

Visit to the National Hospital of Pediatrics- July/August 2006

Hospital Background

Website: <http://www.benhviennhitu.org.vn>

The National Hospital of Pediatrics (NHP) was initially established in 1969 as the Institute for the Protection of Children's Health. It had also been known as the Vietnam-Sweden Children's Hospital and the Olof Palmer Pediatric Institute prior to adopting its current name in 1997.

In 1972, the National Hospital of Pediatrics was heavily damaged by bombing raids. With aid from Swedish citizens and the Vietnamese government, the NHP was able to begin rebuilding in 1975 and was active again by 1981. Currently, the NHP employs 823 staff members, with 100-200 physicians.

The National Hospital of Pediatrics was established to follow the model of the pediatric department in the Bach Mai General Hospital of Hanoi. The Ministry of Health designated the NHP as the leading pediatric department in all of Vietnam. The NHP is the coordinator and the top center for pediatric care in the country.

The NHP sees on average 24,000 in-patients and 190,000 out-patients per year. Each year, the NHP also performs 5000 major surgical operations, including neurosurgery, thoracic surgery, cardiac surgery, urogenital surgery, gastrointestinal surgery, and reconstructive and orthopedic surgery. The practice of laparoscopy was initiated in 1977, and has allowed the execution of such complicated surgeries as inflammatory bowel surgery/hernia and heart murmurs. The National Hospital of Pediatrics is the leading research center for pediatrics in the country. The NHP carries out research at a basic level, a ministry level and a government level every year. (Source: National Hospital of Pediatrics Website)

Hospital Information and Issues

The NHP currently accepts approximately 1,000 new patients each day. According to Dr. Hue, the hospital is vastly overcrowded and is forced to accept many more patients than the hospital can comfortably accommodate. The maternity ward, with only 30 beds, has on average 100 patients. One wing of the hospital was formerly dedicated as a short-term residence for families with inpatient children. Now, due to overcrowding, the hospital has an overflow of families in the hallways, which are now makeshift waiting rooms.

Primary ailments of patients:

For a weekend period in March 2006, 4180 patients were admitted or treated.

Of those patients, 700 reported gastrointestinal problems, 700 neonatal cases, 900 surgical cases, 440 respiratory cases (bronchitis, pneumonia), 400 neurology cases (meningitis, encephalitis). Many of these patients could have easily been treated at the district, commune, or provincial level had the doctors/nurses provided preventative care or had the resources to diagnose such illnesses (i.e. training).

A friend told me the overcrowding is primarily due to an understanding by many Vietnamese that the services at the lower level are of much poorer quality than those at the central hospitals. Therefore, it oftentimes doesn't matter to the patients if the services are provided at the hospital. They will spend many more resources in terms of time and money travelling to the central hospitals to be seen by doctors with more experience rather than a nurse or healthcare worker with little training in the communes.

Discretion with patient information is also very lax throughout the hospital system as a whole. I heard a story from another friend about waiting with her younger brother in the outpatient clinic. When a patient was called in to see the doctor, the nurse called out the name of the illness rather than the patient's name. While she was waiting the nurse called out the name of some STD and the entire waiting room went silent. Then, from the corner of the room, an obviously embarrassed young man came forward.

Finally, cleanliness, sanitation, and overcrowding are issues at the hospital. While relative care seems to be taken by the nurses and physicians, the sheer number of people and lack of resources create considerably lower standards. One thing I found particularly surprising was the number of physicians who seem to smoke rather heavily, not necessarily in patient rooms but in open-air hallways that lead to examination rooms.

Computing Services at NHP

The NHP currently owns 150 computers. Ninety are connected to LAN. The others are all wireless. Each department has a few computers, with 25 each dedicated to the outpatient clinic and administrative offices. The hospital has three wireless access points throughout the hospital- one each in the administrative area, patient clinic, and IT office. However, they only provide a coverage area of 15m, and is often unreliable.

