Margaret May Blackwell Travel Study Fellowship.

The nurse's role in promoting health of vulnerable children (0 to 5 yr olds) through coordinated care.

2007

Scholarship report

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Executive Summary

The objectives for this study were:

- To explore the provision of emergency paediatric care internationally
- To explore the concept of child orientated / family centered care and how this can be achieved
- To explore health promotion projects and initiatives in emergency departments
- To explore access to care, for vulnerable children
- To explore follow up processes, liaison with inpatient units, other agencies, primary health care and tertiary links
- To explore provision of care for children with chronic illness and those that are technologically dependant
- To gain insight into the role of paediatric nurse specialist / nurse practitioner roles
- To explore educational opportunities and competencies for nurses working with children in acute care areas, in particular emergency departments.
Children are not little adults.

"Paediatric emergency - 2 words that cause even the most experienced emergency nurse to develop a knot in her or his stomach" (Sheehy, 1994). Children requiring emergency care have unique and special physical and psychological needs, which require special equipment, specific knowledge of differing stages of child development and an environment suited to these needs. The unique attributes of paediatric emergencies are influenced by the growing anatomy, immature physiology and variable developmental achievements of children.

Children account for approximately 25% to 30% of all presentations to emergency departments (Eckle, Haley and Baker 1998, Sheehy 2003, Evans 1999). Data from the UK suggests that in one year half of the populations of infants less than 12 months old will attend an ED along with a quarter of the population of older children (Department of Health, 2004). The majority of these child presentations are unexpected or unplanned. Internationally children aged less than 5 years and in particular those aged less than 2 years predominate A & E medical attendances. Many of these children are cared for in general emergency departments amongst adults with a variety of illness or injury, mental health patients, abusive and intoxicated patients.

Review of the literature has identified some recurring themes in relation to the care and management of children in emergency departments. These themes include standards of care for children, policies, reasons why children are seen in emergency departments, parents and child’s perception of their needs, equipment, facilities and environment, professional education requirements, family centred care, prevention of illness and injury and data collection.

In paediatric emergency care, as knowledge and technology have become more advanced, access to systems of care has become increasingly more important in saving
the lives of children (Henderson, 1994). Ample evidence exists that preparation, training, and access to specialized care make a difference in the mortality and morbidity of ill and injured pediatric patients (Henderson, 2002).

**New Zealand Perspective**

*Child Health Strategy*

The Child health strategy identified some priority groups in relation to health and wellbeing (Ministry of Health, 1998). These include:

- Tamariki Maori
- Pacific Children
- Children with high health and disability needs
- Children from families with multiple social and economic disadvantages.

There were certain principles that the strategy identified also. These include:

- Children / tamariki should have their needs treated as paramount.
- Child health and disability support service staff should work together, with each other, and with staff from other sectors, to benefit the child.

Health and disability support services should be:

- Focused on the child /tamariki and their family and whanau
- Provided to achieve equity
- Based on international best practice, research and education
- Regularly monitored and evaluated
- Culturally safe, culturally acceptable and value diversity

The child health strategy also suggested some future directions for child health care. These include:

- A greater focus on health promotion, prevention and early intervention.
- Interventions to promote health and prevent disease work alongside services to treat ill health.
- Better coordination
- Develop a national child health information strategy.
- Child health workforce development. Children / tamariki have special needs which reflect their developmental stages and family circumstances. Those working with children need and understanding of children’s special needs and an ability to respond to them appropriately.
- Improved child health evaluation and research
- Leadership in child health

**Hawkes Bay**

In Hawkes Bay, of the 20% of ED presentations that are children, 17% are children aged less than 1 year, 35% are aged between 1 to 4 years, 22% are aged 5 to 9 years and a quarter are aged 10 to 14 years. Therefore over half of the paediatric presentations are aged less than 5 years.

**Paediatric presentations by age**

![Paediatric presentations by age](image)

**Ethnicity**

The proportion of persons that identify themselves Maori in HB is approximately 25% which is higher than the overall New Zealand population which is 15% (Statistics New Zealand, 2006). Maori represent nearly half (42%) of the total paediatric presentations. In the 0 to 1 years, 53% of the ED paediatric presentations are Maori. (Albertyn, 2007). Maori tend to have lower levels of socioeconomic status and poorer levels of health
generally (Hawkes Bay District Health Board, 2005; Ministry of Health, 2001). Research indicates the small and increasing Pacific Islands people’s population also has lower levels of socioeconomic status and poorer levels of health (Hawkes Bay District Health Board, 2005). Lower socioeconomic status is also associated with reduced access to private transport, and telephones, reducing their ability to access health and other services (Ministry of social development, 2006).

Deprivation

Level of deprivation is indicator of socioeconomic status. New Zealand Index of Deprivation 1996 (NZDe96) is one measure of deprivation. It is a relative measure and refers to the average level of deprivation of many small residential areas and is based on the population living in that area. The highest scores of 9 and 10 represent the areas of highest deprivation.

Hawke’s Bay has a population of higher than average deprivation score. Children from areas that have levels of high deprivation are identified as having higher health needs (Hawkes Bay District Health Board, 2005). Over half of the presentations to HB ED are from households with decile scores of 9 or 10 (Albertyn, 2007). It is recognized that
children from families with socioeconomic disadvantage are more likely to have poor health outcomes (Ministry of Health, 1998)

_Total attendances by NZ Decile Ranking_

This data suggest that the emergency department can play a vital role in the care of children aged less than 5 and in coordination of ongoing care. The focus of my visits was around emergency care but I was able to observe and discuss many other areas as well.

**Children's Hospital Los Angeles**

Children’s Hospital Los Angeles, emergency department treats more than 62,000 patients a year, of which approximately 11,000 are admitted. Fifty percent of admissions are children under four years of age.

It is designated as a level 1 paediatric trauma centre by the County EMS agency and as a result patients go there for expert trauma care from throughout Southern California. The
trauma centre treats more than 1,500 trauma patients per year. Within the department is an area known as Kids Care where patients with acute but non-emergency conditions (such as the flu, ear infections or other minor diseases) can receive care. Other services include emergency child abuse evaluations and referral service for physicians in other hospitals.

A new hospital is planned for 2008 which will feature more private rooms for patients as well as a Chase Place Playroom for patients and their siblings.

Education

Orientation and education within the department was impressive. While they did have new graduates they primarily employed nurses with at least 2 years experience preferably with paediatrics. All nurses were expected to complete the paediatric life support course (PALS) and the emergency nurses paediatric course (ENPC). They are now moving into completing the trauma nurses core course (TNCC). Orientation includes a 4 day didactic course, 4 weeks preceptor orientation during which they spend some time in other departments getting an idea of the overall concept of paediatric care. This meant they had knowledge of referral agents and what was offered. Nurses that wish to advance their practice must be involved and complete some project work, promote nursing knowledge and show nursing expertise.

The hospital has made a major commitment to professional development. Ongoing education is fully funded and pay increases are offered for credentialing, so given the choice between the beach and ongoing education..... education is being given a fair chance of winning.

For new graduates that wish to work with children they can complete the RN Residency in Pediatrics

RNResidency@chla.ucla.edu

Program was created in 1999 and provides tools and experiences needed by new graduates to become successful pediatric nurses. It is a paid 22 week program that provides new graduates with a comprehensive clinical and learning experience to prepare them for work in an acute environment. It is recognized in the US as an excellent model for pediatric nursing programs.
Ongoing education offered through organizations such as the AANC includes registration as a critical care nurse, certified paediatric nurse, certified emergency nurse. The certified emergency nurse is primarily an adult course but a paediatric CEN course is coming out soon and this is exciting as it acknowledges that paediatric care is a specialty of emergency care. Other tools for education include online courses such as WebInserv® e-learning. An outline of courses for paediatric nurses and emergency nurses is attached. (Appendix 1)

Policies and guidelines

Discussion around the issue of policies and guidelines suggested that these were found very useful to ensure consistency of care and samples were offered for my use.

Health promotion

Noticeable there was very little in regard to information posted around the waiting room and I discussed this with Inge. While this was felt an important factor she explained it was really a lack of resource and time factor.

Research

As part of her master's program one of the staff was about to start a project looking at why children came to the emergency department in preference to a primary health care facility. A questionnaire was to be provided to parents to complete during her stay in ED. I plan to keep in contact with the researcher to see how this progresses. I plan to keep in touch to see the outcomes of this.

EDAP

Within the Los Angeles County Emergency Medical System, a number of emergency departments have gained status as Emergency Departments Approved for Paediatrics (EDAP). As part of this accreditation, emergency departments must have a paediatric liaison nurse, (PdLN) along with meeting other criteria such as; having certain equipment, physician coverage, ongoing paediatric education and policies. There are documented standards for accreditation as an EDAP hospital.

An example of how these standards can be used was a RN from Oregon who was having a hard time convincing the medical group that vital signs in triage were a useful tool. By referring to the EDAP guidelines minimum standard she could argue her case. A copy of these standards is available through the PdLn website.
Paediatric Liaison Nurse Group.

