccRt	0.00%	0.00%	0.00%	0.00%		
Hospital	ADC	0.00	0.00	0.00	0.00		
Bergen	Beds	96	0	9	105		
Regional	OccRt	67.57%	0.00%	51.76%	66.21%		
	ADC	64.87	0.00	4.66	69.52		
Valley	Beds	327	37	48	412		
Hospital	OccRt	98.43%	66.07%	80.20%	93.40%		
	ADC	321.88	24.45	38.40	384.82		
Englewood	Beds	225	30	24	279		
	OccRt	79.08%	54.84%	70.57%	75.74%		
	ADC	177.92	16.45	16.94	211.31		
Holy Name	Beds	220	29	19	268		
Hospital	OccRt	83.39%	40.57%	76.92%	78.30%		
	ADC	183.46	11.77	14.62	209.84		
Hackensack	Beds	463	65	48	576		
University	OccRt	99.94%	90.61%	60.47%	95.60%		
MC	ADC	482.74	58.90	29.03	550.67		

	2009						
		Med/Surg	OB/GYN	ICU/CCU	Combined		
Pascack	Beds	0	0	0	0		
Valley	OccRt	0.00%	0.00%	0.00%	0.00%		
Hospital	ADC	0.00	0.00	0.00	0.00		
Bergen	Beds	96	0	9	105		
Regional	OccRt	67.83%	0.00%	55.59%	66.78%		
	ADC	65.12	0.00	5.01	70.12		
Valley	Beds	331	38	48	417		
Hospital	OccRt	93.74%	78.63%	80.09%	90.79%		
	ADC	310.27	29.88	38.44	378.59		
Englewood	Beds	219	30	25	274		
	OccRt	76.50%	55.83%	71.29%	73.76%		
	ADC	167.54	16.75	17.82	202.11		
Holy Name	Beds	220	29	19	268		
Hospital	OccRt	83.62%	42.25%	65.28%	77.84%		
	ADC	183.95	12.25	12.40	208.61		
Hackensack	Beds	474	65	48	587		
University	OccRt	93.50%	86.34%	86.59%	92.14%		
MC	ADC	443.2	56.12	41.56	540.88		

Beginning in 2009, Valley Hospital did not include Same Day Caths and Endoscopies in its B-2 reports. Those numbers have been added back to give a proper comparison of admissions and patient days with those of the other hospitals.

### **Maintained Beds**

	2010						
		Med/Surg	OB/GYN	ICU/CCU	Combined		
Pascack	Beds	0	0	0	0		
Valley	OccRt	0.00%	0.00%	0.00%	0.00%		
Hospital	ADC	0.00	0.00	0.00	0.00		
Bergen	Beds	96	0	9	105		
Regional	OccRt	69.26%	0.00%	54.43%	67.99%		
	ADC	66.49	0.00	4.90	71.39		
Valley	Beds	331	38	48	417		
Hospital	OccRt	93.69%	76.33%	78.77%	90.39%		
	ADC	310.11	29.00	37.81	376.93		
Englewood	Beds	220	30	23	273		
	OccRt	76.24%	49.63%	75.01%	73.21%		
	ADC	167.73	14.89	17.25	199.87		
Holy Name	Beds	220	29	19	268		
Hospital	OccRt	80.96%	39.85%	69.98%	75.73%		
	ADC	178.10	11.56	13.30	202.95		
Hackensack	Beds	489	65	48	602		
University	OccRt	92.13%	91.86%	78.49%	91.01%		
MC	ADC	450.52	59.71	37.67	547.90		

2011 - 1st Quarter						
		Med/Surg	OB/GYN	ICU/CCU	Combined	
Pascack	Beds	0	0	0	0	
Valley	OccRt	0.00%	0.00%	0.00%	0.00%	
Hospital	ADC	0.00	0.00	0.00	0.00	
Bergen	Beds	96	0	9	105	
Regional	OccRt	75.98%	0.00%	53.09%	74.02%	
	ADC	72.94	0.00	4.78	77.72	
Valley	Beds	331	38	48	417	
Hospital	OccRt	90.83%	72.92%	81.50%	88.13%	
	ADC	300.66	27.71	39.12	367.49	
Englewood	Beds	230	30	27	287	
	OccRt	72.35%	51.67%	67.04%	69.69%	
	ADC	166.41	15.50	18.10	200.01	
Holy Name	Beds	220	29	19	268	
Hospital	OccRt	83.59%	37.20%	71.64%	77.72%	
	ADC	183.89	10.79	13.61	208.29	
Hackensack	Beds	448	77	48	573	
University	OccRt	120.87%	77.10%	52.50%	109.26%	
MC	ADC	541.49	59.37	25.20	626.06	

