

Urologic Disease in America Podcast Series
Episode 3: Benign Prostatic Hyperplasia
Presented by: Brian Matlaga, MD, MPH, *Johns Hopkins University*
Guests: Kevin McVary, MD, *Loyola University Medical Center* and
Charles Welliver, MD, *Albany Medical College*

- Brian Matlaga, MD: Hello, this is Brian Matlaga, Professor of Urology at Johns Hopkins School of Medicine. And I'd like to welcome you to this installment of the American Urological Association's podcast series, that they have graciously chosen to feature the Urologic Diseases in America project, which is an NIDDK funded effort to characterize the burden of urologic disease in the United States. And what we've been doing is focusing the podcast series on different disease processes or conditions studied. And so, in this installment, we will focus on benign prostatic hyperplasia. And with us today, we have Dr. Kevin McVary, Professor of Urology at Loyola University Medical Center, Dr. Chuck Welliver, Associate Professor of Urology at Albany Medical College and they've served as really the subject matter or content experts that have driven the BPH portion of the Urologic Disease project forward. So Chuck, Kevin, I'd like to thank you for joining us in this podcast series.
- Kevin McVary, MD: Great to be here, Brian, thanks for the invite. It's been a pleasure.
- Charles Welliver, MD: Yes, same, thanks so much for letting us be part of this.
- Brian Matlaga, MD: Yeah. And so I'll open up just with a first question, which is just, essentially a broad question as you were coming to the UDA project, of what are the knowledge gaps that you would see in the area of BPH and what can an initiative, such as the Urologic Diseases in America project, the NIDDK sponsors, bring to try to bridge some of those knowledge gaps?
- Kevin McVary, MD: Oh, I'll go first if you don't mind, Chuck. And so, I mean at first... I asked... I answered the second question first. And that's that, when you think about the importance of LUTS/BPHs into the urology specialty and to the demographic, there is surprising little investment in research and BPH. So, this type of entity is really a critical point for us to try and bolster support, bolster interest and better understand the knowledge deficits in our field.
- Brian Matlaga, MD: And so to answer some of that, one of the things that the Urologic Diseases Project can do, as a result of the funding from NIDDK, is they can purchase various data sets. And so, two of the really critical data sets for BPH investigation that have been used in this project are CMS data, so Medicare data and then also data from Optum. Can you speak a little to what, how those two data sets complement each other and what we can learn from them.
- Charles Welliver, MD: So this was an important thing to really have both of these datasets together because we... In this country at least, we find that at 65, men tip over from using private insurance into getting into the Medicare realm. So we kind of have trouble following men across time in general, with just our sort of fragmented medical records, but in particular, as they cross over that age group, it's difficult to kind of see what happens to guys. Of course, in their sixties, that's when we really see a lot of the BPH problems start to occur. So to be able to have comprehensive datasets with Optum that went down to guys that were 40 and then Medicare, which would really kind of extend us out to the end of life. We really got a really nice ability, both as cross-sectionally to look at the whole group, and then also a nice longitudinal data to kind of follow guys over time. So the use of these large, administrative claim database, has really let us capture a large number of patients and then really be able to follow them in an accurate way, throughout the study period.

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- Kevin McVary, MD: The only thing I would add is that when we have these big data sets, we can get a better estimate of the total economic burden of lets BPH, but also ask questions about, "Hey, how are urologists behaving in terms of guidelines?" And it has a lot of other ramifications for our specialty.
- Brian Matlaga, MD: Yeah. And so that raises the... Or speaks to the next question I was going to ask, which is what, at your first pass of the data analyses, what did we learn about prevalence and treatment of men with BPH from using these two complimentary data sets?
- Kevin McVary, MD: I'll try to answer that Brian, as best I can. One of the big messages, right out of the gate, was these age specific trends in lets BPH management, increasing usage of medications, which we expected. And then, surprisingly big, maybe not surprisingly, big transitions in medication use as men transitioned from, let's say their fifties to their sixties. The other is, medication increases over time. But interestingly, surgery procedures, nearly uniformly, decrease over time.
- Brian Matlaga, MD: Yeah. So as you look at the different age cohorts, you're seeing those variations in who selects what type of treatment first?
- Kevin McVary, MD: Right. Medication usage increases over time, surgery decreases over time. But then, within each one of those age ranges, they have their own peculiar pattern. Like, younger men may choose procedures, which if they choose procedures, may choose those which would have less impact on sexual function. We don't see that as much in our older cohorts. And obviously this is a pattern which is likely to increase in the next go round.
- Brian Matlaga, MD: Yeah. And so, one thing that we talk about, all of us in the urology field and really in all surgical fields, is trying to understand what quality of care is and it's obviously, sort of difficult to define and means different things to different people. And one challenge is always, how do we measure quality? Do you have a sense from UDA data, these kind of high level administrative data sets that encompass millions of data files, of what can we begin to learn about quality of BPH care.
- Charles Welliver, MD: One of the things we looked at, particularly with this dataset, was the use of testing around the time of diagnosis. The AUA guidelines are these very large projects, these, meant to really use evidence to sort of make it both a good standard of care and also to use testing that has value. And so, one of the things we did look at, or currently in the process of looking at, is looking at how guideline adherence is occurring within these datasets. And an interesting part of this data set, too, is it looked at both primary care and urologists. It was really anybody that was going to code a man as having BPH. So we saw both sides of that within this data set. So we're not really just sampling one or the other. We're really getting the whole concept of BPH care.
- Brian Matlaga, MD: And then, I think Dr. McVary, I think you had mentioned previously just one of the values of having these large data sets, too, especially CMS and Optum data, or Dr. Welliver, it may have been you that mentioned this, but that we can start to understand about cost of care and what were you able to learn about costs in the analyses?
- Kevin McVary, MD: Well, at this juncture we're really excited to just now open that can of worms. That is obviously a huge topic. It's obviously a huge cost and we're now just starting to delve into that. So I'd say,

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stay tuned, look forward. What's interesting when we look, you see the TURP has a certain resilience, MISTs come and go. TURP, particularly in our older groups, remain very constant.

