Tele-Urology Improves Access and Quality of Care for Patients
Innovative and Cost-Efficient Technology is Changing How Urologists Care for People Remotely

San Diego, CA, May 6, 2016 – New data highlighting the effectiveness of telemedicine, as well as, innovative screening methods for male infertility using smartphone technology, will be presented during the 111th Annual Scientific Meeting of the American Urological Association (AUA) on Friday, May 6 at 8:30 a.m. The press session will be moderated by Eugene Rhee, MD, MBA, AUA spokesperson and chief of urologic surgery at Kaiser Permanente, San Diego. He is also the recipient of the 2013 AUA Gallagher Health Policy Scholarship.

Telemedicine and the innovative use of technology are considered two of the fastest-growing components within the health care delivery system. Both provide novel and opportune access to hospitals, clinics and health care providers for those who otherwise would have limited to no access.

Within the urologic community, telemedicine, also referred to as tele-urology, offers several practical uses such as condition diagnosis, general management of care, pre- and postoperative care, second opinions and, possibly, remote surgery. Additionally, for many healthcare organizations that have trouble seeing a high number of patients, tele-urology has the potential to assist in decreasing wait times and increasing quality of care.

Today’s medicine is also harnessing the power of smartphone and other mobile devices to help better detect conditions, cheaper, better and faster while also accounting for patient comfort and convenience.

“Ten to fifteen years ago, we never imagined the role technology and mobile devices would have within the urologic community,” said Dr. Rhee. “These platforms are essential to reaching and treating not only today’s patients and with a high quality of care and patient satisfaction, but as well, the next generation of patients and their urologists.”

Study Details
Publication Number: MP93-03
The Novel Screening Method for Male Infertility with Single-Ball Lens Microscope and Smartphone

For men wishing to have their semen tested for fertility, providing a sample at a clinic might be an embarrassing and uncomfortable experience. Unfortunately, sperm samples must be tested within a short period of time for accurate results. An international team comprised of researchers from Japan and the United States, constructed a microscope capable of attaching to a smartphone equipped with a standard 500-megapixel camera with 800x480 video resolution. Utilizing semen samples with a volume of approximately 20 μl on a 50 μm cellophane sheet, motile and static sperm were counted on an enlarged PC screen connected to the smartphone. Semen samples were analyzed both with the newly-developed microscope and CASA software.

Results Showed:

- Smartphones have great potential to support semen analysis because they are portable, contain excellent digital cameras and can be easily attached to a microscope
- Sperm concentration and sperm motility were analyzed using the newly developed microscope; both showed very strong correlations with the CASA results (P<0.01, r=0.89) and (P<0.01, r=0.74), respectively
- This inexpensive and easy to use attachable single-ball lens microscope can support testing for male infertility at home, increasing the convenience, cost and comfort for men with questions about their fertility

Study Details
Publication Number: MP31-08
Tele-Urology versus Face-to-Face Clinics: A Survey of Patient Preference

Patient satisfaction remains a key measure of quality care, and telemedicine clinics may improve the clinical experience by minimizing delays in receiving care. Researchers from Atlanta, GA compared satisfaction levels among patients seen utilizing Tele-urology vs. conventional face-to-face clinic encounters. The study showed Tele-urology clinics reported higher patient satisfaction levels when compared to conventional face-to-face encounters.

Results Showed:

- Out of 251 tele-urology patients surveyed, 200 (80 percent) had faster clinic access than their face-to-face counterparts, as well as higher overall satisfaction levels (92. Vs. 7.8 FTF, p<0.001).
- Tele-urology patients reported significantly more attention and better communication from their provider (89 percent vs. 72.5 percent FTF, p=0.0002)
The majority (82 percent) of face-to-face patients would choose tele-urology over fact-to-face for future care.

**Study Details**
Publication Number: PD25-04

**Evaluating the Effectiveness of Urologic Telemedicine in Male Prisoners**

With limited healthcare resources in the prison system, patient transportation for health care can put a strain on an already burdened system and budget. Therefore, utilizing 376 medical records of male prisoners who were initially evaluated via telemedicine for a urology complaint, researchers from Iowa City, IA set out to demonstrate that telemedicine is a safe and effective means to provide urologic care to those who have limited to no access to healthcare specialists, such as the prison population.

Results Showed:

- Tele-urology care alone was sufficient for 27 percent of the prison patients with 56 percent requiring a face-to-face follow-up
- Diagnoses were the same between tele-urology consultations and face-to-face visits for 90 percent of the prison patients
- Telemedicine saved at least one face-to-face in 94 percent of patients and that less than 50 percent required eventual face-to-face
- Researchers concluded that telemedicine is a safe and effective method to increase access to urologic care, especially in access-poor populations such as the prison population.

**Study Details**
Publication Number: PD10-12

**Implementation of the Three E’s (Efficiency, Education, and E-Consults) to Improve Urology Access within the Veterans Health Administration**

With its immense backlog of cases and limited resources to see its patients, the VA’s Department of Urology in Iowa City, IA hoped to decrease wait times for its veterans. Researchers at the University of Iowa suggested that, along with other measures, consultations by primary care providers with urologists over a webcast can help improve accessibility for VA patients.

The study overhauled templates for patient visits and evaluation by primary care providers (based in part on the AUA Guidelines) and provided e-consults with urologists instead of formal consultations. Results showed that the simple measures dramatically and quickly decreased wait times for urologic consultations in the Iowa City VA clinic.

Further Results Showed:

- Clinic wait time for new consults was reduced from 80 days to 30 days (a 63 percent reduction) and cystoscopy wait time was reduced from 40 days to 11 days (a 73 percent reduction). Ninety percent of patients are seen within 30 days
- Only 10 out of 65 e-consults (15 percent) required a formal in-person consult
- AUA Guideline-based templates decreased BPH consults by 20 percent

**About the American Urological Association**: The 111th Annual Meeting of the American Urological Association takes place May 6-10 at the San Diego Convention Center in San Diego, CA.

Founded in 1902 and headquartered near Baltimore, Maryland, the American Urological Association is a leading advocate for the specialty of urology, and has more than 21,000 members throughout the world. The AUA is a premier urologic association, providing invaluable support to the urologic community as it pursues its mission of fostering the highest standards of urologic care through education, research and the formulation of health policy.