Chair Update

I write this article with mixed emotions. I am about to complete my last newsletter article as Chair. Mixed in with that sadness, however, is immense pride in what everyone in our Section has accomplished in the last 4 years.

Looking back, I want to highlight some of the key things we accomplished together. We knew that the health and vibrancy of any group is dependent on significant engagement of its members. Towards that end, we undertook several initiatives to involve and engage as many of you as possible in the various Section activities.

In the past, the Chair had served as the default editor of the Section’s twice-yearly newsletter. Recognizing the increasing...
intricacies of this job, we created a separate Newsletter Editor position outside of the EC. This person could now concentrate on the newsletter, bringing more attention and fresh new ideas. Teri Jo Mauch took on this position and immediately our newsletter, in the words of an EC member, “shined in comparison to those from other groups”. Teri has instituted several new features in the newsletter that have allowed many of you to be featured (e.g., New member spotlight) or to contribute (e.g., a case quiz, with the answer somewhere else – see below). Your active participation has enriched our entire Section!

Similarly, the role of the Program Chair, responsible for suggesting nephrology programming to the AAP’s National Conference and Exhibition (NCE), was historically handled by an EC member. I had served in this role when I was an EC member. When I took on the Chair role, Stephanie Jernigan succeeded me as Program Chair. Stephanie’s expertise, acquired by years of experience in the role, was too valuable to lose. Upon completion of her EC term, we created a Program Chair position for her, outside of the EC. This allowed Stephanie to take a longer-term look at what we proposed each year and whom we suggested to speak. Her fresh ideas also allowed us to tap into a wider speaker pool (more on that below) and the high attendance at the NCE sessions reflects some sage choices on her part, with input from many of you and from all of the EC.

In these past 4 years, some tumultuous events affected our county and society. The death of George Floyd and others brought long-delayed attention to the issues of equity, diversity and inclusion to many organizations, including our AAP. Our Section created a separate EDI subgroup, headed by my predecessor Doug Silverstein, EC member Juan Kupferman and our then fellow representative Julie Reardon. Doug, Juan and Julie were then able to co-opt several other members to create a true EDI workgroup, as I informed you in the Spring 2022 newsletter. This workgroup developed a work plan to achieve some of the shorter-term goals. Our SONp EC has heartily approved the work plan and we have used them every time we consider nominations for any group or individual position, such as whom to invite as an NCE speaker, mentioned earlier.

The COVID pandemic was another ground shifting event, one from which we are slowly now recovering. (Fingers crossed when I say this!). We all rapidly moved to virtual meetings and collaborations. Our AAP SONp set up a formal Section Collaboration website, with all sorts of useful information for SONp members. If you haven’t visited the site yet, please do – it is worth your while! We linked the Collaboration website to many other things, such as the answer to the case quiz from our newsletter. See page 12 on how to access and navigate the site.

Our section has always had a significant proportion of trainee members – medical students, residents and fellows. We have had a single fellow representative on our EC for some time now. But we recognized the need to keep the young trainees engaged after they finished their education or training. Plus the organizational knowledge and memory of the departing fellow representative was also too valuable to lose. A survey was recently sent to all trainees to identify those who may be interested in establishing a trainee subcommittee. I know that social media jumps out as one such idea, but keep in mind that AAP, given its influence, must speak with one voice – so there is only one AAP account on the various social media platforms. Note that we did host our first ever webinar for AAP medical students and residents who might be interested in careers in pediatric nephrology. This webinar was hosted by Dr. Kimberly Reidy and Dr. Loretta Reyes and the recording is available for viewing on the SONp collaboration website here.

Each of the initiatives above have led to a gratifying increase in SONp membership these past few years. But we recognize that we have to earn your continuing membership every day and every year, so our engagement efforts will continue.

In these 4 years, our EC members also completed a detailed strategic plan review. We spent a lot of time on this, and each part of the plan got scrutinized, with animated discussion among our EC members. Details of the updated strategic plan, including goals and action items, can be found on our collaboration website. As part of this review process, we also updated our SONp’s vision and mission statements. These statements might sound easy to review and edit, but every word in such statements matters, so again we spent a lot of time making sure we represented your priorities. Along the way, we also modified the criteria for the Henry Barnett lifetime achievement award to give priority to accomplishments in the pediatric nephrology domain, while still recognizing accomplishments in general pediatrics.

