

NPCA Quality Improvement case studies

Severe genitourinary complications following radical prostatectomy: Gloucestershire Hospitals NHS Foundation Trust

Context

The National Prostate Cancer Audit developed a [validated measure of severe genitourinary \(GU\) toxicity following radical prostatectomy](#) enabling a comparison of outcomes between NHS providers in England and Wales. Overall, 11% of men experienced at least one severe treatment-related GU complication within two years following surgery in 2015, although a high level of variation was apparent.

Gloucestershire Hospitals NHS Foundation Trust was found to be outside the expected limits for the national mean rate following adjustment for age, comorbidities, cancer risk status and socio-economic deprivation - 28% of men experienced a [GU complication](#) within two years of follow-up. As a result, the trust was flagged as a potential outlier and the [2018 NPCA Outlier Process](#) was implemented. The Clinical Lead at Gloucestershire was formally notified and invited to review the trust results with support from the NPCA Clinical Leads. Patient-level data was provided.

Evaluation & diagnosis

Internal investigations carried out by the clinical lead and team verified the results and determined that an increased rate of urethral stricture post-operatively accounted for the increased complication rate. Strictures occurred across all surgeons in the unit.

The lead clinician and trust team reviewed the entire process of surgery within the urology department to identify potential causative factors. Cross-departmental discussions were also carried out to spread learning.

Improvement plan

On conclusion of the local investigation carried out by the trust, the following plan has been implemented:

- Changing the skin preparation used at surgery.
- Shortening the time a catheter may be put on gentle traction during surgery.

Next on the improvement journey

Trust review of initial results indicate that the changes implemented have resulted in a reduction in strictures and thereby post-operative complication rate.

The Care Quality Commission's hospital inspections will utilise the results for [Gloucestershire](#) provided by the NPCA to support the National Clinical Audit Benchmarking initiative .

The NPCA will continue to provide validated results overtime to support benchmarking and quality improvement. In addition, the NPCA will hold a Quality Improvement workshop during the next round of the outlier process and both negative and positive outliers will be invited to share learning.