GETTING IT RIGHT FIRST TIME

Urology

GIRFT Programme National Specialty Report

by Simon Harrison
GIRFT Clinical Lead for Urology

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GIRFT is delivered in partnership with the Royal National Orthopaedic Hospital NHS Trust and NHS Improvement

Contents

Foreword from Professor Tim Briggs GIRFT Programme Chair

I am delighted to present and recommend this report by Mr Simon Harrison, GIRFT clinical lead for Urology; who, along with leading clinicians before him, and following him, has travelled the country to help NHS hospitals improve patient care.

The Getting It Right First Time (GIRFT) programme covers 35 surgical and medical specialties, working directly with frontline clinicians to identify and reduce unwarranted variations in service delivery and clinical practice. When I began the first specialty review of orthopaedic surgery more than five years ago, it was clear when visiting hospitals and meeting surgeons, clinicians, managers and support teams how everyone shares a desire to improve practices, techniques and processes for the benefit of our patients. Staff across the NHS recognise and support the importance of having a better insight and understanding of how their specialty is performing and the kind of impact unwarranted variation is having on their services.

Each GIRFT review results in a report that includes a range of evidence-based recommendations that our clinical leads, all experts in their field, feel would truly make a difference to patient care and efficiency in that specialty. In tackling the variation in the way services are provided and delivered, we are able to identify recommendations that can help improve the quality of care and outcomes for patients, as well as helping the NHS deliver much-needed efficiency savings.

Throughout, we have found a real willingness to engage with our programme and this review into Urology has been no exception. Simon Harrison's review has helped to identify improvements for trusts' teams to take forwards, alongside strategic changes to the workforce and networking of urological services. Throughout, this report highlights what works well and what isn't working, helping clinicians and managers to understand the collective benefits of small changes which together can improve the capacity of current services across the NHS for the benefit of patients.

GIRFT and the other Carter programmes are already demonstrating that, by transforming provider services and investing to save, there are huge gains to be made in stabilising trusts financially and improving care for patients. My hope is that GIRFT will provide the impetus for clinicians, managers and programmes such as ours, to work together, shoulder to shoulder, to create solutions and improvements that for too long have seemed impossible to deliver.

GIRFT Programme Chair and NHS Improvement's National Director for Clinical Quality and Efficiency

Professor Tim Briggs is Consultant Orthopaedic Surgeon at the Royal National Orthopaedic Hospital (RNOH), where he is also Director of Strategy and External Affairs. He led the first review of orthopaedic surgery which became the pilot for the GIRFT programme, of which he is now Chair.

Prof Briggs is also National Director for Clinical Quality and Efficiency at NHS Improvement.

Professor Tim Briggs CBE

Foreword from Simon Harrison
GIRFT Clinical Lead for Urology

It has been my privilege to carry out 134 visits, with colleagues from the Getting It Right First Time (GIRFT) team, covering over 140 trusts and meet the clinicians and managers who are responsible for delivering hospital-based urological care in England. The experience confirms the validity of GIRFT's central tenet – that information from large national databases can provide powerful insights into a clinical service's performance, when interpreted with the help of the clinical team and senior trust managers. In particular, it has highlighted that examining how a team is delivering care in comparison with its peers can motivate service development.

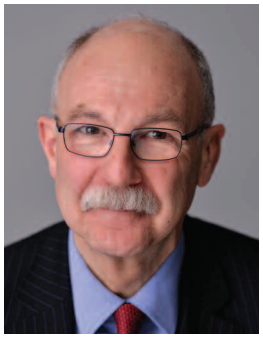
One aspect of the visits has been particularly striking – the willingness of clinicians and managers to look at their service in an open and reflective way, without rancour or defensiveness. The way in which clinical teams have engaged with the GIRFT initiative illustrates the extent to which the NHS engenders a culture of openness. I am sure that we take this collective attitude for granted: it should be celebrated and nurtured.

This report builds on the wide-ranging discussions that took place in those visits and has further benefitted from the constructive input of colleagues in the British Association of Urological Surgeons (BAUS) and the British Association of Urological Nurses (BAUN).

A great deal of urological care is of an extremely high standard. However, there is a strong appetite for further improving patient care, despite the constraints under which many departments are working. The GIRFT review has identified possible paths for improvement that fall into two broad categories. Firstly, there is scope for improving the delivery of care at a departmental level. Improvements in patient pathways, for those presenting as an emergency with urinary tract stones or urinary retention, are in the gift of trust teams. There is already a shift towards greater consultant involvement in the management of emergency patients with urological conditions: this direction of travel needs to continue and accelerate.

Secondly, there is the need for important national initiatives. For example, the development of the urological workforce is vital. Specialist nurses are key members of the urology workforce and yet there is no clear career structure for those that want to take on these varied and challenging roles. It is time that training programmes for specialist nurses, and other members of the workforce, were developed within a proper educational framework. A further example is the need to develop urology networks, made up of clusters of adjacent urology departments (Urology Area Networks). It is clear that comprehensive, high-quality urology services cannot be provided across a geographical region without a more structured approach to inter-departmental cooperation.

For me, the GIRFT urology initiative has set two important challenges for the specialty and the wider NHS. Firstly, we need to make rapid progress towards defining which units should work together within Urology Area Networks. Many departments are currently unable to build cohesive working relationships because of uncertainty about the future configuration of inter-trust collaboration. Once boundaries are defined, work to build sustainable services across a region can start. Secondly, to support this, a specification for a regional urology service must be developed that provides a clear and consistent understanding as to what a comprehensive networked service should deliver. This will provide a template that can be used by providers and commissioners, to determine whether their urological team is in a position to deliver high quality, comprehensive urology services.



Simon Harrison

Simon was a consultant urologist at Pinderfields Hospital, Wakefield from 1992 to December 2016. Pursuing a special interest in neurological urology, Simon developed a tertiary referral practice for patients with complex lower urinary tract dysfunction. Simon has served on the Council of the British Association of Urological Surgeons (BAUS), been chairman of the BAUS Section of Female, Neurological and Urodynamic Urology, and was chairman of the NICE Guideline Development Panel for the guideline on Urinary Incontinence in Neurological Disease.

Foreword from Kieran O'Flynn

President, British Association of Urological Surgeons

In July 2018, the National Health Service (NHS) will be 70 years old. Founded with the aspiration of providing a comprehensive health service based on clinical need, not on the ability to pay, and available to all, the NHS is justifiably admired for its ambitious goals and many achievements. Over the past 70 years, urology has developed as a separate specialty dealing with diseases affecting the genitourinary tract (previously dealt with by general surgeons), and urology has been at the forefront of developments in technology which have heralded the widespread adoption of minimally invasive techniques allowing patients to recover more quickly when surgery is required.

However, in the face of significant challenges, the NHS now faces a genuine crisis on a number of fronts. Foremost among these are the financial constraints within which the NHS functions. Second is the shortfall in the workforce required to deliver the service. Indeed, the House of Lords Select Committee report in April, 2017, posited that the biggest internal threat to the sustainability of the NHS is the lack of a long-term strategy to secure an appropriately skilled, well trained and committed workforce.

In compiling the GIRFT report, Simon Harrison and colleagues have carried out 134 visits covering over 140 trusts in England providing urological care and the GIRFT urology report is the first comprehensive review of the state of provision of urological services in the NHS since its foundation in 1948. Recognising that much of the care provided by urologists and their teams is of a high quality, Simon and colleagues have however identified significant variations in the timely delivery of quality care that cannot be explained by geographical differences alone. There is significant scope to improve the care delivered to our patients, surely a worthwhile goal.

There is a workforce shortfall in urology and with the rising urological requirements of an ageing population, a pressing requirement to develop the urological workforce (both medical and nursing), while ensuring that standards are maintained. While medical training in urology is well established and of a high standard, GIRFT has rightly identified there is currently no established curriculum for nurses to develop and be rewarded for their expertise. This needs to be addressed. Recognising that there are significant problems recruiting to district general hospitals (DGHs) nationally, the inevitable consequence of a limited consultant workforce is the pressing need to develop urology networks, ensuring that timely consultant delivered emergency care is optimised. With the significant national variation in the management of common conditions, (e.g acute ureteric colic and urinary retention), local solutions will need to be identified ensuring that our patients are treated well and promptly.

This report is a significant milestone for the specialty and is both welcomed and supported by the British Association of Urological Surgeons. The challenge for all of us involved in the delivery of urological care is to ensure that we reflect on its contents and put in place measures to improve and, where possible, optimize care for our patients.

Kieran O'Flynn

President BAUS

The British Association of Urological Surgeons

Foreword from Julia Taylor

President, British Association of Urological Nurses

It is over 10 years since the British Association of Urological Nurses commissioned the first research project 'A baseline description of the research, clinical practice and development needs of urology nurses in the United Kingdom'(2007). It specifically highlighted a plethora of different titles used by urology nurses and the lack of nationally recognized education programmes, leading to recognition of nursing practice at an advanced level that continues to impact the development and delivery of clinical practice today.

The production of the GIRFT report through the result of positive engagement with the urology workforce was a significant undertaking for Simon Harrison and the team. The contribution of this first comprehensive review of the urological NHS services and the subsequent recommendations for urological nursing, are consistent with the strategic aims of the British Association of Urological Nurses and so are both eagerly awaited and supported. The report offers an opportunity to highlight again the unmet needs of urological nursing within a political context, whilst exploring changes that are required to address areas of need in research, clinical practice and development. It also highlights the significant role that urological nurses play in the delivery of high quality, patient focused urological care. If urology nurses are to be seen as part of the solution to the needs faced by health care systems, providers and patients, then action is clearly needed.

Despite the known benefits of access to a specialist nurse, the distribution of specialist nurses and incidence-to-nurse ratios vary enormously indicating that there is likely to be inequity of access for patients. Where there is variation, clearly there are opportunities to improve the delivery of holistic patient care. Undertaking review of nursing job plans is not supported for the purpose of reducing the numbers of specialist nurses but to support their ability to be more productive.

As highlighted within the GIRFT report, key to the development of the urological workforce will be establishing an outline urological nursing educational curriculum, which would allow greater insight into the complexity of urology nursing roles and the preparation needed to adopt them. Outlining a draft curriculum that enables a framework for explicit learning outcomes, standards and processes for urological nursing practice will, in turn, identify the educational preparation needed to ensure that all urology nurses from the most junior to the most advanced, continue to be prepared. This resource can also be utilised by hospital trusts and commissioning bodies upon which to base their individually tailored programmes and learning needs assessment.

The challenge for all involved in the commissioning and delivery of urological services will be to model inspirational leadership to undertake and deliver the recommended actions whilst evaluating the impact of the changes on the delivery of high quality urological services, with associated high level of patient satisfaction. Surely anything less will fail both the speciality and our patients.

Julia Taylor

President BAUN

BAUN BRITISH ASSOCIATION of UROLOGICAL NURSES

Executive summary

With over 750,000 episodes of care a year, urology is a specialty faced with high demand – but often for patient investigations and medical care rather than surgical procedures. Many of the conditions the specialty deals with aren't immediately life-threatening but have a major impact on the quality of everyday life. However, urologists also address conditions which can lead to kidney failure and manage several common types of cancer, including prostate, kidney, bladder and testicular cancer. For many patients, the specialty is delivering high quality care but further improvements can still be made.

Urology services are provided in over 140 different NHS hospital trusts in England, but the volume of activity undertaken varies considerably between providers. While some hospitals undertake fewer than 200 urology procedures a year, there are others carrying out almost 10,000. These include sub-specialist procedures such as laparoscopic surgery on the kidneys and shock wave treatment to break down urinary tract stones, as well as major cancer surgery to remove the bladder, prostate or a kidney.

As these examples demonstrate, urology is a specialty which has been at the forefront of technological change. It was the first specialty to use endoscopy as a standard surgical approach and is now pioneering robotic surgery.

The GIRFT programme has examined in detail the way that urology is currently provided in England. The GIRFT team has carried out 134 visits to NHS trusts in England that provide urology services, looking at overall departmental workload and organisation, approaches to common conditions and performance against a range of indicators. This report builds on those visits to set out 18 recommendations to improve the way urology services are provided in the NHS in England.

The recommendations focus on how resources across this large specialty could be better used to improve the patient experience by reducing waiting times, enabling more care to be provided via outpatient settings and providing more effective pathways to definitive treatments. To do that, the report recommends changes to service configuration within trusts, changes to staffing arrangements – extending the role of specialist nurses and asking consultants to focus more on emergency care – and a greater emphasis on networking between urology departments.

Many of these recommendations can be implemented relatively easily and at no extra cost to the specialty, while potentially increasing overall capacity and quality of care. The recommendations have been reviewed and considered by relevant stakeholders before publication, securing strong support for both the overall direction and the specific detail of implementation. The aim is that they should serve as the catalyst for further discussion and action at national, trust and individual surgeon level.

The GIRFT programme

Funded by the Department of Health and jointly overseen by NHS Improvement and the Royal National Orthopaedic Hospital NHS Trust, GIRFT seeks to identify variation within NHS care and then learn from it. GIRFT is one of several ongoing work streams designed to improve operational efficiency in NHS hospitals. In particular, it is part of the response to Lord Carter's review of productivity and is providing vital input to the Model Hospital project. It is also closely aligned with programmes such as NHS RightCare, acute care collaborations (ACCs) and sustainability and transformation partnerships (STPs)/integrated care systems – all of which seek to improve standards while delivering efficiencies.

Under the GIRFT programme, data from many NHS sources is consolidated and analysed to provide a detailed national picture of a particular area of practice. This process highlights variations in care decisions, patient outcomes, costs and other factors across the NHS. The data is reviewed by experienced clinicians, recognised as experts in their field, who visit individual hospital trusts to discuss the data with senior management and the clinical teams involved in the specialty under review. This is an opportunity for both parties to learn; the individual trust can understand where its performance appears to be below average and draw on clinical expertise to identify ways to address that, while the visiting clinicians can gain an insight into emerging best practices, to feed into the national picture and make recommendations for service-wide improvement.