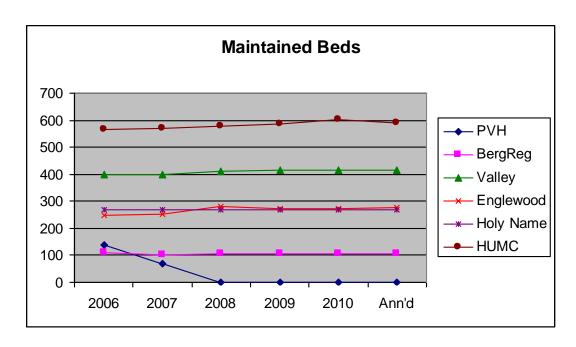
### **Maintained Beds**

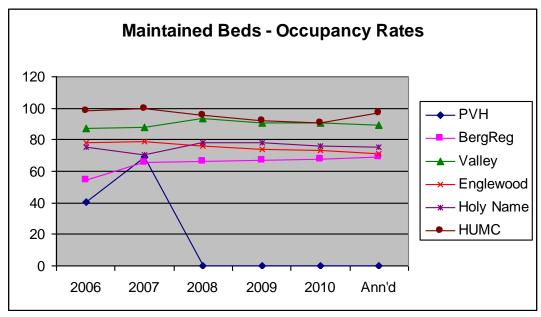
	2011 – 2nd Quarter						
		Med/Surg	OB/GYN	ICU/CCU	Combined		
Pascack	Beds	0	0	0	0		
Valley	OccRt	0.00%	0.00%	0.00%	0.00%		
Hospital	ADC	0.00	0.00	0.00	0.00		
Bergen	Beds	96	0	9	105		
Regional	OccRt	67.50%	0.00%	47.13%	65.76%		
	ADC	64.80	0.00	4.24	69.04		
Valley	Beds	331	38	48	417		
Hospital	OccRt	90.79%	74.70%	75.27%	87.54%		
	ADC	300.52	28.39	36.13	365.03		
Englewood	Beds	227	30	26	283		
	OccRt	74.49%	56.70%	61.37%	71.40%		
	ADC	169.09	17.01	15.96	202.05		
Holy Name	Beds	220	29	19	268		
Hospital	OccRt	81.62%	38.88%	67.15%	75.97%		
	ADC	179.57	11.28	12.76	203.60		
Hackensack	Beds	446	77	48	571		
University	OccRt	112.63%	78.31%	47.78%	102.55%		
MC	ADC	502.32	60.30	22.93	585.55		

Anı	Annualized 2010-Last 2 Quarters – 2011 – 1 <sup>st</sup> 2 Quarters					
		Med/Surg	OB/GYN	ICU/CCU	Combined	
Pascack	Beds	0	0	0	0	
Valley	OccRt	0.00%	0.00%	0.00%	0.00%	
Hospital	ADC	0.00	0.00	0.00	0.00	
Bergen	Beds	96	0	9	105	
Regional	OccRt	71.07%	0.00%	51.51%	69.39%	
	ADC	68.23	0.00	4.64	72.86	
Valley	Beds	331	38	48	417	
Hospital	OccRt	92.66%	74.79%	76.11%	89.13%	
	ADC	306.72	28.42	36.53	371.68	
Englewood	Beds	224	30	23	277	
	OccRt	73.89%	51.91%	69.94%	71.18%	
	ADC	165.70	15.57	16.26	197.59	
Holy Name	Beds	220	29	19	268	
Hospital	OccRt	80.33%	38.51%	69.68%	75.04%	
	ADC	176.72	11.17	13.24	201.12	
Hackensack	Beds	471	71	48	590	
University	OccRt	87.05%	85.08%	59.52%	97.05%	
MC	ADC	483.13	60.41	28.57	572.10	

Source: DHSS Health Care Financing Systems Summary of Inpatient Utilization (B-2)

### **Maintained Beds**





### Appendix D

### Admissions from 2006 – 2010 and 1<sup>st</sup> Two Quarters 2011 B-2 Data Representing Admissions to the Six Area Hospitals for those Service Categories HUMC North will provide