The Paediatric liaison nurse is responsible to facilitate communication between local and hospital entities, promote and track paediatric education, identify quality improvement opportunities and implement changes to improve paediatric emergency care. The PdLN collaborates with the nurse educator to assure that all the requirements for EDAP are met and that the minimum number of paediatric education hours are provided and tracked. Other tasks include conducting specific QI audits on patients seen and developing programs in response to determined needs and makes resources available to the staff and out of hospitals providers. The PdLN is considered the “in house” paediatric resource who liaises as needed with other professionals as necessary. The PdLN is expected to attend monthly meetings with other PdLN’s and should actively participate in other paediatric committees activities.

Since my visit they have developed a website with information about the PdLN, and offer some resources for other hospitals. An example of a resource is the Paediatric assessment tool as attached as appendix 2.

The website is [http://pdln.net](http://pdln.net).

Some examples of the work that this group has completed are the audit of pain relief of single limb fractures for children. The findings suggested that overall children were not given adequate pain relief as compared to adults with a similar fracture. Using such tools as the Flacc pain assessment tool, and the faces pain assessment tool the audit suggested that while 78% of children had a pain score of more than 5 but only 38% got pain relief. The findings of this study suggested that some concrete guidelines were needed for children with single limb injury for pain management and these were developed within the group and taken back to individual areas for introduction. The PDLN were provided with education about pain relief which was taken back to their areas. Pain management protocols for triage were implemented and a post implementation survey will be completed. Inge suggested that each emergency department did not have the numbers of patients nor the resource to be able to complete individual research so by completing this as a group, the findings were more effective and the PdLN group can effect change.
Another quality improvement process that has been completed is the development of memory boxes has been funded by the group and distributed to participating hospitals. These memory boxes include such things as cardboard and stationary for foot prints a bag for a lock of hair, and any mementos that parents of children that die may wish to take with them. These were funded by proceeds from the annual conference. Information about these will be posted on the website soon.

The PdLN group is also instrumental in organizing the annual conference and recently had one in combination with pre hospital organizations which was very successful. The next conference is in October 2007.

Other projects they are working on and will be posted on the website include:
The LA county paediatric resource manual
The resource manual will provide information about where the most appropriate place to send children with certain conditions is, contact information, and will have information about all paediatric services.
“Just in time” paediatric training book.
Following the disaster consortium, the issue around management of large numbers of paediatric casualties was raised. The “just in time” training guide will provide a quick reference for those not used to caring for children with information like medication guide, normal vital signs, normal neurological assessment for say a 2 year old child. It is envisaged it will be available on CD.

The website will also have information about upcoming education, training packages etc. It will be open to the public. The ultimate dream for the PdLN group is to become a nationwide group to ensure that the subspecialty of paediatric emergencies gets the attention it should.
Boston

My primary aim of visiting Boston was to attend the conference entitled Nursing care of Hospitalized child. Topics included in the conference included
Factors influencing cardiac output
Shock: Pathophysiology and management
Recognising respiratory distress vs respiratory failure
CXR interpretation to confirm clinical assessment.
Neurological assessment inc ICP
Poisonous ingestions in children
Renal physiology and failure
Atopic dermatitis in the hospitalised child
Introduction to paediatric palliative care
Communication is the key
Pain management in a child with a life threatening illness
Management of dyspnoea, anxiety and agitation
Care of the dying child, it’s more than pain and symptom management
To lose a child. A parents perspective and providing support
Case studies. Bringing it all together
Should parents know when things go wrong
Sudden cardiac arrests in young athletes
Not your usual ethical issues in paediatric nursing
Management of severe acute asthma
Patient satisfaction : tools and outcomes
Conscious sedation fact or fiction
Working with “difficult” families : packing and unpacking stress
Family presence: beyond the resuscitation room

While unable to attend all the concurrent sessions, all those I did go to were extremely interesting. The conference had some very interesting topics, and I purchased a copy of the CD of most of the presentations to ensure I could revisit these and share with colleagues.
During this I met an RN from England who was travelling on a similar scholarship examining children’s participation in healthcare options. I subsequently spent some time with her in Redding England.

While I was in Boston I visited Boston Children’s hospital and the Floating Hospital for children.

Boston Children’s Hospital Emergency Department has over 50,000 patients annually. Children and young people up to the age of 21 can attend the ED. Some initiatives introduced to Boston Children’s in the past 2 years have been:

Discharge follow-up. Patients in high-risk groups are called after discharge to follow-up on their condition and to answer any questions about their care.

Participation in a hospital-wide and national initiative to improve asthma care.

Bedside testing. Physicians have the ability to conduct a number of lab and ultrasound tests right in the exam room, allowing patients to remain comfortably in one place and saving time waiting for results to come back before making a diagnosis and beginning treatment.

3C Campaign. Children’s ED is piloting the "Concise, Clear Communication" program to provide families with techniques to help them ask the appropriate questions to get the answers they need about their child's care.

Unified care and computerized charting. These initiatives allow nurses and doctors to more easily share data regarding patients, improving communication between staff and ensuring that patients won’t have to repeat information.
Leader rounding. Nursing leaders regularly check in with patients in the ED to make sure patients are comfortable, facilitate communication and update them on the status of their care.

Pediatric Emergency Care Applied Research Network. (PECARN) Children's in Boston is part of a nationwide, multi-institution effort to study patterns of illness and injury, and best practices for caring for patients with rare or infrequently seen conditions.

I was invited to join the team at handover time which was an interesting concept involving, medical staff, nursing staff and bed management and a newly formed role of case manager.

I met with a case manager, who had been recently appointed to this new role. The role included:
- Discharge planning
- IV care
- Wound care
- Educating clinicians on new products
- Home nebulisers
- Equipment services

Education
I also met with the Educator who explained how the nurses were orientated and received ongoing education.

Orientation
Was done in blocks starting with medical complaints and this lasted about 2 to 3 month’s dependant on experience. The nurse then had to attend trauma classes and these occurred in 4 to 8 hour blocks. Nurses that were triaging needed to have 1 year experience, then 4 hours classroom teaching, then 16 hours preceptorship. After 40 hour triage a chart review was completed to audit their triage.

New graduates in ED were relatively new with the first new grad being employed in 2005. This had been a fairly positive experience.
Competencies

Staff were encouraged to complete an online education tool, Net learning, which also kept track of their education.

Floating Hospital for Children Boston

Family centered care is the philosophy that guides the 128-bed Floating Hospital, which began in 1894 as a hospital ship, sailing Boston Harbor and encouraging mothers to participate in their children’s healthcare.

Affiliated with the Floating Hospital is; The Kiwanas Pedaitric Trauma Institute
http://www.kpti.org/about.htm
Some of the projects that the Kiwanas support are;

The Hap Gerrish Kiwanis Pediatric Trauma Registry - This project is funded and sponsored by the Kiwanis Foundation of New England. It is a web based source of information for physicians, emergency medical personnel, research scientists and the general public. It contains continuously updated information about patient care, access to trauma data and communication with other physicians around the world. It is also useful for the general public to locate safety and other information about pediatric trauma related issues.

Child Abuse Curriculum for Emergency Departments - KPTI is sponsoring this program created by Dr. Robert Reese at Tufts-NEMC. It is a series of DVD’s that teach emergency medical personnel about the very difficult diagnosis and treatment of child abuse in the emergency room and clinical setting. The curriculum is currently in development and will be distributed to physicians and hospital emergency departments.
Welcome Bags for Trauma Patient Families - When a child comes to the trauma center, family members often must drop whatever they are doing and rush to the hospital where they may find themselves unprepared for an overnight (or longer) stay. Welcome bags containing items such as toothbrush and toothpaste, snacks and parking and restaurant vouchers help families during the initial period of their child’s treatment. The Kiwanis club of Sheffield, MA will be helping us with this project.

Wards

I spent some time observing in a ward area at the Floating Hospital. The ward I was in was primarily medical children but included specialty nursing such as oncology, cancer treatments, and high dependency care. They have had many changes over the past few years with ward closures, restructuring and nursing shortages. They did not have nurse practitioner working in this area. Orientation to this ward was extensive and included ongoing education packages. I was fortunate to be offered some of these to bring back with me.

Emergency Department

The Pediatric area opens from midday to midnight, staffed by nurses with paediatric experience or emergency department nurses interested in working with children. These nurses work the 12 hour shift in a separate specifically built area. Between the hours of midnight to midday children go into the adult department. Discussion about this identified it was not an ideal situation but the number of presentations did not support having this area staffed 24 hours per day.

The paediatric area had separate rooms, each decorated with pictures, including ceiling tiles. They all had equipment in appropriate sizes for children. The resuscitation area had colour coded trolley (Broslow cart) with equipment suitable for children of varying weights. I had discussions in the areas about these carts which are expensive and the value of having them. Generally in the paediatric specialty ED’s they felt they were unnecessary but in mixed department they were felt to be a valuable investment primarily due to the infrequency that children with critical illness presented.
Broselow System

Fish feature regularly in paediatric areas  Typical waiting room

Canada

Hospital for Sick Children Toronto
Organised by Jacqueline Deigo
Website: www.sickkids.ca
Sick kids is a teaching hospital and tertiary centre for children in the Toronto area.
From the website on who are we.
The Hospital for Sick Children (SickKids) is a health care community dedicated to improving the health of children. Our mission is to provide the best in family-centered, compassionate care, to lead in scientific and clinical advancement, and to prepare the next generation of leaders in child health.