The analysis and visits lead not only to targeted action within individual trusts, but also to the production of this national report and its recommendations, backed by an implementation programme to drive change and address unwanted variation.

Challenges identified by the GIRFT programme

For urology overall, the picture is positive, with large numbers of patients receiving effective and timely treatment. However, there are valid concerns within the speciality that certain pathways are not as effective as they should be; that, with an aging population, patient numbers are set to grow faster than staff numbers, and that there is a small group of providers that are routinely struggling to meet key performance targets.

Specific concerns were also raised about the impact of cancer wait time targets on both the overall treatment provided to cancer patients and the quality of service delivered to non-cancer patients.

Opportunities in urology

The GIRFT process has identified a range of opportunities to improve the patient experience, by reducing wait times and lengths of stay, accelerating diagnosis, avoiding unnecessary admissions and providing patients with definitive treatment faster. In many cases, the key to realising these opportunities lies in some reorganisation of the way urology is provided and the specialty's resources are used.

For example, technical advances have meant that much urology is minimally invasive and recovery times can be swift. This offers an opportunity to increase the use of day surgery and to conduct many investigations and some treatments in an outpatients' setting. In particular, the report recommends the adoption of Urological Investigations Units (UIUs) which can provide swift diagnosis and treatment without needing to admit patients. Much of the work in a UIU can be led by specialist nurses rather than consultants, releasing the latter to help improve emergency care.

There is a prime recommendation to increase the delivery of consultant-led emergency care, which appears to provide better outcomes including greater continuity of care and shorter stays. It also has the potential to address the issue of patients being admitted in an emergency but then not having key decisions made about their care, or receiving only interim treatment during the emergency admission. This means they are discharged without the underlying condition being dealt with and must return to see a consultant via the elective stream. With experienced consultants overseeing emergency care, free from elective responsibilities, such situations are less likely to arise: a greater proportion of patients will receive definitive treatment during the emergency admission.

Some providers, particularly those that have several hospitals with urology units in the same trust, may be able to make these changes on their own. However, for others, the pace of change and time to benefit could be accelerated by moving to a network model, with different parts of the urology workload centred at different providers within a urology area network. There are strong foundations within urology for such a move, in the form of networks for cancer care and reconstructive urology; this report recommends the approach is adopted for a greater range of conditions.

Deep dives: learning from peers using data

Many of the specific changes recommended in the report are based on approaches being successfully used by some urology providers. These approaches, which were identified during deep-dive visits, include:

- UIUs;
- the introduction of a "consultant of the week" model for emergency care; and
- the concept of a five-day urology department, which builds on the current reality of limited weekend working (and small numbers of patients) to propose an approach where fewer departments remain fully open at weekends. These fully open departments can then offer a higher standard of care.

Arguably, two of the most important findings of the GIRFT programme also emerged from deep-dive visits. The first of these was just how demoralised the small number of providers that are constantly failing have become. Even while doing many things right from the process perspective, the sheer imbalance between patient numbers and available resources is proving almost insurmountable for these providers. With recruitment also a challenge, they are seeking additional support and have found little available. The network model is potentially part of an answer here; targeted support from programmes such as GIRFT is another.

The second issue relates to cancer wait time targets. While most providers are performing relatively well against these, discussions during visits revealed some important concerns. Some providers felt that they had been forced to focus disproportionately on the 'clock stop' point of providing first treatment within 62 days of referral from primary care.

For muscle-invasive bladder cancer, which can progress quickly, providers indicated that, while they were meeting the target by undertaking preliminary treatment, there was then often a prolonged delay before they were able to offer patients the more important definitive treatment. For prostate cancer, which often develops slowly, a common concern was that the target meant some patients were pressurised into receiving a treatment within 62 days, even where that was not clinically necessary.

Given these concerns, the report recommends reconsidering the standards and identifying how these adverse effects of a positive aim could be avoided.

Making it happen

The report makes 18 recommendations in total, covering a wide range of themes. The timelines for the recommendations are indicative. To support providers in implementing them, the GIRFT programme is setting up regional hubs that can provide practical advice based on data, the feedback from visits and the expert input of experienced clinicians.

List of recommendations

1. Develop a structured training curriculum for specialist urological nurses and establish accredited training departments.
2. Provide job planning for clinical nurse specialists and ensure appropriate skill mix.
3. Increase the provision of Urological Investigations Units (UIUs), providing a dedicated resource for urological outpatient care.
4. Review follow-up rates against a median of 1:2 first outpatient to follow-up.
5. Take further action to improve RTT performance for common conditions and pathways.
6. Address the potential adverse effects of existing cancer diagnostic and treatment standards.
7. Review guidance for urology cancer MDT working.
8. Reduce average length of stay across the specialty through enhanced recovery and increased use of day case pathways, while monitoring causes and rates of emergency readmissions.
9. Improve the secondary care pathway for patients with urinary tract stones.
10. Provide consultant-delivered emergency urology care in every trust by reducing elective commitments for consultants on call.
11. Review workloads of on-call consultants to ensure the sustainability of on-call arrangements.
12. Ensure high-quality emergency urological care is available in all areas seven days a week by focusing available resources at weekends on a smaller number of departments, while allowing some departments to operate on a five-day basis.
13. Review the approach to providing care for patients who require urgent surgery for urinary tract trauma and related conditions.
14. Establish urology area networks (UANs), comprising several urology departments that provide comprehensive coverage of urological services, beyond existing network arrangements, to optimise quality and efficiency.
15. Reduce the numbers of complex surgical procedures that are carried out in small volume centres, using networks as they develop.
16. Align data collection efforts across urology and ensure that data collected are relevant and have a value that is in proportion to the resources needed for its collection.
17. Enable improved procurement of devices and consumables through cost and pricing transparency, aggregation and consolidation, and the spreading of best practice.
18. Reduce litigation costs by application of the GIRFT Programme's five-point plan.

What is urology?

Urology can be broadly defined as the specialty that manages patients presenting with diseases of the male and female urinary tract, and of the male reproductive organs. It covers a wide range of common conditions including urinary tract infections, urinary tract stones, problems with bladder emptying, urinary incontinence and erectile dysfunction.

Urologists also treat patients with kidney, bladder, prostate, penile and testicular cancer. The last of these typically affects younger men than most cancers; prostate cancer, on the other hand, is most often seen in older patients. Statistics from the charity Prostate Cancer UK have shown that prostate cancer now accounts for the third highest number of cancer deaths in the UK, but also that the mortality rate for prostate cancer dropped by 6% between 2010 and 2015, reflecting growth in the number of men being diagnosed, and living with, the condition.

Unlike most surgical specialties, there is no parallel medical speciality for urology and fewer than 20% of patients admitted as an emergency under the care of a urologist undergo a surgical intervention during the acute admission. A high proportion of urologists' work is carried out in an outpatient setting, addressing conditions that significantly affect everyday quality of life.

Across the entire NHS, there were just over 773,000 episodes of urology care in 2016. Of these, 658,000 were seen under the care of a urologist, including 132,000 emergency admissions. In total, 435,000 urology procedures were conducted.

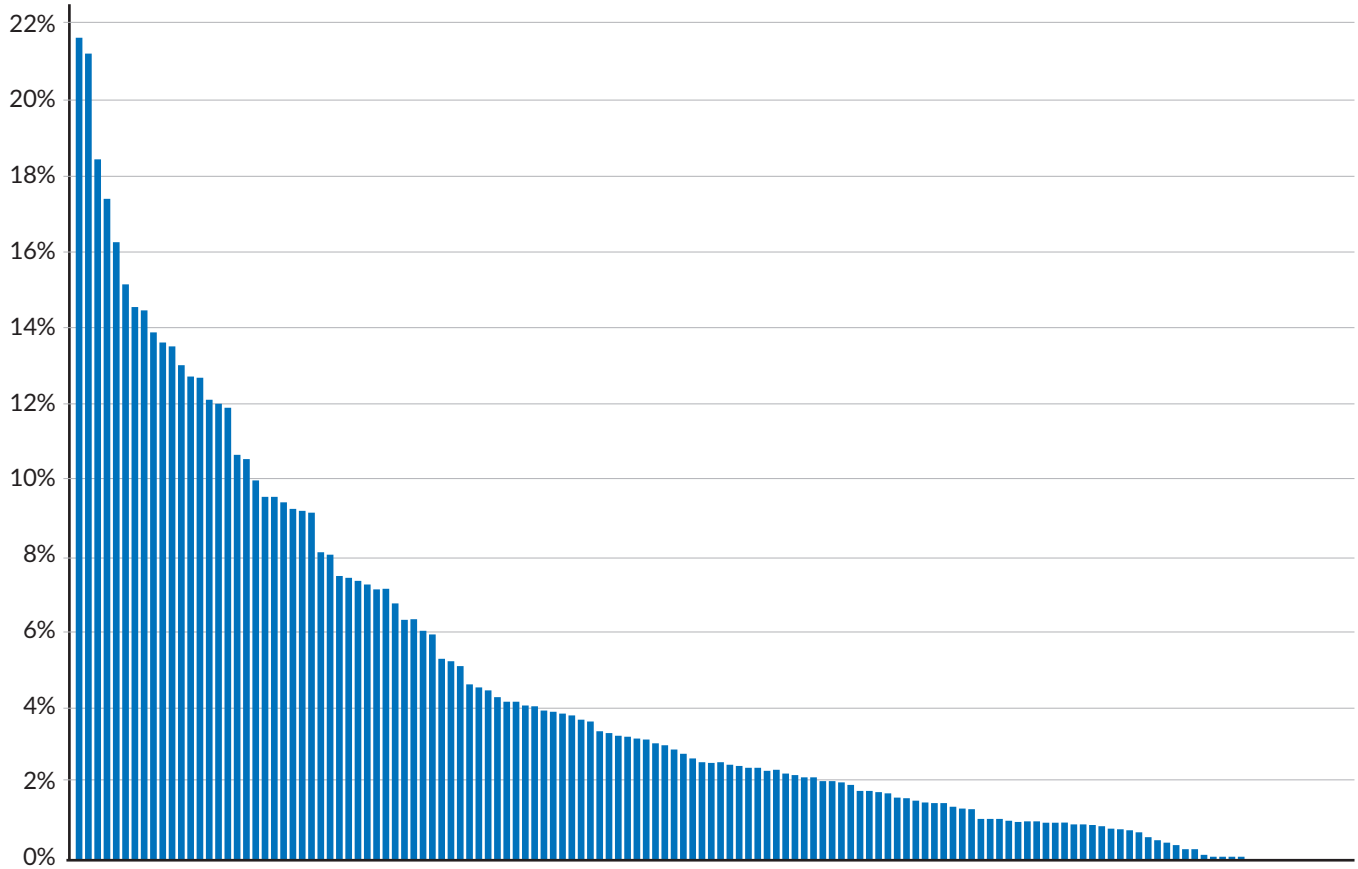
While urologists carry out some major surgical operations, such as removal of the bladder or prostate and open urinary tract reconstructive surgery, much urological surgery can be conducted relatively swiftly and using minimally invasive techniques. This reflects the fact the urology was amongst the first surgical specialties to introduce endoscopic surgery. The specialty continues to be at the forefront of technological change and many providers now offer robot-assisted surgery.

General urology, covering the majority of emergency, diagnostic and investigative work, is offered by the majority of NHS urology providers. However, recent years have seen an increase in sub-specialisation, in particular around:

- andrology and genito-urethral surgery;
- endourology;
- female, neurological and urodynamic urology;
- oncology; and
- paediatric urology.

Even in the busiest providers, this sub-specialist work remains a small proportion of the overall urological workload. In half of trusts, less than 3% of procedures are classified as "specialist"; only 15% of hospitals classify more than 7% of the procedures they conduct as specialist.

Figure 1: Proportion of total surgical activity defined as a 'specialist urological procedure' by trust, 2016



Source: HES

Typically, urologists see many more male patients than female. As many urological conditions develop with age, urology also tends to have a high proportion of older patients. This in turn means that many patients suffer from co-morbidities. Urologists therefore often work in close partnership with other medical and surgical specialties.

