

# Frailty remains underrepresented in LUTS research among older patients, but with its growing recognition, a critical shift is emerging in the future care of older adults

## HYPOTHESIS / AIMS OF STUDY

LUTS are highly prevalent in older adults, especially in frail populations

Limited research at the intersection of LUTS and frailty

Aim: Use of AI-powered scientometrics to map trends, identify emerging topics, and highlight research gaps

## STUDY DESIGN, MATERIALS AND METHODS

AI-driven scientometric analysis (Mynd platform) of LUTS in older and frail patients

Analysis of 13,737 PubMed-indexed articles (1954–2024)

Unsupervised topic modeling clustered research themes

Novel “recency” metric identified emerging, mainstream, or declining topics

## RESULTS

LUTS research peaked mid-2010s, declined after 2020

Urinary incontinence most studied diagnosis (n=3,663)

**Emerging topics:** overactive bladder, detrusor underactivity, beta-3 agonists, prostatic artery embolization

**Declining topics:** urodynamics, uroflowmetry, sling procedures

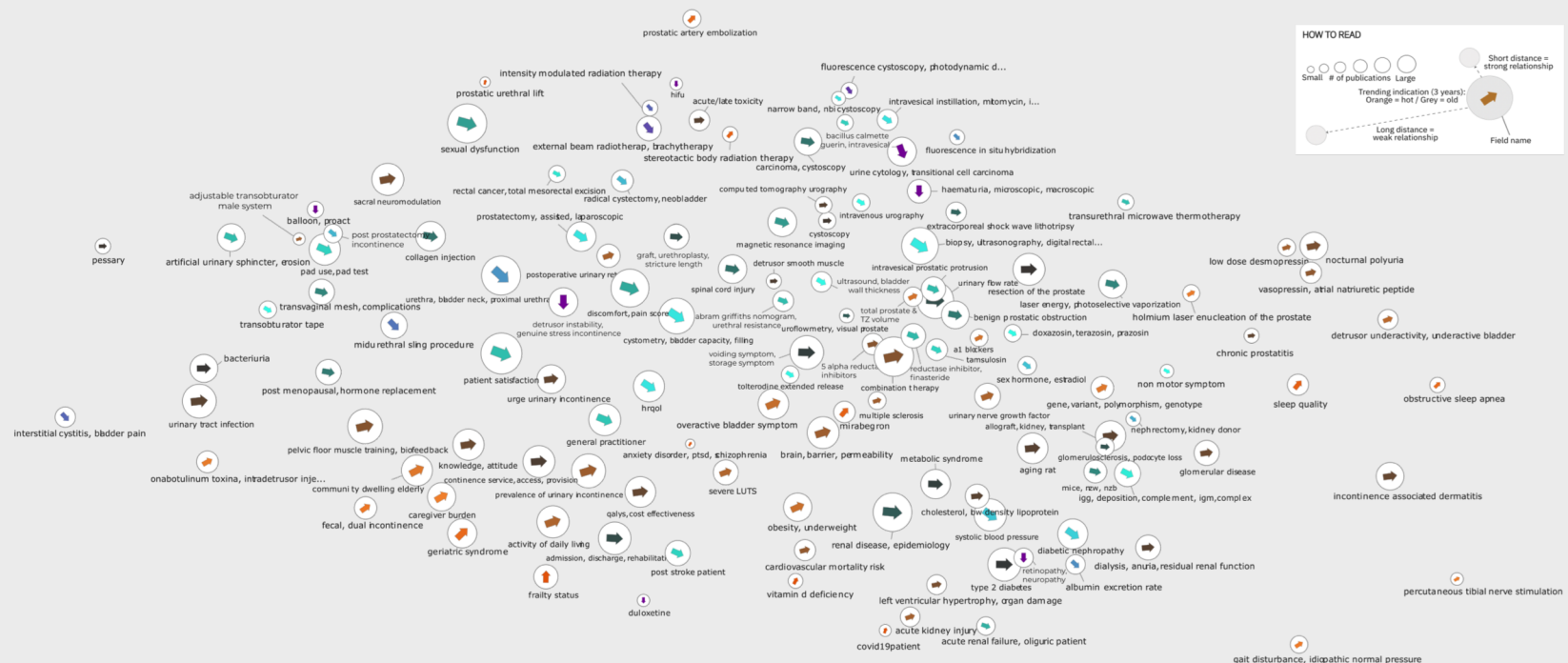
**Frailty:** only 2.5% of studies, but strong upward trend (recency +1.57)

## CONCLUDING MESSAGE

LUTS research is evolving with focus on targeted, less invasive diagnostics and therapeutics

Frailty remains underexplored but is gaining attention

Future studies should integrate frailty to improve outcomes in vulnerable older populations



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