HEALTH CARE ADVISORY BOARD

Meeting Summary
February 9, 2009

MEMBERS PRESENT
Marlene Blum, Chairman
Bill Finerfrock, Vice Chairman
Rose Chu, Vice Chairman
J. Martin Lebowitz, MD
Timothy Yarboro, MD
Dave West
John Clark
Ellyn Crawford
Susan Conrad
Rosanne Rodilosso

STAFF
Sherryn Craig

GUESTS
Gloria Addo-Ayensu, MD, MPH, Health Department
JoAnne Jorgenson, Health Department
Pat Walters, Inova Health System
Liz Johnson, Inova Health System
Jennifer Siciliano, Inova Health System
Tim Sampson, Walsh, Colluci
Christine Louder, Deputy Chief, EMS
Susan Khorsand, Helping Adolescents Through Service (HATS)

The meeting was called to order by Marlene Blum at 7:46 p.m.

Approval of the Minutes

Ron Ewald's name was spelled incorrectly. The minutes from December 8, 2008 were accepted as corrected.

Inova Fairfax Hospital Special Exception Application Review

Due to the complexity of the application, public comment (scheduled at the conclusion of the applicant's presentation) was solicited at the beginning of the public hearing. Susan Khorsand, with the Helping Adolescents Through Service (HATS) program, provided comment in support of expanding Inova Fairfax Hospital. Ms. Khorsand has been involved with Inova Fairfax Hospital for Children for 15 years as a volunteer working with Kurdish refugees. She expressed appreciation for the care and professionalism extended to the families of sick and injured children. She commented on the age of the building, that the intentions of the staff are limited by space, and that most rooms are semi-private. Because the rooms are semi-private, low income children experience fewer social supports (e.g. stuffed animals, balloons, cards). HATS seeks to equalize these disparities. Ms. Khorsand concluded her remarks by stating she had traveled to 23

children's hospitals across the country and a stronger infrastructure is needed to improve children's health.

Tim Sampson provided additional background on Inova's special exception (SE) application. Inova Fairfax Hospital occupies 60 acres and has a Floor Area Ratio (FAR) of 0.7, meaning Inova has 300,000 square feet (from 1.8 million total square feet) that can be developed. The Comprehensive Plan provides the option of increasing development capacity to 0.8 FAR on the condition that Inova coordinates its development with the adjoining County and Inova owned properties—the Woodburn Center for Community Mental Health and Willow Oaks. The inclusion of these properties will support additional development capacity. Inova is also seeking an amendment to the Comprehensive Plan to increase its FAR from 0.7 to 1.0. Looking beyond 2030, this amendment would allow Inova to expand its campus southward in order to meet regional health care needs.

Marlene Blum reminded members that the HCAB's purview extends only to health care issues and matters related to the Special Exception process. She introduced Pat Walters who provided information on Inova's SE application. The main focus of the project, as characterized by Mr. Walters, is the replacement of patient beds and tower space.

In the proposal, Inova is seeking to build an 826,000 square foot, eleven story Women's Hospital Patient Tower, with 566 acute care beds, which includes 206 obstetric (OB) and 360 medical surgical (med/surg) beds, plus 80 neonatal intensive care unit (NICU) beds. The State Health Commissioner issued a Certificate of Need (CON) on December 3, 2008, approving the financing and physical plant design of the new patient tower, but denying Inova's request for additional licensed beds. Liz Johnson, Inova's Strategic Planner, said that Inova was only approved for 876 beds, a net increase of 43.

Inova is seeking a net increase of 193 licensed beds, from 833 to 1,026: 91 will be needed for the new Women's Hospital Patient Tower and 102 will be directed to future needs. Bill Finerfrock noted that Inova was requesting 924 beds to relocate the Women's and Infant's services to the new tower. Requesting additional beds beyond the new tower specifications means Inova could circumvent the special exception process. Approving the request for 1,026 beds would bind the HCAB and the Board of Supervisors to a projection that may not be in keeping with future needs.