Our SONp EC accomplished all this while continuing the activities that were historically ours in the past, COVID or not. With our EC’s help and guidance, our former fellow representative Brian Stotter created 3 PowerPoint presentations for pediatric residents on the most common topics that we teach them: hypertension, hematuria, proteinuria. Can you guess where they can be found? Yes, that collaboration website again – I told you it has useful stuff!

As in prior Chair newsletters, here are some updates since our last edition:

1. Workforce Survey Update – As reported in the spring newsletter, The AAP will be coordinating subspecialty workforce surveys

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in 2022 and the SONp and ASPN is again collaborating on in this initiative. Thank you to SONp and ASPN members Drs Darcy Weidemann, Adam Weinstein and S. Sudha Mannemuddhu who will lead this effort for the pediatric nephrology survey. The timeline to field the survey is in process, but the hope is to do so this fall. You might say to be on the watch for further information about the survey as your participation is critical!

2. Parent Education Articles – Working with the ASPN and the National Kidney Foundation, the SONp/NKF/ASPN Patient Education Collaborative (PEC) Writing Group was established and they have written many articles that are published on the AAPHealthyChildren.org and NKF websites. Most recently the following two articles have been published:
   a. Children who are born with One Kidney by Patty Seo-Mayer and me
   b. Prenatal Hydronephrosis (Urinary Tract Dilation) by Darcy Weidemann and Juan Kupferman

3. NCE Programming:
   a. Joint Program: Section on Neonatal Perinatal Medicine and Section on Nephrology - Renal Issues in Term and Preterm Infant - Matthew W. Harer, MD, Shina Menon, MD, David Selewski, MD, MSCR, Michelle C. Starr, MD MPH FASN FAAP, Christine Stoops
   This session discussed issues such as maturation of renal function, criteria used for acute kidney injury diagnosis, unique vulnerabilities of the kidney in preterm infants to nephrotoxins (Baby NINJA), hypoxia and hypo-perfusion injury, and follow-up considerations for the primary care pediatrician.
   b. Risk Factors, Diagnosis, and Management of Urinary Tract Infections – Tej Mattoo and Renea Sturm (Urology)
   c. Update and Review of Hypertension – Joshua Samuels

4. Policy Updates:
   a. Status of AKI intent – The SONp is collaborating with the Committee on Fetus and Newborn (COFN) to submit an intent to develop a clinical report on the management of Neonatal Acute Kidney Injury. Thank you to Drs Kimberly Reidy (SONp), Arun Pramanik (COFN) and Elisabeth B. Cole (SONp) who are serving as the authors.
   b. Status of Urinary Tract Dilation Clinical Report – The Section on Urology in collaboration with the Sections on Nephrology, Radiology and Hospital Medicine are co-authoring a clinical report, “Prenatal Urinary Tract Dilation: Practice Implications for the General Pediatrician”. The draft report is currently undergoing internal AAP group and external organizational peer review.
   c. Urinary Tract Infection Subcommittee – We are pleased to announce that David Hains will serve as a Vice Chair and Tej Mattoo as the Section representative on the new AAP clinical practice guideline subcommittee on UTI. They will revise the “AAP Clinical Practice Guideline for the Diagnosis and Management of the Initial UTI in Febrile Infants and Children 2 to 24 Months that had been retired.

5. EDI Subcommittee – Since our last newsletter, the AAP has a new policy statement and resources regarding the elimination of race-based medicine. I encourage you to review this important information.
   a. New AAP Policy & Resources on Eliminating Race-Based Medicine
The AAP policy statement addresses the elimination of race-based medicine as part of a broader commitment to dismantle the structural and systemic inequities that lead to racial health disparities. Race-based medicine has been perversely interwoven into the fabric of health care delivery in the United States for more than 400 years. Race is a historically derived social construct that has no place as a biologic proxy.
   • Policy Statement: “Eliminating Race-Based Medicine”
   • AAP News: Equity journey: AAP calls for elimination of race-based medicine in new policy
   • News Release: American Academy of Pediatrics Calls for Elimination of Race-Based Medicine
   • Pediatrics On Call Podcast on Eliminating Race-based Medicine

6. Our newest task, just about to start, is to help the journal Pediatrics celebrate its 75th anniversary. Some of our long time Section members (Rick Kaskel, Richard Fine, Manju Chandra, Robert Chevalier and Bill Primack) will highlight key Nephrology papers published in this journal in different eras. We thank all of them for a “labor of love” on their part.