Melanie Bynoe Transitional Care Coordinator

Sickkids provides tertiary level paediatric care to children within Toronto region. The hospital had discharge planners but restructuring had resulted in the development of transitional care coordinators (TCC). This role is to focus on communication with community hospitals and ensuring the safe and appropriate transfer of children to secondary level care while ensuring that hospital beds were made available for children that required the care provided by Sickkids. The focus remains on providing family-centered teaching and support. The transitional care coordinators help to connect families with much needed support and resources within their community. They require an in-depth knowledge of discharge planning process and extensive paediatric knowledge of many conditions along with in depth knowledge of insurance companies and entitlements.

Discharge planning starts at admission, referrals are sent early to enable processes to be put in place so there is limited delay to discharge. Specialty care that occurs at home and is organised and supported by the TCC along with the CCAC and includes such care as Home IV, Total Parental Nutrition (TPN), and dialysis.

Important to ensure that accepting facility had the resources and ability to provide the care required. They work closely with Community Care Access Coordinators (CCAC).

Discharge summary written by CNS / Nurse practitioner and physician.

Coordination of outpatient follow up.

Transitional care coordinators assist with ensuring outpatient appointments are coordinated and child will have appointment scheduled together or things such as tests completed before appointments etc.

They also attend multidisciplinary meetings for children as identified as needing significant discharge planning and support.

During visit I attended a multidisciplinary meeting around the discharge of a child currently in ICU with muscular dystrophy that was ventilated. This meeting was very
focused on the needs of the child and the family. Some issues were raised about the ability of the parents to manage this child and a change in decision made by the family to not care for this child at home but not discussed in a negative manner but instead as to how they could further support this family to care for the child in a supportive manner. This was a multidisciplinary approach to coordination of care and was very impressive. Persons present included; physician, CNS /NP physiotherapy, occupational health, dietician, social worker, transitional care coordinator, CCAP, and occasionally teacher, chaplain

Outpatient Rehabilitation

Sometimes children are discharged with a planned readmission to a rehabilitation facility such as Bloorview

http://www.bloorview.ca

Bloorview is a provincial facility that sees about 7,000 children and youth on an outpatient basis, and we have over 650 inpatient admissions each year from across the province, across Canada and around the world. They care for young people from birth to about 19 years old with disabilities, who have rehabilitation needs and/or ongoing complex health needs. The types of conditions that require rehabilitation that are seen there include cerebral palsy, acquired brain injury, muscular dystrophy, amputation, epilepsy, spina bifida, arthritis, cleft-lip and palate, and a range of developmental disabilities, including autism.

The health professionals co-ordinate the care include: developmental pediatrics, neurology, psychiatry and radiology, nursing, respiratory therapy, social work, psychology, occupational therapy, physical therapy, speech-language pathology, therapeutic recreation, child and youth work, child-life, early-childhood education, orthotics, prosthetics, chaplaincy, pharmacy, dietetics, dentistry, teaching, audiology, life-skills, creative arts and radiology.

Bloor view has many community and patients and family resources available on such things as child stress, financial matters, supporting siblings, preparing your will, discipline. These range from early childhood matters to transitioning into adulthood. For the transition period thing such as Connections; A guide to transition planning for parents with a child with developmental disabilities.
While I did not have the opportunity to visit this centre, it appeared to be a vital link in the co-ordination and continuation of children's care.

Other resources we discussed were things such as:

Resources for educational professionals such as the Acquired Head Injury Education package available from www.abieducation.com

Initiatives that supported the practice of the TCC included such things as:

From the website

*The Electronic Child Health Network (eCHN)* is a non-profit organization dedicated to using computers to share children's health information among authorized health care providers.

Here are two components to the network.

*Professional Online Forum*

PROFOR includes a wide range of current information for health care professionals, opportunities for dialogue on child health issues, streaming video presentations, parent education information that can be provided to parents after consultation with a health care professional, pharmacy information, newsletters published by eCHN member facilities, as well as an events calendar and links page.

*Health Information Network (HiNet)*

HiNet is a secure system in which a child's medical records are available electronically to health care providers when and where they are required. This information includes laboratory results, doctor's notes, x rays, visit information, personal information such as address and contact persons.

HiNet is not connected to the Internet and all information remains private within eCHN. Patient participation in HiNet is voluntary and written parent consent is required. Although the decision to not participate will not affect the care delivered to any child,
there are substantial benefits to having a child's health data on the network. These include faster access to patient records, more complete information available to health care providers and a reduction in duplicate x rays and diagnostic tests.

*Community Care Access Coordinators*

I was able to discuss this role with Mark Rogers one of the CCAC

Each client has a care coordinator who conducts an assessment of the child’s healthcare and needs to determine what services are required. This care may involve, equipment, nursing support, personal support, physiotherapy etc. The coordinator will try and see the child prior to discharge and works with the TCC to ensure a smooth transition to home. Services are reviewed regularly and contact made with families on ongoing basis.

*Andrea Rickstins Respiratory Care Nurse Practitioner*

Krista Kelly Respiratory Care Nurse Practitioner

These nurse practitioners (NP) work with the multidisciplinary teams to ensure children with respiratory condition such as asthma, chronic respiratory failure, complex diseases, congenital lung diseases and lung abnormalities, cystic fibrosis, Lung transplantation, Ventilation and sleep related respiratory conditions. They work alongside and with physicians, ward staff, nutritionists and social workers to ensure children get access to the right care. I was fortunate on this day to work alongside both of these nurse practitioners. I started the day going on the ward rounds with the physicians. I learnt so much in such a short period. The NP has extensive knowledge of each patient including their medical problem, progress, family background, issues they have been having. This knowledge is shared prior to the medical staff assessing the patient. The NP provides education to the ward staff particularly around the complex patients and is a valuable resource to these wards. In particular, as we moved to the neurology ward where a child
with complex respiratory as well as neurological problems was, the NP provided guidance to staff about the workings of equipment and how to access necessary support for the parents. From the ward round we moved to the clinics where the NP ran their own clinics, with supervision and assistance from the physicians as required.

I was lucky enough to be able to talk to one parent about the care that had been provided since the diagnosis of her respiratory problem which saw her requiring nocturnal CPAP. The story told of valuable support and skills by the multidisciplinary team with the NP being available to contact during the day or sometimes at night, to help deal with the sometimes seemingly minor concerns of parents that left unanswered or sorted, led to major worries or problems. During the visit this child had what looked like impetigo, but was not improving despite antibiotics. This had been going on for a number of weeks so the NP was able to arrange a consult with dermatology team to review this child during this visit. This is one of the advantages of a large paediatric only hospital. The NP had the time to talk through problems with this patient, and the comment made from the mother was that she couldn’t do this with medical staff as they always appeared rushed. Another young man that came through the clinic was about to be transitioned to adult care. Prior to seeing this patient the physician and NP had a discussion about the ongoing needs for this young man. Sickkids was about to launch a program around transitioning of young people to adult care while I was there. The mum was very apprehensive about her son leaving Sickkids and moving to adult care. The NP had done some background work looking at where best this young man’s needs would be met ensuring that his complex needs both from a cardiac and respiratory view point. With the large number of specialties available it was important that he be referred onto one centre that could provide care for both conditions. A lot of time was spent talking to the mum and son about weight control, activity, and him being independent, along with preparing him for adult medicine. Again I spent some time talking to the mum, and she described the Sick kid’s team as being her family, her support and was fearful of being without them as backup. Amongst tears and hugs she left at the end of the visit with a lot of information and the promise that she could ring for advice again should she need to.
The NP requires extensive knowledge of equipment and access to services to be able to provide comprehensive care to her patients. They also required extensive knowledge in their specialty.

**Kim Evanoff Emergency Department**

Sickkids has over 50,000 presentations annually. They are the primary emergency department for children in the central Toronto area plus the tertiary referral centre for the greater Toronto area. They are also the trauma center for the greater Toronto area and manage approximately 200 trauma victims per year. Unfortunately none of these occurred while I was there.

Like most emergency departments they have significant issues with access block and overcrowding. One child had been in the ED waiting for a bed for over 24 hours.

The facility is comprised of 2 resuscitation rooms with 2 step down high dependency rooms, 7 monitored rooms for acutely unwell children, 12 examination rooms for those with less severe illness or injury, isolation rooms and a safe room for children with mental health problems. There is also a 6 bed observation room for patients awaiting inpatient beds or requiring an extended period of observation within the ED. There was a triage area that involved a queue system, where the triage nurse made an initial assessment of children and arranged for the appropriate placement of the child i.e. to cubicles, waiting room etc. Also in the triage room was flow sheet for the management of sickle cell disease which is a common presenting complaint, along with triage charts.