Ms. Blum asked Mr. Walters to clarify the subject of the special exception application. While Inova is planning to renovate the existing Tower Building and develop the current Women's and Children's Building into a dedicated pediatric facility, the special exception application pertains exclusively to the construction of the Women's Hospital Patient Tower. This will also include all the site work associated with the installation of a new boulevard designed to enhance campus access and way-finding, plus site utilities and the projects required to free up the site for the new building.

The lower levels of the new tower building would include the Birthing Center (Labor and Delivery rooms and C-Section rooms), Neonatal Intensive Care Unit (NICU), High Risk Pregnancy Unit, Family Centered Care (FCC), Postpartum Beds, Special Care OB Beds,

Women's Surgical and Oncology Beds, Antenatal Testing Center, Women's outpatient special care unit, Surgical suite dedicated to Gynecologic surgery and Breast procedures, and Women's Imaging. The upper five levels of the building will house adult med/surg, intensive care, and intermediate beds, including nursing units dedicated to Trauma and surgical critical care, medical intensive care, Neurosciences, Orthopedics, Oncology, and Surgery. Nonclinical space will include a new Central Energy Plant below grade, Lobby, Retail, Volunteers, and Registration on the Ground Floor and Administration, Educational/Conference space, Medical Staff/Residency support, and Support Services (i.e. materials management, satellite kitchen and sterile processing).

The construction of a new patient tower will address two challenges. The first is the urgent need to replace an aging building. The main patient care tower was built in 1961. The building systems are inadequate (e.g. air handling, electrical power, elevators, etc.) and need to be replaced. Rooms are semi-private and undersized. The Virginia building code requires that newly constructed critical care, med/surg, and OB rooms are private and meet minimum square-feet-per-patient ratios. The proposed expansion will be designed to meet or exceed the minimum requirements defined in the Virginia Department of Health, Center for Quality Health Care Services and Consumer Protection State Medical Facilities Plan (SMFP), 2006 American Institute of Architects (AIA) Guidelines for the Design of Health Care Facilities, the 2006 International Building Code (IBC), and the National Fire Protection Association (NFPA) 101—Life Safety Code (LSC).

Dr. Lebowitz agreed that the evidence supports the move away from semi-private rooms, arguing that cohabitation increases the transmission risk of certain infections, such as MRSA. Mr. Walters also said patient preference is driving the shift to private rooms. He said Inova's OB and elective surgery lines have lost business to facilities offering private rooms. Mr. Walters conceded that the costs of care would increase, but would be offset by the increase in revenue.

Second, the hospital operates above optimal occupancy levels as defined in the State Medical Facilities Planning Guidelines. Mr. Walters commented that Inova Fairfax Hospital has the fourth largest OB program in the country and remains the largest and busiest hospital in Virginia. The region's growing and aging population is projected to strain the hospital's ability to meet an increasing demand for services. The Women's and NICU services have already outgrown the facility capacity in the building that opened in 1992. The women's center was designed to accommodate 7,500 labor and deliveries (L&Ds) a year. In 2007, there were 13,000 L&Ds, substantially increasing utilization above what was anticipated. The NICU, designed for 47 infant stations, presently houses over 80 in extremely crowded conditions.

According to Ms. Johnson, the new Birthing Center would enhance Inova's OB capacity, increasing the number of Labor and Delivery rooms from 22 to 32, the number of C-section rooms from 3 to 6, and the number of Women's Operating Rooms (ORs) from 5 to 8. With respect to making the NICU rooms private, JoAnne Jorgenson asked if Inova's nursing rate would increase. Mr. Walters replied that he did not think the rate would be affected by the new NICU rooms, but the added med/surg capacity would increase the number of clinical staff.

Given the existing facilities, Mr. Walters said Inova cannot accommodate the women's program, nor can it grow the children's program. Relocating the women's programs out of the Women and Children's Building into the new tower will free up the existing tower. Upon renovating the existing tower, Inova will relocate its mental health facilities (currently housed in the 1950s building) to the top floor and redevelop the children's program into a comprehensive children's hospital. Mr. Walters said that beyond the additional beds requested for the new patient tower, Inova would be looking to increase the number of mental health beds. Dr. Lebowitz asked if there was a plan to move children's surgery into the renovated tower. Mr. Walters said that Inova is considering building a children's surgical suite during the renovations.

