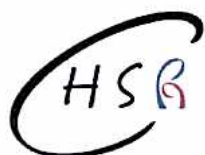


The Pediatric Examiner



Children's Health Services Research

Department of Pediatrics, IU School of Medicine Spring 2005

Faculty Spotlight: Sarah Wiehe, back home again



Dr. Sarah Wiehe with her Lab, Libby.

by Sarah Wiehe, MD

In preparation for this piece, I read the faculty spotlight articles of some of my colleagues. All were interesting in their own ways and quite informative, but a comment by Gil Liu was especially helpful in getting me started. He recalled

how upset his parents were when they saw the home he planned to move into and restore. Like Gil, I also found an old home. It has been vacant for 30 years, has no usable utilities and a hole in the roof, and costs

a small fortune. When I told my parents, who have been in Indianapolis since 1967, about the house of my dreams, they were ecstatic. I was pleasantly surprised by this and a little puzzled until I discovered the reason for their reaction - They knew I would be around for a while since it would take a lifetime to restore the place and two lifetimes to pay for it. Actually, my boyfriend, Tyson, is a general contractor in Seattle, and has promised to manage this project after he finishes up some projects currently underway, so perhaps the restoration of my new home will only take half a lifetime. (As someone interested in studying the social determinants of health and the application of various statistical procedures to the unraveling of causal pathways, I am still trying to figure out whether my interest in restoring old houses stems from my interest in Tyson or whether it's the other way around.)

One additional significant other moving out here from Seattle is my faithful canine companion, Libby. Libby is a

Resident Spotlight: Aishwarya Deenadayalu

by Aishwarya Deenadayalu, MD

As I draw closer to completing my pediatrics residency, I find it interesting to contemplate the journey of my career thus far. I have wanted to be a pediatrician since I was a young girl, and I hoped to model my career after the example set by my childhood pediatrician in his practice in Ft. Wayne, Indiana.

After graduating from high school, I began the long trek, attending college at Emory University in Atlanta, Georgia and then medical school at Wright State University in Dayton, Ohio. Over these years, I continued to see myself as a budding general pediatrician, although I did not consider all of the details of my chosen profession. While I always considered myself a caring, compassionate person, I never truly contemplated how I would treat my patients and their families, nor the nuances of relationships that I would have with my patients with chronic medical conditions and their families. Yet, after returning to Indiana for residency, I began to mull over these issues, not because of an experience in my continuity clinic or the intensive care unit or through any interaction with any of my own patients, but the result of a conversation

that I had with Donna Olsen, Director of the Indiana Parent Information Network.

I met Mrs. Olsen in May 2003 during my Community rotation required by our residency program. During our initial conversation, she introduced me to the concept of transition of medical care for youth with chronic medical conditions from pediatric to adult healthcare providers. I was struck immediately by her recollection from many years ago of her children's pediatrician asking Mrs. Olsen to picture her son and daughter, both of whom had been diagnosed with cystic fibrosis, five, ten, and fifteen years later and her hopes and dreams for each of her children. I left that meeting thinking that, in the future, I hoped to model my approach to treating patients with various chronic illnesses after the example set by the Olsen children's pediatrician.

During my second year of residency, my growing interest in the medical care of youth with chronic medical conditions led to my involvement in the Dyson longitudinal project that was partnered with IPIN, specifically addressing transition of these individuals from pediatric to adult healthcare providers. I conducted semi-

structured interviews with eleven pediatric specialists at Riley Children's Hospital to determine their experience with medical transition and their thoughts regarding the role that their patients' general pediatrician may play in the process of medical transition. After these conversations, I realized that, often, the general pediatrician plays a very limited role in transitioning the medical care of youth with chronic medical conditions from pediatric to adult healthcare providers. While I concede that for whatever reason, currently, the general pediatrician plays a very limited role in this transition, I simply don't think that this is acceptable, and hope to be part of the movement towards a new medical model of the care of these individuals in the future.