Brian Matlaga, MD: Yeah. And so, I'll ask each of you separately, what was the most exciting or shocking, surprising thing that each of you learned as you did the analysis?

Charles Welliver, MD: Really, I mean a bunch of things, but one of the things that I thought was the most interesting was, in sort of how often age really made a huge difference in what patient selection for treatments, occurred. We found younger guys really being much more cognizant of sexual function related treatments and, of the ones we kind of sampled in this study, we have subsequently found out they're not the greatest for symptomatic improvement. So really, patients may have a certain set of guidelines or thoughts about what they want their treatment to look like, and clinicians may have a different one. And really need to keep in mind that we need to have both of these goals involved when we talk to patients about treatment options for lets BPH.

Kevin McVary, MD: I'd say my surprising thing is, I don't want to call it normal practice or inertia, but change ends, let's say surgical choice, that comes very slow. I was a little bit surprised to see that. Interested to see what we do in this new age going forward. We have different types of MISTs available for our patients, but goals of patients and goals of clinicians may not always be in sync. And so, it seems like our time tested procedures, they don't want to go extinct anytime soon.

Brian Matlaga, MD: Yeah. And so, when we look at the UDA, it's obviously a very broad project. There's a lot of resources that the NIDDK brings to bear in it. A lot of time that both of you have spent looking at the analyses. Our colleagues at Social Scientific Systems, Dr. Julia Ward, Dr. Lydia Feinstein, who, obviously, also spend hours with the epidemiology and the programming considerations for the analyses. So it's a lot of resources put into this. So what is the value that the urologic community gets out of the UDA?

Charles Welliver, MD: It's... Go ahead... Oh, sorry Kevin, it's multi-faceted of course. We keep worrying about in the future, shrinking resources, cost-effective care. These are sort of buzzwords that get sent around. And so, I think that that... This potentially looks at that and points us in that direction about what are we doing for treatment options? What sort of testing are we doing? And hopefully eventually, we can get to the point of really figuring out what testing is best for patients based on their goals and their wants and needs, in addition to doing things that are cost effective and actually lead to symptomatic improvement.

Kevin McVary, MD: I'd add only, agree with everything Chuck just said, but I'd say there's a lot of health policy implications. This type of analysis might tell us about unmet needs going forward. And then ultimately do our policies, do our guideline efforts, do these behaviors we're trying to track, do they make a difference in the care of our patients? These are questions that UDA can answer.

Brian Matlaga, MD: Yeah. And so building off of that as you work forward, what questions would you like to see the future iterations of the UDA project address, that might increase our understanding of the epidemiology of BPH.

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Charles Welliver, MD: I think there's a lot here, so Kevin and I will probably both want a crack at this one. The one that I think that's really important in this, sort of slightly piggybacking on what I just said. We don't have a good way to follow guys after treatment. So many BPH studies are single center. We get these five year rates of retention in this study of 40, 50%. So we just don't know what happens to guys after a lot of these treatments, over time. And when we talk about cost effective care, if you're going to go through the whole rigmarole of taking out of the OR, giving them general anesthesia, spending all this money, you want to make sure that he's not back on meds in a year, or two years, or maybe even 10 years. So I think using the ability to follow these guys well, over time, it'd really be nice to know what our surgical re-treatment rates are in 10 years or 15 years. And if a certain technology is not getting us a good value there, then maybe it should hit the old dustbin or maybe we should kind of bring something else in that could hopefully do that.

Kevin McVary, MD: I'm interested in, particularly, a disparity of care and I think in a perfect world, if we could really get good granular data on care in rural areas, metro areas, get a better idea of care by zip code or ruck codes. That would be, I think, really helpful in terms of better understanding BPH care in America.

Brian Matlaga, MD: Yeah. And, I think, among the things lost in the AUA annual meeting this year, which obviously was canceled due to the COVID-19 pandemic, but there was to be a good amount of data that you would be sharing from this project on that program and abstracts, whether moderated posters or podiums. And I know there are also multiple peer-reviewed publications that are either in press, or have been published already about what we've talked about today. And so I think that's a source that the listeners can certainly go into for more detail. I'd like to thank both of you, Dr. Welliver, Dr. McVary, for being a part of this installment of the AUA's podcast series.

Kevin McVary, MD: Been a pleasure, Brian.

Charles Welliver, MD: Yeah, Brian, thanks for having us.

Brian Matlaga, MD: Yeah, and of course, we, on behalf of the Urologic Diseases in American Project, would like to thank the AUA for providing this venue for sharing the findings from the Urologic Diseases in America Project. And as we continue to work through the different urologic conditions, this will be a forum whereby we can share the findings with the urologic community, and then hopefully from this, there can be a springboard into a deeper dive into the published literature from the project. So again, I'd like to thank the NIDDK's support of this project. Thanks Dr. McVary, Dr. Welliver for your role in looking at the data for BPH and the Social Scientific System's group for providing the analytic expertise that's required to do this work. So, I hope this was an enjoyable listen, and I look forward to speaking with everyone again.