#### 2006

	Med/Surg	OB/GYN	ICU/CCU	Combined
Pascack Valley	5,778	1,393	624	7,795
Valley	32,430	3,143	1,655	37,228
Englewood	12,671	2,188	118	14,977
HUMC	47,030	5,146	73	52,249
Holy Name	14,093	1,514	647	16,254
Bergen Regional	5,508	0	221	5,729
Total	117,716	13,240	2,867	133,823

#### 2007

	Med/Surg	OB/GYN	ICU/CCU	Combined
Pascack Valley	3,035	567	130	3,732
Valley	32,780	3,262	1,711	37,753
Englewood	13,062	2,147	132	15,341
HUMC	44,863	6,026	78	50,967
Holy Name	14,117	1,463	655	16,235
Bergen Regional	5,851	0	311	6,162
Total	113,708	13,465	3,017	130,190

#### 2008

	Med/Surg	OB/GYN	ICU/CCU	Combined
Pascack Valley	0	0	0	0
Valley	35,976	3,599	1,963	41,538
Englewood	14,554	2,189	112	16,855
HUMC	44,240	6,451	86	50,777
Holy Name	15,426	1,547	673	17,646
Bergen Regional	6,105	0	408	6,513
Total	116,301	13,786	3,242	133,329

Beginning in 2009, Valley Hospital did not include Same Day Caths and Endoscopies in its B-2 reports. Those numbers have been added back to give a proper comparison of admissions and patient days with those of the other hospitals.

#### **Admissions**

Beginning in 2009, Valley Hospital did not include Same Day Caths and Endoscopies in its B-2 reports. Those numbers have been added back to give a proper comparison of admissions and patient days with those of the other hospitals.

### 2009

	Med/Surg	OB/GYN	ICU/CCU	Combined
Pascack Valley	0	0	0	0
Valley	36,094	3,391	2,153	41,638
Englewood	13,828	2,201	135	16,164
HUMC	42,923	6,209	46	49,178
Holy Name	16,152	1,581	682	18,415
Bergen Regional	6,026	0	413	6,439
Total	115,023	13,382	3,429	131,834

#### 2010

	Med/Surg	OB/GYN	ICU/CCU	Combined
Pascack Valley	0	0	0	0
Valley	35,756	3,202	2,282	41,240
Englewood	13,901	1,966	63	15.930
HUMC	40,435	6,519	69	47,023
Holy Name	16,403	1,545	669	18,617
Bergen Regional	6,049	0	464	6,513
Total	112,544	13,232	3,547	129,323

### 2011 - 1<sup>st</sup> Quarter

	Med/Surg	OB/GYN	ICU/CCU	Combined
Pascack Valley	0	0	0	0
Valley	9,008	780	588	10,376
Englewood	3,349	501	15	3,865
HUMC	11,050	1,599	14	12,663
Holy Name	4,308	363	160	4,831
Bergen Regional	1,520	0	109	1,629
Total	29,235	3,243	886	33,364

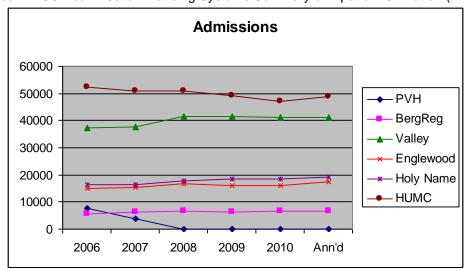
### 2011 – 2<sup>nd</sup> Quarter

2011 2 Quarto:							
	Med/Surg	Med/Surg OB/GYN		Combined			
Pascack Valley	0	0	0	0			
Valley	8,837	842	584	10,263			
Englewood	3,349	501	15	3,865			
HUMC	11,050	1,599	14	12,663			
Holy Name	4,308	363	160	4,831			
Bergen Regional	1,520	0	109	1,629			
Total	30,871	3,436	900	35,207			

Admissions Annualized (3<sup>rd,</sup> 4<sup>th</sup> Quarters 2010, 1<sup>st,</sup> 2<sup>nd</sup> Quarters 2011)

	Med/Surg	OB/GYN	ICU/CCU	Combined
Pascack Valley	0	0	0	0
Valley	35,585	3,259	2,327	41,171
Englewood	15,415	2,015	62	17,492
HUMC	42,215	6,627	76	48,918
Holy Name	16,831	1,504	681	19,016
Bergen Regional	6,109	0	462	6, 571
Total	116,155	13,405	3,608	133,168

Source: DHSS Health Care Financing Systems Summary of Inpatient Utilization (B-2)