Urology provision today

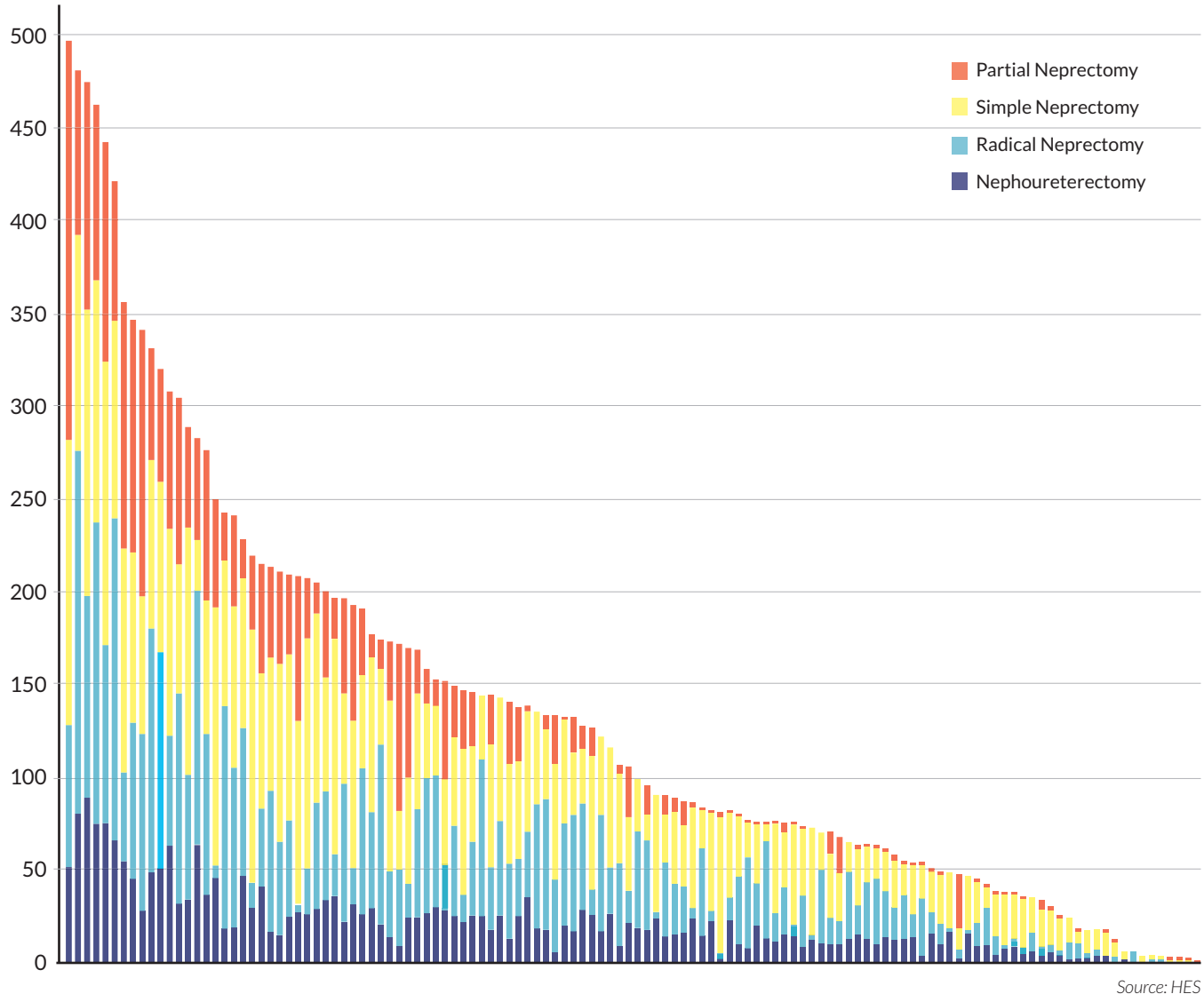
Urology services are provided in 147 NHS hospital trusts, with many trusts having more than one hospital that offers urology services. The volume of activity undertaken varies considerably between providers; the busiest hospitals undertake almost 10,000 urology procedures a year, while some undertake fewer than 200. Urology provision is commissioned by both NHSE specialised commissioning and Clinical Commissioning Groups[1].

The variation can be readily seen by looking at a single 'category' of procedure – nephrectomy, the removal of a diseased kidney, or part of a kidney. Most nephrectomy procedures are now conducted laparoscopically or with the assistance of surgical robots.

As figure 2 below shows, 13 providers conducted over 300 nephrectomy procedures in 2016. More than half conducted fewer than 150 and around a fifth of all providers conducted fewer than 50. The national distribution is representative of many other urological services, where the data repeatedly show there are about 10-15 very large units and a similar number undertaking very small volumes of procedures.

[1] For NHSE commissioned services service specifications are available : B14/S/b NHS Standard Contract For Cancer: Penile (adult) , available via: https://www.england.nhs.uk/wp-content/uploads/2013/06/b14-cancr-penile.pdf ; b14/S/a For Cancer: Specialised Kidney, Bladder and Prostate Cancer , available via: https://www.england.nhs.uk/wp-content/uploads/2013/06/b14-cancr-kidney-blad-pros.pdf ; For Cancer: Testicular (Adult) , available via: https://www.england.nhs.uk/wp-content/uploads/2013/06/b14-cancr-testic.pdf ; For Ex-Vivo partial nephrectomy service, available via: https://www.england.nhs.uk/wp-content/uploads/2013/06/a06-ex-vivo-part-neph-ad.pdf

Figure 2: Count of nephrectomy procedures undertaken, by operation type, by trust, 2016



Source: HES

One factor that affects volumes is the size of the population being served by the unit, where again there is considerable variation. For example, one London trust serves a population of about 2 million; a neighbouring trust serves around 250,000.

In addition to variation in activity and population, the GIRFT programme found extensive variation in terms of staffing, facilities and case mix across urology units.

The urology workforce

The smallest departments had three urology consultants; the largest well over 20. The annual urology workforce study conducted by the British Association of Urological Surgeons (BAUS) reported that there were 922 consultant urological surgeons in England in November 2017[2], continuing the pattern of steady annual growth in consultant numbers over the last decade. Nonetheless, the consultant figure equates to one consultant urologist per 64,376 people in the UK – a figure lower than in many other European countries. The report also found that there were 272 urology specialist registrars in training.

At the end of 2017, there were 44 unfilled consultant urologist posts in England reported to the BAUS survey, although this is thought to underestimate the true number of vacancies. The BAUS analysis indicates that as urology workloads increase, there is likely to be a substantial shortfall in consultant numbers over the next decade.

[2] *See www.baus.org.uk/_userfiles/pages/files/About/Governance/2017%20Workforce%20Report.pdf*

Aside from the consultants, a part of the urology workforce that has grown in importance in recent years is specialist nurses.[3] These nurses are trained to carry out a wide range of diagnostic tests and some procedures (such as inserting catheters, removing ureteric stents and administering chemotherapy drugs into the bladder) as well as playing a key role in patient support and education. All departments now have some specialist nurses, with some units developing new and innovative specialist nursing roles. In over half of urology units, specialist nurses now carry out diagnostic endoscopic assessment of the lower urinary tract (flexible cystoscopy); they also play a key role in reducing unnecessary admissions and attendances at hospital, through telephone or electronic follow-up and emergency triage systems.

It is important to recognise that specialist nurses also bring wider benefits to a urology service because of their profession's emphasis on patient safety and patient experience; their ability to provide a genuinely caring environment is an essential component of high-quality care.

Variation in treatment choices

As part of the GIRFT process, further analysis was conducted on the workload of each department. This looked not only at case mix and total volumes of procedures, but also at the frequency with which specific procedures are carried out by different surgeons and the different responses to patients presenting with similar conditions. The analysis highlighted some significant differences in patient pathways, and different approaches to managing the same condition.

For example, urinary stones are a relatively common reason for emergency urology admissions. However, once patients are admitted, there is a wide variation in how they are managed. In some trusts, more than half of urinary stone patients receive some form of procedure during their initial admission, while in others the figure is under 10%.

There are a number of different procedures that can be used to treat urinary stones in the emergency setting: the most commonly performed is ureteric stenting, which allows urine to bypass the stones. It is invariably an interim procedure, which relieves the immediate pain but does not remove the stones. In some providers, this was the treatment given to more than half of patients receiving a procedure during an emergency admission for urinary stones – while in others, stenting was not offered at all. During GIRFT deep-dive visits, this difference in approach was explored, looking for explanations for the disparity.

Transurethral resection of bladder tumour (TURBT) is the standard endoscopic approach to removing bladder tumours. It provides diagnostic information as the tumour is subjected to microscopic examination. An endoscopic TURBT operation typically takes the surgeon around 30 minutes to perform. It is therefore potentially suitable for day case surgery – and in eight providers, more than a third of TURBT procedures are conducted as day cases. The highest proportion reported to the GIRFT team was 71%. However, at the majority of providers, fewer than 10% of TURBT procedures are conducted as day cases.

This in turn leads to a nine-fold variation in average length of stay following a TURBT procedure, from about 0.3 days at providers which regularly use day surgery, to 2.6 days. The average length of stay is at least 1.2 days.

Providers that regularly use day surgery are confident that it does not lead to any difference in overall outcomes. This signals an opportunity to use day surgery more frequently and reduce the average length of stay across the board – freeing up beds and allowing more patients to recover at home.

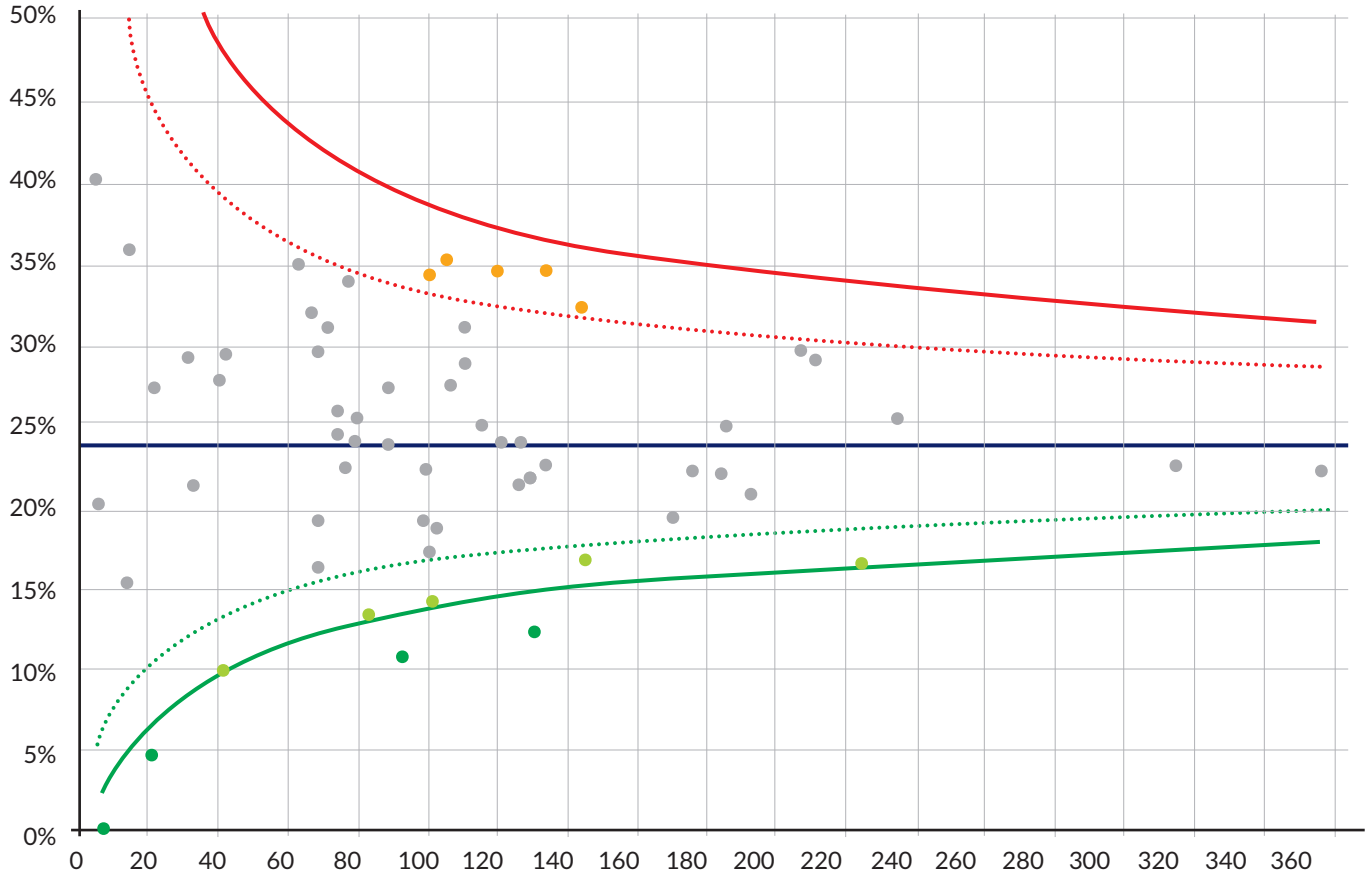
Variation in readmission rates

The rate of emergency readmissions is often used as a measure of surgical outcomes and performance: lower readmission rates are viewed as an indicator that the surgery was conducted effectively. While there are important concerns about relying on this as an outcome measure, readmissions data following major urological surgery nonetheless reveal some significant differences.

For example, there was wide variation in the 30-day emergency readmission rate following a radical prostatectomy: the lowest rate was 1% of patients and the highest 20%. Following cystectomy, the 30-day emergency readmission rates over a three-and-a-half-year period ranged from 5% to 40% - the latter indicating almost half of patients were readmitted within a month of the procedure. The national average was 24%. While there are many factors that can affect readmissions, the data indicate an opportunity to improve.

[3] The term 'specialist nurse' is used in this document to describe nurses that specialise in working with urology patients and utilise specialist or advanced levels of practice. The term is therefore inclusive of nurses with a variety of training backgrounds, qualifications and grades. This would include ward based nursing, and nurses working in a day case and outpatient setting, as well as those with a more specialist scope of practice.

Figure 3: Emergency readmission rate within 30 days of discharge following a radical cystectomy procedure, by trust: April 2013 – Sep 2016



Urology data

As a specialty, urology has long benefited from collecting a large volume and range of data. In particular, BAUS operates a series of registries for surgeons to help build a picture of specialty activity; there are also national audits, such as the National Prostate Cancer Audit, trust-level databases and the main NHS sources such as Hospital Episode Statistics (HES).

While each is extremely valuable, the GIRFT process has highlighted that there is a significant lack of consistency between these different databases. For example, both HES and BAUS registries ask for data to be recorded about the frequency of percutaneous nephrolithotomy (an endoscopic procedure for removing kidney stones). In seven trusts, the BAUS registry recorded over twice as many percutaneous nephrolithotomy procedures as were recorded in HES. By contrast, some trusts which had entered records of the procedure in HES had none in BAUS. This inconsistency means it is not clear which source – if either – provides an accurate record of urology workload.

It is also clear that there is a need for more routine collection of the data that most powerfully examines quality of care. There is only limited information about the key outcomes of much urological care; more data is needed that examines the short, medium and long-term outcomes of urological procedures, and non-operative treatments.

The GIRFT programme as a whole seeks to encourage and enable more accurate and comprehensive data recording across all specialties; the report makes specific recommendations in relation to urology.

Recommendations

Optimising urology outpatient services

As discussed above, the extensive variation in overall workload, size of the population served and staffing levels make it almost impossible to describe a 'standard' NHS urology department. Yet there is a common challenge that providers of all sizes face: how to make the best use of the resources available to them. This is a particular challenge for trusts which have more than one hospital providing urology services, which then have to balance the resource across geographically dispersed sites to offer the most appropriate and effective service to patients.