As the medical care for children with chronic medical conditions continues to improve, and these children subsequently develop into adolescents and adults with the same chronic medical conditions, if developmentally appropriate and possible, I think that these individuals should be cared for by adult healthcare providers. I believe that it is the responsibility of the general pediatrician who cares for such children to encourage and facilitate the process of

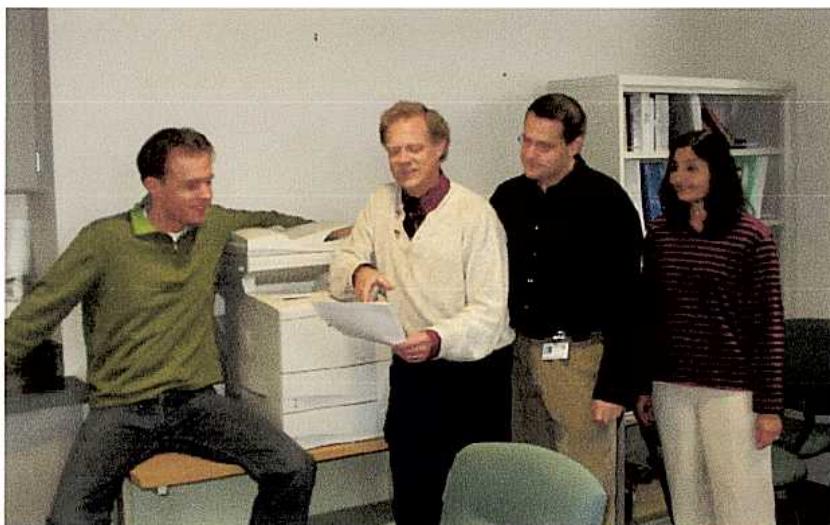
CHICA system goes live, improves patient care

by Stephen M. Downs, MD and
Paul Biondich, MD

On November 5, 2004, the Child Health Improvement through Computer Automation (CHICA) system "went live" at Wishard's second floor primary care pediatric clinic. CHICA, a major research project of Children's Health Services Research, is a computer based decision support system designed to improve the quality of pediatric well care visits. (See the June 2003 issue of the *Pediatric Examiner* at www.ichsr.org) CHICA acquires patient information from the Regenstrief electronic medical record system to generate computer-readable, individually tailored paper questionnaires that capture important health information before the child sees the doctor. These surveys, which assess a number of age-specific health risks, are completed by families in the wait-

"...evidence suggests that CHICA has greatly increased the detection of problems like maternal depression..."

ing room. Support staff also collect vital signs, such as heights and weights. CHICA analyzes all of this information against a series of authoritative



CHICA team (l-r): Dr. Paul Biondich, Dr. Stephen Downs, Dr. Aaron Carroll and Lead Systems Developer, Vibha Anand

care guidelines (e.g., from the American Academy of Pediatrics) to generate reminders and other useful pieces of information on a special worksheet that can be used by the physician during the patient visit.

Previous work with CHICA's predecessor, a system developed by Dr. Downs while in North Carolina, showed that these reminders can significantly improve the quality of patient care. Since it was turned on in November, CHICA has provided assistance with almost 3000 visits. The transition to CHICA has had some challenges according to the system's developers (Steve Downs, Paul Biondich, Vibha

Anand, and Aaron Carroll). There are logistic issues as staff learn how to handle the printing and scanning equipment and change routines to accommodate the new forms. Physicians have also had to adapt to the new forms, which differ substantially from the previous encounter forms. However, the team has been encouraged by the staff's acceptance of this newly developed system to date.

