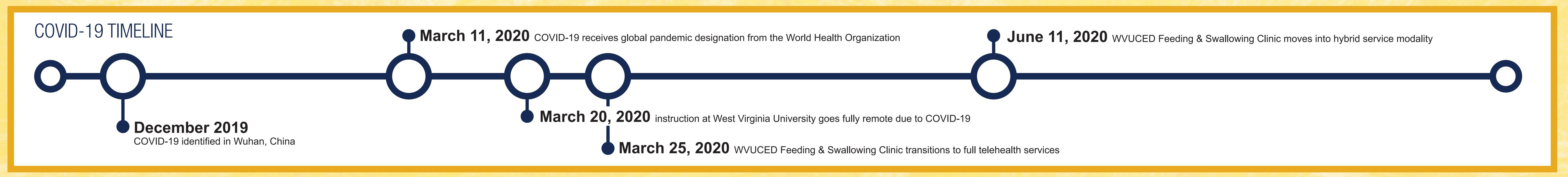# Clinical Learning in Higher Education during the COVID-19 Pandemic: Student Comparisons of In-Person and Telehealth Teaching Paradigms

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COVID-19 TIMELINE

December 2019
COVID-19 identified in Wuhan, China

March 11, 2020 COVID-19 receives global pandemic designation from the World Health Organization

March 20, 2020 instruction at West Virginia University goes fully remote due to COVID-19

March 25, 2020 WVUCED Feeding & Swallowing Clinic transitions to full telehealth services

June 11, 2020 WVUCED Feeding & Swallowing Clinic moves into hybrid service modality

Background:

- In WV where healthcare disparities are the worst in the nation (Asada, 2013), the WVUCED Feeding and Swallowing Clinic previously attempted to implement telehealth to eliminate healthcare access barriers. However, telehealth remained vastly underutilized until COVID-19.
- The obligatory shift to online clinical learning because of the COVID-19 pandemic exposed the lack of existing teaching and learning pedagogies in telehealth.
- Throughout the coronavirus pandemic, the WVUCED Feeding and Swallowing Clinic provided uninterrupted evidence-based telehealth services for children with feeding and swallowing difficulties.
- During COVID-19, the WVUCED Feeding and Swallowing Clinic identified clinical teaching and learning strategies supporting equitable access to learning, therapeutic intervention, and quality teaching for trainees, patients and their families, and the community.

Objectives:

- Identify differences between in-person learning and online learning for trainees at the WVUCED Feeding and Swallowing Clinic during COVID-19.
- Analyze data from trainee survey to inform future learning pedagogies.
- Synthesize findings with current research examining telehealth as a modality for online clinical teaching and learning.

Methods:

- An email survey was conducted with the purpose of capturing the firsthand clinical learning experiences of Leadership Excellence in Neurodevelopmental Disabilities (LEND) trainees at the WVUCED Feeding and Swallowing Clinic during the COVID-19 response. In addition, a former LEND trainee provided a participant observer narrative detailing her clinical learning experience during the coronavirus response.

Findings:

- Survey yielded responses from 6 Masters-level LEND trainees. Respondents by major: 2 Social Work, 1 Special Education with emphasis in Applied Behavior Analysis, 3 Speech Language Pathology.
- Reported clinical learning *limitations* via online telehealth platform:
  - Missed hands-on learning
  - Multidisciplinary interactions more efficient in-person
  - Direct observations limited by technology
  - Tools and assessments not adapted to telehealth
  - Lack of immediate access to adaptive equipment
  - Would have liked time for reflections at the end of each session
- Reported enhancements to clinical learning from an online telehealth platform:
  - Transition to full telehealth was eased because Feeding Clinic telehealth was already established
  - Provided normalcy amidst COVID-19
  - Met goals of providing patient care and acting as an educational platform
  - Preexisting trainee/mentor and clinician/patient relationships were helpful
  - Appreciated observing telehealth first and then participating
  - Ability to see the families in their home environments allowed for more individualized clinical recommendations
  - Caregivers were able to take more of a leadership role in treatment
  - Reinforced that patient needs don't end, even during a pandemic

Telehealth Connectvity Map

LEND Trainee Narrative:

- Clinics being online made it easier/possible for some students and mentors to attend
- Interactions shifted through the change to online- this included student/student, mentor/student, student/client interactions, and client/family/home interactions.
- Affirmation of Community and Commitments – We all made promises to each other, both as students, teachers, and healthcare professionals. The ability to continue work uninterrupted allowed us to honor commitments. It was an important lesson in professionalism and a working example of the importance of the commitments we will make as professionals serving our communities.
- What May Come Next? Opening up clinics to other LEND students at other institutions – what observations and learning experiences can we open up for all LEND students using this technology?

Conclusions and Informed Pedagogies:

- Similar to Raatz et al. (2020), findings support the need for technology training for students, clinicians, and families before using telehealth. Based on survey responses, telehealth etiquette training, technology training, and a focus on camera angles would all be beneficial. In addition, trainees benefited from receiving log-on information ahead of time and from having clinicians well versed in best telehealth practices.
  - All survey participants would participate in web-based clinical activities in the future, but want to gain clinical skills in-person before moving to telehealth. Further, while trainees recognize telehealth as an emerging service modality accelerated in use by COVID-19, half of respondents still prefer in-person over telehealth. In the same manner, Abraham et al. (2020) conducted a study with third year medical students and found high value placed on telehealth, but a lack of confidence surrounding provision of quality telehealth services.
  - LEND trainees also report wanting to see an emergence of telehealth research. While some scholarly texts such as Burns et al. (2019) and Clark et al. (2019), have evaluated feeding and swallowing telehealth services, a gap does still exists in telehealth research.
  - Survey data also found trainees support the use of telehealth to eliminate healthcare access barriers such as community exposure for at-risk patients, travel, and financial concerns and also to expanded access for rural or underserved populations. In agreement, Bloomfield et al. (2018) and Burns et al. (2017) identify increased access as a benefit for telehealth practices.

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