Because there is no parallel medical specialty, outpatient care is a major part of the urology workload. Managing the balance between inpatient, day case and outpatient care has been identified as an opportunity to streamline services and offer a better patient experience.

The key here appears to be making smarter use of outpatient services, in particular for investigations and non-surgical treatment. Where patients can be diagnosed without needing to be admitted, the pressure on hospital facilities is reduced and a better patient experience offered; answers can be provided quickly, and next steps agreed – whether that is a treatment plan or reassurance and closure of the care episode.

Developing the specialist nursing workforce

Specialist nurses are crucial providers of urology care, particularly in outpatients' settings, and yet, at present, there is little or no evidence of a systematic, proactive approach to the recruitment, training, development and retention of urology specialist nurses. There is no standard training curriculum for urology specialist nurses; training is typically provided in an ad hoc manner.

While there is a clear need to establish formal training posts, career development should also be addressed so that specialist nurses can progress their careers, making urology an attractive specialty for nurses who are looking to subspecialise. Importantly, specialist nurse recruitment should not be restricted to higher band nurses; having a wider range allows trusts to ensure that staff are carrying out work that is appropriate for their grade and experience.

Recommendation	Actions	Timeline
1. Develop a structured training curriculum for specialist urological nurses and establish accredited training departments.	**1A:** GIRFT to engage with BAUN, BAUS, Health Education England (HEE), Council of Deans, and the Royal College of Nursing (RCN) with a view to developing and implementing a specialist training curriculum for urological nurses, as well as an accreditation scheme for training within departments or networks. Any outputs would need to be consistent with the national ACP framework.	For completion June 2021.

The term 'specialist nurse' is used in this document to describe nurses that specialise in working with urology patients and utilise specialist or advanced levels of practice. The term is therefore inclusive of nurses with a variety of training backgrounds, qualifications and grades. This would include ward based nursing, and nurses working in a day case and outpatient setting, as well as those with a more specialist scope of practice.

Recommendation	Actions	Timeline
2. Provide job planning for clinical nurse specialists and ensure appropriate skill mix.	**2A:** Trusts to provide job planning for clinical nurse specialists, and review skills mix to ensure clinical nurse specialists carry out work appropriate to their grade, utilising their skills as fully as possible.	December 2018.
	2B: GIRFT, BAUN and NHSI Clinical Productivity programme to develop any guidance product to support further improvement.	December 2018.
	2C: Trusts to review skills mix and job plans using the guidance product.	June 2019.

Developing Urological Investigation Units

The range of diagnostic tests and treatments that can be conducted via urology outpatient facilities is growing. As well as a core of standard urological investigations that includes flexible cystoscopy, prostatic biopsy and urodynamic testing, outpatients' clinics now increasingly offer treatments such as intravesical instillations to treat bladder pain, botulinum toxin injections for overactive bladders and suprapubic catheter insertions. This is in addition to procedures such as removal of ureteric stents and vasectomies. All of this activity is a crucial part of the urology workload, but rarely requires the patient to be admitted.

While many providers now conduct some such tests and treatments in the outpatient setting, this is not done consistently. In particular, there is often a gap between the investigation and the treatment – meaning patients need to re-attend, which is less convenient for them, delays symptom relief and increases costs for the provider. Further delays in patient pathways can arise if there is an excessive wait for imaging investigations, such as ultrasound and CT scanning.

One approach that makes it possible to use urology outpatient services more effectively is to concentrate such activity in a dedicated Urological Investigations Unit (UIU). These are specially designated outpatient facilities, which are equipped and staffed to offer a comprehensive range of urology diagnostic and treatment interventions. They also provide a setting for patient education, such as around self-catheterisation or bladder/pelvic floor training.

A UIU will typically comprise accommodation that includes a reception and waiting area, two treatment rooms, a consultation room, office space, changing facilities and toilets that are suitable for flow rate investigations; in larger departments, more space might be needed. In trusts which have a urology department that covers several hospitals, a UIU can be established on one or more sites; a UIU is an effective way of establishing a urological "footprint" in a hospital that lacks its own urology department.

Much of the UIU's work can be conducted by specialist nurses. As noted earlier, numbers of specialist nurses have increased in recent years as providers have been swift to recognise the advantages of the additional knowledge and skills they bring – and the reduction of the pressure on the urology medical team. The UIU can provide a first point of contact for people who are referred from primary care, particularly if they need urgent attention for a problem that can be dealt with by a specialist nurse.

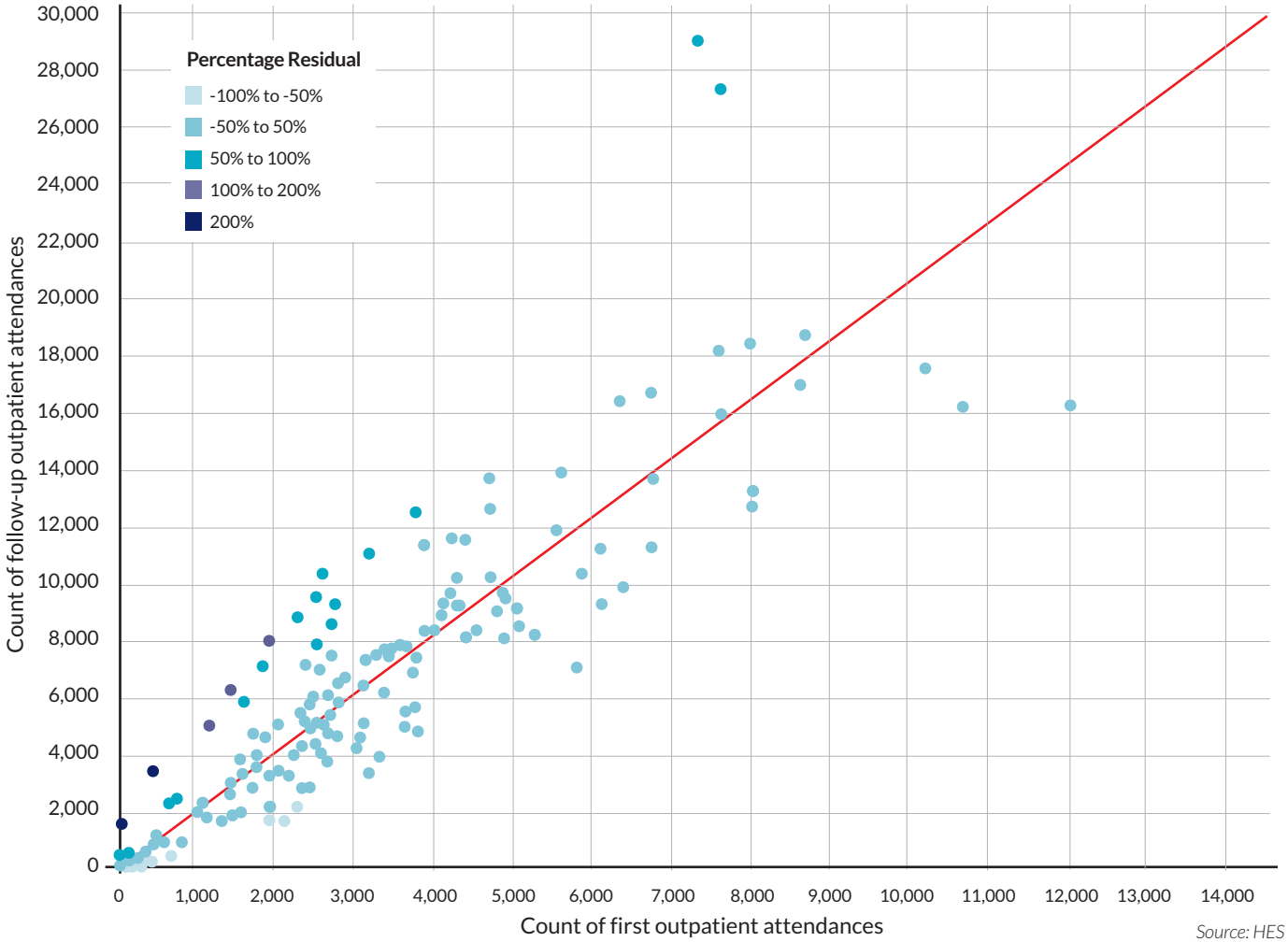
UIU nursing teams also play an increasingly important role in patient follow-up. They are used to conduct surveillance cystoscopy for patients who have had bladder cancer, monitor outcomes for patients with urinary retention and provide repeat treatments. Nursing teams are also essential to more innovative forms of support for cancer patients, such as internet-based follow up for prostate cancer patients and survivorship programmes for those who have undergone radical cancer treatments. However, it is notable that there are fewer specialist cancer nurses covering urological cancers – and bladder cancer in particular – than are available for other common types of cancer.

Recommendation	Actions	Timeline
3. Increase the provision of Urological Investigations Units (UIUs), providing a dedicated resource for urological outpatient care.	**3A:** Trusts to consider development of UIUs, implementing where necessary and in agreement with commissioners. GIRFT to consider possible joint working with NHSI on this point.	June – December 2019.
	3B: Concurrent to 3A, GIRFT to develop case studies covering implementation, costs and benefits.	December 2018.
	3C: GIRFT to discuss any possible joint working in this area with NHS England.	For immediate discussion.

Reviewing outpatient usage

Beyond the recommendation to increase the use of UIUs, there are other aspects of outpatient provision that need to be reviewed. One example identified through GIRFT analysis is the number of follow-up appointments patients have after their first outpatient appointment. As figure 4 below shows, the national median is two follow-up appointments. However, at some providers, the average is less than one while at others, patients typically receive four follow-up appointments.

Figure 4: First outpatient attendances vs follow-up out-patient attendances, all under the care of a urologist, by trust, 2016



Source: HES

While the number of follow-up appointments each patient receives will in part depend on their condition and the treatment method chosen, this explanation alone cannot account for this wide variation. Instead, it seems likely that the differences are related to provider processes.

An average of four follow-up appointments exceeds the expectations of standard guidance. Further, offering unnecessary follow-up appointments will reduce the provider's capacity to see new patients. By contrast, providers that are offering fewer than one follow-up appointment may be increasing the likelihood of the patient being re-referred or having a poor experience of care.

Two further factors relating to excess numbers of follow-up appointments emerged during GIRFT deep-dive visits. Firstly, some urology teams indicated that they offered additional follow-up appointments as a result of a lack, or perceived lack, of expertise and capacity within primary care. However, in many parts of the country, shared care guidelines are well-established, indicating that increased engagement with primary care may facilitate the development of more appropriate follow-up arrangements.

Secondly, it became apparent that some providers have opted to focus their outpatient capacity on new patient appointments, leading to long delays in providing follow-up care. This can be seen in trusts which have built up large backlogs of undated follow-ups for patients whose conditions are deemed not to be urgent. Often, these departments appear to be performing well on other measures, such as referral to treatment (RTT) times for new patients, but the experience for these non-urgent patients is poor and there is a clear risk of some patients suffering harm as a result of inappropriately delayed appointments.

Overall, both the data and provider feedback suggest there is room for improvement in some patient pathways and for greater consistency between providers in terms of the follow-up care offered. Given the growing workload of urology departments, it seems logical to try and reduce variation in the number of follow-up appointments; as a first step, providers are encouraged to monitor this internally and assess whether the follow-up care they provide is appropriate.

Recommendation	Actions	Timeline
4. Review follow-up rates against a median of 1:2 first outpatient to follow-up.	**4A:** If the follow-up rate is high, providers and clinicians to consider reducing follow-up towards the median to help avoid RTT or capacity issues. If the follow-up rate is low, check that patient outcomes are not being compromised. This review should be undertaken jointly with CCGs to ensure that any dependencies with primary care capacity are considered.	For immediate action.
	4B: Based on results of 4A, providers to agree planned changes with commissioners and enact them.	Upon completion of 4A.
	4C: Concurrent to 4A and 4B, GIRFT to consider with NHSI pricing colleagues any tariff changes that could support optimisation of follow up rates.	For immediate action.