Even more encouraging, anecdotal evidence suggests that CHICA has greatly increased the detection of problems like maternal depression that can be quite common, but often missed. The CHICA

Spring 2005 WIP Speaker Schedule*

March 22—Jonathan Thackery
March 29—Journal Club**
April 5 —Marc Rosenman
April 12 —Nicole Keith
April 19 —PAS prep session
April 26 —PAS prep session
May 3 —PAS prep session
May 10 —PAS prep session
May 17 —No session
May 24 —Journal Club**
May 31 —Toni Laskey
June 7 —OPEN*
June 14 —Nancy Swigonski
June 21 —Journal Club**

*If you would like to reserve one of our open dates to present your ongoing research, please contact Loyce Stultz at lstultz@iupui.edu.

** Journal Club sessions, held the last Tuesday of each month, will consist of a brief review of current literature by CHSR faculty.



In December 2004, Dr. Nancy Swigonski received the **Governor Frank O'Bannon Memorial Kids First Award**, an award that was established in honor of the late Governor's efforts to promote the health and well being of Indiana's children. The award is presented to an individual who has exhibited leadership in improving statewide policies and processes, and commitment to the Covering Kids & Families' mission. She is pictured above with the award, a framed photograph of a beautiful scene in Clifty Falls State Park, photographed by local artist, Randall Shedd.

- Deenadayalu continued

transition of healthcare. These beliefs led to my decision to apply for a CATCH grant, funded by the American Academy of Pediatrics. This would financially help me initiate conversations with youth with chronic medical conditions who face the prospect of medical transition.

In December 2004, I was informed by the AAP that I had received the CATCH grant, and will be funded through June 2005. During this time, I plan to

enlist resources provided by IPIN, to recruit approximately 25 youths ages 10 to 21 with various chronic medical conditions to be part of one of three focus groups (each with about eight individuals). In these focus groups, I hope that we can discuss what they view as prerequisites, necessities, and barriers to successful medical transition. I will share the knowledge gained with my colleagues in the Pediatrics

residency program at Indiana University. I will also share this information with the residents and faculty at St. Vincent's Family Practice residency program where I have accepted a Pediatrics staff position which I will begin upon completion of my residency with Indiana University.

CHSR: in print

School-Based Smoking Prevention Programs Ineffective

By Cindy Fox Aisen

Smoking prevention programs in junior high or high school have little influence on whether teens choose to light up or not, according to a study published in the March issue of the *Journal of Adolescent Health*.

"Our study shows there is little evidence to suggest that existing school-based smoking prevention programs produce long-term reductions in smoking prevalence among youth," says the study's first author, Sarah Wiehe, M.D., M.P.H., assistant professor of pediatrics, Division of Children's Health Services Research at the Indiana University School of Medicine.

The researchers reviewed eight randomized, controlled smoking prevention trials with follow-up smoking data through at least 12th grade or age 18. Data from the popular Project DARE (Drug Abuse Resistance Education) program were included in the final analysis.

Seven of the studies, including project DARE, showed no statistically significant difference in smoking prevalence between students enrolled in school based smoking prevention programs and students

not enrolled in this type of program.

The Centers for Disease Control and Prevention currently recommends a comprehensive tobacco-control program, which includes a school-based component. Additionally, Congress mandates that schools seeking Title IV funds use research-based prevention programs.

The school-based programs studied by Dr. Wiehe and colleagues shared certain characteristics. Most targeted middle-school students, although some

focused on high school students and one addressed both age groups. Most of the programs followed the social influences model of behavior change.

None of the smoking reduction programs reviewed included community or media programs, which have been shown to negatively influence adolescent smoking. There were wide variations in study populations, type and intensity of intervention, and outcome measures.

"Race, urban community stressors, and behavioral and emotional problems of children with special health care needs"

by Rachel O'Connell and Gil Liu, MD

CHSR researchers Gil Liu and Nancy Swigonski are co-authors on a manuscript recently published in *Psychiatric Services* (January 2005 Vol. 56 No. 1). The manuscript is entitled, "Race, Urban Community Stressors, and Behavioral and Emotional Problems of Children With Special Health Care Needs."