Supporting the triage nurse were receptionists collecting demographic data. Within the department there was also an information clerk. This person had a variety of tasks including paging people required in the ED, organizing procedures such as x-ray, and generally completing task that freed health professionals to look after the patients. This person was kept very busy and was an integral part of the team.

Code 50 is a trauma call that comes over the hospital public address system. These criteria are based on the mechanism of injury, vital signs and anatomical factors. The typical patient who would meet these criteria is a child struck by a car travelling at more than 40 km/hr, and who has suspected head and leg injuries. When the locating operator announces the arrival of a "Code 50", all primary team members immediately leave what
they are doing and attend in the ER. This team is led by the Trauma Team Leader. In attendance are residents from general surgery, anaesthesia, orthopaedics, emergency/pediatrics, neurosurgery and radiology, as well as ER nurses, a respiratory technician, radiology technician, chaplain, trauma social worker, trauma patient care coordinator and a patient service aide.

A designated emergency department nurse also responded to calls for wards for a critical response. Team that will respond when there is concern about the child will independently assess and treat the child and transfer to ICU as required.

Education within the ED includes workshops on things such as procedures, suturing, glue, lumbar puncture, conscious sedation.

Having had a nurse practitioner in the ED for a short period, as I understand it was felt not to have “worked” but I was unable to determine the reasons why.

The department has produced a guideline to emergency care for children: Sickkids Paediatric Emergency Medicine which is a useful tool for anyone working in paediatric emergency care.

Discharge information was available within the department and I was able to access copies of these. Health promotion was seen more as a general hospital issue and understandable being a paediatric only hospital they had teams responsible for child safety, and health promotion. There was a few posters in the waiting room re safety. However when children presented with an injury the parents were asked to completed a form, gathering data on the child’s accident for reproach purposes. I was able to bring a copy of this back to share with the Otago University research coordinator investigating injury prevention I children less than 5.

Within the ED, I met the child life team. They were keen to show me what they were doing including a poster r they had put together for the ED staff. The child life team work in the ED providing distraction therapy, pre procedural preparation, family support, activities et to help the child deal and cope with an ED visit. They provide this service
between 11a, and 11 pm. Again an advantage of a paediatric only hospital. They also provide education to staff about child development, and how to help children through distraction and play. I have been provided with information about their role and some tips also. In Sickkids the child life team have developed Mianes Lounge, a time out place for children of all ages who are patients in the hospital. It has a fully equipped kitchen, play stations computers games etc and there are many organized activities for children to take part in.

_Gillian Thompson CNS, NP Adolescent medicine/ Young Families Program_

The young families program provides healthcare for high risk adolescent parents and their children. It is geared to adolescent parents whose infants are at high risk of negative health outcomes. The focus of care is on optimizing health with a strong emphasis on education, illness prevention and support. The care provided to the children includes regular health assessment, well baby checks, immunization, developmental screening and management of illness. Parents are provided with sexual health services, parenting education, support and advocacy. The multidisciplinary team includes: paediatricians, nurses, social worker, public health nurse and nurse practitioner. The team also collaborates with other teams in the hospital including the pre natal team, and community agencies.

During my observation of a clinic, I was impressed by the interaction between teenage mums and staff, and the range of support, education and coordination of care that occurred. There was a range of information, education packages available to clients including information on family violence, normal childhood development for varying ages, drug abuse etc.

This team is part of the adolescent medicine division which includes other programs:

- Substance abuse program which includes a Drug abuse clinic, outreach program, and day care program
- Eating disorder program
- Teen clinic
- Complex adolescent problems program for adolescents with chronic illness or disability.

Thus the sick kids programs are meeting needs of an often poorly managed group of patients. Another institutive they had been working on and were about to ...... was a transitional program for children that were moving to adult services. This is an area that was highlighted in many areas as lacking.

**Scan Program**

Scan Program = Suspected child abuse and neglect program

Karla Wentzel Clinical Nurse Specialist, Nurse Practitioner, Sexual assault nurse examiner, Scan Program

During this day I was fortunate to be invited to the multidisciplinary meeting to discuss current cases. Even though I have had quite a lot to do with child abuse locally and listen too many stories I was shocked by the stories I was hearing. However this tea was working effectively together to ensure as many children as possible were being kept safe. They worked very closely with the police.

I was also permitted to watch on a closed circuit TV the interview with a child that had disclosed sexual abuse and observe the subsequent examination of the child by the nurse practitioner.

The scan team provided a service that:

Reviews cases of children where it is known or suspected that the child has been abused, and arranges these children to have examinations.

Conducts assessments of children and families where the child may have been abused but no disclosures have been made.

Provides children who have been abused, and their families, with treatments and support.

Provides advice to other people on how to manage cases where a child has been abused or neglected over a 24 hour period.

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Provides education on child abuse issues, such as how to recognize child abuse and what to do if they think a child is being abused. Works with groups that are investigating or dealing with children who are abused or neglected. Involved with research on child abuse and neglect. Provide a resource for parent about child abuse.

I was able to bring back a copy of their resource to share with our child abuse team. The NP plays an integral role in this area. My observation was a great rapport with children and a great advocate. A discussion with the police officer in charge of the investigation of the young girl I observed, and the NP identified that the NP was working in the child’s best interests and convinced the police officer that further investigation on this day was inappropriate and unnecessary but arranged for the investigations to occur on a more appropriate occasion.

Family focused care
karen.dryden-palmer@sickkids.ca

Study day presented by Karen Dryden-Palmer, Nurse Educator Critical Care Unit. This study day was provided for nurses new to the hospital and main participants were nurses that were part of New Graduate program. It was a mandatory requirement for all nurses. Some statements were made to be discussed:
All charts, progress notes etc should be available for families to read and to contribute to in writing if they wish to do so.
Discussion included:
Concerns about continuity and the notes becoming too large. It was felt if the parent was present it was enough that they could contribute verbally. Concerns were raised about the appropriateness of what could be written.
Psychosocial reports should be shared with families.
Confidentiality issues were raised, what say a 14 year old admits sexual activity but parent allowed access to notes. Other issues included a comment re mental illness as it carries connotations.
Children/adolescents should be able to decide on who is present during an intrusive examination or procedure.
Children/adolescents should be invited into decision making about their treatment or surgical decision.

We were given an example to think about, an adolescent making a decision about lung transplant, believed he was going to have ongoing pain following lung transplant declined ventilation for deteriorating lung function awaiting transplant. He had an acute event while it was still being discussed and required ventilation. His parents ended up making the decision and the transplant took place and the adolescent was very happy afterwards.

Who should be present at disclosure of diagnosis?
Parents and/or child were debated.

Newborn babies of inpatient siblings should be allowed to room in with their nursing mothers.

Siblings should be allowed to stay overnight at HSC.

Both parents are allowed to room in with their child at the same time.

One participant explained her experience in Malaysia, where siblings were present, and this was very normal. Parents dictated plan of care.

Is there such a thing as informed consent or is it educated coercion?

Some of the ideas that came up in the discussion were:

Families should always be present and available to participate in multidisciplinary rounds, case conferences or staffing and in the resulting documentation of the plan of care.

The parent/child can pick the nurse to care for their child form those on duty. Concern was raised that some staff would have no patients and others heaps. Chronically ill children do have the ability to have continuity of care by identifying key nurse for care in some areas.

Discussion around the parent role when a child is admitted and ownership of that child. Does the child belong to the mother or the hospital? Need to empower families in decision making. Encourage parents and child to be involved in rounds, education of families

This whole discussion as very interesting and I could see the ethos of children having rights, but involving parents. It would be interesting to pose these questions to NZ nurses.
Family centered care

Providing family centered care is time consuming and means that each member of the health care team will be required to be available to meet with each and every family member who requests info or support. Suggest that it is woven into everyday care.

Definition of family

Families are not visitors; they are an integral part of the child’s healthcare team. There are various definitions of family but overall they are who they say they are. “Whoevers important to the child at that point in time”? There was much discussion about why families are different, how they react differently, they must be seen in the context of their own experience and not judged.

Family adaptation, how to help families “cope” were other important topics. Many examples were offered and was very thought provoking.

Family centered care is not:

- Singular
- Only about parents presence and participation
- Just for nurses
- Clearly understood

Key principles of family centered care include:

- Respect
- Information sharing
- Collaboration
- Family to family support
- Confidence building for all

Family centered care:

- Improves satisfaction with hospital care,
- Improves problem solving ability
- Improves child health outcomes
- Improved emotional wellbeing of child and family
- Encourages family empowerment
- Allows efficient use of resources

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• Improves professional satisfaction

Also included in this day were 2 parents that had chronically ill children. Telling their story was empowering and it is a great tool for nurses.
I am hoping to get a copy of the presentation slides as there was too much for me to remember, write down and to be able to participate as well. This is an area that I would like to study further.

