

# Disruptive Education for the 21<sup>st</sup> Century: Bringing Telehealth Clinic to the Pathophysiology Classroom

Janice K. Williams, DNP, MSN, BSN, FNP-BC

Laura A. Taylor, PhD, RN, ANEF, FAAN

Diane Seibert, FAANP, FAAN

Daniel K. Inouye Graduate School of Nursing  
Uniform Services University of the Health Sciences



# Disclaimer

The opinions or assertions contained herein are those of the speakers and are not to be construed as official or reflecting the views of the Department of Defense or the Uniformed Services University of the Health Sciences."

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# Presentation Objectives

- Implement dynamic learning strategies in the pathophysiology classroom
- Importance of telehealth education
- Telehealth in pathophysiology course
- Impact of telehealth as a teaching strategies
- Benefits and limitation telehealth



# HRSA

Health Resources & Services Administration

[www.HRSA.gov](http://www.HRSA.gov)

“The use of electronic information and telecommunications technologies to support and promote long-distance clinical healthcare, patients and professional health-related education, public health and health administration technologies include video conferencing.”

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# Telehealth Objectives



- Pre-recorded endocrine lectures , assigned materials
- Demonstration of basic simulated telehealth encounter competencies
- Telehealth clinical encounter : audio/video conferencing.
- Cooperative Learning- social learning experience and academic activities
  - Group presentation with ppt template
  - Demonstrate synthesis of endocrine pathological disease process by delivering a oral presentation

# Why this approach?

- Interactive learning strategy
- Implementation of evidence-based practice
- Facilitation for the translation of knowledge for the novice practitioner into clinical practice
- Improve competency regarding telehealth
- Understand telehealth experience from diverse perspectives
- Complexity of pathophysiology
- Address National Academy of Medicines Triple Aims



# Why Endocrine

- Disease process
- Develop students competence in gathering information
- Build on students ability to develop differential diagnoses

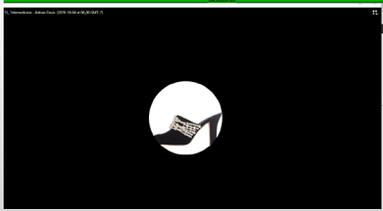


# Approach

- Patient case selection
  - 8 endocrinology cases
- SIM lab collaboration
  - SPs- variety of ages, 20's -70s
- Students groups
  - 15 groups – (4-5 students)
- Google hangout links created
  - (30 minute sessions/30 minutes-student collaboration)



# Telehealth Groups



# Student Presentations

- Intra-professional faculty assignments
- Scheduling of student presentations (1 week post telehealth clinical visit)
- Presentation Templates
  - 8-10 minute presentation / faculty dialogue



# Results

- High patient/student satisfaction
- Translation of knowledge into practice
- Telehealth knowledge
- Leadership development
- Intra-professional collaboration
- Synthesis of knowledge



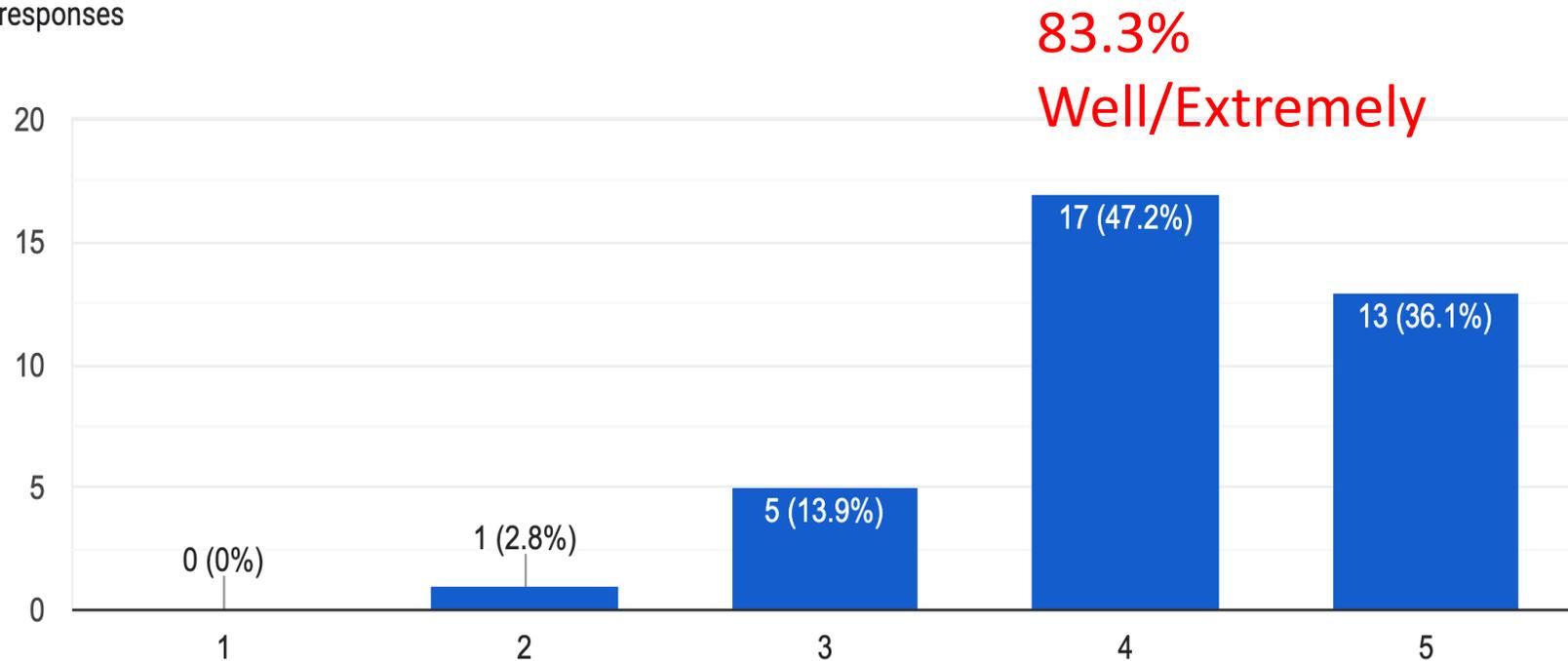
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### How did you think this Telemedicine (TM) experience went