Children with special care healthcare needs (CSHCN) have a much higher rate of be-

havioral and emotional problems. The manuscript reports on a study of the relationships between socio-demographic characteristics, health status, access to health care, satisfaction with health care, and urban stressors among African-American and white low-income children with special health care needs. The primary aim of the study was to identify aspects of stress experienced by

- Wiehe continued

chocolate Labrador Retriever who entered my life as a puppy during my second year of residency. Having heard horror stories about how rambunctious Labs can be, Libby and I enrolled in dog obedience school. Although Libby has 'Sit!', 'Stay!', and 'Lie Down!' reasonably well in hand (paw), she has not yet learned to curb her naturally

"Though I thoroughly enjoyed my time in the Pacific Northwest, I am happy to be back home again in Indiana."

friendly disposition to the point where she can resist greeting another dog, on a leash, when their two owners pause (paws?) to shake hands. Unfortunately for Libby and me, mastery of this task is first on the list of things required to pass the course. Consequently, Libby still has not graduated from obedience school, but we console ourselves with the thought that anyone with as much love to give as Libby has doesn't really need all of those diplomas on her dog house wall.

Speaking of significant others, a word or two about my family may be in order. I am the oldest of three children. Both of my parents have been involved with teaching since

moving to Indianapolis. My dad was on the Behavioral Science faculty at the University of Indianapolis for 26 years. Since leaving 12 years ago, he has worked with low income children and families while consulting for the state and IPS. My mom teaches choral music in Washington Township, first at junior high and then, following an eight year hiatus to launch my siblings and me, at North Central High School, where she heads the choral music program. My sister, Petra, taught in East Harlem and currently is working on a second master's degree at Columbia which will enable her to work more effectively with autistic pre-schoolers. My brother, Aaron, is a project manager in Seattle for PCL, one of North America's largest construction companies.

My own education was at the University of Chicago, where I majored in economics as an undergrad and attended medical school. Gary Becker lived just a few doors down the street from me, so it may come as no surprise that I combined my interest in social justice with an interest in human capital and became convinced of the need for much greater investment of medical and educational resources to benefit low-income members of American society. Lest one conclude my eight years in Chicago were hopelessly boring and serious, I pursued extra-curricular interests in music and cross-country. I also developed an exquisitely

refined taste for deep-dish pizza and micro-brewed beer.

My most recent stint was in Seattle where I did my pediatric residency, chief residency year, and fellowship/MPH work. Despite my busy academic career at the UW, I also had time to pursue my new interests in snowboarding, gardening, and ceramics. Though I thoroughly enjoyed my time in the Pacific Northwest, I am happy to be back home again in Indiana.

- CHICA continued

team is working to study what benefits and problems the system may present. They have also already begun working on new features, such as the introduction of a Spanish language version of the family questionnaire so CHICA can serve the growing Spanish speaking population. There are additional plans to provide customized "just-in-time" patient handouts related to problems identified during screening, along with improved immunization and growth assessment.

Working in close collaboration with IUMG-PC, the Pediatric Policy Advisory Committee, the Quality Improvement Committee and the faculty and staff of the PCC Pediatric Clinic, the CHICA development team at CHSR expects to see a continued evolution of the system.

Staff Spotlight: Clarian Grant Project Manager, Vickie Cater

by Vickie Cater and Monnica Lewis

Sometimes I find it hard to believe I have lived in Indianapolis for nearly eleven years. A Southern Belle, I grew up in Cairo, Georgia and attended Albany State University where I earned a degree in psychology and met my husband, Robert.

Shortly after college, in 1995, we moved to Indianapolis where my husband began his private medical practice. For a short time, I worked as a teller at Bank One, but decided to be a stay at home mom when my son, Robert (Robbie), was born. However, after a while I realized how much I missed the rewards and challenges of working outside the home.

