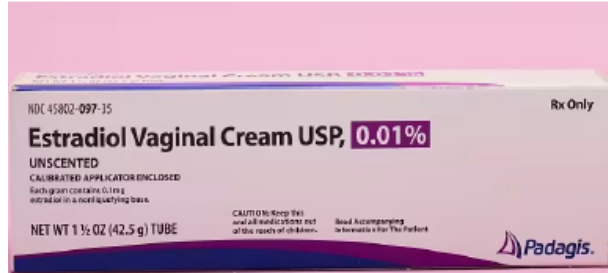


# Reducing Recurrent UTIs in Postmenopausal Women: Evaluating the Role of Vaginal Estrogen Cream



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## Clinical Problem

- Recurring UTIs ( $\geq 2$  in 6 months or  $\geq 3$ /year) are common in postmenopausal women<sup>2</sup>
- Estrogen deficiency leads to vaginal atrophy, increased pH, loss of lactobacilli, and increased inflammation<sup>46</sup>
- Repeated antibiotic treatment does not address the underlying cause and contributes to resistance<sup>3</sup>

## Significance

- Recurrent UTIs negatively impact quality of life, intimacy, and mental well-being<sup>7</sup>
- Increased risk of serious complications including pyelonephritis, sepsis, and hospitalization<sup>1</sup>
- Estimated U.S. healthcare costs exceed \$7 billion annually<sup>7</sup>
- UTI recurrence occurs in 53% of women  $\geq 55$  years compared with 36% of younger women within one year<sup>1</sup>

## Setting & Population

- Primary care clinics serving suburban, rural, or underserved populations
- Postmenopausal women aged 50 years and older with recurrent UTIs

## Purpose

To evaluate evidence supporting vaginal estrogen therapy as an effective, non-antibiotic strategy to reduce recurrent urinary tract infections in postmenopausal women in primary care settings.

## Literature Review: Best Practice Recommendations for the Use of Vaginal Estrogen

### Key Evidence-Based Findings

- Vaginal estrogen restores vaginal epithelium, lowers pH, and promotes Lactobacillus growth<sup>46</sup>
- Reduces inflammatory markers (e.g., IL-6) associated with UTI susceptibility<sup>4</sup>
- Demonstrated reduction in UTI recurrence and UTI-related hospitalizations<sup>348</sup>
- Minimal systemic absorption and strong safety profile<sup>48</sup>
- Recommended by multiple clinical guidelines for postmenopausal women with recurrent UTIs<sup>24</sup>

## Purposed Solution & Implementation Plan

### Proposed Intervention

- Incorporate vaginal estrogen therapy into routine primary care management for eligible postmenopausal women with recurrent UTIs

### Implementation Plan

- Provider education on safety, indications, and prescribing
- Screening during routine visits for recurrent UTI history and symptoms of urogenital atrophy
- Prescription of low-dose vaginal estrogen when appropriate
- Patient education on use, expectations, and preventive behaviors
- Follow-up at 6–12 weeks to assess response and tolerance

## Evaluation of Desired Outcomes

- Reduction in UTI frequency at 6 & 12mo
- Decrease antibiotic utilization
- Reduced urgent care or emergency visits for UTIs
- Improved genitourinary comfort
- Improved patient-reported quality of life

## 5 LIFE CHANGING BENEFITS of Vaginal Estrogen

- 01 UTI Prevention
- 02 Better Bladder Control
- 03 Healthy Vaginal Microbiome
- 04 Improved Sexual Health
- 05 Prevention of Vulvovaginal Atrophy

## Anticipated Results

### Expected Outcomes

- Fewer recurrent UTIs<sup>348</sup>
- Reduced reliance on chronic antibiotic prophylaxis<sup>3</sup>
- Improved patient satisfaction and comfort
- A reduction in antibiotic use in primary care

## Conclusion & Implications for Practice

- Vaginal estrogen therapy is a safe, effective, and underutilized preventive strategy<sup>468</sup>
- Addresses the root cause of recurrent UTIs in postmenopausal women
- Easily integrated into primary care workflows
- Particularly beneficial for rural or underserved populations
- Supports long-term quality improvement and antimicrobial stewardship<sup>37</sup>

## References

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