Note from the Editors

Dear JACOT Readers,

We are excited to begin our **sixth year** of facilitating an evidence-based resource specific to knowledge surrounding occupational therapy value in acute care practice, education, and leadership. This is the **Winter 2024 issue** for Journal of Acute Care Occupational Therapy. We continue to promote our journal's mission to provide an evidence-based resource that is current and representative of occupational therapy unique role in acute care. This past fall, the journal was fortunate to be asked by *AOTA Everyday Evidence* podcast to share our journey in developing and sustaining a peer-reviewed, relevant, and rigorous evidence resource for the occupational therapy profession. Check out this podcast episode to further hear our journey to filling a knowledge gap and continuing to expand evidence resources for acute care occupational therapy practitioners, educators, and students.

This Winter 2024 issue provides insight into occupational therapist's report of their role and responsibilities regarding delivery of occupational therapy to unique populations having cardiopulmonary and mechanical device support needs. In addition, four functional performance measures associated with frailty are examined in an effort to better predict postoperative outcomes and identify patients with heart failure who may be at a higher post-operative risk. Furthermore, this issue examines occupational therapy value in assessing readability and usability of patient education handouts for individuals with intellectual disabilities. Finally, a quality improvement project is described, demonstrating improved nursing staff competency and adherence to positioning and handling techniques with patients after stroke.

We ***thank*** all of our readers and followers for supporting this evidence-based resource and look forward to providing an ongoing outlet for practitioners to promote their work in the practice area of acute care. We invite all occupational therapy practitioners to be an active reader, promoter, and investigator for JACOT.

Best regards,

Hannah Oldenburg, EdD, OTR/L, BCPR

Co-Founder & Editor

Jennifer Bergstrom, EdD,OTR/L, BCPR

Co-Founder & Editor

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Editorial

Evolving Training for Mechanical Device Use in Occupational Therapy Practice

Author: Ben Krolak, OTD, OTR/L

Patients implanted with a left ventricular assist device (LVAD) and their family members must learn new routines related to the operation and care of their device while performing everyday occupations (Chandra & Suplicki, 2020). With expertise in activity analysis and occupational science, occupational therapists (OTs) are uniquely positioned to guide the rehabilitation process for this population, especially around specialized tasks such as daily mechanical device management (Boop et al., 2020). Being competent and confident in the mechanical device management is best developed through hands-on clinical experience with patients in their initial recoveries to be able to feel comfortable assisting patients in these specialized occupations (Wyble, 2020). Practitioners need to develop and maintain their knowledge and skills regarding mechanical device equipment function, interventions and medical / surgical trends that occur within a given acute care institution. Changes in heart transplant allocation put in place in 2018, as well as nationwide practice changes in management of advanced heart failure has made this more challenging (Jorde et al., 2023). After a brief uptick in 2019, overall LVAD surgical volumes have continued to decline by 21% nationwide across the past three years. This has led to decreased opportunities for new OT practitioners across all trauma centers too gain clinical experience working directly with this patient population in their initial recoveries.

As a cardiac lead position at a level I trauma center, it is my responsibility to oversee rehabilitation staff orientation and training in acute care specific to cardiac practice needs, including mechanical devices such as LVADs. Over the past year, it became clear updates and additional training was warranted for our novice and experienced practitioners' working with patients implanted with an LVAD. This need arose through a needs assessment survey of OTs in acute care who had been oriented to the cardiac population and LVADs in the past 3 years to gauge their clinical experiences during their orientation process as well as their comfort levels in working with this population. A majority of OT staff surveyed reported having only 1 or 2 opportunities to work with patients in their initial recovery from LVAD implantation, with many reporting their time in orientation did not include any direct patient care with LVADs. A percentage of OTs also reported they would not feel comfortable delivering occupational therapy services to patients implanted with an LVAD unless another trained, experienced OT was present.

In response to the survey findings, an educational in-service training was developed and implemented with novice and experienced occupational therapy practitioners to support the knowledge, resource, and skill need within the rehabilitation department. The education in-service was designed and implemented, with objectives aimed to review LVAD specific equipment and trends as well as an in-depth review of OT-related goals and approach specific to the populations implanted with LVADs. This training also provided protected time and opportunity for practitioners to have hands-on training using practice equipment (i.e., controller and batter exchange).

Here are some key lessons learned related to LVAD training at our facility.

1) *Ongoing Education* – Currently, HeartMate 3 as this is the only current FDA approved device for destination and bridge-to-transplant (Jorde et al., 2023). However, staff still need to be provided with education on prior generation devices as they may encounter hospitalized patients with these devices who have been re-admitted for various conditions (i.e., infection, failure to thrive, falls).

2) *Access to Practice Equipment* - Having available practice LVAD equipment (batteries, controller, day and shower bags) are beneficial for training of staff as well in use with patients either awaiting surgery or post-surgery for training purposes

3) *Orientation & On-Going Training Sessions* - The importance of keeping up to date and detailed orientation checklists to ensure staff training competencies. Provided intermittent refresher in-services to maintain knowledge and skills as well as has hands-on opportunity to use the devices.

4) *Practitioner Support* - Available and willing practitioner expert support for novice practitioners may bridge practice knowledge and confidence gaps as well as have a support system

5) *Communication on Culture Trends* - Mechanical device, such as LVADs, practice trends and developments evolve based on device, manufacture, and facility / physician, which warrants on-going attention and training updates for rehabilitation practitioners to be competent and confident to serve this population.

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Author Biography

Ben Krolak OTD, OTR/L is the acute cardiac lead occupational therapist for Mayo Clinic Rochester. He was one of the inaugural members of the embedded cardiac surgery intensive care unit (ICU) team at Saint Mary's Hospital in Rochester and has been in clinical practice for 8 years. Other practice interests include supervision of level I and level II fieldwork students, orthopedics and other areas of ICU practice. He sits on various committees in the institution including the Therapy Professional Development Committee and Critical Care IMP Quality Subcommittee.

Contact Information

krolak.benjamin@mayo.edu