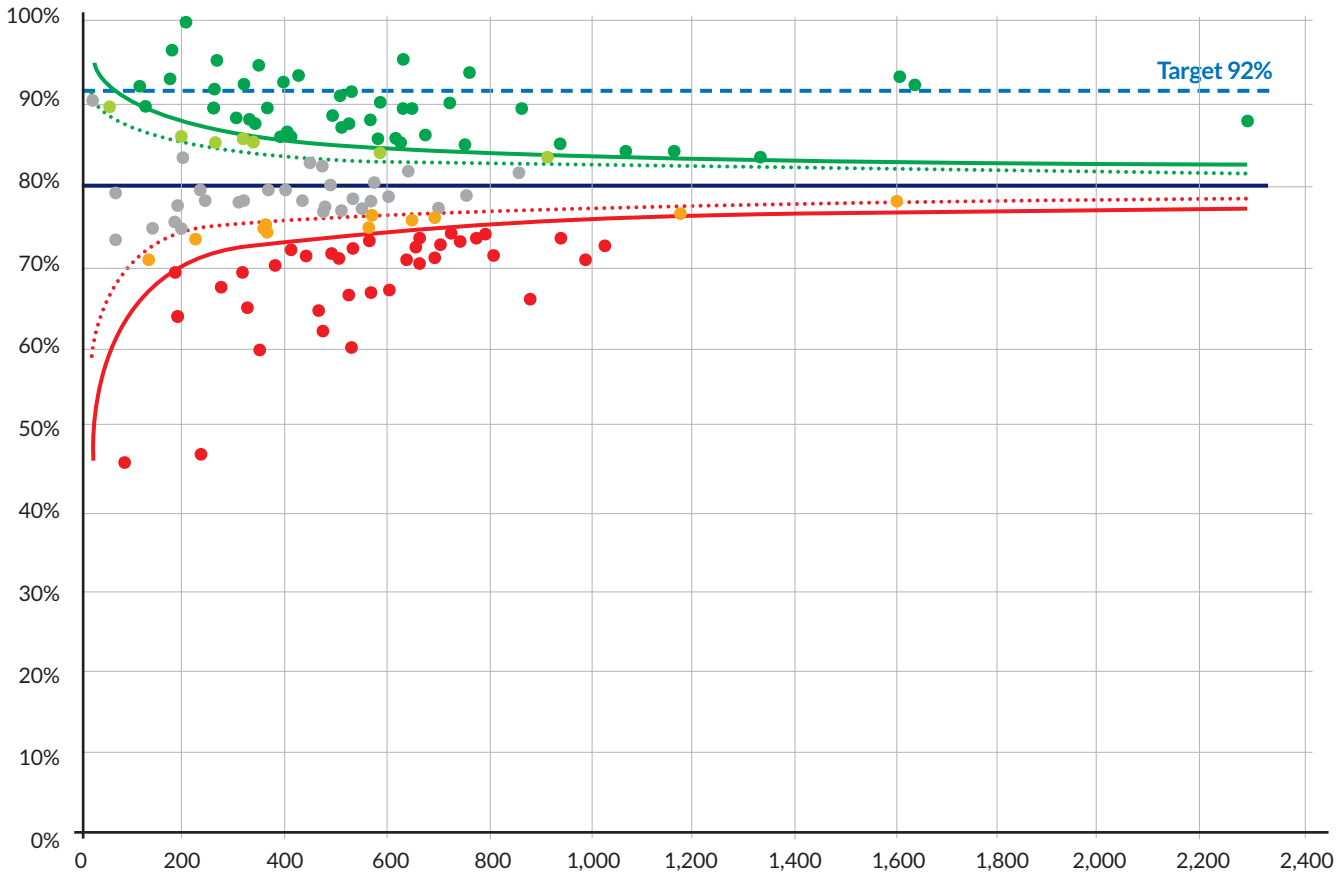
Providing the right care at the right time for all patients

Wait times and targets

Another area where there was significant variation was around waiting times. As in all specialities, urology is subject to the target that 92% of patients waiting to start treatment will wait for no more than 18 weeks.

In 2016, only 15 of the 147 trusts met this target for patients undergoing a urology procedure and the average for England as a whole was 80%. This shows that the majority of urology departments find the RTT targets a challenge. Amongst these were 16 trusts which failed to reach even the 70% level, which emphasises the extent of the variation in performance across the country.

Figure 5: 18-week RTT performance for a urological procedure, by trust, 2016



Note: Values calculated as average of four quarterly snapshots: Mar-16, Jun-16, Sep-16, Dec-16.

Source: HSCIC

Discussions during deep-dive visits revealed concerns amongst urology professionals about some of the consequences of reorganising services to meet wait time targets, particularly those for cancer treatment. Patients with serious, but non-malignant, conditions can face longer waits for treatment because of the need to accommodate those requiring treatment for cancer.

The majority of trusts reported some degree of mismatch between local demand for urology services and the capacity available. While the pinch-points varied from trust to trust, some of the difficulties identified related to a lack of personnel overall, insufficient outpatient capacity, limited investigation facilities and restricted availability of theatre sessions.

Urinary retention

Providing the right care at the right time is of course a fundamental aim of all healthcare – and much NHS urology care meets this standard. However, during the GIRFT visits, many providers acknowledged that they were not always providing optimised care for the patient, particularly at the first point of contact.

For example, one area where current approaches are not ideal is where patients present in an emergency with urinary retention. Historically, such patients would have been admitted for observation; if a diagnosis was made of retention due to an enlarged prostate, then a transurethral resection of the prostate (TURP) would typically be recommended, and probably performed during that hospital stay. Though this might have entailed the patient staying in hospital for several days, this patient pathway meant the urinary retention problem would be treated in a single hospital admission.

Today, it is usual for a patient presenting with the same condition to have a catheter inserted and be discharged home, often that day. The patient will then return to have the catheter removed to see if they are able to pass urine. Those that fail to void satisfactorily will need further treatment and, possibly, prostate surgery . While this approach helps address the issue in the short term and provides a swift remedy to the discomfort related to retention, it does not resolve the underlying cause at first presentation.

GIRFT data suggest that nearly 20% of men admitted with retention are subsequently admitted for a TURP procedure within 12 months of the emergency admission. In the majority of such cases, experienced clinicians would be able to identify on first assessment whether a patient is likely to need a TURP. Yet many providers have adopted a process that prevents patients from being assessed by a senior decision-maker at an early stage of their pathway; instead, patients often attend multiple appointments and continue to experience significant discomfort before treatment decisions are made. In this time, patient morbidity and costs can add up, as catheters need to be changed and infections can arise. While the initial catheterisation may appear to be a lower-cost and faster solution, it can end up becoming a considerable waste of resource.

Further, data examined by the GIRFT team demonstrated that the average interval between an emergency admission with retention and an admission for TURP, for patients undergoing the TURP within one year of developing retention, is over 120 days. Even the best-performing providers average over 70 days to provide the procedure. Because the condition is not life-threatening, patients are often not prioritised and when other patients present with more urgent requirements, the unfortunate TURP patient becomes an obvious candidate for cancellation and rescheduling.

Overall, this is an area of care where urology as a whole has the opportunity to improve patient pathways and offer patients a far better experience. Key steps are timely assessment by an experienced clinician and effective prioritisation on surgical waiting lists for those patients that require TURP operations.

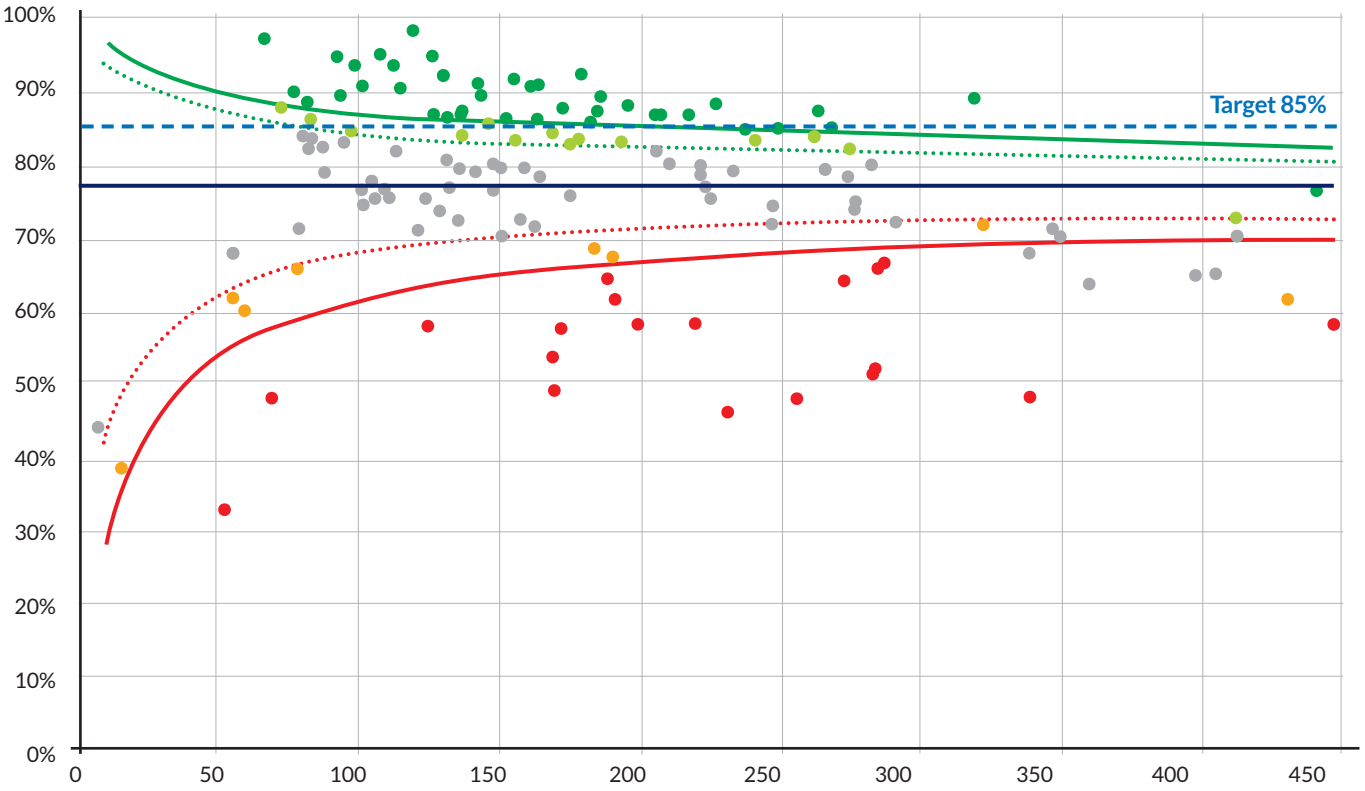
Recommendation	Actions	Timeline
5. Take further action to improve RTT performance for common conditions and pathways.	**5A:** GIRFT to work with NHSI and NHSE to investigate causes of consistently insufficient RTT performance for Urology, with a view to develop an improvement plan.	For agreement with NHSI and NHSE.

Cancer care

The deep-dive visits also revealed concerns amongst urology teams that they were struggling to provide the right care at the right time for some cancer patients. There is a national target that providers ensure that for at least 85% of patients, cancer treatment commences within 62 days of referral from general practice. Although this is a general cancer target, the large number of urological cancers that are seen means that trusts can only meet the target if the treatment of patients with prostate and bladder cancer takes place close to 62 days from referral.

Nationally, during the period studied, 77% of urological cancer patients (excluding testicular cancer)[4] were treated within this 62-day target. However, as figure 6 below shows, there was broad variation; over a quarter of trusts achieved the target but seven trusts (including two with very small numbers of patients) treated fewer than half of their patients within the target time.

Figure 6: 62-day wait from referral to urological cancer (excluding testicular) treatment, by trust, 2016



Source HSCIC/ NHS England

In most cases, performance well below target can be read as an indicator of serious process or resource issues – such as staff shortages. However, a small number of providers that are not meeting the target are well-resourced specialist cancer hospitals; here, the performance reflects the complex referral processes from primary care to the specialist provider.

But the headline target alone is not the only reason there are concerns amongst urologists about whether the right care is being provided to cancer patients at the right time. During GIRFT visits, a number of providers raised concerns about the validity and value of some of the cancer targets and in particular the way that departmental workloads are organised to ensure targets are met.

The primary issue raised related to the 'clock stop' at 62 days. Providers are measured on whether or not a treatment of any sort is provided or commenced within this period; as a result, many have organised resources and pathways to meet this initial target. However, there are then no formal targets for the next stage of treatment, which can be as – if not more – important.

[4] *The numbers of testicular cancer patients are typically very small, and they are almost always treated extremely quickly.*

This issue is of particular concern in relation to muscle-invasive bladder cancer. This is one of the most serious conditions urologists deal with and delays in treatment are known to reduce survival chances. The 62-day target is met, and the clock stopped, when the patient undergoes a bladder tumour resection (TURBT). However, where the cancer is muscle-invasive such a procedure will, almost inevitably, leave viable cancer tissue still in the body and thus is unlikely to be sufficient to prevent the cancer spreading. Patients will invariably then need definitive treatment of the cancer, such as surgery to remove the bladder (cystectomy) or radiotherapy.

Data analysed as part of the GIRFT process show that there is often a substantial delay between the original referral and cystectomy. Patients who underwent a cystectomy within nine months of a bladder tumour resection between April 2013 and March 2016 waited on average 144 days from referral to cystectomy. While it is recognised that, in some cases, the patient will receive chemotherapy after the TURBT and before cystectomy, this long period indicates that some patients are waiting far longer than 62 days to receive the most important – and hopefully definitive – treatment for their cancer.

Different concerns were raised during the visits in relation to the application of cancer targets for prostate cancer. This type of cancer generally develops slowly; while early diagnosis is invaluable, allowing ongoing monitoring, for the large majority of tumours there is no clinical need for definitive treatment to be started within 62 days of referral.

Further, a very large majority of urology consultants indicated that rigidly applying the 62-day target to the complex pathway and decision-making that patients with prostate cancer face could actually result in harm. Problems encountered included inefficient use of diagnostic services, including MRI scanning, and excessive amounts of clinical and administrative time being taken up by the need to track patients through the pathway. The greatest concern voiced by some urology professionals was that patients could feel pressurised into accepting a treatment within 62 days, simply to meet the target. We acknowledge that these concerns are based purely on feedback from deep dive meetings, and would need to be quantified.

The way that patients with suspected prostate cancer are being assessed is changing rapidly. NHS England has recently published a timed pathway approach to prostate cancer diagnosis that builds on evidence that MRI scanning is increasingly accurate in diagnosing and staging prostate cancer, and providers should make use of this pathway[5]. It is clear that there is a need to move to a process which delivers rapid diagnosis and staging but then provides treatment in a timely manner for those urgently requiring it, while allowing those men who do not need to be fast-tracked to have the time carefully to consider the options that are available for managing their cancer.

Recommendation	Actions	Timeline
6. Address the potential adverse effects of existing cancer diagnostic and treatment standards.	**6A:** Trusts to use NHSE's timed prostate cancer diagnostic pathway handbook to improve performance against diagnostic pathways.	For immediate action.
	6B: NHSE and GIRFT to assess potential negative impacts of current treatment targets with respect to prostate cancer, which may include unjustifiable pressure on patients to make decisions about treatment and inefficient use of diagnostics.	For agreement with NHSE.
	6C: NHSE and GIRFT to ensure that current practice in the management of muscle-invasive bladder cancer is quantitatively examined and to consider redefining clock-stop points for bladder cancer patients, to address any delays in treatment that occur as a result of 'clock stops' being triggered before definitive treatment is provided.	For agreement with NHSE.