36 responses



**83.3%**  
**Well/Extremely**

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# Evaluations

- Simulated Standardized patients
- Students



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# Simulated Patient Evaluation

- Being that it was the first time, I liked the process. I did not have any issues or challenges.
- There were some long silences that I think probably would not have happened with a face-to-face encounter
- Have to figure out how to get character name as the sign in - so students do not see real name.
- Students funneled questions by chat through one spokesperson -- I was expecting all to speak, but the one person approach seemed to make them work as more of a team.
- The order of questions and flow was not as formal feeling as when in the room together.



# Qualitative Results: General Systems Theory

- We did not know if the SP could see what we chatted about and there was no video. Made some components of the assessment difficult to assess.
- Too many people in the group trying to talk, not very easy to have a fluid interview with the patient.
- At the beginning of the conversation it was a little awkward bc we didn't know what we were doing but then a member the group just jumped in with OLDCARTS and it went good from there.
- Nice to experience the challenge of being a investigator/provider through a screen



# Student Recommendations

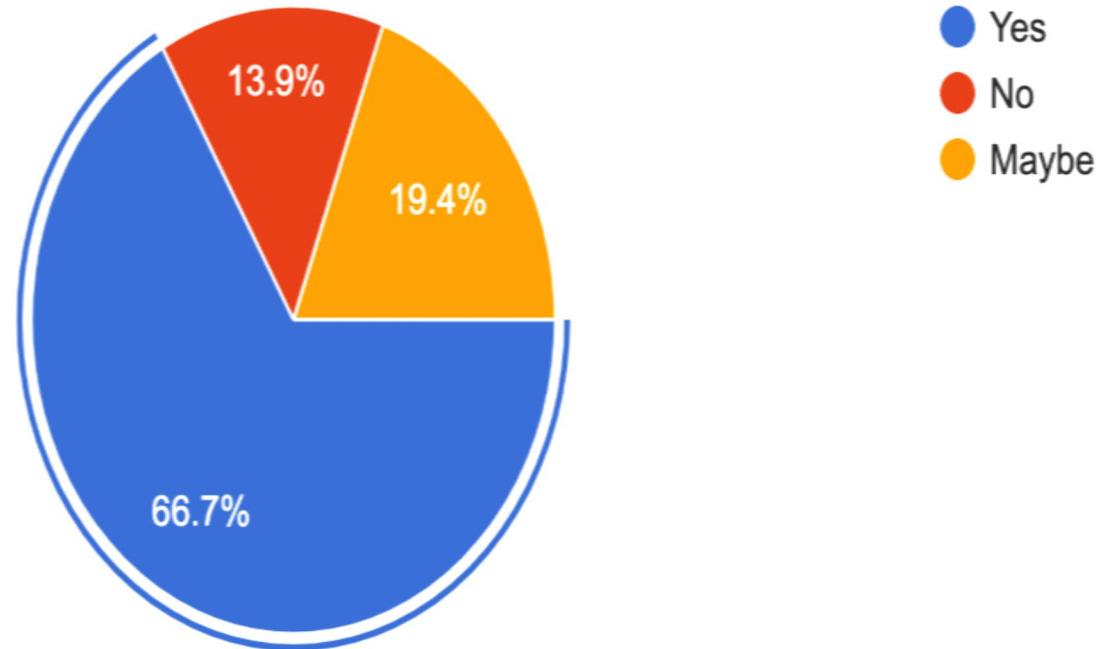
- I was VERY pleasantly surprised it went as smoothly as it did. Our SP was awesome despite "not being good at these technology things". Kudos to everyone involved!
- Maybe a little blurb about what telemedicine is. It is definitely the future of medicine.
- It was a fresh, engaging attempt to use a different learning method
- It's just different conducting an assessment over the phone.
- Really clear explanation of intent and roles.