The hospital library also has four computers in its medical library for doctors and medical staff. However, the library is only open during working hours, so doctors are often unable to access this resource. RCHI has funded internet access for the library only for 3 years. This is the final year of funding.

The internet service provider for the hospital was formerly FPT, a private Vietnamese company. The hospital was unhappy with their service, so they switched to VNPT, a government-run internet provider and the leader in internet services in Vietnam.

The hospital has an electronic medical record powered by Medisoft T.H.I.S (2003) which was converted into Vietnamese by a local company called Links Co. Limited, as the program is no longer under copyright. This medical record system is currently used for patient billing and financial services only, although the hospital would like to upgrade to a more comprehensive medical records system soon.

Other information about the Medisoft Electronic Medical record:

Font Unicode

Healthcare Level 7

XML

Oracle

Microsoft Vision net

Website: www.toancausoft.com.vn

Company email: Email: links@toancausoft.com.vn

In addition to the medical records system, there is a lab record management database the hospital uses called LABCONN. It was created by a Vietnamese company called LABSoft based in Hanoi. Some

lab tests are recorded directly into the database as the system is connected to some of the machines in the lab. Other lab results are recorded into the database by hand by technicians in the lab. Mr. Lam, the Sales Manager for LABCONN was in the lab when I visited and is planning on emailing us a presentation about his company and software.

A Fiber-optic telecommunications system is also currently in place in conjunction with Tokyo and Melbourne hospitals. Videoconferencing and consultation takes place between these hospitals on a regular basis.

NHP Patient Records- New and Transfer Patients

When a patient enters the NHP for the first time, they go to an information desk to buy a patient diagnosis booklet for 1000dong. They are then triaged to different departments depending on their illness. For each department, there is a financial office station which takes basic medical information (I have a very similar paper copy I am sending back). This includes name, age, address, primary ailment and payer status. They are then assigned an identification number for the hospital which will be included in all labs and records. This is the same number printed at the top of their patient diagnosis booklet. The Vietnamese do not have the equivalent of a SSN, so the individual hospital identification number is the closest option for distinguishing patients, yet obviously presents many difficulties because it would be different at other hospitals.

After basic information is entered into the Medisoft program, each individual is required to pay for the ability to see a physician. Exceptions include children 6 years or younger, those with insurance, or those who have received a waiver for care free of charge(See Vietnamese healthcare system). The fee to receive a physician examination is anywhere from 15,000 to 30,000d. Once payment has been received, patients receive a card identifying a waiting area within each specialty (immunology, neonatal care, etc.). From this point forward, records are kept in primarily paper form. When a patient is called to the doctor's office, they present the card from the financial office with their waiting number and a record of their name, address, age and primary ailment are recorded in a ledger at the nurses station within each department. After the doctor has examined the patient, the diagnosis, medication, and follow-up are recorded on a paper record kept for the hospital in the records filing room. Each patient keeps the booklet they received from financial services where the physician or nurse will record the diagnosis, medication or required treatment, how to use the drugs or perform a treatment, and finally when to return to the hospital for a follow-up. The patient is then required to bring this form back with them to the NHP or a provincial/district hospital where they will receive follow-up care. This system puts a lot of pressure on the patient to keep track of their own records.

Before they leave, the patient must go to a "check-out" counter where a nurse will record some of the paper medical record and vital signs into the system. I believe the patient also pays at this desk if any special procedures were performed during the examination.

If, after an initial examination, the patient requires bloodwork, x-rays, or a CT scan, they will then be sent from this counter to a different waiting area and pay another fee to the financial desk in that department. After blood is drawn, it is taken next door to a lab where they perform the bloodwork. The results are recorded in the Medisoft database and a paper copy of the results is returned to the patient. I think they then pay another fee to have a doctor consultation/follow-up in the clinic.

(This is typically how the outpatient, non-emergency services operate at the NHP.)