[5] *NHS England (2018) Implementing a timed prostate cancer diagnostic pathway: a handbook for local health and care systems , available via: https://www.england.nhs.uk/wp-content/uploads/2018/04/implementing-timed-prostate-cancer-diagnostic-pathway.pdf*

The role of MDTs

Multidisciplinary teams (MDTs) are now a central part of the approach to cancer care in all specialties, and urology is no exception. Amongst the original aims of the MDT process was a drive to increase quality and consistency of cancer treatment; with more professionals involved, treatment decisions are less likely to reflect any one individual's view or recommended approach and instead be based on expert consensus.

The principle of MDT working remains strongly supported by the urological community and support was reaffirmed during the GIRFT visits. Furthermore, MDT working in urology extends beyond cancer care. MDTs are used in some trusts for stone management and for the treatment of urinary incontinence. Regional MDT working is also established in some areas for reconstructive urology and andrology. This approach is undoubtedly a driver of improved quality of care.

However, during the GIRFT process, some providers voiced the view that cancer MDT processes weren't always working well – an opinion supported by some of the data that has been collected. There are still very different approaches to treatment being used in different trusts: for example, the proportion of prostate cancer patients with tumours at a more advanced stage who undergo radical prostatectomy differs markedly (and sufficiently that this is not purely a result of case mix) from one trust to the next. Marked variation is also seen in kidney cancer care, where MDTs are selecting widely varying proportions of patients for more conservative surgery, where only part of the kidney is removed, rather than complete removal of the cancer-containing kidney. The extent of this variation is illustrated in Figure 2 (page 13).

Furthermore, MDT work takes up a significant share of clinicians' time. Many consultant urologists will spend between two and four hours of their allocation of direct clinical care sessions on MDT work. This equates to between 6% and 17% of the time they spend each week looking after patients. MDT meetings are attended by a large number of staff, so that the resource allocated to MDT working is considerable.

The question that arises from this is whether the MDT process amounts to money well spent. While it undoubtedly results in better care and decisions for some patients, there is a risk that, in some providers, it may become a bureaucratic and costly process that serves a minority of patients, rather than delivering the best outcomes for all patients.

NHS England has already recognised the need to review the way cancer MDTs are working. Ways of streamlining MDT processes are being looked at, with input from clinical experts. This review will culminate in further national guidance being published in the near future. There will be opportunities, in implementing the new guidance, to tailor changes in the way that MDTs work to enhance urological cancer care.

Recommendation	Actions	Timeline
7. Review guidance for urology cancer MDT working*. **in the event that implementing new guidance would affect payment, this may need to be considered locally with commissioners prior to implementation.*	**7A:** National Cancer Board to continue work reviewing cancer MDT meetings.	For continuation.
	7B: GIRFT, BAUS and BAUN to collaborate with the NHS England on implementation in Urology on forthcoming guidance on cancer MDT working.	Upon completion of 7A and in agreement with BAUS.
	7C: GIRFT, working with national and professional bodies as appropriate, to identify best practice case studies in effective MDT use	Upon completion of 7B.

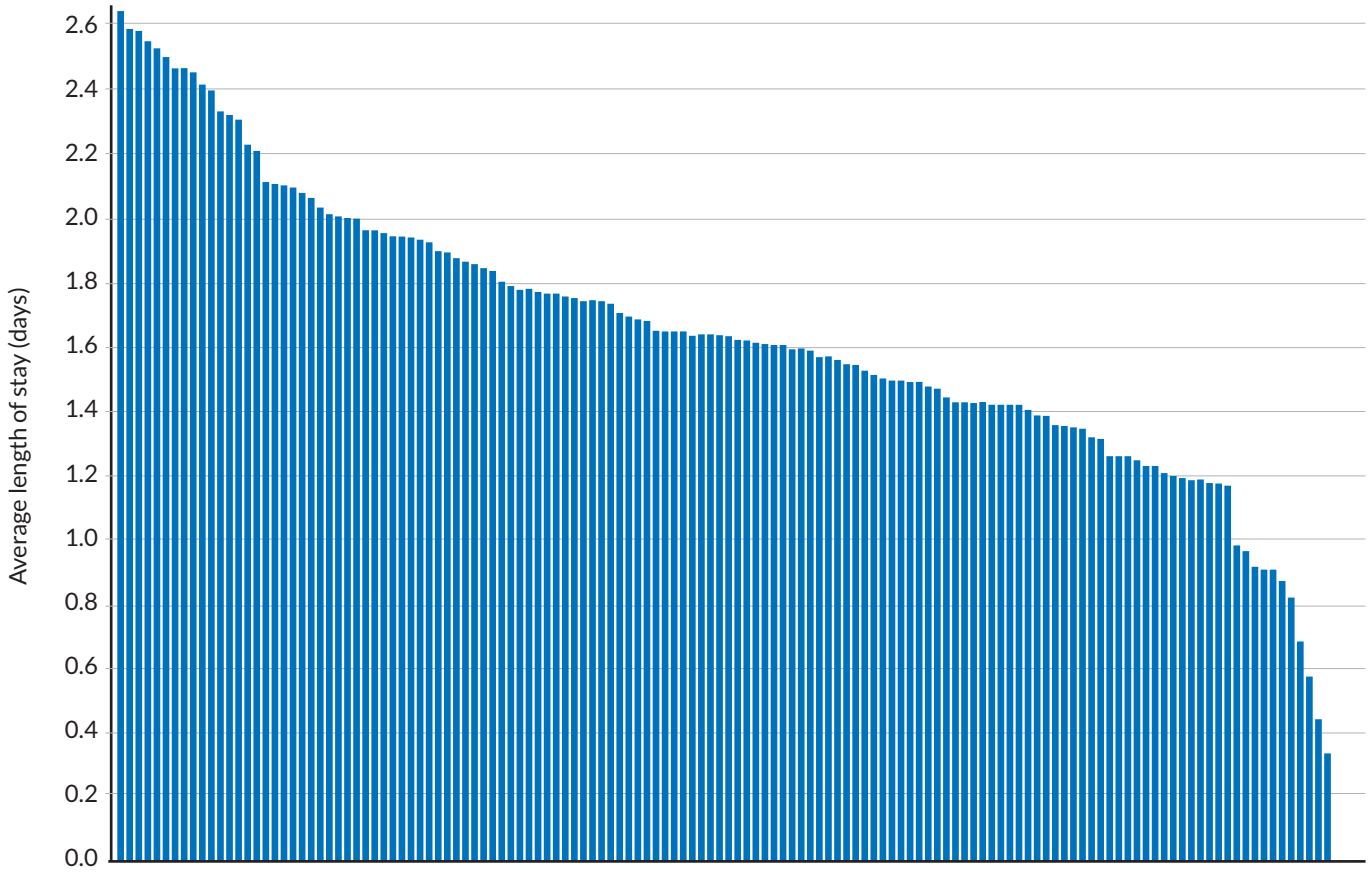
Improving patient experience and reducing length of stay

Inpatient length of stay is widely recognised as a useful measure of post-surgical care, as it will strongly influence the costs associated with a procedure and overall patient flow through a department. It also has a major impact on patient experience. Overall, it's generally accepted that – as long as outcomes are good – shorter stays in hospital are evidence that a surgical service is functioning well.

In recent years, technological developments have been a major driver of reducing lengths of stay in urology and this continues today, with the adoption of robot-assisted surgery and the use of lasers to treat prostatic obstruction. However, shorter lengths of stay are also the outcome of clinical pathway re-design, under the banner of "enhanced recovery".

Yet despite this progress, across urology providers, average length of stay varies considerably for many common procedures. For example, as figure 7 below shows, average length of stay following a transurethral resection of a bladder tumour (TURBT) procedure varies between 0.3 and 2.6 days. While these were two extremes, with the majority of trusts having an average length of stay of between 1.2 and 2.1 days, there is still substantial variation across the country.

Figure 7: Average length of stay for TURBT procedure admissions, by trust, 2016



Source: HES

A difference this broad indicates that this is not simply a result of patient needs; instead, suggests that different approaches to clinical decision-making and different care pathways are a factor.

One approach that is relevant to TURBT procedures is the use of day surgery. TURBT is one of the procedures within the British Association of Day Surgery (BADS) category "endoscopic resection / destruction of lesion of bladder". BADS recommend that this category of operations could be conducted as day surgery in up to 60% of cases, as Table 1 shows.

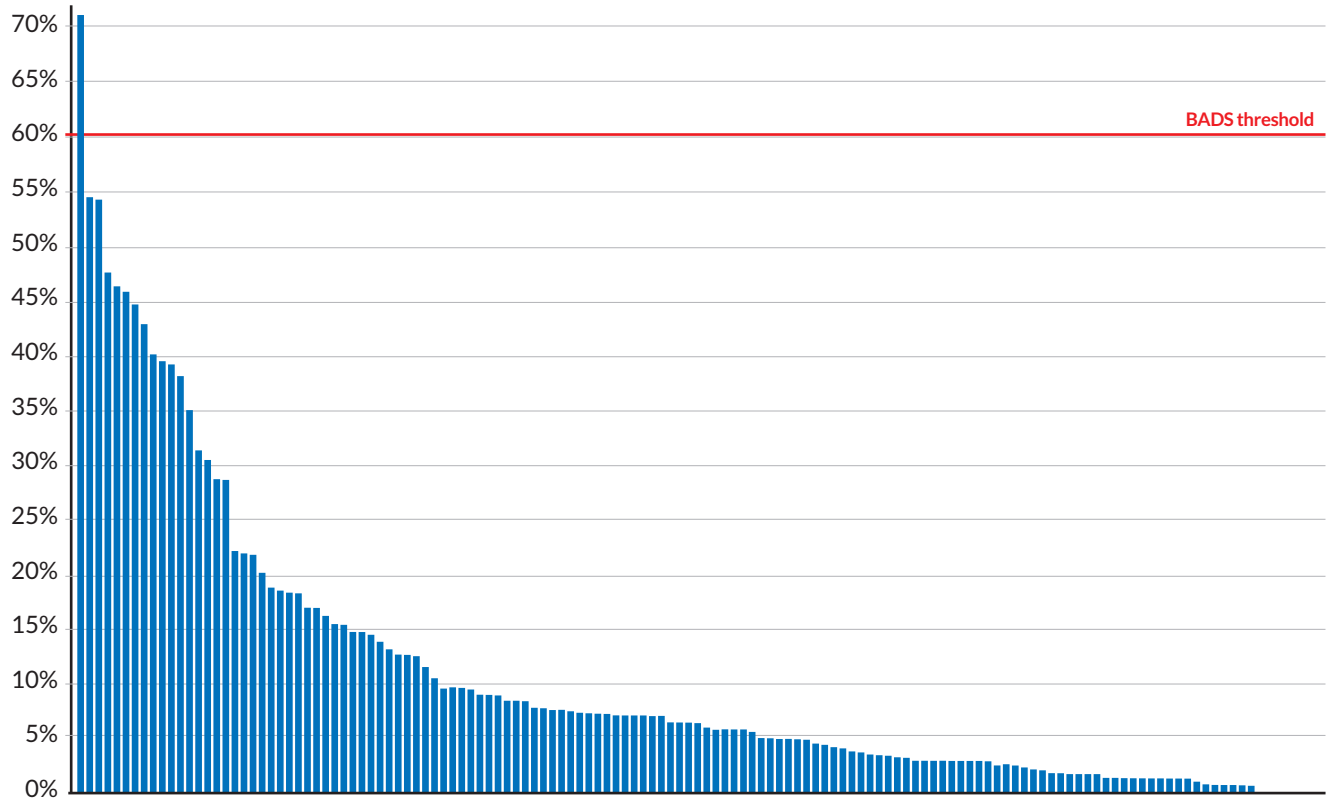
Table 1: Current admission to discharge day case rates for urological procedures as published by the British Association of Day Surgery (5th Edition).

Procedure description	BADS Zero night LoS rate (%)	One to two night stay (%)
Ureteroscopic extraction of calculus of ureter	70	30
Endoscopic insertion of prosthesis into ureter	90	10
Removal of prosthesis from ureter	100	0
Endoscopic retrograde pyelography	90	10
Other endoscopic procedures on ureter	90	10
Cystoscopy and insertion of suprapubic tube into bladder	80	20
Endoscopic resection/ destruction of lesion of bladder (including TURBT)	60	40
Endoscopic extraction of calculus of bladder	60	40
Diagnostic endoscopic examination of bladder (including any biopsy)	95	5
Dilatation of outlet of female bladder	95	5
Endoscopic incision of outlet of male bladder	50	50
Endoscopic examination of urethra (including any biopsy)	100	0
Endoscopic resection of prostate (TURP)	15	85
Resection of prostate by laser	80	20
Prostate destruction by other means	80	20
Operations on urethral orifice	95	5
Orchidectomy	95	5
Excision of lesion of testis	99	1
Correction of hydrocele	99	1
Excision of epididymal lesion	99	1
Operation on varicocele	99	1
Excision of lesion of penis	99	1
Frenuloplasty of penis	99	1
Operations on foreskin (including circumcision, division of adhesions)	99	1
Optical urethrotomy	95	5
Vasectomy	100	0
Laparoscopic nephrectomy	5	95
Laparoscopic pyeloplasty	10	90
Laparoscopic radical prostatectomy	10	90

Historically, many urologists have regarded the BADS assessment of day surgery opportunities as somewhat aspirational and it notable that only one trust is routinely conducting TURBT as day surgery with a majority of providers rarely using this approach. However, we take the view that it is reasonable for providers to aim to meet such a target, given that the BADS recommendations are based on day case rates that are already being achieved by 5% of UK trusts.

Figure 8: Day case rate for TURBT procedures, by trust, 2016.