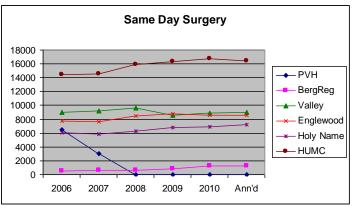
# Appendix E Same Day and Outpatient Surgery

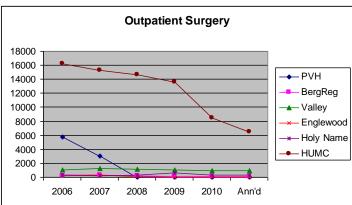
### SameDay Surgery

Hospital	2006	2007	2008	2009	2010	2011Q1	2011Q2	Ann'd
PVH	6464	3049	0	0	0	0	0	0
Bergen	549	628	619	880	1213	291	289	1228
Regional								
Valley	8963	9174	9580	8546	8853	2264	2310	9052
Englewood	7713	7645	8521	8800	8562	2091	2186	8559
Holy Name	6090	5854	6254	6781	6865	1808	1937	7241
HUMC	14390	14540	15897	16360	16704	4157	4188	16421
All	44169	40890	40871	41367	42197	10611	10910	42501

### **Outpatient Surgery**

Hospital	2006	2007	2008	2009	2010	2011Q1	2011Q2	Ann'd
PVH	5731	3023	0	0	0	0	0	0
Bergen	206	273	245	130	117	24	34	102
Regional								
Valley	1020	1247	1183	998	981	229	230	917
Englewood	344	267	53	51	44	13	9	44
Holy Name	358	253	318	632	357	89	94	352
HUMC	16223	15301	14623	13590	8452	1623	1478	6497
All	23882	20364	16422	15401	9951	1978	1845	7912





# Appendix F Population Projections

Projections based on ratio of Patient Days at HUMC to Total Population of Bergen County; Ratio of Patient Days to Population Projections taken for 2008-2010 and averaged; this average multiplied by Population Projections for 2011-2020 to reach Patient Day Projections for those years.

	Patient Days for Combined Med/Surg, OB, ICU/CCU beds	Maintained Beds	Occupancy Rate	Population projections	Beds needed to be added to bring 83% occupancy rate target
2008	201544	576	95.60%	889,900	87
2009	197423	587	92.14%	890,360	65
2010	199982	602	91.01%	890,820	58
2011 projected	199856	580 *	94.41%	891,280	80
2012 projected	199959	580 *	94.45%	891,740	80
2013 projected	200063	580 *	94.50%	892,200	80
2014 projected	200202	580 *	94.57%	892,820	81
2015 projected	200341	580 *	94.63%	893,440	81
2016 projected	200480	580 *	94.70%	894,060	82
2017 projected	200619	580 *	94.77%	894,680	82
2018 projected	200758	580 *	94.83%	895,300	83
2019 projected	200883	580 *	94.89%	895,860	83
2020 projected	201009	580 *	94.95%	896,420	84

Projections based on ratio of Patient Days calculated by most recent LOS (4.32) multiplied by Admissions projected on basis of ratio of Admissions to Bergen County Total Population Projections for 2008-2010; average of that ratio multiplied by Population Projections for 2011-2020

Patient Days | Admissions | Maintained | Occupancy | Population | Beds

	Patient Days for Combined Med/Surg, OB, ICU/CCU beds	Admissions	Maintained Beds	Occupancy Rate	Population projections	Beds needed to be added to bring 83% occupancy rate target
2008	201,544	50777	576	95.60%	889,900	87
2009	197,423	49178	587	92.14%	890,360	65
2010	199,982	47023	602	91.01%	890,820	58
2011 projected	211,870	49044	580 *	100.08%	891,280	119
2012 projected	211,979	49069	580 *	100.13%	891,740	120
2013 projected	212,089	49095	580 *	100.18%	892,200	120
2014 projected	212,236	49129	580 *	100.25%	892,820	121
2015 projected	212,383	49163	580 *	100.32%	893,440	121
2016 projected	212,531	49197	580 *	100.39%	894,060	122
2017 projected	212,678	49231	580 *	100.46%	894,680	122
2018 projected	212,826	49265	580 *	100.53%	895,300	123
2019 projected	212,959	49296	580 *	100.59%	895,860	123
2020 projected	213,092	49327	580 *	100.66%	896,420	123

<sup>\*</sup> Average of maintained beds for reported years 2006-2010 was used.