Ms. Blum asked Mr. Walters about the cost of the project. Mr. Walters said it would take almost $2.5 billion to complete the entire expansion and renovation, assuming continued financial stability. However, issues with debt markets, constrictions of debt availability, the deterioration of investment portfolios, and a 20 percent increase in bad debt and charity care may erode the reliability of the $2.5 billion price tag.

Asked about the cost of the Women's and Patient Hospital Tower, Mr. Walters said the project was estimated at $950 million. This figure includes the tower, the boulevard and associated proffers (e.g. widening Gallows and Woodburn Roads, coordinating wayfinding with the construction of the High Occupancy Toll (HOT) Lanes, and reconfiguring the Willow Oaks and Woodburn properties).

Mr. Walters said Inova will seek fixed-rate tax-exempt bonds in two drops. Between $100 and $200 million will be sought over the next six months for site and infrastructure improvements. A second take will be scheduled in 2-3 years to shore up the construction of the building. In total, 40 percent (approximately $375 million) of the project will be paid for with bond financing; the remaining balance (approximately $575 million) will be financed from accumulated reserves, which currently amount to $1.6 billion.

Mr. Walters was asked if Inova planned to delay other capital projects. To address the costs of the project and the uncertainty of today's markets, Inova will indeed have to reprioritize its schedule of capital improvements. The expansion of the Inova Fairfax Hospital campus remains a top priority, and Inova will delay, and possibly suspend, other capital improvements. Mr. Walters was unable to provide further information, but has agreed to report back to the HCAB about the impact this may have on the community.

Inova's projected timeline for completing the expansion is September 2013. The first 8-9 months of the 41-month project will focus on restructuring access to the site: reorganizing traffic flow, parking, and entrances, clearing the main entrance to the hospital, building temporary entrances and rerouting traffic flow, and moving major utilities. Major construction will begin in June 2010 and take four years to complete. Renovations to the rest of the campus will take place once the new patient tower is constructed.

Dr. Yarborough asked about the need for additional parking. Mr. Walters said Inova has not ruled out the possibility of building a parking garage at the front of the campus. However, based

on several parking studies, Inova feels that the existing parking facilities will accommodate any increase in staff and patient volumes.

Susan Conrad made a motion to recommend approval of Inova's special exception application to expand Inova Fairfax Hospital. John Clark seconded the motion.

During discussion, Mr. Finerfrock agreed with the underlying need to renovate the hospital, but disagreed with the request to increase bed capacity to 1,026. Mr. Finerfrock said he was not comfortable making a decision that ties the hands of the HCAB and the BOS for the next 10-15 years.

Mr. Finerfrock amended the motion to specify that the HCAB recommend that the BOS approve Inova's special exception application to increase bed capacity to 924, the number needed for the new Women's Hospital Patient Tower. Ms. Conrad seconded the motion.

The HCAB voted 10-1 in favor of the amended motion.

The vote on the main motion, as amended, was unanimous.

Emergency Medical Services (EMS) Presentation

Deputy Chief Christine Louder presented EMS quality management data. She began her presentation with cardiac arrest data, since this information is often solicited. Each year, the County receives an estimated 97,000 calls to 911. The majority of these calls—approximately 65,000—are EMS calls. 366 of these cases were people in cardiac arrest.

The ability of a patient in cardiac arrest to have return of spontaneous circulation is dependent on a number of variables. Patients who had a witnessed cardiac arrest as well as present with shockable rhythm (V-Fib or V-Tach) upon the arrival of EMS, are the population of patients in which lifesaving interventions are the most significant. This specific population is the standard accepted as a measure of system performance. 44.3% of patients with bystander witnessed arrest and presented with shockable rhythm upon the arrival of EMS, had a successful return of spontaneous circulation upon arrival at the hospital.

Because of the Health Insurance Portability and Accountability Act (HIPAA), EMS had difficulty securing end point data on these patients. There was considerable discussion about the use of HIPAA to preclude data access. Dr. Lebowitz suggested getting in touch with one of the quality directors to coordinate data exchange. He suggested the names of Dr. John Moynihan or Terri Sher. Ms. Blum suggested that EMS contact Supervisor Gross and ask her to facilitate the request for data. JoAnne Jorgenson also offered help in working with Inova Hospital. Dr. Lebowitz argued that data on the use of Automated External Defibrillators (AEDs) may be useful to secure additional funding.