Atlanta
Children’s healthcare of Atlanta

Children’s was formed in 1998 when Egleston Children’s healthcare and Scottish Rite Children’s medical centre combined to form a unified health system. In 2006, an affiliate of Children’s began providing services at Children’s at Hughes Spaulding
Scottish Rite
This is a new purpose built building for children emergency care. It has 50 bed spaces
Triage
Child presents to reception;
Parent is asked to complete a piece of paper with name of child, signed by parent. Child is issued with a sticker for child stating NBM and explanation given to parent not to feed child until seen by triage nurse. They are issued with an issued with a Pager device that is used to call child to triage nurse
This is contrary to the ACEM guidelines that we work by in that the nurse should be the first point of contact. They tend to rely on receptionist to alert the triage nurse to children that are particularly sick. There are certain conditions that the receptionist must inform the triage nurse of immediately, Sickle cell disease and child that is on chemotherapy.
During visit triage nurse was able to manage to see most patients within about 10 minutes of arrival.

**Environment**

Waiting room very basic with chairs, TV but no other activities. There was very little health promotion or space.

There were 2 Triage rooms leading from main waiting room

Waiting area through inner side of triage area with activities, TV, It is used for children they want to separate from others, allows for closer watching.

There is another room with multiple activities for children and siblings to use while waiting, however it is not supervised.

**Staffing**

RN experienced in paediatric triage works out in triage, assisted by health assistant. Enters triage assessment while health assistant takes vital signs, applies emla cream as appropriate.

Chair scales placed in triage room and child sits in this to get weight. Assessment occurs while child sitting in scales.

**NP**

There was a NP working in the department. She worked in a similar role to the physicians but had certain restrictions on her practice. She could not directly refer to other specialties and could prescribe very little. She was not employed by the hospital directly but contracted in a similar way to the physicians and had to meet seeing a set number of patients per shift. I was a little disappointed in her role.

**Department**

Resuscitation room has 2 beds, fully equipped with paediatric equipment.

There were 4 groups of single rooms used for examinations. The overall area gave appearance of being a very large spacious area. The children were not able to be observed without actually entering the rooms, this meant that nursing staff rely on caregiver to notify them of change if busy with other patients, however it offered privacy and ensured other children were not exposed to unnecessary sights and sounds.

Express care area was an 8 cubicles area used for children that were expected to be able to see and sort quickly. Patients that came through this area had minor injury, sprained
ankles, non deformed possible fractures, those with short history of diarrhea and vomiting.

Patient documentation was almost fully computerized. It gave an impression of nurse that were always looking at the computer but also provided a comprehensive care plan with good discharge advice and information. It was a good documentation tool.

Egleston Children’s emergency department

This department did not have a Nurse Practitioner and I don’t believe any plans for one. I spent a day in this department, observing and assisting. While similar in many ways to Scottish Rite, it felt different. It was older, smaller and seemed busier, but that was perceptions as they are were both equally busy. During my visit to Atlanta they had an outbreak of gastroenteritis. The management of these children was by way of a pathway which included the administration of an ondansetron wafer soon after arrival followed by a trial of fluids and then these children were most often subsequently discharge. A similar management for this condition occurred in Canada and was beginning in England. My perception was it worked. On my return I began the discussion about why we did not do this.

Replies were:

The pediatricians say it doesn’t work, ...we just don’t, ...well I would give my child this treatment but it is expensive........ So I did a literature search and the evidence is there to suggest it is a good way to treat gastroenteritis in children. So... the next step was to approach the pediatricians when I have time to follow it up. But they have now broached the subject themselves and studies are under way.

Education

An educator works across both sites and is about to move into Hugh Spaulding hospital as well. There is an extensive orientation program with ongoing weekly forums and presentations available for staff. Regular auditing of practice occurs.

NP training

I was also able to participate in some of the University sessions for the nurse practitioners. The primary care NP training is a 3 semester, 1 yr full time course while the Acute Care NP course is 4 semesters . The sessions were very good, I learnt a lot,
from management of asthma to the child with the painful hip, neonate assessment, and pain control and assessment. I was able to get an overview of the year’s program also.

Form this day I spoke with the NP for the pain team and went on a patient round with them. Again I was impressed by the care provided by nurses to help with the complex needs of these children.

Transport team
I spent the day with the paediatric transport team. This is a specialised team of nurses and paramedics whose role is to provide transport of children for the larger region to the specialty hospitals. Each ambulance is like a paediatric intensive care unit. The ambulances are tailored to meet the unique needs of children including a TV and DVD on the ceiling. It was a slow day and we only did 2 calls, one a child from Hughes Spaulding to Egleston with abdominal pain and a 4 hour retrieval of a young boy with probable mental health problems. Mental health in children overseas was a big issue. It did allow for a great discussion about education of paediatric health professionals. I also observed the nurse role in being the patient advocate and refusing to transport a child with traction to another facility until further discussion had taken place to ensure the safe transfer.

England
Children and young people’s partnership for health partnership for child health
http://www.ich.ucl.ac.uk/cypph
Devala Dookun
Their vision;
To revolutionise the delivery of services to children in North Central London, by bringing all the providers of children’s healthcare together in one integrated, child and family focused organisation (the Children’s and Young Persons Partnership for Health) that is responsive to the changing demands in service delivery for the NHS.
The themes they are focusing on are;
Provision and delivery of excellent clinical skills
Provision of education, training and development for all staff
Production of research and development related to childhood conditions

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The partnership includes: Great Ormond Street Hospital, North Middlesex University Hospital, Haringey Teaching Primary Care Trust and The Whittington Hospital.

Some of the initiatives we discussed in relation to nursing were:

The development of an interchange of staff between the partnership to allow development of skills and exposure of nurses to specialty areas. This was felt to be important to ensure that nurses had knowledge of what was available to help families and children and built good relationships between colleagues and sharing expertise and knowledge.

Working towards decreasing representations by education and discharge planning

The principles of the partnership are related to reports such as:

The National service framework for children, young people and maternity services

Department of Health 2003

Every Child Matters The Stationary Office 2003

The website offers a lot of information including a progression of what works and what is happening. There is a pilot of an audit tool included looking at various aspects of paediatric care.

http://www.ich.ucl.ac.uk/cypph/ensf_audit_tool.pdf

Rapid assessment Neurology unit (RANU)

This unit based in an old ward area, provided comprehensive care for children suffering from neurological problems. Providing an acute outpatient service with comprehensive follow up and coordination of services, these children with often very complex problems are provided with an impressive service. A nurse practitioner (NP) was involved in this service and is integral to the focused care of children. The NP also provided education and support to the inpatient areas.

The need for the unit was founded out of long delays for semi urgent OP appointments, lack of coordination of services, and ongoing issues for parent with acute deteriorations.

There is a lot of work goes on before the appointment ensuring the multidisciplinary team required is available, all tests booked or completed as appropriate, and then following the appointment to ensure local hospital is aware of management plans, has appropriate equipment to deal with acute episodes etc. The NP is a contact point for families with issues and will try and sort them out. They must have extensive knowledge of referral
areas, and neurological conditions. They provide education for emergency departments about special conditions and neurological conditions.

**Cystic fibrosis Clinic**

I had the opportunity to join the cystic fibrosis team for a patient review meeting over lunch. This was a multidisciplinary team meeting including dieticians, social workers, NP medical staff respiratory technicians, physiotherapists.

Patients that were currently inpatients or those that had been inpatients during the previous week were discussed along with any other children that had been in contact with any members of the team with significant problems. Plans were made and follow up arranged. I then attended a cystic fibrosis clinic where met patients from a variety of ages from 3 to 20. Again that issue of transition was identified. For the younger children this clinic was very child focused with an environment that was friendly, bright and child focused, despite the need for particular infection control issues related to the care of multiple CF children with varying bacteria. The care was very co-ordinated ensuring appropriate services were available or used.

Following the clinic I was offered samples of education packages for general staff, primary health care facilities, brochures and education packages for children and parents which I have shared with our paediatric respiratory nurse specialist. The NP in this team also assists children with informing classmates about their condition. Between them the NP and child develop a power point presentation to the child’s classmates. This has been very positive. The child participates as much as or as little as they wish and can choose how much they tell their mates.

**Renal Transplant Clinic.**

This topic was very interesting from a personal perspective, having had my own 21 year old son with renal failure and subsequent transplant.

This renal unit is the largest in the UK, providing a comprehensive service for children with renal disorders. There is a 16 bed ward with nearby renal transplant and hemodialysis clinic. They also share some facilities such as the programmed medical investigations unit. The unit also covers every other aspect of Paediatric Nephrology with
special expertise in congenital renal anomalies, nephrotic syndrome, hypertension, vasculitis, tubular, metabolic and stone disorders. Strong working links exist with Paediatric Urology, Radiology and Pathology.

In addition, there are outreach links with a large number of teaching and district general paediatric departments. Surgical care of the end-stage renal failure (ESRF) patients is provided by a team of four transplant surgeons. The renal ward (Victoria) is managed by a senior sister; there are five clinical nurse specialists (CNS) for ESRF patients, a CNS who is responsible for co-ordinating the living donor programme, a CNS in charge of the plasma exchange programme, a senior and two other renal dieticians, a senior pharmacist, clinical psychologist, consultant family therapist, nurse counsellor, social worker, teacher and two play therapists.

