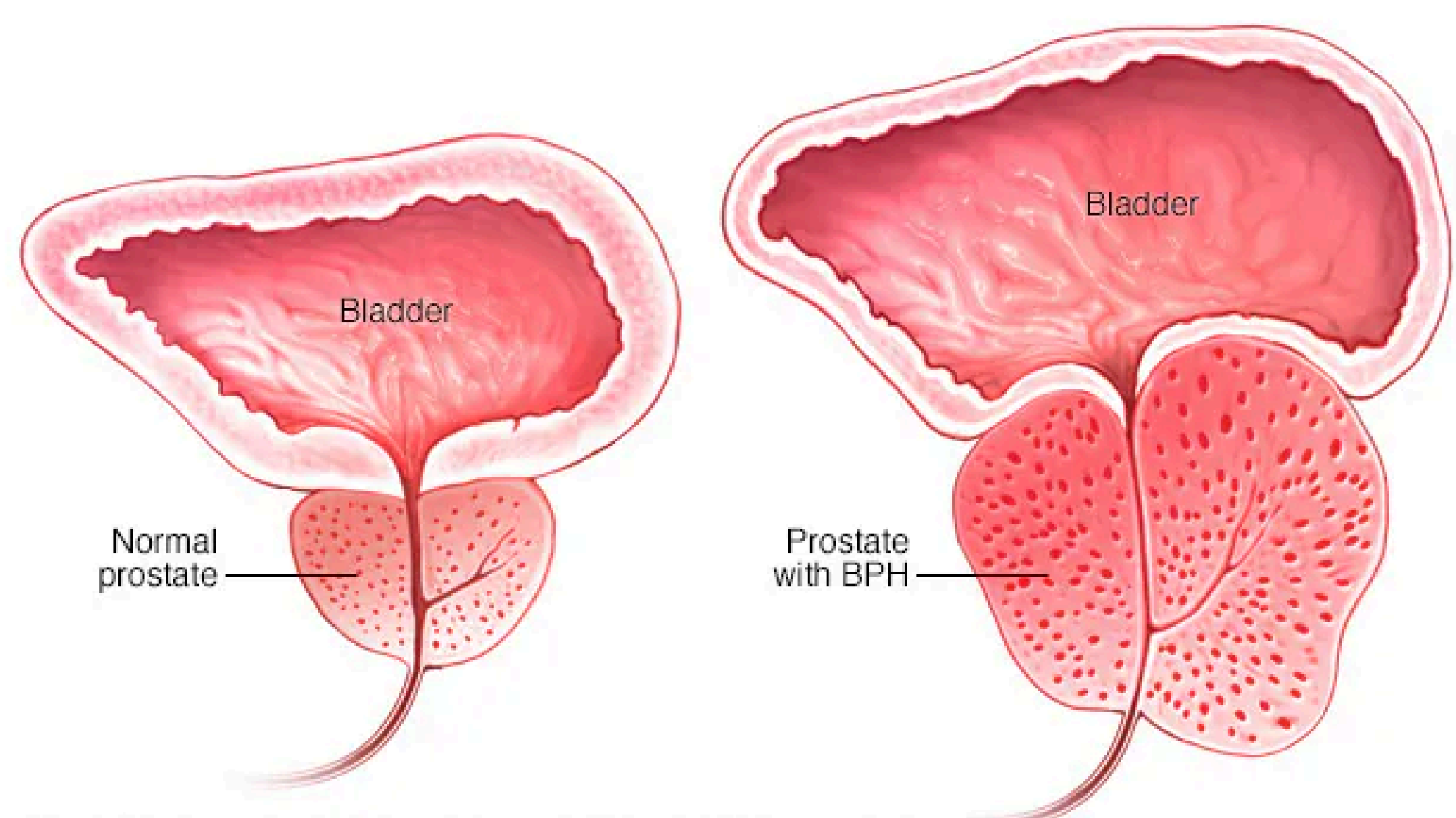


Background



Benign prostatic hyperplasia (BPH) is a nonmalignant enlargement of the prostate, often leading to surgical intervention¹.