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## Would you be interested in getting more experience with telemedicine?

36 responses

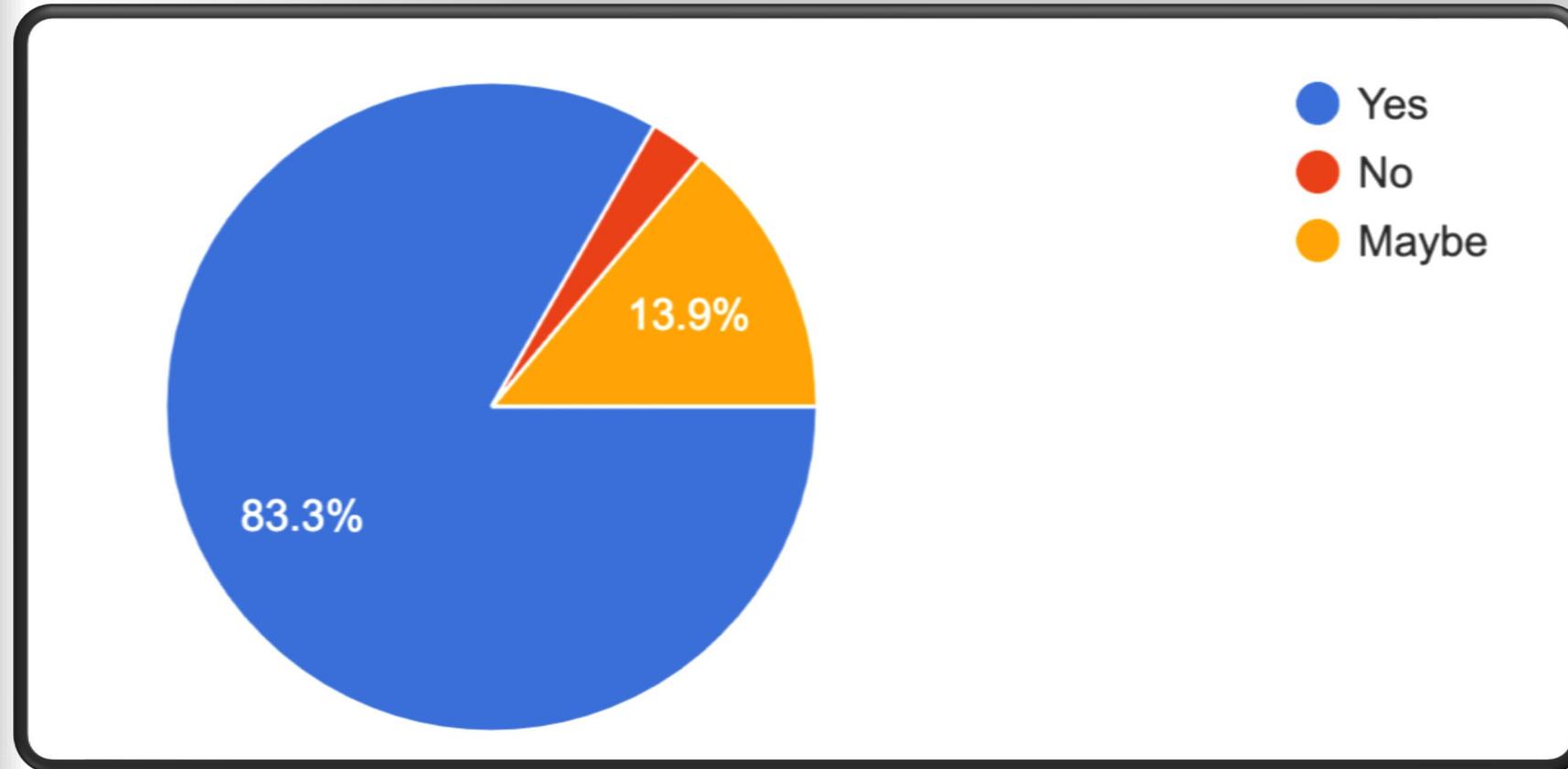


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# Do you think providing TM exposure is important to your educational career?



# Lessons Learned

- Technology
- Knowledge
- Leadership
- Group impact
  - At home – individual vs group
  - Smaller groups



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# Question for the Audience

- What course content might you consider using a “Telemedicine” experience?
- What is one new thing you learned today?
- Janice.[Williams@usuhs.edu](mailto:Williams@usuhs.edu)
- [Laura.Taylor@usuhs.edu](mailto:Laura.Taylor@usuhs.edu)
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