(Note: the BADS threshold shown on the chart is for all "Endoscopic resection/ destruction of lesion of bladder", which includes TURBT procedures)



Source: HES

The GIRFT team examined the approach taken by trusts which make more use of day surgery. For TURBT procedures, several factors were identified as helping increase the use of day surgery:

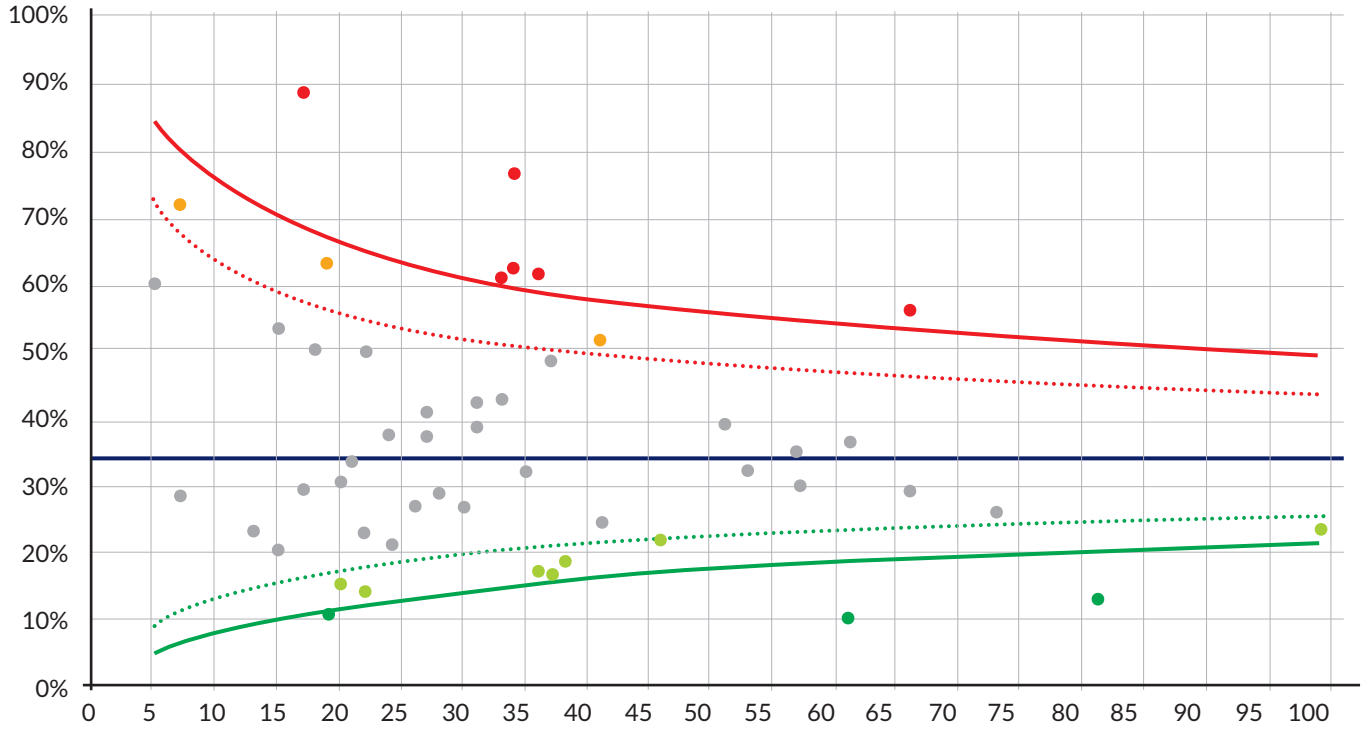
- for appropriate cases, adopting a clear triage policy towards day surgery from the point of diagnosis. This ensures patients are aware that the intention is to provide day surgery and can prepare accordingly. It also means that other parts of the process – pre-operative checks and patient information transfer – are orientated towards a day case pathway.
- the administration of Mitomycin C intravesical chemotherapy as an integral part of the in-theatre procedure, rather than treating it as a second stage during the admission. a policy of nurse-led discharge from the day surgery unit, rather than requiring consultant input.
- a growing acceptance that most patients with stable, well-managed medical disease can be safely managed in a day surgery setting.

The same approaches can be adopted to reduce length of stay for other urological procedures, even where the intention is not to use day surgery. . The successful adoption of a range of technologies that allow many procedures to be conducted using minimally invasive methods provides an important opportunity to reduce the duration of hospital stays Patient information is crucial in setting expectations for rapid recovery and early discharge: large numbers of urology patients do not need prolonged recovery periods in hospital, yet may still expect them.

Some procedures do require patients to stay in for monitoring and post-surgical treatment but here too the data show such widespread variation between providers as to indicate different approaches are being adopted.

For example, it is recognised that centres that conduct a higher proportion of cystectomy procedures laparoscopically and/or with robot assistance have shorter average lengths of stay than units that make proportionally greater use of open surgery. Yet as Figure 9 below shows, there is a huge variation in the frequency of long stays (12 days or more) after cystectomy procedures – and this variation is marked even amongst providers who are using similar surgical modalities. This suggests that the causes of longer stays are multi-layered.

Figure 9: Proportion of patients receiving a cystectomy procedure with length of stay greater than 12 days, by trust, 2016



Source: HES

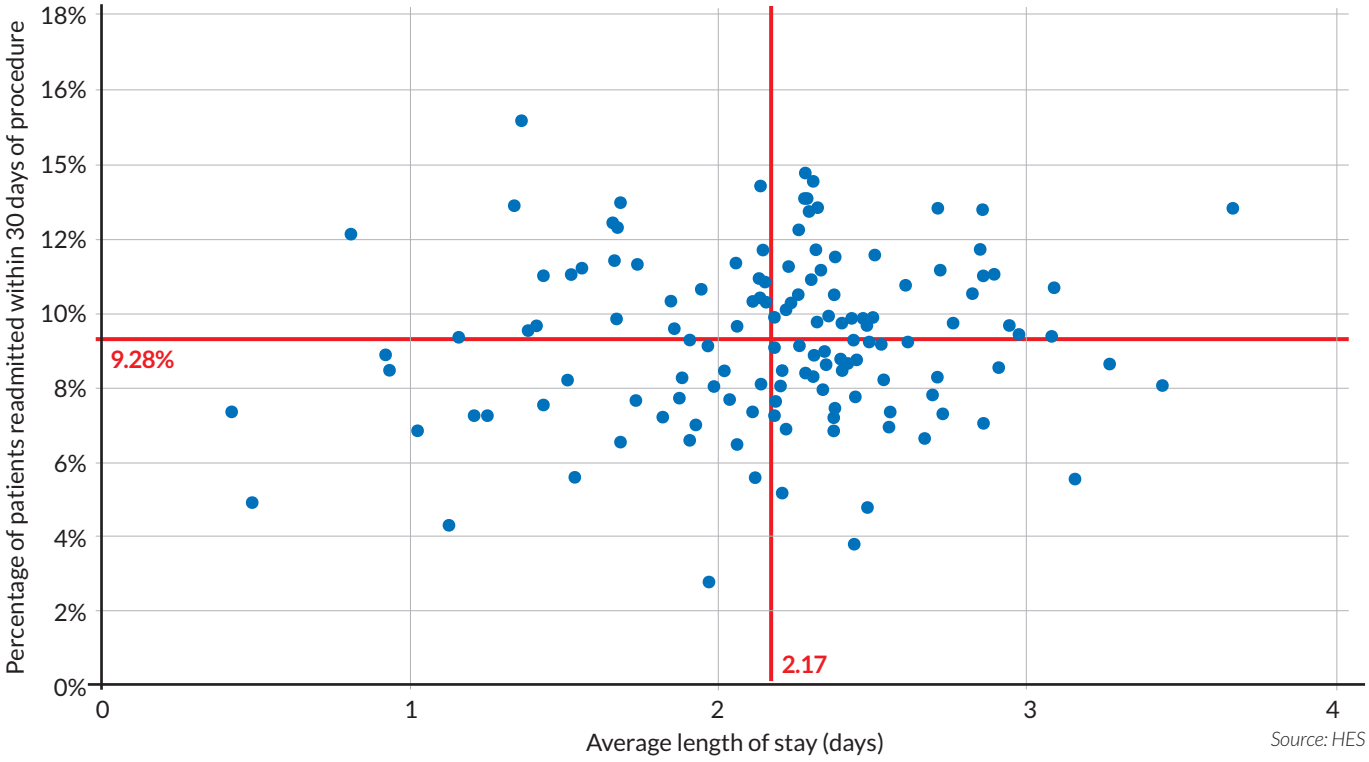
Further research is needed to understand the reasons for this variation, but the data indicate there may be a good opportunity to learn from providers that are discharging the large majority of patients in under 12 days and so reduce the average length of stay overall.

It seems clear that a drive towards reducing bed usage and promoting early discharge requires a whole-team adoption of the early-discharge philosophy and processes. During deep-dive visits, some providers indicated the length of stay for patients with stomas was determined by the approach taken by the Stoma Care Team. Familiarising patients with the use of stoma care equipment before their operations allows patients rapidly to gain confidence in managing their stomas following surgery. It is clearly in no-one's interests to discharge patients with stomas before they are able to manage them well, but the experiences of providers indicate that there is an opportunity to co-ordinate processes to enable earlier discharge.

Any actions intended to reduce length of stay must always be balanced against quality; if shorter stays and earlier discharge leads to worse outcomes for patients, then there is no benefit gained. To assess this, the GIRFT team explored whether shorter lengths of stay appeared to result in higher emergency readmission rates. Optimised care would see short lengths of stay and low readmission rates.

Figure 10 plots average length of stay against 30-day readmission rates for patients undergoing a bladder outflow obstruction procedure. Around a fifth of providers are in the lower left quadrant, with below average lengths of stay and below average readmission rates. This indicates it should be possible for the other 80% trusts to produce similar outcomes and help bring down the averages for both length of stay and readmission rates.

Figure 10: Average length of stay vs 30-day readmission rates for patients undergoing a bladder outflow obstruction procedure, by trust, 2016



Source: HES

Enhanced recovery programmes can be associated with improved patient experience but there is a need to ensure that patient outcomes are not worsened by early discharge as lengths of stay reduce. At the Royal United Hospitals Bath NHS Foundation Trust, shorter stays are achieved for patients who undergo surgery for male bladder outflow obstruction by discharging patients, where appropriate, with a urinary catheter in-situ. The catheter is then removed at a scheduled outpatient appointment, where the patient's wellbeing and recovery is also assessed. This allows the patient to recover in the comfort of their own home, frees up inpatient beds and reduces pressure on ward staff. Crucially, patients are reported to be very happy with this approach and readmission rates are low.

Recommendation	Actions	Timeline
8. Reduce average length of stay across the specialty through enhanced recovery and increased use of day case pathways, while monitoring causes and rates of emergency readmissions.	**8A:** Providers and clinicians to aim to achieve day surgery rates defined by the British Association of Day Surgery in table 1, by adopting practices described above.	For immediate action.
	8B: Providers to adopt enhanced recovery techniques, increase consultant involvement in day-to-day care and ensure that the wider clinical team is fully engaged in the enhanced recovery process. Providers should monitor patient experience as new processes are adopted.	December 2018.

Improving treatment of urinary tract stones

Urinary tract stones are one of the most common conditions dealt with by urologists and result in an estimated 6,000 patients a year being admitted to hospital. Stones can cause intense pain as they move from the kidney towards the bladder and obstruct urine drainage; a neglected, obstructing stone can cause permanent kidney damage. If there is accompanying infection, life-threatening sepsis can develop.

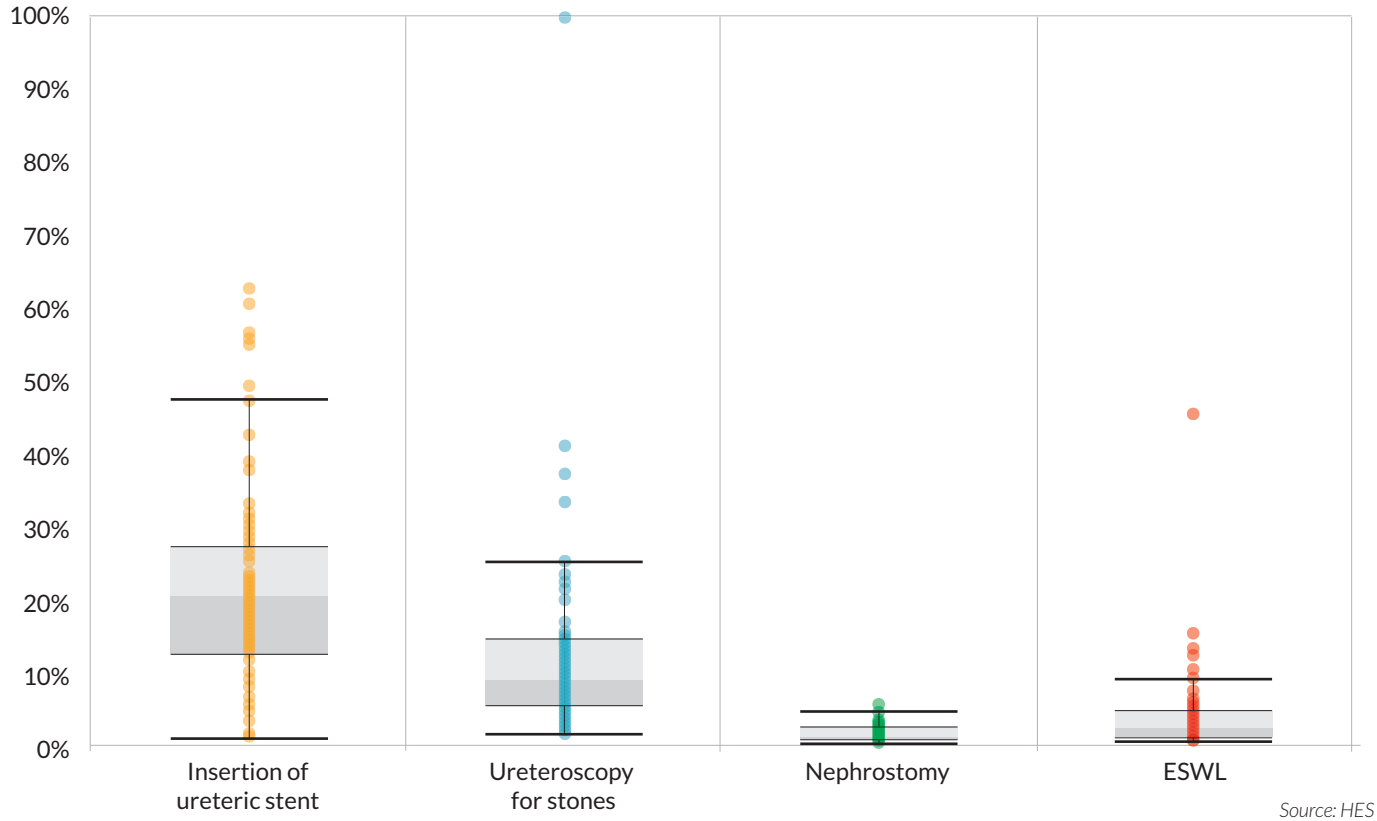
There are a wide range of options for treating stones, from conservative management (essentially seeking to encourage the stones to pass naturally) to technologically advanced techniques like ureteroscopy and laser lithotripsy, which uses laser energy to break stones into small grains that can safely pass through the urinary tract. The laser is directed onto the stone using a long, narrow endoscope (ureteroscope). Definitive stone treatment can also be provided by extracorporeal shock wave lithotripsy (ESWL). This non-invasive technology uses a machine to send highly focussed pressure pulses into the body in a way that will fragment a stone and allow passage of the resultant debris. ESWL is typically provided on an outpatient basis, often over two or more treatment episodes.