60%

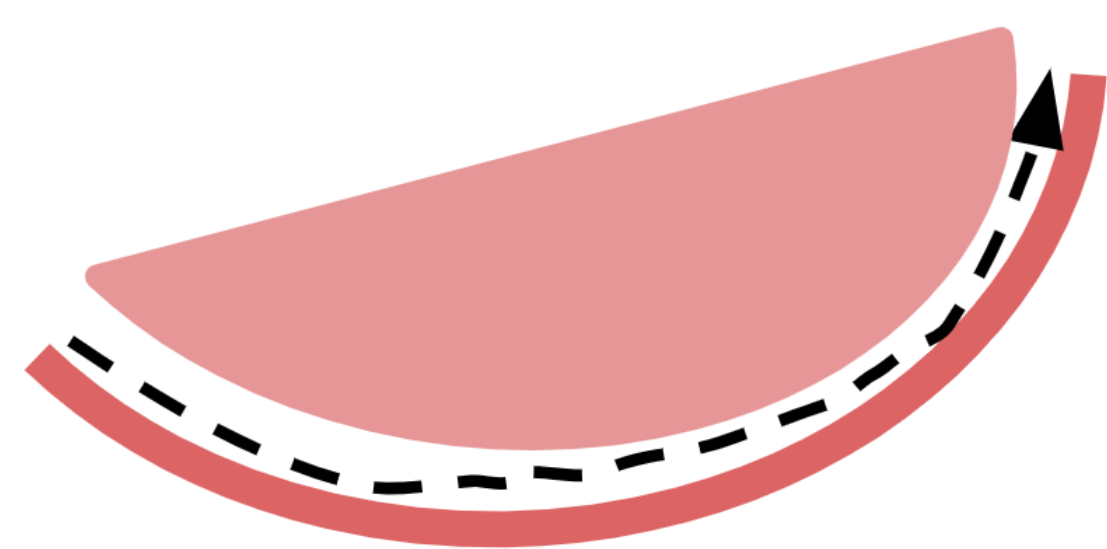
Of men over 60 years old have BPH

250K

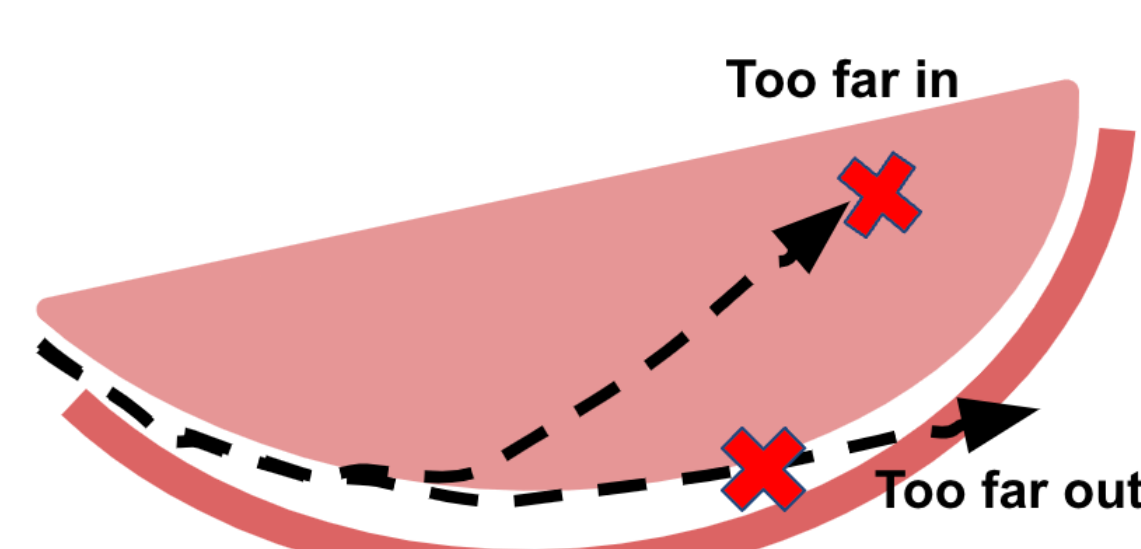
Men need surgical intervention every year

- Anatomical Endoscopic Enucleation of the Prostate (AEEP) is an underutilized surgical treatment for BPH largely due to its **difficulty to learn**.²
- Existing training models **lack feedback of force** applied on the sphincter and prostate and **visual guidance** for correct surgical path.

