

Conference abstract

QI Initiative to Improve Inpatient Rehabilitation Bladder Protocol Compliance and Support Diagnosis of Urinary Retention

Saina Gowani, DO^{1a}, Juliet Peck, MD¹, Sean Sellwood, MD¹, Joe Mendez, MD¹, P.Tyler Rosk, PhD¹

¹ Physical Medicine and Rehabilitation, Corewell Health East - Taylor

Keywords: 2026 QI Summit Poster Presentation

<https://doi.org/10.69735/001c.163771>

INTRODUCTION

Urinary retention is a common diagnosis in inpatient rehabilitation facilities (IRF). Patients are admitted to IRF after surgeries, strokes, traumatic brain injuries, and spinal cord injuries and thus are at higher risk of urinary retention. Diagnosing and addressing urinary retention in a timely manner is imperative to reduce risk of infection and related morbidity. This project sought to improve diagnosis of urinary retention by improving compliance with the existing post-void residual (PVR) measurement protocol.

METHODS

Due to poor compliance and conflicting practices, the existing PVR protocol was evaluated and updated to align with current evidence-based guidelines. This initiative, with involvement of all care team members, aims to improve compliance of PVR protocol to 80% over 3 months. A training module featuring a video and quiz on proper documentation, and the new protocol was designed for nursing staff. Senior resident duties were expanded to include daily oversight of PVR collection and communication of outstanding PVRs to nursing staff. To ensure team accountability, PVR completion was added to interdisciplinary team meeting documentation. An Epic Workbench Report was designed to

enable regular monitoring of compliance for 3 months of pre- and post-intervention.

RESULTS

Pre-intervention compliance rates were 50.5%, 58.0%, and 60.4%, respectively. Post-intervention preliminary data shows compliance of 87%, 81%, and 92.5%. This initiative was effective in improving PVR protocol compliance to over 80%. Data was collected with an Epic workbench report and compared with a manual check of compliance. This showed a 3% margin of error.

CONCLUSIONS

This intervention successfully improved PVR protocol implementation while spreading accountability over multiple job roles to avoid overburdening staff and ensure sustainability of the intervention. Limitations include specific patient situations, which impede application of the protocol, ie self-catheterization, CNA and RN engagement, and patient refusal. The impact of this improvement on diagnosis of urinary retention is still pending further data analysis.

Published: June 29, 2026 EDT.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.