

LEADING MANAGEMENT OF ASYMPTOMATIC BACTERIURIA AND NON-CATHETER ASSOCIATED URINARY TRACT INFECTIONS

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DESCRIPTION

Urinary tract infections (UTIs) are among the most commonly reported infections in long-term care homes (LTCHs), often leading to unnecessary antibiotic use and contributing to antimicrobial resistance. Humber River Health (HRH) supports the North Western Toronto Infection Prevention and Control (IPAC) Hub, which includes 10 LTCHs. Surveillance data from 2022–2023 indicated a rise in reported UTIs, prompting a review of existing management practices. Asymptomatic bacteriuria and non-catheter associated UTIs were identified as key areas of clinical ambiguity and potential over-treatment. In response, HRH explored evidence-based strategies to improve diagnostic clarity, promote appropriate antibiotic use, and enhance healthcare worker (HCW) education.

OBJECTIVE

To improve the management of UTIs by implementing a standardized UTI management program across LTCHs, grounded in Public Health Ontario (PHO) guidance and quality improvement principles.

ACTIONS TAKEN

In June 2023, HRH introduced PHO's UTI management program in affiliated LTCHs. Actions taken included:

- **Baseline Assessment:** Utilized a standardized tool to evaluate current practices related to UTI management. The assessment focused on adherence to established policies, accuracy of specimen collection protocols, and HCW's knowledge and competencies.
- **Gap Analysis and Targeted Interventions:** Findings from the assessment were analyzed to identify practice gaps and areas for improvement. These insights informed the development of focused educational sessions and revisions to existing policies and procedures. Education brochures were developed for families and shared during family council meetings.
- **Reinforcement of Specimen Handling Best Practices:** Best practices for proper specimen handling and transport were reinforced through ongoing education and monitoring to ensure compliance.

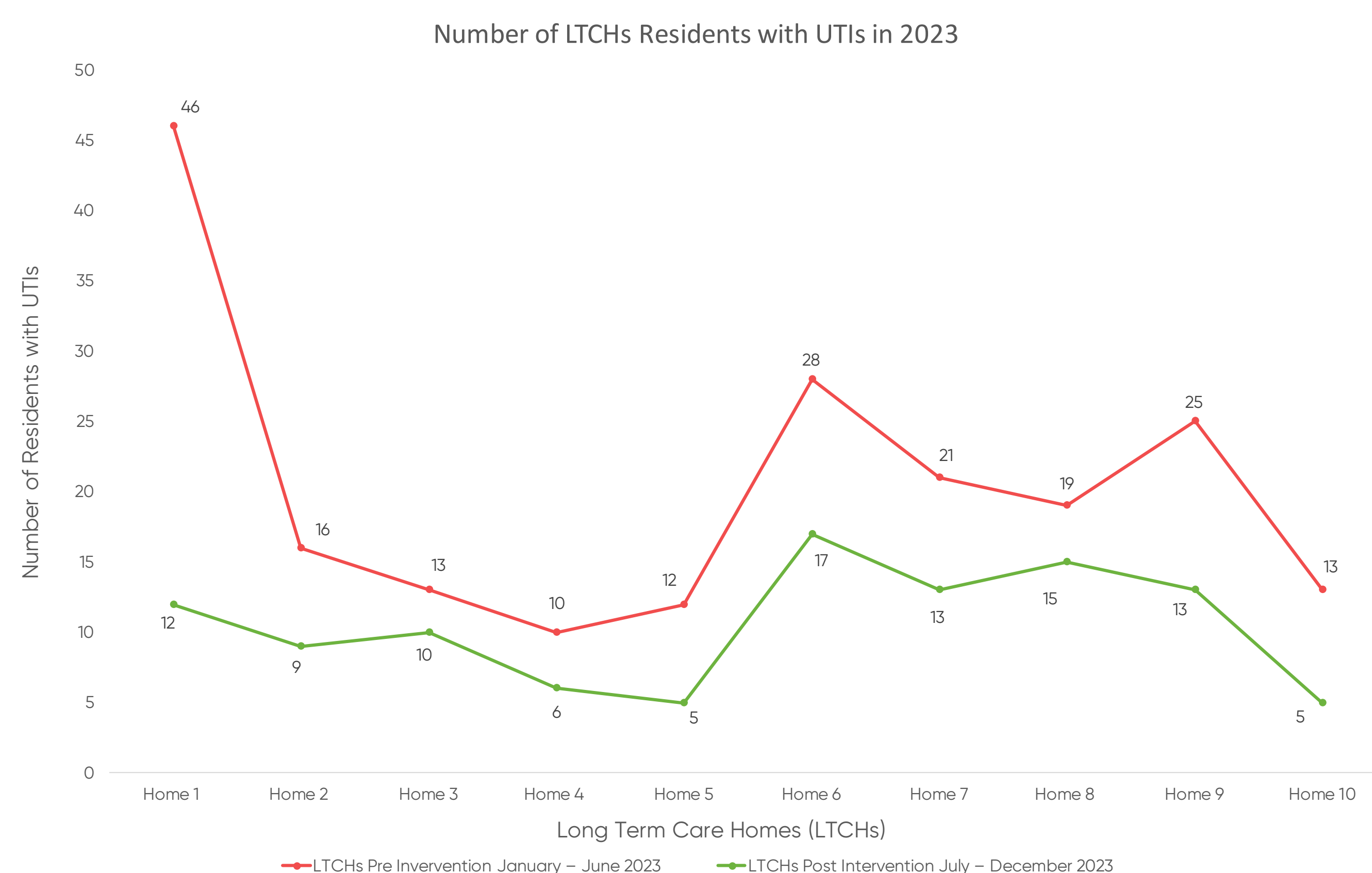


Figure 1. There were 203 LTCH residents with UTIs pre-implementation from January to June 2023 and post-implementation had 105 LTCH residents with UTIs which demonstrated a 48% reduction in UTI rates.