Ideal Dissection



Common Spatial Errors



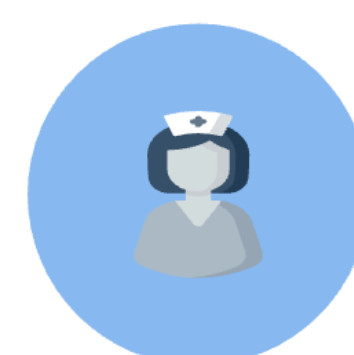
Solution Impact



Hospital Admin
Reduces Cost of Training



Urological Surgeon
Reduces Training Time



Urological Trainee
Builds Confidence



Patient
Reduce Complications

Opportunity

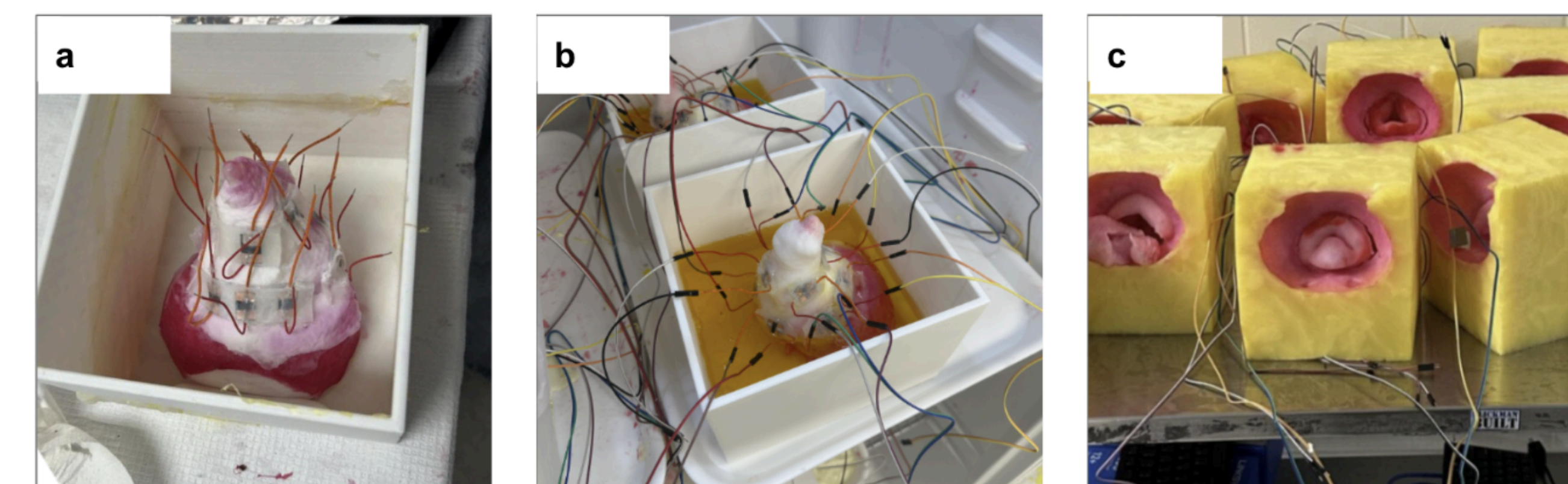
Novice urologic surgeons need a way to improve their **visuospatial awareness** of the prostate their ability to apply appropriate force to the sphincter and the prostate while learning the AEEP procedures to **accelerate the learning curve**.

