2-2021

Assessing the Educational Impact of 3D Printed Models on Fellow, Resident, and Patient Education for Partial Nephrectomies

E. Reilly Scott
Thomas Jefferson University, elizabeth.scott@students.jefferson.edu

Samuel Morano
Thomas Jefferson University, samuel.morano@students.jefferson.edu

Andrea Quinn
Thomas Jefferson University, andrea.quinn@jefferson.edu

Erica Mann
Thomas Jefferson University, erica.mann@jefferson.edu

Kaitlyn Boyd
Thomas Jefferson University, kaitlyn.boyd@jefferson.edu

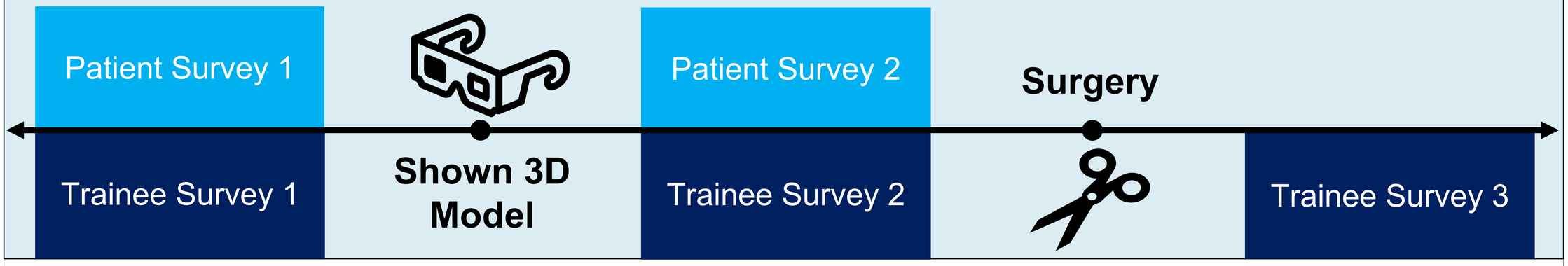
Authors

E. Reilly Scott, Samuel Morano, Andrea Quinn, Erica Mann, Kaitlyn Boyd, Michelle Ho, Alice Karp, Abhay Singh, Thenappan Chandrasekar, Mark Mann, Edouard Trabulsi, Vishal Desai, and Costas Lallas

What is the Educational Impact of Cost-effective ($35) 3D Printed Models on Resident, Fellow, and Patient Education for Partial Nephrectomies?

Timeline

20 patients between July 2020 and January 2021



Patient Impact

18 patients filled out both surveys

Subjects

Kidney

Disease

Surgery

Risks & Complications

Significantly increased patient understanding and knowledge in all subjects (P < .01)

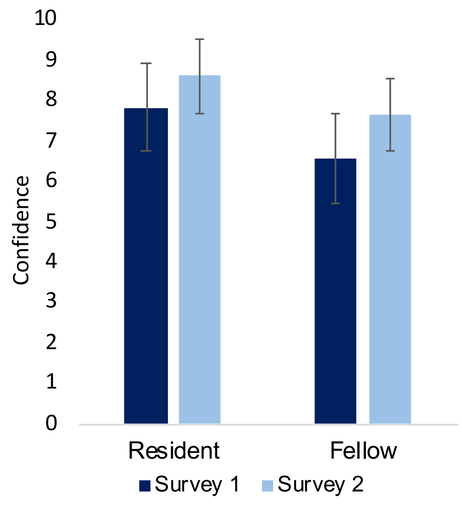
"On a scale of 1-10, to what extent did the presentation of your personalized 3D Kidney model help you in…"	
Learning about the kidney?	9.3 (±1.5)
Learning about your disease?	8.8 (±1.5)
Understanding the surgery you will undergo?	8.7 (±1.7)
Understanding the risks of complications related to the surgery?	8.3 (± 2.4)

Resident and Fellow Impact

3 residents filled out 17 surveys
1 fellow filled out 16 surveys

Survey 1 vs. Survey 2

Residents (P < .001) and fellows (P<.01) reported increased self-confidence in their surgical plan following seeing the model



Survey 3

no help 1 2 3 4 5 6 7 8 9 10 extremely helpful

"How much did the 3D model increase your…"

Trainee	Comprehension	Confidence
Residents	7.7 (± 2.2)	7.2 (± 2.7)
Fellow	6.8 (± .98)	6.9 (±1.6)

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