Hello, and welcome to the first episode of a podcast series featuring the NIDDK's Urologic Diseases in America report. This project has been funded in whole or in part with Federal funds from the National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Department of Health and Human Services, under Contract No. 75N94019F00260.

Hello, this is Brian Matlaga. I'm a professor of urology at Johns Hopkins University and I also serve as the principal investigator for the Urologic Diseases in America Project. And I have the honor of speaking to you today through the AUA's podcast series as we explore new and novel ways to begin to disseminate the work of the Urologic Diseases Project to our larger community and also to begin to interface with that community to understand how the information that we gather in the course of our analyses can best serve what we do as urologists on a daily basis.

I have the honor also of speaking today with Dr. Kevin Abbott from the NIDDK, who oversees the Urologic Diseases in America Project. And what I'd like to do at the beginning here is just to spend a few minutes chatting with Dr. Abbott just to understand what the NIDDK's view of the Urological Diseases Project is, why they support it, and what they hope to see the project accomplish.

Dr. Abbott, thank you for joining us. And I guess I'll just start off just asking, what do you see as the role of the Urologic Diseases in America Project plays for the NIDDK and what that value is?

All right, Brian, thank you very much. The NIDDK has a variety of compendia or annual data reports in various diseases. Urologic Diseases in America fits in that. It compliments that very nicely. The oldest one is the United States Renal Data System, which was established by legislation back in the 80s and we have corresponding and annual data reports or compendia in diabetes, in digestive disorders. And so main purpose of these is to provide a service that the community generally would not do as the general descriptive epidemiology of these particular diseases, providing estimates, prevalence and incidence of certain conditions; where possible, prognosis; and essentially to provide a starting point for researchers so that they can get at least some estimates in planning clinical trials and other projects, and also projects of interest to the lay and research community.

And now that the Urologic Diseases Project is well over a decade in age, what do you see as the vision for the next, say, five years of how you see the urologic community beginning to adapt to these findings?

One of the key advances we'd like to make, actually right inside of this, is in the field of benign urology. We had in the past relied, like other diseases, on clinical codes based on billing data, which for particularly benign urology may be very insensitive. And so we have made some arrangements for certain data sources to get access to full text data from electronic health records and others, which we hope at some point in the not too distant future to be able to harness and expand on our knowledge of the prevalence and risk factors of these conditions.

Thanks so much, Dr. Abbott. That's incredibly helpful to understand at a high level what the NIDDK leadership views as really what makes the Urologic Diseases Project important. I've had the good fortune of working with the team from Social Scientific Systems and the group from NIDDK, Dr. Abbott, Dr. Ziya Kirkali, Dr. Tamara Bavendam. To over the past few years as we
began to look at some of these benign urologic diseases, as Dr. Abbott mentioned, and what I'm looking forward to is over this coming year that we will begin to explore these different conditions in much more detail. And so we will have separate podcasts that will be devoted to taking a deeper dive into these benign urologic conditions. And so for example, we will be sharing information from our work on urinary incontinence, benign prostatic hyperplasia, and also kidney stone disease, and those are just a few of the podcast episodes that we look forward to presenting over the [inaudible 00:05:26]. ... just share, maybe just for a few minutes, high level findings from those analyses, discuss a little bit about the teams that will be presenting the deeper dive into that information.

If we start with urinary incontinence, we'll be presenting information on this condition that we've gathered from analysis of the NHANES dataset, which is a national health and nutrition survey, also from CMS Medicare data and also from Optum Health data. That gives us really, I think, a very broad understanding of the condition from a survey instrument that goes out, that's needed nationally representative; from Medicare, which obviously gives us a good understanding of older Americans and how they utilize healthcare and the outcomes they may experience, and then also from a working-age population too. And so within urinary incontinence we partnered with Dr. Kathleen Kobashi and Dr. Una Lee, who will be sharing their work that they've done in this area, discussing some of the publications so that they've put together that we're starting to see come out in the press, in the urologic press at this point.

