



A Need for a Time-Out: A Consensus Statement From the Post-Acute and Long-Term Care Medical Association (PALTmed) on the Use of Urine Polymerase

[https://www.jamda.com/article/S1525-8619\(25\)00263-4/fulltext](https://www.jamda.com/article/S1525-8619(25)00263-4/fulltext) Chain Reaction Testing for Urinary Tract Infections – Journal of the American

Abstract

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Identification and appropriate treatment of urinary tract infections (UTIs) is challenging in post-acute and long-term care (PALTC) settings. Urine polymerase chain reaction (PCR) has emerged as a rapid diagnostic alternative to standard urine culture, gaining increasing adoption in nursing homes despite limited guidance on its appropriate use. In response to concerns regarding clinical utility, a small workgroup composed of members of the Infection Advisory Subcommittee convened in 2024 to develop a consensus statement on urine PCR testing in PALTC settings. A comprehensive literature review identified several issues. Urine PCR demonstrated a high sensitivity for organism detection, including those of unclear clinical significance. This may lead to UTI overdiagnosis. Discrepancies between gene resistance data and phenotypical antibiotic susceptibilities may result in inaccurate antibiotic selection, with a lack of established treatment thresholds further complicating decision-making processes. Moreover, the cost of urine PCR testing is significantly higher than standard urine culture and much of the supporting literature is biased due to industry funding. Most importantly, no objective studies have demonstrated improved patient outcomes associated with the use of urine PCR. Based on these findings, we recommend against the routine use of urine PCR testing for UTI diagnosis in patients who are in PALTC settings. Its widespread use will likely drive unnecessary antibiotic use, increasing the risk of antimicrobial resistance and its associated harms. Further research is needed to firmly define the population of patients who are in PALTC settings who would benefit from urine PCR testing.