During my 4 years on the EC and another 4 years serving as your Section Chair, I have been honored and privileged to work with some amazing colleagues on the EC: Larry Greenbaum, Doug Silverstein, Teri Jo Mauch, Stephanie Jernigan, Amy Wilson, Don Batisky, Juan Kupferman, Dan Feig, Kimberly Reidy, Manju Chandra, Rick Kaskel, Nicole Christin, Brian Stotter, Julie Reardon, Carol Shen and Lyndsay Harshman.. I cannot thank all of them enough – their wisdom and cooperative spirit were enriching several times over. I speak for all of them when I say that serving all of you has been enriching to each of us.

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Finally, any words of praise I have for our Section Manager Suzanne Kirkwood would be inadequate. Suzanne has been the glue of our Section for many, many cycles. She kept all of us focused and has always sought to help our Section thrive, besides being supremely efficient and always polite and pleasant to all. There may have been times that she considered tearing her hair out, having to deal with some of the more “eccentric” Section Chairs (especially me!), but she remained positive throughout. As much as all of you are the valuable assets of our Section, Suzanne is perhaps the most prized asset of all. Life will be much easier for her now, as Dr. Amy Wilson will take on the Chair role. We are all thrilled and excited to see what Amy has in mind!

Once again, my humble thanks to all of you,

Respectfully,

Vikas Dharnidharka, MD, MPH, FAAP

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A Word from the Editor . . .

The summer has flown by, and it’s time for another newsletter. In case you hadn’t already guessed from the Chair’s Update, the focus of this issue (and the next – in which we explore its role in mentorship and research) is collaboration. Collaboration has many synonyms: cooperation, partnership, alliance, teamwork, association, all of which apply not only to the articles in this issue, but to how we care for our patients and each other. It’s been an honor to work with Dr. Vikas Dharnidharka, and I’m thrilled to welcome Dr. Amy Wilson to her new role as our incoming Chair.

Dr. Margaret Cuomo, a radiologist and author on health issues, wrote, “How did we cure polio, smallpox and send a man to the moon? How did we decode the human genome in just 13 years? Collaboration. Focus on a specific goal, and teamwork.” That nicely summarizes our work on the AAP SONp and the articles featured here. In her Training Fellow Liaison column, Dr. Carol Shen discusses how taking a multidisciplinary approach can promote patient adherence with medications. Dr. Katie Jones, a new contributor, provides advice on how to develop and foster collaborative relationships within the medical team, using a case of neonatal renal failure as an example. In her thoughtful article, she not only highlights the roles of the parents and each specialist, but also provides tools for working together as a team and recognizing individual and team victories. New member Melissa Muff-Luett, MD, collaborates with Pediatric Urologists and dietitians, not only in a multidisciplinary kidney stone clinic, but also on their collective contribution to this newsletter. In the spirit of collaboration, their article will also be available to our colleagues in the AAP Section on Urology. We often think of our collaborators as fellow physicians, scientists, nurses, and other medical team members, but our patients and their parents are increasingly active partners in health care. We are grateful to the AAP Section on Uniformed Services for allowing us to reprint Dr. Wendy Schofer’s article on the power of parents in controlling pediatric obesity, and to Drs. Amy Wilson and Don Batisky for screening other Sections’ newsletters to find this article. And of course, this newsletter is itself an exercise in collaboration, including, but not limited to, the Chair, contributors, and Suzanne Kirkwood, who makes it all look easy. Please see the Section Collaboration website for additional opportunities.

Actor, composer and lyricist Lin-Manuel Miranda summed it up nicely: “The fun for me in collaboration is, one, working with other people just makes you smarter; that’s proven.” I think it’s also safer; if one team member misses something, chances are, another member of the team will catch it. Like a many stranded rope, together, we are stronger.

Please continue to encourage your colleagues to join us and submit ideas for future newsletters to me at teri.mauch@unmc.edu.

Teri Jo Mauch, MD, PhD, FAAP
You are in transplant follow up clinic seeing “Alex”, a 16-year-old who received a deceased donor kidney transplant 2 years ago. She did well immediately post-transplant, but as you are reviewing her chart you realize she missed her last two clinic appointments. As you are talking to her she admits to not taking her immunosuppression medications in the last two months because “things got busy”, and your heart sinks as you see that her creatinine has doubled since her last visit.