**Partnership with local services**

In every case the care of children is shared between the referring hospital and the specialist service at Great Ormond Street Hospital. An effective partnership, with continued local hospital involvement is essential for patients with complex abnormalities as they will benefit from services which are better integrated with the local community and schools. This partnership allows the local services to use their considerable skills and knowledge and for the Great Ormond Street Hospital service to provide their specialist services and expertise for the benefit of a large number of children.

There is an active end-stage renal failure programme which includes treatment with chronic peritoneal dialysis or haemodialysis and renal transplantation.

The unit has special expertise in the investigation and management of children with nephrotic syndrome, haemolytic-uraemic syndrome, hypertension, vasculitis, tubular disorders and infants, young children and adolescents with chronic and end-stage renal failure (dialysis or transplantation).

The renal unit works very closely with the urological service providing comprehensive management of infants and children with complex nephro-urological disorders.

They also have a significant amount of information for parents about medications, and advice for parents and children with renal disease. These are available on the website;
The team has developed pathways and guidelines for the management of some conditions such as rejection, viruses that affect immunocompromised children post transplant. I was able to join a clinic with the CNS and medical staff and again saw evidence of care that was child and family focused with an abundance of information.

With all of these services, I was impressed by how the care was organized to ensure the children had as few appointments as possible and the staff co-ordinate with various services to ensure quality care.

**North Middlesex University Hospital**

Emergency care was not provided at GOSH but instead at their partner North Middlesex University hospital amongst other places.

North Middlesex provides emergency care for all ages. The emergency department has a paediatric only area beside the adult ED. Unfortunately this is only open from 10am to 6pm. After these hours the children are seen amongst the adult patients. My discussions with the staff suggest that the care the children receive in the paediatric area is more child focused and overall better than in the adult area. Children requiring resuscitation always go to the adult resuscitation area but a nurse for the paediatric area assists. The issues identified form the adult area include no special area for children and thus often the children are placed in the low acuity area as this is deemed more paediatric friendly but in doing so they become identified as requiring less urgent attention, when this is not necessarily the case.

The NHS has a 4 hour rule in their ED’s so no patients are expected to be in the ED for more than 4 hours. My observation of this based on my 1 day admittedly, was the focus was on how fast these patients could be moved on and not what care was best. However it also ensured that the patients were seen in a timely manner.

The paediatric area was staffed by nurses with paediatric experience and education. The UK has a qualification of children’s nurse. It was evident however that staffing was an
issue with a general shortage of experience in the nurses rostered. This was identified by the Senior RN on the shift. It was compounded by 2 of the senior staff being on study days.

My observation of the area was the area was designed with children in mind, with a separate waiting room for the adults, during the hours the area was open, with toys available etc. The bed spaces were short and many children with gastroenteritis, respiratory problems and other infectious disorders were cohabitating. This was identified by the nursing staff but while they did the best they could, the facilities did not allow for the isolation of these children. Plans are in progress for the redevelopment of the site which is hoped to include a 24 hour separate paediatric ED.

Unwritten guidelines for care were evident on the management of common conditions, such as fluid replacement for children with gastroenteritis. Like many ED’s a lot of work was required but managing the day to day care of children left little time for quality improvement initiatives.

Royal Berkshire Hospital Reading

While I was at Boston I met up with an RN who was a manager of paediatric services in Royal Berkshire Hospital in Reading on the outskirts of London.

She was really enthusiastic about paediatric healthcare and its importance in a general hospital as compared to a paediatric only facility. She invited me to visit her on my travels.

I spent a couple of days with her observing various improvements they had initiated in their facility. In my discussions with her, I was interested as to how they had used various reports, recommendation papers and standards to achieve funding to improve paediatric care. In the UK there have been many reports into paediatric improvements such as the Bristol report, Every Child Matters and National service framework for children, young people and maternity services.

http://www.dh.gov.uk/policy_and_guidance/health_and_social_care_topics

They were currently working on implementing a paediatric early warning score, (PEW) which was intended to assist nurses to identify and act on children that
were seriously unwell or deteriorating. It was added to documentation used by staff. This concept was used in other hospitals and is currently being implemented for adults in our hospital. I will be involved in looking at this for children also.

I was able to have a look at facilities for children overall, including the paediatric assessment unit, designed for children referred by GP’s, Kempton day bed unit, Dolphin ward, Lion ward, neonate unit, and spent some time with the community nursing team. The PAU was situated away from the emergency department. Primary health care providers referred children to this unit for assessment and observation. It was a purposeful designed area that was alongside Kempton day word which was a day surgery, treatment area for children. In Kempton ward children that required simple procedures that required sedation or observation were managed as day patients, along with all day surgery. This allowed the children to be in a child friendly environment with space toys and bright pictures. There was a well stocked waiting area with activities, toys and a TV shared by these 2 facilities. Patients attended to through Kempton day ward received a follow up phone call next day to check on progress.

They had also developed a paediatric area with the bigger ED. I spent an evening observing the care of these children along with the bigger department. It was a very good initiative but unfortunately they did not have the appropriate staff to care for the children separately. I understand this is one of the next projects. They have a large amount of discharge information which I was provided many samples of. I was also given copies of magazines provided to keep children entertained while waiting for care. They were sponsored by local community groups and were really great with activities, word search, crosswords, comic strips along with educational and health information etc. They also proudly told me about their:
Teddy Clinic

The Trust runs a 'Teddy Bear Clinic', where children can visit the A&E department. The aim of the visit is for children to see how a hospital works and to alleviate any fears or concerns the children may have about being sick or visiting a hospital."

The children are shown around A&E and get the opportunity to experiment on their teddies with real equipment. The children saw oxygen masks, took their teddies blood pressure, went to x-ray and the doctor gave each teddy a diagnosis. The children also experienced being a patient in an ambulance, which was provided by the Royal Berkshire Ambulance Trust. The staffs love it as well as the children.

I spent my last day of my trip enjoying the sights of London on top of a double decker bus, my one and only sightseeing day.
Australia

Being our closest neighbor, it seemed appropriate to see what was happening. I teach the emergency nurses paediatric course in Australia, so was aware of some initiatives that were happening.

Association for the Wellbeing of Children in Hospital (AWCH)

www.awch.org.au

The Australian Association for the Wellbeing of Children in Healthcare (AWCH) is a national, non-profit organisation of parents, professionals and community members who work together to ensure the emotional and social needs of children, adolescents and their families are recognised and met within hospitals and the health care system in Australia. We believe in:

- access to quality healthcare for all children and young people
- valuing the opinions of children, young people and their families in the delivery of healthcare
- families playing a vital role supporting children and young people receiving healthcare
- fostering partnerships between parents/carers and health care providers
- the provision of culturally sensitive healthcare services
- appropriate information and resources being readily accessible
- challenging the status quo to advance our mission

History

The Association for the Welfare of Child Health, AWCH (formerly the Association for the Welfare of Children in Hospital) was 'born' on the 15th February 1973 as a voluntary organisation consisting of both professional and non-professional people from all parts of Australia, interested in formulating and satisfying the non-medical needs of children and their families in hospital and health care.
A *Recommended Health Care Policy Relating to Children and Their Families* setting out principles and practical guidelines was prepared by the Association and published in the *Medical Journal of Australia* as a special supplement on 9th August 1975. It was declared the official policy of the Health Commission of New South Wales and the Australian Capital Territory and endorsed by the National Health and Medical Research Council.

Over the years AWCH has been the advocacy voice for children and their families in the health care system. Being outside the system, we are able to bring consumer pressure to elicit changes. AWCH has been instrumental in the introduction of:

- 24 hour visiting by parents in hospitals
- provision of parent accommodation and facilities
- child friendly environments in health care settings
- recognition in the importance of appropriately trained staff
- recognition of the importance of supporting the family
- recognition of the importance of play and education in a child's recovery

They have held seminars and conferences on a number of topics, such as the importance of play in a child's recovery, the emotional needs of infants and young children and the health care needs of marginalised children and young people. In 1979 the International Year of the Child, the Association organised "Children in Hospital Week" - Other seminars and conferences have drawn attention to the special needs of children with disabilities in hospital, isolated families, Indigenous and Non-English Speaking child health issues, and unnecessary surgical procedures.

AWCH has an extensive library that can be accessed via the Sydney Children’s Hospital website and has many resources for parents. Tyhe have developed books for children coming to hospital, which I was able to purchase a copy of, developed a grandparents scheme, where older volunteers helped parents have some time out by caring for their child in hospital.

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Their current project is looking at paediatric areas in mixed hospitals and the parental satisfaction.

**Child Health Networks**

In 1997 Department of Health NSW, brought together clinicians and planners in the Greater West of Sydney and from metropolitan and rural health services to look at the issue of networking of services. Their brief was to consider how networked services would enhance quality care, provide strategies to improve access to specialist services and clarify the future direction of paediatric services in NSW. A key recommendation from this process was the development of networks of paediatric services. It was envisaged that by networking, high quality clinical care could be provided as close as possible to home for all children. The focus was a shared approach to service development with common guidelines for care, accompanied by staff training and development.