Our Solution

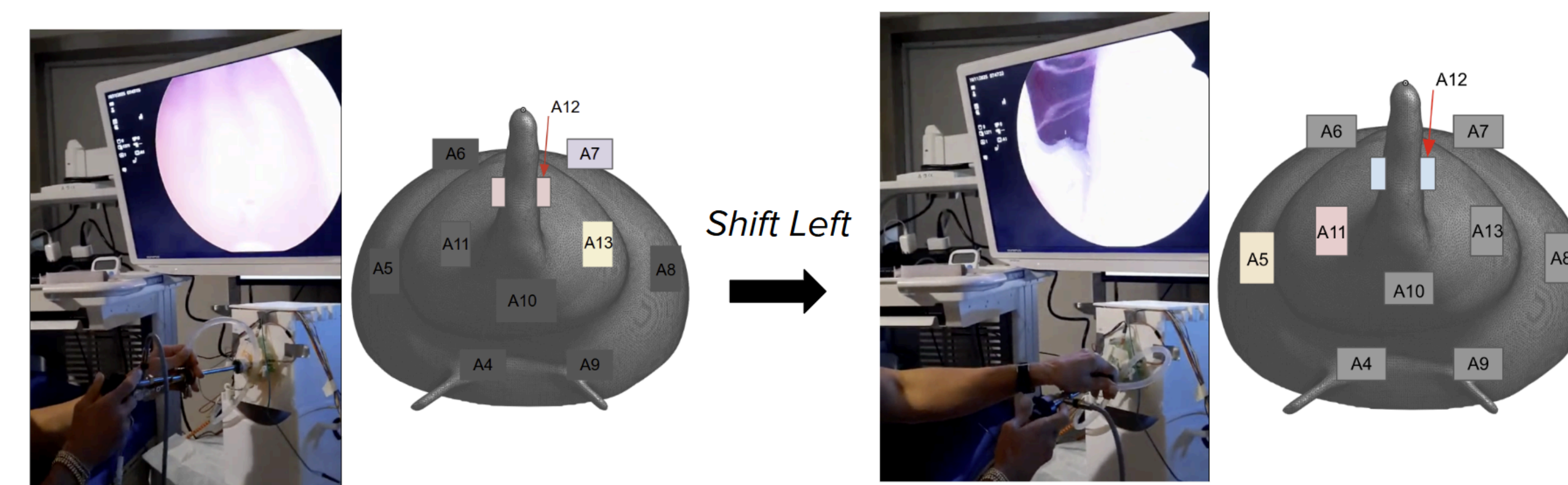


- Real-Time Minimap:** Helps trainee visualize real-time location in the prostate.
- Force-Sensing:** Notifies trainee when excessive force is applied.
- Post-Procedural Dashboard:** Consolidates learning by providing feedback and allows trainees to track their progress.

Surgical Bootcamp

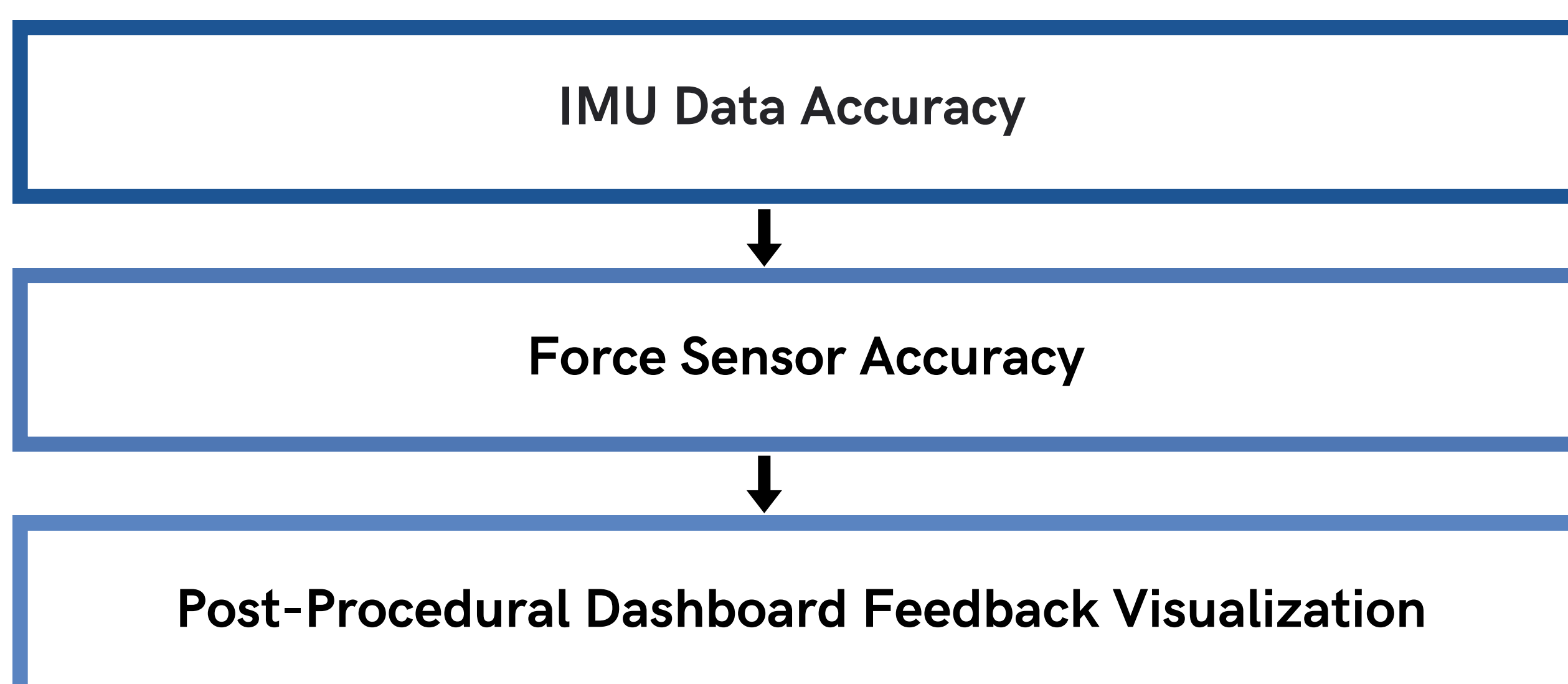


Pouring process for specialized hydrogel model used in surgical bootcamp to generate force baselines of expert surgeons to use in force-sensing feedback.



Internal pressure sensors show correlation between top 3 sensors activated and surgical movements.

Future Steps



Acknowledgements

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