I am sure this story is familiar to many of us. In residency, many of us had continuity clinic patients assigned to us, and we began to learn to navigate issues surrounding patients’ adherence to medications and appointments. Now in fellowship, I think I’m not alone in feeling that the stakes feel especially high, when some of the medications our patients take are critical in preventing rejection, or avoiding serious electrolyte abnormalities or other severe consequences. In some cases, missed medications and follow up appointments can lead to hospitalizations, or even loss of a kidney transplant. How do we partner with our patients and other providers to ensure that they have the tools to take care of their own health?

In order to understand what drives whether a patient adheres to a medication regimen or not, it is helpful first to understand the barriers preventing them from doing so. Much of the literature surrounding medication adherence comes from the area of transplant, as patients are on strict and complex regimens, providing much opportunity for error. A survey assessing providers’ perspectives on barriers to medication adherence in adolescent solid-organ transplant recipients cited these common reasons: forgetting/poor planning, the desire to be normal, lack of support, and poor parental monitoring. However, the actual reasons may be more complex and involve myriad psychosocial factors. In addition to the perceived barriers listed above, patients cite undesirable side effects, difficulty with the number of pills or act of swallowing pills, family and/or other psychosocial stressors, and barriers with insurance or obtaining medications from pharmacies as reasons they take medications late or miss a dose.

Taking the time during a visit to ask why a patient missed their medication in a non-judgmental manner may be the first step to promoting adherence. Certain screening tools (e.g., the adolescent medication barriers scale (AMBS), parent medication barriers scale (PMBS)) also exist to help elicit information in an unbiased manner. Screening patients and parents separately may also provide the added benefits of confidentiality and ability to distinguish differences in perspectives. Once barriers are identified, the medical team can then partner with a multidisciplinary team to assess patients’ and parents’ readiness for behavioral change and address psychosocial barriers. The social work team can be involved to help alleviate socioeconomic stressors in the home. A current study is investigating the efficacy of engaging patients and their social networks via tailored psychotherapy sessions in promoting adherence. There have also been recent trials investigating the efficacy of technology-driven approaches (e.g., text reminders, electronic pill boxes, directly observed therapy via mobile applications) in improving adherence.

Ultimately, there is no one-size-fits-all approach to improving adherence, and a collaboration between physicians, patients, their support network, and a multidisciplinary team is crucial to empowering patients to manage their own health.

References:
One of the great strengths of pediatric nephrology as a career is the opportunity to work with multiple specialties in a variety of clinical areas. No case is more illustrative of this fact than that of neonatal renal failure. In the child’s first few years of life, the nephrologist will interact with over a dozen different providers and staff while caring for these complex patients. The relationship with the patient’s family may begin prior to birth during a prenatal consultation involving both the obstetrician and the neonatologist who will care for the infant in the first days and weeks of life. If urinary obstruction is present, the pediatric urologist will also join the patient’s healthcare team.

When dialysis is required, a pediatric surgeon will be consulted for catheter placement. The transition to an outpatient dialysis unit brings with it a new group of nurses, social workers, and dietitians. As the child grows, the nephrologist will introduce the patient and family to the transplant surgeon. The pediatric ICU will frequently become involved post-operatively and a child life specialist will assist with adjustment and coping during this transition time. The effectiveness of the nephrologist as a team leader and communicator will directly impact how the patient experiences the health care system as well as the quality of care delivered.

With so many interactions and individuals, it is inevitable that some miscommunication or misunderstanding will occur. But how can we as nephrologists, the major sources of continuity within these patients’ large healthcare teams, anticipate and mitigate these challenges? Are there more specific proficiencies we can seek to gain for ourselves and our trainees aside from “play nice in the sandbox?” A review of the existing literature on this topic suggests these are skills that may be honed rather than innate abilities of individuals. The following are a few major principles that emerged during a brief foray into healthcare teamwork science:

- Ensure an environment of psychological safety. What is psychological safety? Simply put, it means that team members feel secure that if they question a plan of action or admit a mistake, they will not be ridiculed or punished. Many of us can recall an error that was prevented when an individual spoke up and brought a concern forward during rounds. This is most likely to occur when leaders exhibit humility and foster an environment open to questioning and criticism. Teams that are psychologically safe are also inclusive and respectful of each individual’s background and identity. When a colleague feels excluded or othered, they will be less likely to voice their opinion even when they have a crucial insight into the plan of care. For example, if the nephrologist observes a resident talking over a nurse during rounds or vice versa, they should take control of the situation to ensure that individual concerns are heard and addressed respectfully.