My job as an instructional assistant with Noble of Indiana, a nonprofit organization dedicated to helping those with physical and/or mental disabilities live better lives, affected me greatly. As I spent time teaching clients daily living skills and job search skills, I learned humility and developed greater patience and compassion for those who face different challenges. The lessons they taught me have stayed with me to this day.

When my second child, Victoria, now six, was born, I once again became a stay at home



mother; returning to work after she was old enough for preschool. In search of a new challenge, I decided to look for ways I could apply myself in the medical research field, which led me to the IUPUI campus and the IU School of Medicine Cancer Pavilion. For two years, I was a research assistant and played an active role in the development of a database system designed to capture all serious adverse events to cancer treatment for patients around the world. The most difficult task, for me, was when I would make a follow-up call to patient's homes only to learn he or she had passed away.

I joined the Children's Health Services Research team in June 2004 as a Project Manager charged with coordinating two concurrent Clarian Values grants, "Use of Toolboxes for

Resident Education" and "Teaching Pediatric Residents Oral Health Skills". Toolboxes, or fact sheets, are quick reference guides for residents to use in clinic.

Thus far, we have developed one for ADHD, though several more are in the works. Once toolboxes are developed, I am responsible for detailing residents in their use and making follow-up visits to ascertain their effectiveness. The other half of my time here is spent matching pediatric residents with dental residents who work, hands on, at the Riley dental clinic with patients. The goal is to teach general pediatric practitioners, who have more regular contact with their patients than dentists, how to screen for dental problems which may need further attention. It is a privilege to be a part of this effort to broaden the training experiences of IU pediatric residents and, by extension, contribute to the quality of healthcare for Indiana's children.

While working and parenting full-time keep me pretty busy, in my spare time, I enjoy taking Tae Kwon Do classes with my children. We have two pet hamsters, Harry and Speedy, a crawfish named Brett and a nameless goldfish.

- in print continued

families of CSHCN living in urban communities that have a significant impact on the behavior and mental health of their child with special health care needs. The researchers hoped to assist health care providers address important community-level risk factors when caring for this highly vulnerable population.

The study involved interviews with 257 caregivers of children with special health care needs. Participating families completed surveys such as the ULSS, a 21-item questionnaire designed to measure subjective community-level stressors as

potential sources of psychological and emotional stress experienced by persons living in

medium to large cities. The ULSS addresses a wide range of topics including housing, marriage, crime, racism, and so on. The results from this survey indicated that urban community stressors, race, and a child's health status were all significantly associated with behavioral and emotional problems among children with special health care needs. It also found that after controlling for demographic and health care access and satisfaction factors, white children were shown to have more behavioral and emotional

"Primary care physicians will need to position themselves in partnerships with community-based organizations..."

problems than African-American children. However, the association between urban stress and children's mental health did not differ by race. These findings support those of other studies that concluded that urban stressors and limited social support are independently associated with a need for mental health services and that white individuals in low-income environments may be more vulnerable to health problems than individuals in minority groups.

Given the limitation of mental health services for children, primary care physicians should strive to identify the urban community stressors of their young patients with special health care needs and to ac-

knowledge the impact these stressors have on their behavioral and emotional health. Primary care physicians will need to position themselves in partnerships with community-based organizations to assist families who are experiencing life stressors that ultimately lead to poor mental health among children. Moreover, efforts are needed at the public policy level to address social inequities such as inadequate employment, housing, and education that have been repeatedly identified as adversely affecting health.

The Pediatric Examiner is a publication of Children's Health Services Research, Department of Pediatrics, Indiana University School of Medicine.

Mission: We strive to improve the health and healthcare of children by developing and applying best scientific evidence and methods in health services research and informatics.

Values: We are guided by compassion for children, partnerships with others, and scientific rigor.

Vision: We seek to become the nation's preeminent center for children's health services research and informatics. We strive for excellence in research, education and service to children, their families, their communities and the professionals who serve them.

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