



## Extended Research Article

# Urodynamics tests for the diagnosis and management of male bladder outlet obstruction: long-term follow-up of the UPSTREAM non-inferiority RCT

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## Plain language summary

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## Plain language summary

Lower urinary tract symptoms are common in older men and can need treatment. The UPSTREAM study (Phase I) aimed to help guide treatment options for these symptoms. Improvement in symptoms are measured by changes in the International Prostate Symptom Score. Men were assigned at random to have urodynamic testing or routine National Health Service care. We followed up all men for 18 months but found that some were still waiting for treatment at the end of the study.

Phase II of UPSTREAM followed up men from Phase I study until they were at 5 years from entering the study. We wanted to measure their lower urinary tract symptoms and find out how many men had undergone prostate surgery. We asked men to complete a questionnaire which included the International Prostate Symptom Score and quality-of-life measures. We also used routine National Health Service data to gather information on prostate surgery and the use of hospital services.

Of the 820 participants in Phase I, 416 completed a 5-year questionnaire and National Health Service data were available for 801. At 18 months, there was a similar reduction observed from baseline symptoms in both groups (men who did and did not have urodynamics). We saw a slight increase in symptoms between 18 months and 5 years, with no big difference between the two groups. Furthermore, 43% of men had received surgery for their urinary symptoms by 5 years. There were no big differences observed between the groups in use of hospital services or quality of life.

UPSTREAM Phase II found that there were no major differences between the two groups after 5 years. There was no difference in the number of men receiving surgery or using hospital services. There was also no difference in their urinary symptoms or quality of life.

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## This article

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