- Develop and voice a shared mental model. The care of children with kidney disease is complex and the medical institution necessarily looks to the nephrologist to lead the plan of care and oversee its execution. Obviously, we cannot do everything alone. The nephrologist may have a clear vision in their mind but unless they are able to verbalize that vision, their team will be lost amongst the details. We can overcome this problem by thinking out loud and deliberately voicing our thought process, especially during bedside rounds. The more that our coworkers understand the “why” behind our care decisions, the better they will be able to execute that vision. One scenario where this would be particularly important might be dialysis initiation: “This patient has chronic renal failure and needs to start dialysis tomorrow. The nephrology fellow will place all the dialysis orders and the patient will be transferred to the dialysis unit and receive a blood transfusion during dialysis and then will return to the floor after a 1-hour treatment. It is important to start with short treatments to avoid the risk of dialysis disequilibrium syndrome, which may manifest as headache, vision change, altered mental status or even seizures.”

- Improve conflict resolution skills. Care of the patient with advanced kidney disease is multifaceted and nuanced. There are often differences of opinion between very experienced clinicians. We can navigate these differences through free exchange of ideas, active listening, and asking questions about the goals and plans of the other party, rather than repetitively stating our own position. Assuming that we already fully know and understand the thought processes and motivations of our counterparts can lead us to fall into the “us vs. them” mentality and degrade future interactions and collaborations. The nephrologist may encounter this when discussing the surgical plan for a patient with obstructive uropathy: “You are saying that a vesicostomy is not indicated at this time. Do you have a different idea for how to decrease the frequency of infections in this patient? Is there a point that vesicostomy would become indicated?”

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Perspective: The Art and Science of Collaborative . . . Continued from Page 6

- Recognize individual and team victories. Kidney care is rarely convenient. The nephrologist may need to ask colleagues for help with difficult problems at inopportune times, such as around 5PM on Friday afternoon or 2AM Sunday morning. When possible, consultations should be placed early in the workday, accompanied by a brief description of the problem and specific request for service. Showing gratitude for the efforts of our collaborators and explicitly identifying them as key drivers of our success increases the morale and resiliency of everyone. Inviting intensive care unit nurses and physicians and dialysis staff to participate in transplant reunion events could be one way to recognize their contribution to the care of these complex patients.

These are just a few of the main elements required to be a great collaborator. At first glance these may seem obvious, but in practice they are difficult to adhere to when patience is low and healthcare worker burnout levels are high. It is nice to be well-liked by our peers and coworkers, but how does our ability to work well with others translate to the patient? Although the literature on the science of teamwork in healthcare is relatively young, the field is actively evolving and there have been several studies exhibiting an association between effective communication and improved patient outcomes. And what better reason could there be to hone these skills than that? Our patients expect us to be the authority in diagnosis and management of kidney disease, but they are also counting on us to work effectively with their other doctors, nurses, and support team. Their health may depend on it.

The opinions and assertions expressed herein are those of the author(s) and do not necessarily reflect the official policy or position of Tripler AMC, The US Army, or the Department of Defense.

References

Featured Section Article: The Power of Parents in Pediatric Obesity
(What we’ve been missing in our current approach)

CAPT (ret) Wendy Schofer, MD, FAAP, DipABLM

According to the CDC, over 35% of American children are diagnosed with overweight and/or obesity (report from 2017-2018). And as the media and medical journals continue to report, the “epidemic” of obesity has been growing with the social changes of the pandemic. What I’ve seen in practice and in the community is that these reports and statistics, while well-intended to shed light upon the public health implications, are having significant effects upon our families. And specifically, our parents.

Parents are worried about their kids’ weight.

Parents are being blasted by information daily about the hazards of obesity, about the increasing prevalence of obesity, and the concerns about increasing rates of eating disorders as well. Parents have kids who have been diagnosed with overweight or obesity, other kids who are “skinny and need more calories” and others who have developmental body changes (like the early adolescent belly) that make them worry if their kids have inherited the family genes leading to obesity. Parents have their own concerns about weight: a history of dieting, body image challenges, and doubt that so often is reported to me as “I can’t be the role model for my kids” to reach a healthy weight.

Emily was 6 years old when we met for a well visit. I looked at her vitals and growth charts as I did for every visit, and she had always been tracking >85%ile for BMI. Her growth was nothing if not consistent. I learned about her varied diet, daily activity, sleep routines,
love of animals, and great connection with her family and peers. There were zero red flags. Her mom asked me, “When are you going to talk about her BMIs?” I asked her what her concern was. “Every time we come, I hear about how she’s still overweight, no matter what we do. I’m failing her.” Emily was thriving. And her mom thought that she was failing her based on a number.

