

## **Conference**

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## **Title**

Non-Pharmacologic Management of Orthostatic Hypotension in Inpatient Rehabilitation: A Quality Improvement Initiative

## **Authors**

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## **Basis of Inquiry**

Orthostatic hypotension (OH) is frequently encountered during inpatient rehabilitation following ischemic stroke and is associated with dizziness, instability, and disruption of therapy during a critical stage of neurorecovery. In our neurorehabilitation unit, OH was identified as a common cause of missed therapy sessions. Although nonpharmacologic strategies such as compression garments, hydration, and physical counter-maneuvers are commonly recommended, implementation is often inconsistent.

## **Purpose/Objectives**

The objective of this quality improvement initiative was to implement a standardized, nurse- and therapist-driven non-pharmacologic protocol for managing OH in patients recovering from ischemic stroke without requiring immediate physician involvement.

## **Methods**

Conducted on a 20-bed inpatient neurorehabilitation unit in a large urban teaching hospital, this quality improvement initiative followed a literature-guided protocol developed by a multidisciplinary team. Eligible participants were adults recovering from ischemic stroke who demonstrated OH, defined as >20 mmHg systolic or >10 mmHg diastolic blood pressure drop accompanied by symptoms.

A multidisciplinary team developed a standardized OH protocol involving knee-high compression stockings, abdominal binders, oral bolus (480 mL water over 5 minutes), and a structured set of seated countermeasures. Data were collected from March 2024 through March 2025.

## **Findings or Outcomes**

Thirty-one OH episodes were documented, of which twenty-two met full protocol eligibility and received non-pharmacologic intervention. Fifteen episodes (68%) were successfully managed using the protocol, allowing patients to resume either full therapy (n=6) or seated therapy (n=9) without missed treatment time. Compression stockings were used most frequently (19/22), followed by abdominal binder (11/22), seated countermeasures (11/22), and oral bolus (6/22). Eleven of the thirty-one total episodes required pharmacologic management.