For emergency or transfer patients to the NHP, the system is slightly different. A transfer patient to the hospital will oftentimes arrive by ambulance from another provincial or district hospital and go directly to the emergency area of the hospital. Other times, emergency patients will arrive on their own, bypassing the district or provincial level services. Almost always, the NHP is unaware that a patient is being transferred from a lower level hospital. According to Dr. Hai, the chief of the emergency department, surrounding hospitals do not contact the NHP for consultation. Patients are just transferred.

Also, little information arrives with the patient. On some occasions, the primary doctor at the provincial or district hospital will send along a copy of the medical record, but most of the time the doctor must go through the entire examination process all over again.

In the emergency waiting area, each patient must have a form completed regarding their previous care (I have a paper copy of the form in Vietnamese).

Following is an English translation:

Name: Age:

Address:

Mode of transportation to hospital:

Ambulance

Taxi

Motorbike

Bus

Bicycle

Foot

Train

Who is filling out this form for you?

Doctor Nurse Other

(If the patient arrives by ambulance, the primary doctor/nurse fills out the form, otherwise it is completed by a family member)

Where did you arrive from?

Province District Commune Other

Type of Previous Treatment?

Oxygen

Ventilation

Intubation

Medication

Fluids

Condition of Patient before transport?

Good Medium Poor

Communication with NHP prior to transport?

Yes No (Almost always no)

Complications during transport?

Yes No

If yes, Intervention?

Yes No (Sometimes they include the type of intervention such as ventilation)

Patient condition upon arrival?

1 2 3 4 5

(1=Severe, 5=Stable)

After the form is completed and payment methods have been determined, the patient is initially examined by the emergency department and admitted to the emergency room or they are triaged to other departments such as neurology, surgery or the outpatient clinic. Again, all departments provide each patient with a booklet including diagnosis, medication and follow-up information when they leave. All labs and patient records are in hard copy.

NHP Medical Library Services and Capabilities (Thursday)

Vietnam Cellular Network Capabilities

The cellular network in Vietnam operates on a GSM 900/1800. The two main rival companies are VinaPhone and MobiPhone. A cell phone customer can buy access to a cell network in one of two ways. First, a prepaid SIM card from either provider. A SIM card with additional minutes can be purchased for 250,000dong (\$16US). For calls within Vietnam during the day, the cost is 1,400dong every 30seconds. In the evenings, the cost is 980 dong every 30 seconds. This is comparable between cell phone providers. This type of prepaid card is typically used to access only cellular phone calls and sms. Access to the internet through a smartphone is very expensive using this method. Therefore, people with a smartphone usually just have a prepaid card and access the internet through wireless hotspots at work or in cafes.

The second option for cellphone service is to purchase a monthly plan, the better option if wanting regular and more reliable access to the internet throughout Vietnam. GPRS services on pda or smartphone devices cost 45 dong/kb through Vinaphone and 50 dong/kb through Mobiphone. Many times access to the internet through this service is restricted to those with a contract.

Contact information:

www.mobiphone.com.vn

www.vinaphone.com.vn

Vietnamese Healthcare System

The Ministry of Health has allocated approximately 4% of the total budget for healthcare every year. Of this money, the NHP receives between \$5-6 million US dollars for operation. This is far from

enough to successfully provide services and continues maintenance within the facility. As a result, the NHP has few resources in the budget for improvements, relying primarily on outside donors to do so.

The Vietnamese healthcare system is divided into four primary levels- Central, provincial, district, and commune. While ideally patients would first go to a local facility and then be transferred to the regional and Central hospitals depending on the need and severity of the illness, patients oftentimes bypass the local hospitals and go directly to a central facility such as the NHP. This has led to severe overcrowding at the central hospitals, as they are required to accept all patients who check-in. The central hospitals are then spending the majority of their time treating patients who could easily be treated at local facilities. Therefore, the central hospitals that have the most advanced technologies, facilities, and specialized staff are spending the majority of their time and resources on these patients.

Additionally, many patients that are transferred to the Central facilities are already too sick for additional treatment. Many of the illnesses could have been highly treatable and resulted in decreased severity if local and regional healthcare providers had taken preventative measures. This is oftentimes not the case due to a lack of training and/or resources. This is an area where the Smartphone technology would work well to improve conditions in training and information sharing.

