LETTER FROM THE CHAIR:

Patient Safety and Specialist Recruitment are Top Priorities

The new year marks the start of real work on the Central New York Children’s Hospital at University Hospital. With all of the New York State authorizations in place, the community campaign is in full swing. The architect has been selected, and work groups are just starting to be assembled to begin the detailed planning process. Our project was featured in a workshop on the topic of children’s hospitals within hospitals at a meeting of NACHRI (National Association of Children’s Hospitals and Related Institutions) last month.

As I often remind our staff, however, the rapid progress of the children’s hospital is not an excuse to delay addressing other urgent needs. This issue of KidStuff highlights two such areas.

Patient safety is fast becoming the big issue in health care today. Because of the small size of our patients, as well as their fragility, there is much less room for medication errors. We have made the commitment that our new children’s hospital will be designed with safety as a paramount consideration.

A key component of inpatient safety is computerized physician order entry (CPOE). Such systems can eliminate the vast majority of medication errors. University Hospital has committed to CPOE, and has already acquired a sophisticated system which is being rolled out this year. Pediatrics is one of the first areas to benefit from CPOE, and one of our intensivists, Neal Seidberg, is playing an important role in implementation institution-wide. CPOE will be fully operational well before the new children’s hospital opens its doors.

The other important area is that of pediatric subspecialist recruitment, an initiative that cannot wait for the completion of the new facility. Another article in this issue introduces one such subspecialty area, pediatric orthopedics. We are blessed to have two talented children’s orthopedic specialists on our faculty. Dr. Steve Albanese, the chair of Orthopedics, is internationally known, with a particular reputation in scoliosis surgery. Our newest pediatric orthopedist, Dr. Danielle Katz, recently returned to Syracuse after completing her training at The Children’s Hospital in Boston.

Our orthopedic surgeons are now working in the Center for Children’s Surgery. With operating and recovery areas dedicated and staffed exclusively for children, along with a group of pediatric anesthesiologists, this center will form the nucleus of children’s surgery in our new hospital.

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As we all know, “children are not just small adults.” This holds true in orthopedic surgery as well. Pediatric orthopedic surgery is an exciting field that encompasses care of a variety of injuries, deformities and disease processes specific to children and adolescents. This includes traumatic injuries (such as fractures), spine disorders (scoliosis, kyphosis, spondylolisthesis), hip dysplasia, angular and rotational deformities (bow legs, knock knees, intoeing), foot anomalies (clubfoot, tarsal coalition), growth abnormalities (leg length discrepancies), and orthopedic manifestations of neurologic and metabolic abnormalities.

Many fractures in children can be treated with casts, but some do require surgery. Elbow fractures and femur fractures are those that most commonly require operative treatment. Potential complications from fractures that are unique to children include the development of angular deformities and/or limb length discrepancies as a result of damage to the growth plate.

Scoliosis is the most common spine deformity in children. Small curves may be observed while larger curves may require bracing or even surgery (spine fusion). Congenital scoliosis is less common than adolescent idiopathic scoliosis and may be associated with neurologic, renal and cardiac anomalies.

Although most commonly detected in infancy, hip dysplasia may present at any time during childhood, adolescence, or even adulthood. Infants are most often treated with a Pavlik harness while older children may require casting, open reduction, and/or bony osteotomies. Periacetabular osteotomy (PAO) is an operation in which the surgeon cuts completely around the acetabulum in order to improve its alignment and provide better coverage of the femoral head. This operation is particularly effective in adolescents and young adults to prevent the development of early osteoarthritis.

Small differences in leg length are typically clinically insignificant. Leg length differences above two centimeters sometimes benefit from surgical equalization. When smaller, this can be done by slowing the growth in the longer leg by epiphyseodesis (creating premature closure of one or more growth plates). When the difference is, or is anticipated to be, quite large then gradual lengthening of the shorter leg (by distraction osteogenesis) is an option.

Clubfoot deformity is treated initially with serial casting. Sometimes this is all the treatment needed. Sometimes percutaneous sectioning of the Achilles tendon or comprehensive release is required.

Currently at University Hospital, pediatric orthopedic care is provided by Drs. Stephen Albanese and Danielle Katz. Both are fellowship-trained in pediatric orthopedics. They see patients primarily at 550 Harrison Street, but also at University Hospital. For appointments call 464-8641 or 464-8646.
This is an exciting time in pediatrics. The development of a children’s hospital will go a long way to improve the quality of care for children in this area. While this revolution of care for children is occurring, an equally dramatic and revolutionary change is occurring for University Hospital that will streamline and improve care for all patients.

First was the roll out of “WebCais,” the practitioner’s portal to patient information. Initially, WebCais served to display patient lab results and demographic data. Now, lab data can be reviewed in tabular or graphical format at any computer in the hospital. With the addition of new security capabilities, practitioners from home or office are able to use their web browsers to access this data in real time.

The second change will be the transition from writing patient orders on paper, in charts, to computerized entry of all orders via the WebCais portal or Computer physician order entry (CPOE). Currently, order flow is a complex series of events that must occur for an order to be carried out. First, the practitioner must find the chart and write a legible order. Of course the chart could be any number of locations, including off the floor. While orders are written, the practitioner has no active list of current orders to check for interactions. When an order is completed, it is flagged and placed in a rack. It then needs to be found by a nurse (if it is not taken from the chart by others first) who then transcribes the order and begins to activate it by: faxing to pharmacy, entering a lab request into the lab system, faxing to dietary, etc. If a drug is to be given, the pharmacist enters it into the system, looks for inaccuracies and sends the drug to the floor. The floor nurse needs to notice it has arrived and then check it against the original order (find the chart). The actual time for an order to be completed can be from 30 minutes to an hour on a good day. With CPOE the order can be written from any terminal in the hospital—including at bedside. The order is routed directly to the computer system of the appropriate department after it is checked by the computer for dosing and interaction errors. In the case of a pharmacy order, the order is directly passed to the pharmacy computer system where it is reviewed by a pharmacist. A Pyxis unit on the floor will then automatically dispense the medication. The total turn around time will dramatically decrease while error checking and legibility will diminish potential errors.

CPOE will start this March on 2N (rehabilitation floor) and then move through the hospital. Pediatrics will be one of the first areas to use this technology (anticipated this summer). There are other changes in the wings. Starting now, any practitioner with a wireless capable pocket PC device can view labs and orders in real time using the device in the hospital. They can check a patient’s labs at their bedside while rounding. Also, all of radiology will soon be digital and all films will be viewable from terminals throughout the institution as well as from enabled web browsers in offices.

It is, indeed, an exciting time for pediatrics!

Neal Seidberg, MD
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