Networking was aimed at linking each local paediatric centre with at least one of the specialist children’s hospitals in NSW of which there were three. Westmead, Sydney Children’s and John Hunter Children’s Hospital. The benefits foreseen were improvements in quality of care available in local areas by support from the Children’s hospitals, in terms of specialist outreach services, shared treatment and guideline protocols, staff rotation between services and professional training and development opportunities, support in peak demand and smoother transfer and referral between services.

The process of networking extends and includes GPs private paediatricians and allied health services, primary care services, early childhood services and other government and non government organizations.

NSW health therefore funded the activities of 3 paediatric networks that encompassed the NSW area, Greater Western, Greater Eastern and the Northern child health network. Guidelines were developed for the networking of paediatric service were developed [here](https://www.health.nsw.gov.au/files/paed_networking_guidelines_feb_2007.pdf)
Each network was appointed a coordinator to assist with consultation, liaison, negotiation and documentation required for the development and implementations of the networks. The rural networks were identified as a requiring a significant area of work.

NSW Health has developed 12 clinical practice guidelines for children’s emergency care for the top presenting conditions. It has been the task of the networks to develop a plan to implement these guidelines throughout the state. They are also working with the Clinical Excellence Commission to develop an interactive self learning package to promote awareness and knowledge of these guidelines.

**Northern Child Health Network**

Affiliated with Sydney children’s hospital, the priorities for this group were:

- Improved Safety and Quality of Child Health Services via the Provision of Education and Support to Child Health Service Providers in Rural and District Hospitals
- Improved Communication Between Disciplines, Wards, Facilities and Areas
- Communication and concepts of standardisation
- Increased Resources for Child Health Services
- Partnerships & Collaboration Within and Between Organisations
- Advocacy for Child Health
- Cultural Safety


Examples of work in progress and completed:

- CPGs,
- Accessible through website;
- Development and updates of paediatric resus cards.
- Planning days involving up to 70 participants across the spectrum of paediatric health care. During these days priorities are set for the following year.
Greater Eastern and Southern child health network GESCHN

The plans for the next few years include

2005-2007

Paediatric workshop report
Aboriginal workshop report

Supported Allied Health
Nursing Secondment
Paediatric JMO Training
Telehealth

"Between the beach and the bush"/Paediatric education program in Milton Ulladulla Hospital

Shoalhaven RMO

Canterbury RMO Project

"Shake-a-leg" - Aboriginal Health promotion project

Statewide Education analysis

Western Child Health network

The website does not have so much information but a strategic plan is in place to look at access to care, paediatric acute care amongst other things.

Westmead Hospital

Westmead childrens is beside the adult Westmead hospital. Here I spent an afternoon shift working alongside the clinical coordinator. It was very busy but there were some very good initiatives to deal with business. They have a NP in training. In Australia there are 2 pathways to move into the NP role. Seemingly the preferred method is to work as training NP for 1 year and gain registration though this pathway. The acting NP was knowledgeable and had set up a process whereby he ensured minor illness of injury patients were seen in a timely method while ensuring that other children had appropriate management. One experience that was helpful was the use of entonox for a procedure. The NP was certified to assist with this process. For the child it made the procedure a lot less stressful as well as for the parent.
Sydney Children's Hospital

I spent some time looking around Sydney children's and some initiatives they had developed including a calculator for paediatric resuscitation events and the set up of the resuscitation room. I was also able to have some copies of discharge information, documentation, and pathways. From here I went to Sutherland Hospital with the nurse consultant associated with the child health network.

Sutherland Hospital

In this hospital ED they have just allocated an area to the development of pediatrics. She shared with me her journey which was still in progress. A groups of staff very good, very knowledgeable but not keen on caring for children in ED. A department very focused on adult care and no real facilities for children. A department long had outgrown its presentations versus its area available. (common theme for many hospitals) But as part of the CHN work, paediatric care is being developed so an area was set aside to be developed into a paediatric area. Although still a long way to go, the area is separate and closed off to the noise of the bigger ED area, but it is still visible to staff. It can take 4 beds or cots and has an area in the back to be developed into a procedure area. This will have soundproofing in its walls. Staff were not convinced it was the right thing to do as by doing this they have lost some valuable adult space and that was evident while I was present. Education has become a big priority for these staff around paediatric care. I will keep in contact with its progress.

Port Macquarie Hospital

I had the opportunity to teach the ENPC course in Charlton Towers in Northern Queensland and Port McQuarrie in NSW. I also had the opportunity to talk to many nurses working with children. Charlton Towers is small with limited facilities for children but a large proportion of their staff had been taught ENPC. Port Macquarrie while a relatively smallish hospital has a single paediatric ward and provision within the ED for children. They had just purchased a Broslow trolley and were setting it up and had developed some paediatric pathways in conjunction with the NSW guidelines and the CHN. One of the stationary I was able to have from them was a coloured chart with differing age groups and equipment suitable on an age size basis.
also spotted a chart for parents to complete when a trial of fluids has been commenced. I am in the process of developing some guidelines for the care of gastroenteritis and this chart will be a basis for our tools.

Nambour Hospital
Nambour has quite a higher percentage of children present to their ED. Their department is again quite small but they have a dedicated corner for paediatrics and a dedicated paediatric resuscitation bay that also has a neonatal resuscitation table.

Brisbane Children’s Hospital
Having met some staff from here at a conference in 2005 they were keen to show me around their facility. Again all paediatric so very child orientated right from the entrance way. The waiting area had large non destructible play equipment, educational and health promoting posters were up but limited. I spent the day observing the process for children, including the care of a child with serious burns. The team was experienced; they had an educator that was available and good appropriate equipment to work with. They were happy to share with me their discharge information and I was able to purchase a copy of their guidelines that I could use to write our own.

Soon the Mater children’s and Brisbane children’s will combine. At present they both run a training program where nurse from regional and rural centres can come and work in the ED for 3 months to gain skills. They are working to bring a post graduate paper in acute care of children to Queensland next year.

Redcliffe Hospital
Met with Nurse Practitioner.
They are in the process of new ED being built, that has a separate area for children within it. The current department is very small with a couple of beds in the corner for children but I noted children in other areas. The department sees about 100 people per day and about 20% are children. Similar to our department. Very little work has been done around pediatrics.
Nurse practitioner role was trialed in Redcliffe. She doesn’t see many children less than 2 years except for those with minor laceration.
Have a ED network where management nurse educators, nurse practitioners meet, have some case reviews of interesting patients.
Gold Coast Hospital Southport

Very busy hospital, at time of visit, with significant political discussion re need for bypass due to the inability of the ED to cope with the volume of patients.

Approximately 30 percent of presentations were children.

The educator had worked in Mater Childrens / adult emergency department, and had brought a lot of paediatric education and enthusiasm with him. They had planned and constant scenario based teaching twice per week, teaching sessions 4 times per week on various topics of which a good percentage were paediatric. They participated in a funded 3 month secondment to Mater children hospital to gain experience.

They had a dual registered ED / Paediatric consultant which was felt to be very beneficial in relation to paediatric acute care. She was keen to do research and change the way things were done. They also have a registrar that has almost completed training that will hopefully stay on as a consultant. The next initiative they will trial is a paediatric nurse specialist for the hours where most of their paediatric presentations occur ie the evening period. The idea of this is to ensure children are cared for by a nurse with appropriate training.

I was also invited to view the website they had developed and am impressed by the wealth of information on this site including links to other sites available for nurse. It is a password protected website however.

Conclusions

During my travelling I observed some very good initiatives and met some really awesome people.

Nurses can and do provide great care for children and particularly when observing the roles of nurse specialists and Nurse practitioners I noted some great coordination of care for children and families.

While my report has highlighted some of the highlights of my experiences, I have gained a wealth of knowledge and enthusiasm. I have also met a lot of people, most of whom are keen to keep in contact. We all have stories to share, great things to learn from each other.

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Since my return while trying to complete my thesis, I have also initiated a paediatric special interest group within our ED and shared many resources with colleagues. One particular initiative that I was impressed with was the networking that occurred in various forms between states, regions etc. I would be very keen to begin by developing a network between Emergency departments in relation to paediatric care. This would raise the profile of the care of children in our EDs. It is still sadly common when talking to colleagues to hear the words “not kids, I am not comfortable caring for children”.

Since my return I have developed a poster to present at the Emergency nurses conference in Melbourne about paediatric care in general emergency departments. With the theme of “From Little Acorns Large Oak Trees Grow” it represents a department that had very few facilities for children but had an idea and that idea like children and oak trees grow until that department has great facilities and expert care of children.

I have also sent an abstract into the Paediatric society conference in Christchurch this year to feedback on my visits.

One re-occurring theme that came up in all my visits and many areas are working on is transitioning form paediatric care to adult care.