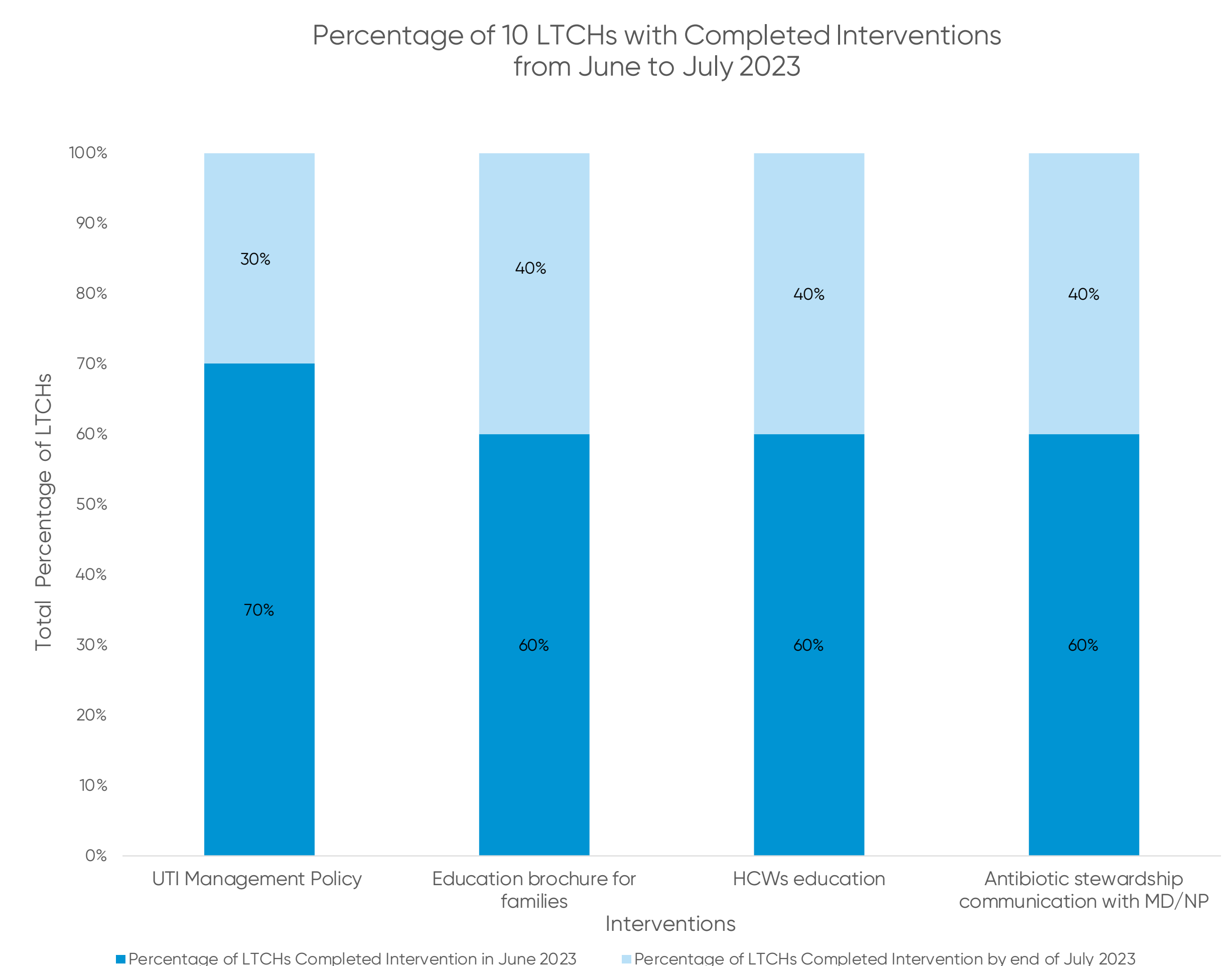


Figure 2. Percentage of 10 LTCHs comparing percentages of LTCHs with interventions completed in June 2023 and interventions completed by end of July 2023.

SUMMARY OF RESULTS

Following program implementation, the number of residents identified with UTIs across 10 LTCHs decreased from 203 (January–June 2023) to 105 (post-implementation), representing a 48% reduction (Figure 1). This preliminary outcome suggests improved UTI management and reduction in inappropriate antibiotic use. All LTCHs completed recommended interventions by the end of July 2023 (Figure 2). While intervention adoption was high, July data may reflect a transitional period and should be interpreted with caution.

LESSONS LEARNED

Empowering healthcare workers through targeted education and stakeholder engagement improved diagnostic clarity, reduced inappropriate antibiotic use, and strengthened collaboration across LTCHs. Further evaluation is needed to assess clinical relevance and sustainability of outcomes.