And I think that one thing that we've worked to identify in the field of urinary incontinence is, what is the patient level experience, how are patients diagnosed with the condition, and then also how is treatment evolving? And I think one of the striking things when we looked at urinary incontinence data is that we have seen fairly significant paradigm shifts in treatment. For example, a movement away for certain populations of using a sling or suspension procedures. And then that, I think brings up a very interesting question of kind of the larger effects that litigation has had in the use of prosthetic mesh in this field.

When we talk about benign prostatic hyperplasia, Kevin McVary and Charles Welliver will share insights they've learned in looking at these data. And I think that what is very apparent to us as we looked at the data is that, as we have an aging population, the burden of the disease is increasing. We're seeing more and more men being diagnosed with benign prostatic hyperplasia. But I think that one thing that was striking is that the surgical treatment terrain is fairly dynamic and we do see minimally invasive therapies as they come onto the scene. Patients are oftentimes treated with them. And then after several years, those therapies maybe don't have quite the durability of some of the historic, gold standard interventions like transurethral resection of the prostate, and those therapies begin to kind of die away.

And so we'll be able to explore that in much more detail. The great thing from having Medicare data is now that we have Medicare Part D data, which is pharmaceutical benefits and also with the private payer dataset that also has benefits for prescription drug utilization, we can begin to characterize how medications are used by these patients. For BPH obviously, there is a whole library of pharmacologic agents that we can apply to patients with enlarged prostates. And so these data will be able to give us a greater insight into how those are utilized.

And then the third disease process that we'll explore is kidney stone disease, and both in the adult population as well as in the pediatric population. And again, when we talk about treatments, especially a condition such as kidney stones where surgical treatments are very commonly utilized, we can begin to characterize how those treatments are applied to patients and we can begin to have a discussion of quality to some extent. Obviously, that's a very broad topic. But one aspect of quality is looking at what are retreatment rates, and so we can get an understanding since we have longitudinal data of how patients are treated and then do some...
Undergo more than one treatment for a kidney stone. And within an administrative dataset we can get some information such as that, especially with our Medicare and our Optum data.

Leveraging our understanding of drug utilization, of prescription drug utilization, we can explore things like opioids. Obviously, kidney stones themselves, and then certainly the treatment for kidney stone can be painful. The United States is in the midst of a very concerning time with a recognition that there may be market over utilization of opioids. We can begin to explore how physicians have been utilizing opioids in the setting of stone disease, both among adults as well as among the pediatric population. And I think we had very interesting insights in that is fairly widespread utilization of opioids, and it gives us an understanding of is that an area for potential process improvement? We can look at things like imaging studies, how stones are diagnosed and are we using studies routinely that expose patients to large doses of ionizing radiation, things such as CT scans and then can those patterns of care be optimized?

I think what we’re going to be embarking on over the next year is going to be very exciting podcast series. Where we can take these data; and oftentimes, these data reside in compendia that are very, very dense, somewhat akin to reading a phone book at times, just they’re very dense with text and numbers, and we can provide from subject matter experts, Dr. Kobashi, Dr. Lee, Dr. McVary, Dr. Welliver, who can really give us, I think, insights into what are the important findings in those data. And how, one, cannot be adapted to improve clinical practice; and then two, from an investigational standpoint, how can these begin to inform new questions to ask or can they provide answers to questions we’re already asking?

I think that having this format of podcasts can provide, I think, a little more insight into these dense compendia of data that we have at present. And also by partnering with our subject matter experts that really know quite a lot about these fields, I think we’ll be able to provide a little editorial commentary that also is insightful to the listener. I’m very much looking forward to this upcoming year, this new podcast series.

I want to of course thank the American Urological Association for partnering with the Urologic Diseases in America Project. As we look at novel ways to disseminate this information, which as Dr. Abbott said, I think is very important to the field and it’s a resource that really is not otherwise easily accessible to us as a urologist, as researchers, as physicians. I’d like to thank you for joining for this introductory podcast episode and I think at a fairly regular clip, about every other month over the course of this year, we'll begin to launch these podcast episodes, and look forward to being a part of it with you. Thank you so much for joining.