Dr. Yarborough suggested that, in addition to the cardiac arrest data, EMS drill down to individual station responses and correlate response times with cardiac arrest outcomes.

Dr. Lebowitz asked if EMS was any closer to having its cardiac machines connected to the hospitals for analysis. Chief Louder said that EMS would welcome the opportunity for more physician online directives (PODs); however, it is difficult to reach a physician via telephone. Therefore, EMS has had to write its own protocols requiring training for its own people. Dr. Yarborough suggested that EMS work with the electronic intensive care unit (eICU).

Chief Louder concluded her presentation with a review of acute coronary syndrome, specifically ST-Segment Elevation (ACS STEMI). Patient care reports were manually reviewed during the months of July, August, and September. All patients meeting the defined ACS criteria, defined as chief complaints of chest pain/discomfort, dysrhythmias, palpitations, and/or heart problems. Chest pains associated with motor vehicle trauma were excluded. All patients meeting the inclusion criteria were entered into several sections of a database,--the first section all call information regarding the incident, date of service, unit, patient age, gender and chief complaint were entered. The second section was only completed for patients meeting the STEMI criteria. The third section regarding transport destination was completed for all patients meeting the ACS criteria. Data concerning time on scene was also collected for all calls with STEMI identified.

In the assessment and treatment of STEMI patients, system providers were assessing and transporting patients to the proper destinations consistently, although additional training has been identified. The protocol for STEMI patients means that they must be transported to a percutaneous transluminal coronary angioplasty (PTCA) capable center. Inova Alexandria, Virginia Hospital Center, and Inova Fairfax are the only PTCA capable centers in the region. Chief Louder said that Reston Hospital is applying for a cardiac cath center, but since they cannot do surgery, patients will be flown to Washington Hospital Center.

Besides STEMI transport requirements, providers consistently applied most of the data elements over 90% of the time. The one area that is marked for improvement is the identification in the narrative in which leads STEMI applies. The new electronic patient care recording method (ePCR) has fields where the interpretation of each lead can be identified, therefore increasing the accuracy and ease in which the proper treatment and assessment of STEMI patients can be performed.

When investigating the treatment of STEMI patients based on the types of medications administered, the reasons for withholding medications was interesting because more than 50% of the time aspirin was withheld due to patient taking a dose before the arrival of EMS. It was also interesting to note that the frequency in which morphine was administered was small even though pain was reported as subsiding with the administration of Nitro only 24% of the time.

An article on quality improvement, published in Fire & Rescue's *Line Copy*, will be distributed in the March meeting packet.

Other Business

Marlene Blum reminded HCAB members that there will be three meetings in March to discuss the FY10 County Budget:

Monday, March 2; 7:30 pm; Conference Room 10, Government Center
Monday, March 9; 7:30 pm; Conference Room 3, Health Department
Monday, March 23, 7:30 pm; Conference Room 10, Government Center

Dr. Lebowitz provided information on Inova Health System's Annual Ethics Symposium. This year's topic is "Talking with Patients About end of Life Issues: Balancing Honesty, Compassion and Hope." The symposium is scheduled for Tuesday, April 14, 5:45-8:00 pm in the Inova Fairfax Hospital, Cyrus Vesuna Auditorium Physicians Conference Center. You can register one of three ways:

By Phone:	*By Fax:*	*By Mail*
703-750-880	703-776-2046	Office of Continuing Medical Education Attn: Ethics Symposium Physicians Conference Center Falls Church, VA 22042-3300

A copy of the registration form will be included in the March 23 meeting packet.

Dave West, at the request of Supervisor McKay, asked the HCAB to consider taking a position on Governor Kaine's proposal to eliminate funding to the Health Systems Agencies (HSAs). Ms. Blum reminded members that Boards, Authorities, and Commissions cannot take a position on legislation that is different from the County's legislative program. However, if a private individual chooses to, he or she can take a position on legislation, but it cannot involve the imprimatur of the HCAB.

There being no further business, the meeting adjourned at 10:28 p.m.