According to a non-physician who has worked in the medical system, Vietnam does not currently have the US equivalent of HIPPA. While there may be rules on the books regarding the sharing of patient information, the flow of this information is usually at the discretion of the doctor (or due to their heavy workload, the nursing staff). Therefore, patient information is usually available upon request, normally for family members or even other doctors outside of the hospital who would request the information. Obviously, the doctors and nursing staff are more likely to release records if you have a legitimate reason to access the information, but this doesn't necessarily have to be the case.

One exception to patient information sharing is HIV/AIDS testing which is performed and recorded anonymously.

Payment for Medical Services

Each child under the age of 6 receives healthcare at a public hospital free of charge. All others are required to pay for services upon treatment. The insurance system I'm a bit shaky on at this moment, and will find out more soon.

Doctors who work for the government are, as a whole, paid very poorly in Vietnam. One estimate put an average doctor's salary at about \$100 dollars per month, the same as any other profession coming out of university despite six years of training. As they are underpaid and overworked, patients oftentimes have to take matters into their own hands in order to secure "good service". On average, one would have to pay approximately 50,000 to 100,000dong (US\$3-6) depending on the severity of the disease and level of care and attention you want the doctor to provide. It is also important for a patient to be sure not to forget the "physician compensation" because it could permanently hinder future services to the patient. For example, a vietnamese friend told me a friend once forgot to give the doctor extra compensation for treating a minor injury. Later that year, his wife came to the same doctor with severe lacerations and a broken arm and the doctor was less than attentive, poorly sewing the wounds and failing to numb the area beforehand. This happened even though the man remembered to compensate the doctor this time.

(More on this Friday)

Pharmaceutical Services

The NHP has its own pharmacy for prescription drugs as well as a drug store for patients. The pharmacy manages prescriptions for both in-patient and out-patient services. Using Medisoft, the nurse on-call in each in-patient department theoretically send a mass patient drug order to the pharmacy each morning. The drugs are then delivered from the pharmacy to each respective department.

The drug store is for both hospital and patient use, carrying more basic medications such as aspirin or cold medicine. While healthcare is free for children under six, everyone is still required to pay for medications. For the NHP, physicians almost always send prescription orders in the out-patient clinic to the NHP pharmacy. Sometimes a doctor may "suggest" that a patient pick up a prescription at another pharmacy, where they oftentimes will receive a commission from that store. While this does happen, it is illegal to do so in Vietnam and the doctor will receive a large fine from the MOH if it is discovered.

While one route to obtain prescription drugs is through a trip to the doctor's office, many times a person can obtain the same drug without a prescription as the pharmacies (particularly those not affiliated with a hospital) are very laid back with prescriptions.

Vietnam currently has many drug suppliers. There are approximately 69 suppliers within Vietnam as well as almost all international drug companies. While the national drug companies are cheaper, they have questionable quality and safety.

Epidemiological Surveillance

On September 16, 2005, the US ambassador to Vietnam, Michael Marine, said the United States would give Vietnam—the country hit hardest by H5N1 avian flu—\$2.5 million over the next 5 years for flu surveillance. The aid will begin with a \$500,000 grant from the Centers for Disease Control and Prevention (CDC) to Vietnam's National Institute of Hygiene and Epidemiology.

The NHP had the first confirmed case of avian flu in Vietnam in 2005. By the end of the outbreak the NHP had 40 confirmed cases of avian flu, half of which were fatal. (Dr. Hai)

English Language Services and Doctor Training at the Hospital

English language training courses are currently available for interested in physicians, nurses and other hospital staff. Two primary teachers exist. The first is the US ambassador's wife, who attends the hospital for lessons every Friday. Secondly, Dr. Amy Grey, from the RCHI, works individually with interested doctors and staff.

Dr. Amy Grey also provides some training courses for doctors. (more later)