This is what I call reframing obesity:

Weight is a number. It is a measurement. But there is so much meaning packed into it. We go from celebrating “chunky” infants to then raising the red flags when the BMI gets calculated at 2 years old. As physicians, we have such good intentions to help our patients. We identify growth patterns, and make diagnoses. Because after all, if we don’t identify the diagnosis, how can we ever address it? The real problem isn’t the weight, or necessarily the diagnosis - it’s what happens with that information: The worry, the fear of complications, the sense of failure, the doubt that changes can be made. And this is all experienced by the parents. Parents who are experiencing worry, fear, failure, and doubt are unable to make meaningful changes for their family. They look at the tip sheets, recommendations for change, referrals to specialists and think, “This isn’t going to work for us.” Or “this never worked for me.” They keep looking for the “right diet,” the “right plan,” a “second, third, fourth opinion,” and the new genetic test or medication for obesity. Or, they focus on the calories to be consumed with each meal and lose sight of the child who’s wondering why they’re being punished with food. They receive pushback from the kids on mandated fitness.

This is where the power of parents emerges. Parents are the key ingredient for the family. Everything that happens to the child (including education, nutrition, activities, housing) is filtered first through the parent. There is a ripple effect that expands outward from the parent in every family. You know, “The parent sets the tone.” Parents are role models for their children. They always have been, and always will be. They are the first role models. Their beliefs, values, and habits are passed along to their children who grow up in the environment created by the parent. A parent who believes that they cannot change their habits, routines and beliefs will first not create change for themselves, and will model a lack of self-efficacy for their children.

This is where we need to focus our attention as physicians. Not on the weight, not on the BMI, and against the spirit of our individualized medical system, not on the child. The focus needs to be on empowering the parent to own their role as the role model for their children, and to create lifelong healthy habits for the whole family.

What does that look like?

Emphasizing healthy relationships (with food, with one’s body, and with each other).

- Understanding motivation: What emotions are driving us to take action - and why do kids push back when they are told to do something? Helping parents become more connected to their own emotional experience goes a long way in modeling healthy habits for children.

- Creating structure: Planning for adequate restful sleep, nourishing meals, regular movement, and developmentally-informed - within which kids will thrive

- Understanding and questioning beliefs around food: What is healthy vs unhealthy, does there really need to be a dichotomy between good and bad? What happens when dinner is served and a child is not hungry?

- Longing at the long-game: Sustainability. Short-term fixes (diets, fitness blitzes, pantry clean-outs) mean nothing if they aren’t sustainable.

- Understanding growth: We as parents are continuing to learn. We have not failed - as we continue to show up for our kids. But we can learn, evolve, and acknowledge that we are still learning every single day. Growth is not just for children!

The real challenge isn’t weight. It’s looking upstream of weight: what are the habits that created overweight in the first place - and empowering the parent to create lifelong habits that the whole family can share. Supporting the parent, helping them become the change they want to see in their own family, is the first step.

Wendy Schofer, MD, FAAP, DipABLM (CAPT, USN, Retired) is a Certified Health and Life Coach for parents who are worried about their kids’ weight. She helps them shift focus from the scale and the individual child to create lifelong healthy habits for the whole family.
to share, at every weight. She is a practicing pediatrician in Virginia, celebrating her recent retirement from the Navy. Her podcast is Family in Focus with Wendy Schofer, MD, and she can be found at www.wendyschofermd.com.

Reference:

*This article was reprinted from the Section on Uniformed Services Winter 2022 newsletter with permission.

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Call for Nominations PREP Nephrology Editorial Board

We are seeking AAP members with an interest and enthusiasm in education to assist with the development, ongoing maintenance, and innovation of this important educational program.

To apply please complete the online PREP Editorial Board Nomination Form. To view a description of the editorial board member responsibilities, click here.

To apply please follow the steps listed below:
1. Complete the PREP Editorial Board Nomination Form
2. Send a current CV and AAP disclosure form to prepnominations@aap.org
   Please read the AAP disclosure policy statement
   And Click here to complete the disclosure form.

The deadline for receipt of nomination materials is November 15, 2022.

A complete application consists of the online PREP Editorial Board Nomination Form, a current CV/resume, and a completed AAP Full Disclosure Statement. Additional required materials should be emailed to prepnominations@aap.org in Word or PDF format. If you have any questions, please contact Lisa Donato at prepnominations@aap.org or call 630-626-6723.

