Session Title:

Boosting Cardiac Surgery Success: Physical Therapists' Role in Frailty Assessment & Prehabilitation

Speakers:

Deanna McIntire, PT, MHS
Marc Burkard, PT, CCS

Session Description:

This session explores the establishment and evolution of the physical therapy role in the UVA Cardiac Surgery Clinic. It highlights the expertise of physical therapists in assessing frailty and its significant impact on preoperative risk for cardiac surgery patients. Detailing the foundational steps, it encompasses the selection of frailty tests, educational components, exercise routines, and patient follow-up strategies. Emphasizing findings from our observational study involving 541 elective cardiac surgery patients, it reveals the significant impact of frailty on postoperative resource utilization, extended hospital stays, and higher readmission rates. This underscores the physical therapist's pivotal role in perioperative planning, predicting resource utilization, and targeting patients suitable for prehabilitation.

This research propelled the development of a dedicated prehabilitation program within the UVA Cardiac Rehabilitation setting for frail or prefrail cardiac surgery candidates suitable for participation. This program provides tailored physical therapy sessions in a safe setting for targeted cardiac surgery patients to enhance robustness before surgery optimizing anticipated postoperative recovery. It is notable that positive prehabilitation experiences in the same setting has the potential to enhance patients' likelihood of attending cardiac rehabilitation.

This talk advocates for physical therapy-led preoperative frailty assessments and prehabilitation programs across multiple cardiac surgery centers. Several case studies will be presented for discussion on challenging patients and the impact of prehabilitation. It champions physical therapists' instrumental role in ensuring a comprehensive approach to enhancing patients' robustness before cardiac surgery and encourages knowledge sharing to promote optimal outcomes for all cardiac surgery patients.

Objectives:

1. Establishing Physical Therapy in the Cardiac Surgery Clinic: Understand the process and steps involved in proposing and gaining approval for a physical therapy position within the cardiac surgery clinic.
2. Defining the Distinctive Role of Physical Therapy in the Cardiac Surgery Clinic: Describe the specific responsibilities and expertise required for assessing frailty, identifying prehabilitation candidates, enhancing perioperative care, and predicting postoperative needs within the cardiac surgery clinic setting.

3. Comprehension of Frailty's Impact in Cardiac Surgery: Gain knowledge in measuring frailty and interpreting scores. Develop strategies to optimize care of cardiac surgery candidates based on preoperative frailty assessments.
4. Understanding the Elements of Physical Therapy designed Prehabilitation Programs for Cardiac Surgery Patients in the Cardiac Rehabilitation Setting: Outline the components of a specialized prehabilitation program designed and delivered by physical therapists to improve frailty of cardiac surgery candidates in the cardiac rehabilitation setting. Discuss the advantages of this setting for selected preoperative cardiac surgery candidates ensuring safety, boosting exercise compliance, enhancing pre-surgery frailty status, and encouraging postoperative cardiac rehab participation.

What will be the clinician/educator takeaways/skills that can be utilized immediately?

Understand the process to gain approval for physical therapy positions in ambulatory cardiac surgery clinics
Recognize the importance of frailty testing in preoperative risk assessment
Target modifiable frailty risk factors in pre-operative education and prehabilitation.
Share the framework and process with colleagues to start a prehabilitation program for cardiac surgery candidates in the cardiac rehabilitation setting
Be proficient in using frailty tools to measuring frailty in practice and understand the potential impact on healthcare consumption
Have support (from us) to troubleshoot expanding the role of physical therapy in cardiac surgery clinics and the cardiac rehab/prehab setting

Speaker Bios:

Deanna McIntire, PT, MHS, is a seasoned Physical Therapist with 25 years of experience at UVA Health focusing the last five years in the Cardiac and Vascular Surgery Clinic. A Virginia native, she earned her degree in Physical Therapy and Masters in Health Science from the Medical University of South Carolina.
She has developed her physical therapy role preparing patients for cardiac and vascular surgeries, optimizing recovery processes, and offering insights into the patient's current physical condition and function, ensuring a collaborative and comprehensive approach to patient care. Her research in frailty has facilitated the development of the UVA prehabilitation program and she is passionate about pursuing other resources and programs to optimize patients before surgery.
Beyond her professional commitments, Deanna enjoys gardening, running, hiking, and sailing adventures with her husband and four boys.
Marc Burkard, PT, CCS has been a physical therapist for over 30 years. He received his BS in Physical Therapy from the University of Connecticut in 1991. After working at a teaching hospital in CT and then as a traveling

physical therapist, he joined the University of Virginia Health System in 1996. Marc has been working with the cardiovascular patient population for the last 15 years in the ICU, acute care, TCV clinic, and outpatient cardiac rehabilitation settings. In 2017, he became Board Certified in Cardiovascular and Pulmonary Physical Therapy. Marc has been involved in the development, design, and implementation of UVA's PREHAB Program for the cardiovascular patient population. In 2022, Marc started treating the first PREHAB patients in the outpatient setting at the UVA Cardiac & Pulmonary Rehabilitation Center. Outside his professional career, Marc enjoys playing poker, exercising, and aviation.

References:

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