

Background

The nursing shortage continues to grow with the estimated shortage of 78,610 full-time nurses in 2025 (AACN). The International Council of Nurses (ICN) reports the nursing shortage as a global health emergency (AACN). Nursing programs continue to exclude a viable workforce. In the United States 28.7% of the population have some type of disability (CDC). Many people with disabilities are marginalized and unable to obtain employment due to bias and prejudice. Utilization of traditional nursing program admissions have used ableism language in qualifications for both undergraduate and graduate level programs, excluding many individuals that could be successful in their program. Ableism language used in the admission process may cause potential candidates to not apply. The technical standard language used in the admission process was development in 1993 and is used throughout the United States nursing programs today. Some of the technical language is antiquated and must be challenged so to meet the advancement of technology and innovation in healthcare. For example, the technical standard for hearing is often worded as "must be able to hear faint body sounds". However, with the invention of the electronic stethoscope nurses both hearing and deaf can hear sounds". However, with the invention of the electron distinguish faint body sounds in similar ways with this stethoscope.

Outcomes

- Recognize and articulate the challenges differently abled learners encounter in healthcare simulation and clinical settings.
- Design an inclusive simulation-based strategy to address and mitigate specific challenges faced by differently abled learners in simulation.
- Embrace a mindset shift towards inclusivity, understanding its impact on nursing education, and the development of a diverse healthcare workforce



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Empowering Success: Healthcare Simulation Transforming Outcomes for the Student with a Disability

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Methods

Utilizing the Universal Design for Learning (UDL) framework promotes flexible teaching methods to accommodate learning needs and abilities (Dickerson et al., 2020). Learning flexibility helps the learner create critical thinking and explore new and innovative ideas that are crucial to nursing. Through the interactive poster, you will participate to create a simulation task for a student with a disability. You will be provided examples of a learner with a disability and the goal is to provide adaptable simulation for the learner. Image 1 has a learner that is donning sterile gloves. Image 2 is a learner that has a T11 spinal injury performing Cardiopulmonary Resuscitation (CPR). What adaptive strategies would you consider to allow a learner to place on gloves properly that only has one hand? Scan QR Code 2 below to provide a short response. What adaptive strategies would you consider to allow a learner to perform CPR effectively? Scan QR Code 3 below to provide a short response.



Image 1: Learner with a disability that is donning sterile gloves.



QR Code 2: Scan QR Code to provide a short answer on what strategies you would consider to allow a learner to place on gloves properly that only has one hand.

Pilot Data

Pilot data was collected from a previous workshop. The audience consisted of 12 participants which were divided into two teams. Each team received two cards with a disability and skill that needed to be developed for simulation. Each team was given time to discuss and collaborate what they would develop for a given learner needing to learn a skill in simulation. Examples of the cards are below in Image 3.

The two teams came together to discuss their findings. A qualitative approach was utilized.

Comments:

"These changes to how a simulation is done would help all students"

"Would this give a student with a disability more of an advantage than the others, reply was no, all the students could benefit and could perform the tasks in a manner that worked for them" "This room should be full of people interested in this topic, we so need this type of information, and we need to change how we teach simulation and nursing overall and how to involve students with disabilities".

CPR Lower Extremity Limitation- Wheel Chair (w/c)	Donnir O
PO Medication Administration Low Visual Acuity	Ca Upp

Future Direction

Advancing Inclusive Simulation Practices

Workshops and webinars hold significant potential for Simulationists seeking to foster inclusive environments for all learners. Through collaborative approaches, educators can discover adaptive simulation strategies that enhance psychological safety—an essential element in achieving the highest standards of practice across programs. These educational events offer valuable opportunities to build skills and share innovations that support diverse learning needs. Additionally, further research is critical to explore how students with disabilities can achieve equitable outcomes in simulation-based education.



Image 2: Learner with a T11 spinal injury performing CPR.



QR Code 3: Scan QR Code to provide a short answer on what strategies you would consider to allow a learner to perform CPR effectively.

ng Sterile Gloves One Handed

theterization per Arm/Hand Limitation

Image 3: Tabletop cards used as an example of discussion with various skills and disabilities.

Resources



QR Code 4: Scan QR Code to access various community and technology resources

Technology

Clinical

- Eko Stethoscope
- Seeing Al App
- Dragon Dictation
- iComm
- MyTalkMobile
- ModMath

Simulation

- Patient Simulators Eko Stethoscope
- Student Auscultatio Manikin
- Seeing Al App
- Igloo Wordly

Resources

- Artificial Intelligence
- State Disability Servious Federal Disability Law
- Assistive Technology National Organization Nursing with Disabili
- Docs with Disabilitie

References

AACN. (2024). Aacn. nursing shortage fact sheet [PDF]. Retrieved April 1, 2025, from https://www.aacnnursing.org/Portals/0/PDFs/Fact-Sheets/Nursing-Shortage-Factsheet.pdf

Ailey, S. (2022, January 20). Opinion. Medpage Today. Retrieved January 1, 2025, from https://www.medpagetoday.com/opinion/second-opinions/96768

Disability language guide - drcnh. (n.d.). DRCNH. https://drcnh.org/rapsheet/disability-language-guide/

Dweck, C. S. (2006). Mindset: The new psychology of success (Reprint, Updated ed.). Random House.

Hopkins, S., Rae, V., Smith, S. E., Meldrum, S., & Tallentire, V. R. (2023). From safety net to trampoline: Elevating learning with growth mindset in healthcare simulation. Advances in Simulation, 8(1). https://doi.org/10.1186/s41077-023-00264-1

John Hopkins University. (n.d.). Clinical Decision Support. Retrieved from http://www.hopkinsmedicine.org/epic/areas_focus/clinical_decision_support.html

Persico, L., Belle, A., DiGregorio, H., Wilson-Keates, B., & Shelton, C. (2021). Healthcare simulation standards of best practice facilitation. Clinical Simulation in Nursing, 58, 22–26. https://doi.org/10.1016/j.ecns.2021.08.010

Togioka, B. M., & Duvivier, D. (2022). Diversity and discrimination in health care. https://www.statpearls.com/point-of-care/130469

VanPuymbrouck, L. (2021). Clinicians who report low disability bias score high for ableism at an unconscious level. Holland Bloorview. https://hollandbloorview.ca/stories-news-events/BLOOM-Blog/clinicians-whoreport-low-disability-bias-score-high-ableism

Villines, Z. (2021). Ableism: Types, examples, impact, and anti-ableism. https://www.medicalnewstoday.com/articles/ableism

Watts, P. I., Rossler, K., Bowler, F., Miller, C., Charnetski, M., Decker, S., Molloy, M. A., Persico, L., McMahon, E., McDermott, D., & Hallmark, B. (2021). Onward and upward: Introducing the healthcare simulation standards of best practicetm. Clinical Simulation in Nursing, 58, 1–4. https://doi.org/10.1016/j.ecns.2021.08.006