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Multi-disciplinary Approach to Pediatric Kidney Stones Improves Management

Melissa Muff-Luett, MD, FAAP, Associate Professor, University of Nebraska Medical Center, Pediatric Nephrology, Children's Hospital & Medical Center, Omaha, NE

Claudia Berrodo, MD, FAAP, Assistant Professor, University of Nebraska Medical Center, Pediatric Urology, Children's Hospital & Medical Center, Omaha, NE

John H. Makari, MD, FAAP, Professor, University of Nebraska Medical Center, Pediatric Urology, Children's Hospital & Medical Center, Omaha, NE

Denise Bryson, RDN, LMNT, Children's Hospital & Medical Center, Omaha, NE

Pediatric Nephrology and Urology have developed a close working relationship at Children’s Hospital & Medical Center in Omaha Nebraska. We share numerous patients, particularly those with congenital anomalies of the kidney and urinary tract. With the rise of kidney stone disease in pediatric patients, we have seen more referrals to both of our services for this disease process. We realized that these patients required several appointments between the two services, with some overlap in education, diagnostic testing, and treatment. Additionally, those patients who were referred to only one of the two services were not able to benefit from the expertise that the other specialty is able to provide without an additional referral, leading to delay and additional separate visits.

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In 2018, our Pediatric Nephrology and Pediatric Urology teams developed a multidisciplinary kidney stone clinic to combine the expertise of members of both teams, including physicians, advanced practice providers, and nurses, along with education from our Renal Registered Dietitian Nutritionist and Nurse Educator. Our goal was to combine all aspects of patient management, including evaluation with imaging and metabolic assessment, disease education, dietary education, and initiation of treatment (including dietary modifications, medications, and surgical intervention). We hold this multidisciplinary clinic one half-day per month. The Pediatric Urology team assesses the patient’s stone burden to determine the need for and modality of surgical intervention. The Pediatric Nephrology team assesses the child’s risk factors for nephrolithiasis and discusses measures to prevent additional stone formation, including the need for medical treatment. This format limits the duplication of work and ensures availability of both teams for interpretation of diagnostic testing.

Patients are referred to our multidisciplinary clinic through multiple avenues. Most patients are referred by either Nephrology or Urology providers. However, patients can also be referred from Emergency Medicine providers, Urgent Care providers and Primary Care Providers when the diagnosis of urinary calculi has been confirmed with imaging. Most frequently our patients have already established care with urology in the acute setting while the acute stone event is managed. After treatment of the acute stone episode, the urology team provides basic education about kidney stone disease, general dietary education, introduces the concept of the multidisciplinary kidney stone clinic, and initiates the metabolic work-up.

Prior to their appointment in the Kidney Stone Clinic, all our patients complete a metabolic evaluation to determine risk factors for kidney stone formation. This evaluation includes a twenty-four-hour urine collection to assess recurrent stone risk (typically a Litholink™ panel), blood work (including a chemistry panel, phosphorous, magnesium, 25-hydroxy vitamin D and parathyroid hormone levels) and urinalysis with microscopy. In patients who cannot complete a twenty-four-hour urine collection, a random urine collection is obtained to screen for common metabolic abnormalities that contribute to kidney stone formation, such as hypercalciuria, hypocitraturia and hyperoxaluria. Additionally, if the patient has passed a kidney stone or if it is retrieved during surgical stone management, it is sent to the lab for chemical analysis. Our clinic space includes an ultrasound suite with a dedicated ultrasound technologist, allowing patients to have renal sonography on the same day of clinic, and they can also complete additional imaging, as necessary.

Prior to clinic our team briefly discusses each patient to update both teams on the patient’s medical history and kidney stone clinical course. We review imaging and discuss our preliminary thoughts on management of existing stones (observation vs surgical intervention) and our prevention management suggestions based on preliminary labs, urine studies or stone analysis. A Nephrology or Urology nurse completes the initial clinic intake with the patient/family utilizing a standardized questionnaire including information on diet, fluid intake, medications, urinary habits, and family history of kidney stone disease. The providers then take turns seeing the patients. The nurse then discharges the patient reinforcing any education provided during the visit and instructions for follow-up.