My heartfelt thanks to the Margaret May Blackwell fellowship for this wonderful opportunity.
Pediatric Assessment Tools
Sponsored by the Pediatric Liaison Nurses of Los Angeles County

Normal Pediatric Vital Signs

<table>
<thead>
<tr>
<th>Age Group</th>
<th>HR (beats/min)</th>
<th>RR (breath/min)</th>
<th>BP (sys mm/hg)</th>
<th>BP (dia mm/hg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newborn</td>
<td>100 - 180</td>
<td>30 - 60</td>
<td>73 - 92</td>
<td>52 - 65</td>
</tr>
<tr>
<td>0 - 1 month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant</td>
<td>80 - 150</td>
<td>30 - 60</td>
<td>90 - 109</td>
<td>53 - 67</td>
</tr>
<tr>
<td>1 - 12 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toddler</td>
<td>75 - 130</td>
<td>25 - 35</td>
<td>95 - 105</td>
<td>56 - 68</td>
</tr>
<tr>
<td>1 - 3 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preschool age</td>
<td>75 - 120</td>
<td>22 - 32</td>
<td>99 - 110</td>
<td>55 - 70</td>
</tr>
<tr>
<td>3 - 5 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School age</td>
<td>70 - 110</td>
<td>20 - 30</td>
<td>97 - 118</td>
<td>60 - 76</td>
</tr>
<tr>
<td>5 - 11 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-adolescent</td>
<td>70 - 110</td>
<td>18 - 22</td>
<td>105 - 124</td>
<td>60 - 80</td>
</tr>
<tr>
<td>11 - 13 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent</td>
<td>65 - 105</td>
<td>16 - 22</td>
<td>110 - 133</td>
<td>63 - 83</td>
</tr>
<tr>
<td>13 - 18 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>50 - 90</td>
<td>12 - 20</td>
<td>113 - 136</td>
<td>65 - 84</td>
</tr>
<tr>
<td>18+ years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wong-Baker FACES Pain Rating Scale

- **Silent/Calm**: 0
- **Quiet/Closed Eyes**: 1
- **Crying/Holding Abrid**: 2
- **Howling/Holding Face**: 3
- **Biting/Holding Face**: 4
- **Fighting/Holding Face**: 5
- **Worse Than Masturbation**: 6
- **Worse Than Masturbation**: 7
- **Worse Than Masturbation**: 8
- **Worse Than Masturbation**: 9
- **Worse Than Masturbation**: 10

**FLACC (< 44 weeks - 3 years)**

<table>
<thead>
<tr>
<th>Category</th>
<th>0</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>Normal expression</td>
<td>Normal expression with minor discomfort</td>
</tr>
<tr>
<td>Legs</td>
<td>Normal position</td>
<td>Upright, legges tense</td>
</tr>
<tr>
<td>Activity</td>
<td>Normally active</td>
<td>Squirming, shifting, and frown, tense</td>
</tr>
<tr>
<td>Cry</td>
<td>Not crying</td>
<td>Mournful tears, occasional crying</td>
</tr>
<tr>
<td>Consolability</td>
<td>Content, relaxed</td>
<td>Fussing and occasional touching, struggling to be calmed, restless</td>
</tr>
</tbody>
</table>

**Glasgow Coma Scale**

**For Patients < 2 years old**

<table>
<thead>
<tr>
<th>Eye Opening</th>
<th>(4) Spontaneous</th>
<th>(3) To speech</th>
<th>(2) To pain</th>
<th>(1) None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal</td>
<td>(5) Coos, lalbies</td>
<td>(4) Irritable cries</td>
<td>(3) Seeks pain</td>
<td>(2) None</td>
</tr>
<tr>
<td>Motor</td>
<td>(1) Normal spontaneous movements</td>
<td>(4) Withdraws to touch</td>
<td>(3) Abnormal flexion</td>
<td>(2) Abnormal extension</td>
</tr>
</tbody>
</table>

**For Patients > 2 years old**

<table>
<thead>
<tr>
<th>Eye Opening</th>
<th>(4) Spontaneous</th>
<th>(3) To speech</th>
<th>(2) To pain</th>
<th>(1) None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal</td>
<td>(5) Oriented</td>
<td>(4) Confused</td>
<td>(3) Inappropriate words</td>
<td>(2) Incomprehensible</td>
</tr>
<tr>
<td>Motor</td>
<td>(1) Normal spontaneous movements</td>
<td>(4) Withdraws to touch</td>
<td>(3) Flexion (pain)</td>
<td>(2) Extension (pain)</td>
</tr>
<tr>
<td></td>
<td>(1) None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WEB-BASED LEARNING FOR HEALTHCARE

Mosby’s Pediatric

Mosby’s Pediatrics Mosby’s Pediatric Nursing focuses on disease processes and congenital anomalies frequently seen in the pediatric hospital setting. It also includes family-centered care lessons that emphasize the psychosocial aspects of nursing, including care of the dying child, child maltreatment, and the child with special needs. Each pediatric course encourages critical thinking and addresses challenging patient care situations. Mosby’s Pediatric Nursing provides every learner with the knowledge needed to optimize the care of the child and the family.

Assessment of the Child and Family

Assessment of the Child and Family: Communication
Assessment of the Child and Family: Health History
Assessment of the Child and Family: Physical Examination

Family Centered Care During Hospitalization

Family Centered Care During Hospitalization: Stressors of the Child and Family
Family Centered Care During Hospitalization: Pain Assessment and Management
Family Centered Care During Hospitalization: Child Maltreatment

The Child with Respiratory Dysfunction

Respiratory Dysfunction: Respiratory Infections
Respiratory Dysfunction: Cystic Fibrosis
Respiratory Dysfunction: Asthma
Respiratory Dysfunction: Respiratory Emergencies

The Child with Gastrointestinal Dysfunction

Gastrointestinal Dysfunction: Disorders of Motility
Gastrointestinal Dysfunction: Inflammatory Disorders
Gastrointestinal Dysfunction: Structural Defects
Gastrointestinal Dysfunction: Obstructive Disorders

The Child with Cardiovascular Dysfunction
Cardiovascular Dysfunction: Congenital Heart Disease
Cardiovascular Dysfunction: Acquired Cardiovascular Disorders
Cardiovascular Dysfunction: Vascular Dysfunction

The Child with Hematologic or Immunologic Dysfunction
  Hematologic or Immunologic Dysfunction: Red Blood Cell Disorders
  Hematologic or Immunologic Dysfunction: Neoplastic Disorders
  Hematologic or Immunologic Dysfunction: Immunologic Deficiency Disorders

The Child with Genitourinary Dysfunction
  Genitourinary Dysfunction: Vesicoureteral Reflux, Nephrotic Syndrome, and Wilms Tumor
  Genitourinary Dysfunction: Renal Failure

The Child with Cerebral Dysfunction
  Cerebral Dysfunction: Cerebral Trauma
  Cerebral Dysfunction: Nervous System Tumors
  Cerebral Dysfunction: Intracranial Infections
  Cerebral Dysfunction: Seizure Disorders

The Child with Endocrine Dysfunction
  Endocrine Dysfunction: Diabetes Mellitus

The Child with Musculoskeletal or Articular Dysfunction
  Musculoskeletal or Articular Dysfunction: Traumatic Injuries
  Musculoskeletal and Articular Dysfunction: Congenital and Acquired Defects

The Child with Neuromuscular or Muscular Dysfunction
  Neuromuscular or Muscular Dysfunction: Congenital Disorders
  Neuromuscular or Muscular Dysfunction: Acquired Neuromuscular Disorders

The Child with Special Needs
  The Child with Special Needs: The Family and Child with Special Needs

The Care of Children at the End of Life
  End of Life: Care of the Child and Family
The Emergency Nursing Orientation Online Course is designed to strengthen the knowledge and skills of nurses working in the emergency department—including new and experienced nurses—as part of their orientation program and continuing education.

The Emergency Nursing Orientation Course is a blended-learning program that consists of 42 online modules with corresponding textbook assignments from Sheehy’s Emergency Nursing: Principles and Practice, 5th edition.

This innovative and interactive online course helps emergency nurses sharpen their critical thinking and technical skills so they can intervene with precision and confidence. To enhance understanding and simplify complex topics, the online content is presented in an organized, concise, and easy-to-read fashion with the liberal use of charts, animations, and interactive exercises. In addition, nurses will have the opportunity to earn up to 68.8 continuing education contact hours through the ENA.*

FEATURES OF THE COURSE INCLUDE:
Captivating, interactive elements, such as animations, video segments, tables, audio, and much more...

Reliable and up-to-date online content that corresponds with Sheehy’s Emergency Nursing: Principles and Practice, 5th edition, by the ENA.

Self-assessment activities appear throughout the modules with immediate feedback and rationales for correct and incorrect answers

Case-based, problem-oriented format of learning activities that relate to real-life patient situations

Links to valuable resources, including journal articles and drug information

The Emergency Nursing Orientation Course offers a wide variety of interactive, self-check activities with feedback and rationales for correct and incorrect answers to help nurses engage with the content, test their knowledge of key concepts, and identify areas needing further study.

THESE SELF-CHEKS INCLUDE THE FOLLOWING ACTIVITIES:

Anatomy & Physiology Review
Case Studies
Drag-and-Drop Labeling
Fill-in-the-Blank
Flashcards
Matching
Multiple Choice
Paragraph Sequencing
Quiz Show Questions & Answers
True/False