The Registered Dietitian Nutritionist, RDN, has one of the most important roles in the multidisciplinary kidney stone clinic. The RDN provides and helps guide dietary management including fluid intake, calcium requirements and dietary sodium restrictions. Dietary modification is often the first line of treatment of pediatric kidney stones. We typically reserve medications as a secondary treatment if dietary interventions are unsuccessful. The dietary management of kidney stones is tailored to the patient based on their individual risk factors, medical problems and stone type. For example, in patients with a calcium oxalate stone we provide education on recommended fluid intake, sodium and oxalate restriction, normal calcium intake, and high citrate intake. In contrast, for patients with calcium phosphate stones education focuses mainly on adequate fluid intake, sodium restriction, and calcium intake goals. In addition, some patients have restricted diets for unrelated medical problems which need to be taken into consideration when making dietary changes. After the patient is seen in stone clinic, the management plan is discussed amongst the providers, noting any specific dietary needs for the renal dietitian to address with the patient and their caregivers. Our nurse educator and dietitian have created patient education materials with general dietary recommendations for each common kidney stone type. This information is combined in a single After Visit Summary. Both the Urology and Nephrology providers and the dietitian document the encounter and a comprehensive letter is sent to the referring provider and primary care provider. Each provider bills their evaluation and management services individually in the single visit encounter, and the patient is charged only a single facility fee for the dual encounter.

Our multi-disciplinary kidney stone clinic has been successful in limiting excessive visits to our medical center and eliminating duplicated work by providers. Patients and their families appreciate the coordinated care and real-time communication between Nephrology and Urology. Due to the increased demand for kidney stone clinic visits, in the past year we have successfully incorporated Urology and Nephrology advanced practice providers into the clinic. They primarily see patients for follow-up visits to address any issues and reaffirm dietary changes.

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The majority of our kidney stone patients are now seen in the Kidney Stone Clinic, allowing our providers to improve care for our patients and gain additional expertise in nephrolithiasis. During the first 3 years of this multidisciplinary clinic, we have diagnosed several patients with genetic stone conditions including primary hyperoxaluria types 2 and 3 and cystinuria. The recent availability of Invitae’s sponsored Nephrolithiasis genetic testing panel, completed at no charge to the patient, has allowed us to diagnose several patients with conditions associated with kidney stones, hypercalciuria and renal tubular acidosis, including mutations in SLC34A3 and SLC4A1.

We have made a point in our clinic to focus on systemic effects of stone formation, especially in our patients with significant hypercalciuria or hyperparathyroidism. When indicated, we obtain bone density scans and focus on targeting normal age-based serum calcium and phosphorous levels, and ensure that patients have normal 25-hydroxy vitamin D levels. Patients with hypercalciuria or hyperparathyroidism are managed with thiazide diuretics to reduce calcium losses or co-managed with endocrinology if additional therapy such as bisphosphonate therapy is indicated.

The multidisciplinary team approach used in the Kidney Stone Clinic at Children’s Hospital & Medical Center has improved the care that we provide to patients with nephrolithiasis. This clinic has allowed us to better serve our patients with expedited care and education, providing earlier dietary modifications and medical management when appropriate. Following kidney stone patients longitudinally also allows for timely surgical intervention if indicated. This specialized clinic allows us to learn from the other providers and has strengthened the expertise of both our Nephrology and Urology providers in the field of kidney stone diagnosis and management.
Section on Nephrology Collaboration Site!

As a member of the AAP Section on Nephrology (SONp) you have access to the SONp Collaboration Web site. This member’s only benefit of the SONp grants each current Section member access to the following:

- Opportunities to get involved in the SONp leadership committees.
- Information on how to recognize a colleague through nomination for the Henry L. Barnett Award.
- Information for trainees regarding a career in pediatric nephrology.
- Section publications including the newsletter, AAP News articles, PN Choosing Wisely list and parent articles on PN topics.
- Quick links to professional resources for SONp members.
- Quick access to new and/or existing AAP policies of interest to SONp members.

And much more!

The access instructions are below. For questions regarding the SONp collaboration site please contact SONp Staff, Suzanne Kirkwood or the SONp Chair, Dr Vikas Dharnidharka.

**Step 1:** Visit [http://www.aap.org](http://www.aap.org) and scroll down and click on Collaborate.

**Step 2:** Log in with your AAP login credentials.

**Step 3:** Access your Section collaboration site

**Step 4:** Begin navigating your site. **Note- You can bookmark your site for future use**
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We welcome your input and encourage you to submit ideas or information by email to Teri Mauch, MD, PhD, FAAP at teri.mauch@unmc.edu or Suzanne Kirkwood at skirkwood@aap.org for future issues of the newsletter.