Sometimes, rather than providing definitive stone treatment, a decision is made to relieve the obstructed kidney so urine can be drained, while leaving the stone in situ. This can be achieved either by inserting a narrow plastic tube (stent) into the ureter, to allow urine to drain past the obstructing stone, or by passing a tube directly into the kidney through the abdominal wall (nephrostomy), allowing urine to drain directly into a bag.

Evidence gathered in the GIRFT process shows that providers take very different approaches to the treatment of patients admitted as an emergency, with a diagnosis of a urinary tract stone. In England as a whole, about 40% of stone patients who are admitted have a procedure carried out during their emergency admission, meaning that approximately 60% are treated conservatively. However, intervention rates vary dramatically from hospital to hospital, with some urology departments offering no procedures, while others intervene in more than half of admissions.

There is also vast variation in the types of procedures that are offered. Figure 11 illustrates the variation between hospitals in the use of ureteric stents and nephrostomies, that offer drainage alone, and in rates of definitive stone treatment with ureteroscopy or ESWL.

Figure 11: Selected procedures, proportion undertaken during non-elective admissions under the care of a urologist for patients with urinary tract stones, by trust, 2016



Source: HES

This shows that, in the period studied, comparatively large numbers of patients admitted in an emergency were treated with insertion of a ureteric stent. While for trusts overall, the median proportion of patients treated with a ureteric stent insertion was 20%, in a small number of trusts more than half of patients admitted in an emergency were given a stent.

A ureteric stent insertion is typically carried out under general anaesthetic and is – in most cases – purely an interim measure that relieves pain and discomfort, but not the underlying problem. Patients then need to return to have the stent removed and often to have a procedure under general anaesthetic to have the stone treated too.

As with the use of interim procedures to relieve urinary retention, this reliance on short-term measures is not ideal for the patient: as well as the additional visits to hospital and need for further surgery, it brings a risk of stent-related symptoms. Further, it is not an effective use of hospital resources.

By contrast, only four providers treated more than 10% of emergency admissions with ESWL. While it is not always successful and is not appropriate for all patients and all stones, it offers the benefits that patients do not need a general anaesthetic and are usually mobile immediately after the procedure.

During GIRFT visits, providers were asked why they did not provide definitive stone treatment with ureteroscopy or ESWL for more of their emergency stone patients. A range of reasons were given, from not having access to a suitable operating theatre to a lack of staff trained to use the stone laser or assist with emergency stone procedures. It was also clear that not all units offer emergency ESWL, even when a lithotripter is available in a neighbouring hospital.

It should be possible to overcome all of these obstacles to effective care. All hospitals that admit emergency urology patients should be able to provide the surgeon with facilities for ureteroscopy and laser lithotripsy for acute cases. Access to acute ESWL should be available by liaising with the urology department in the region that has a lithotripter permanently on site.

In terms of access to theatres, several departments described to the GIRFT team a successful model of having bookable emergency urology operating lists that run once or twice a week. These lists are under the control of the urology unit and are used to provide access for patients requiring urgent urological interventions. Patients with ureteric stones that are unlikely to pass would be on the list which, if not filled with emergency in-patients, can be used to treat other urgent cases, such as the cohort of patients with urinary retention who have a catheter in situ and are waiting for prostate surgery.

Departments operating such a system have found that it also helps to reduce the urological demand on generic emergency lists, which frees up capacity for other specialties.

The use of stone clinics

When a decision has been made to manage a urinary tract stone conservatively, it is vital that there is reliable and consistent follow-up for patients discharged from hospital with stones still in situ.

During the GIRFT visits, several providers described their use of dedicated "stone clinics", held on a regular basis and offering reliable follow-up for patients with stones. Patients can be monitored; blood and urine tests can be carried out or imaging tests undertaken, to see if stones have passed, grown or moved. A UIU may be a suitable setting – as long as it has access to imaging facilities. A variety of approaches have been adopted, including "virtual clinics", where imaging and other results are monitored without the patient needing to attend in person, and clinics that are run by specialist nurses.

Reliable follow-up via a stone clinic brings assurance both to patients, that their stones are being monitored, and to providers; it appears that providers who can offer reliable follow-up are more likely to consider conservative treatment than departments which do not, where operations and procedures are sometimes performed because of a concern that patients might "get lost in the system".

In addition to these opportunities to improve treatment of urinary tract stones, we would also encourage providers, and Directors of Infection, Prevention and Control there-in, to reduce avoidable catheter use. Nationally, this work is led by NHS Improvement's nursing directorate and would reduce Gram Negative Bloodstream Infections in cases of urinary tract stones and urinary retention.

Recommendation	Actions	Timeline
9. Improve the secondary care pathway for patients with urinary tract stones.	**9A:** Providers to deliver effective conservative treatment and follow-up to reduce the need for emergency readmissions and surgical intervention, by: • providing specific stone clinics to offer conservative treatment; • providing timely follow-up to patients discharged with stones still in situ; • providing timely readmission for definitive surgery for patients in whom stones fail to pass spontaneously; and • assessing financial impacts prior to implementation and agreeing changes with commissioners.	December 2018.
	9B: Where clinically indicated, providers to deliver definitive surgical treatment of renal and ureteric stones, rather than a ureteric stent insertion, to reduce unnecessary second procedures, by: • ensuring staff required to assist the procedure are trained to assist with ureteroscopy and laser lithotripsy; • introducing bookable emergency operating lists designated to the urology unit; and • assessing financial impacts prior to implementation and agreeing changes with commissioners.	December 2018.
	9C: GIRFT to work with BAUS and NICE to: • ensure NICE guidance review underway on renal and ureteric stones is used to inform service development; • agree an outline of stone management best practice for inclusion in the GIRFT template for developing Urology Area Networks (see below).	For agreement with NICE.
	9D: GIRFT and Elective Care Transformation Programme to consider any joint working in this area	For immediate consideration.

Improving emergency care

Consultant involvement in emergency care

Several of the opportunities for improvement identified above relate to emergency care and the role of consultants within it. In particular, the report recommends rethinking the approaches taken in emergency admissions for stones and urinary retention, using consultant expertise to provide definitive diagnosis and treatment rather than relying on interim measures.

The benefits of consultant involvement in emergency care will come as no surprise to most urology departments and there has been a notable shift in recent years to increase this. However, in many cases, the emergency care role has been added on to consultants' elective clinical commitments, rather than being scheduled in as a dedicated part of the job. At present, according to the responses to GIRFT's pre-visit questionnaires, only 13% of urology consultants are completely freed up from elective work while on call. Aside from the increase in the workload of the consultant, this also leads to a higher risk that elective work will be disrupted as the consultant has, simultaneously, to be involved in the care of emergency patients.

An alternative model, used in some providers, is to have a true "on-call" system, with the on-call consultant dedicated to emergency care only. While urology has comparatively few emergency procedures compared to some specialties, conditions such as an obstructed infected kidney or testicular torsion do require urgent surgery. Freeing the on-call consultant from elective responsibilities ensures that this kind of emergency surgery can be provided promptly; it also brings a higher level of knowledge and experience to deal with other conditions.

Discussions in deep-dive visits indicated that this model has clear benefits for patients, for the wider team and for consultants themselves. When on call, they can focus on emergency patients, co-ordinate the care of urology inpatients and provide teaching and training. At present, again according to the responses to the pre-visit questionnaire, 60% of consultants are not able to attend emergency handover meetings.

Many providers have gone further and adopted a 'consultant of the week' model, where the consultant is on call for emergencies for several consecutive days. This has advantages in terms of continuity of care for emergency patients. It also appears to help reduce length of stay, as the consultant is able to direct patient care to make more efficient use of time and resources. Reducing or stopping consultant elective activity also frees consultants to be available for rapid access or "hot" clinics, where they can see patients for assessment or close follow-up and avoid potential admissions to hospital. Furthermore, bookable urology emergency operating lists (see above) can be organised within the consultant's on-call workload.

However, increasing the involvement of consultants should be only one part of a broader reassessment of emergency urology care. It is also important to ensure that there is sufficient support for the on-call consultants. In smaller departments, it is common for a consultant not to be supported by urology middle grade doctors; the pre-visit questionnaire responses indicated that only 41% of consultants always receive the support of a urology registrar when on call.

This can result in consultants coming in to work in the morning, having been in the hospital during the night to treat conditions that could have been equally well managed by a junior doctor (who would be working on a shift basis) or a urology specialist nurse. Further, 56% of consultants cover multiple hospital sites when on call – meaning they often have the added burden of driving between these sites

There is an urgent need for trusts to look at the on-call burden that is being placed on consultants and, where necessary, to find ways of reducing their workload, particularly at night. Potential initiatives could include developing a generic on-call surgical team from multiple disciplines, with the skills and experience to conduct some basic urology procedures, and training night-time nursing staff to deal with relatively minor urological problems.

Recommendation	Actions	Timeline
10. Provide consultant-delivered emergency urology care in every trust by reducing elective commitments for consultants on call.	**10A:** GIRFT to work with NHSI to assess impact of recommendation on workforce capacity.	December 2018.
	10B: Conditional on outcome of 10A, Providers to move progressively to a business as usual where consultants on call for emergency care have no, or reduced, elective commitments whilst on call.	Following 10A.
	10C: To achieve 10B, providers should consider adoption of the consultant of the week model.	Concurrent to 10A.
	10D: GIRFT to progressively build a catalogue of best practice case studies in this field, troubleshoot any challenges in adoption, and support the commissioning of further quantitative research to demonstrate causal impact of reducing elective commitments for on call consultants, including through the consultant of the week model.	For continual development, until business as usual.

Recommendation	Actions	Timeline
11. Review workloads of on-call consultants to ensure the sustainability of on-call arrangements.	**11A:** Providers to review consultant on-call workloads and look at ways of avoiding excessive and unnecessary work, including but not limited to those suggested in this report.	December 2018.

The five-day urology unit

Another factor affecting the efficiency of emergency urology care across the country is the need to staff a large number of hospitals with on-call urology services at weekends, despite some units having low levels of weekend activity. Because little or no elective urology surgery is carried out over weekends and urology patients typically have short lengths of stay, patient numbers drop at weekends, leaving only a small number of patients who need to stay in hospital for monitoring. While units can generally reduce the number of staff on duty at weekends, there is still a need for adequate cover – including for any emergency admissions.

To address this, some providers are examining the concept of a 'five-day' urology unit – which provides emergency cover from Monday to Friday only, when elective surgery is also taking place. Emergency cover at weekends can be delivered by a neighbouring urology unit. Patients presenting at the weekend with a condition needing emergency care would be referred to the provider offering the emergency service.

Unless their care requires active urological input, urology patients remaining in the 'five-day' unit at the end of the working week can often be monitored by another surgical team. The very small number of patients who are still needing active, specialist urological care can be transferred to the centre that is providing the weekend emergency service.

Clearly, such a model can only work with effective referral and transfer process between providers. However, it has the potential to reduce costs overall while ensuring patients are cared for in fully resourced units, with an on-call and on-site consultant. It makes better use of the time of consultants, clinicians and nursing staff.

Recommendation	Actions	Timeline
12. Ensure high-quality emergency urological care is available in all areas seven days a week by focusing available resources at weekends on a smaller number of departments, while allowing some departments to operate on a five-day basis. *(This may be supported by a move to a networked model, as recommended below).*	**12A:** Trusts to progress as far as possible within the context of existing network arrangements	June 2019.
	12B: Further action to be taken within the context of recommendation 14.	See recommendation 14.

Managing uncommon but serious emergency conditions

An important issue which emerged through the GIRFT visits was that of the skills and training of on-call urologists in relation to the management of rare, but serious, conditions. Many urologists no longer undertake regular open surgery, and have little or no experience of the operative management of severe renal trauma and iatrogenic ureteric and lower urinary tract injuries. The latter will generally present as an urgent call from the obstetric, gynaecological or colorectal team to attend their operating theatre.

At present, there is no clear strategy to address the problem of this skills gap amongst the emergency urology consultant workforce. This creates significant anxiety for some consultants when on call, and means that patients requiring emergency, open urological surgery are unlikely to receive optimum care. The specialty needs to address this.

Possible solutions include training trauma surgeons in the management of urinary tract trauma and developing management pathways that recognise that many urologists do not have the requisite skills to deal with these types of problems. Such pathways may include patient transfer to a specialist centre, or arrangements being made for a second tier of regional consultant cover to be provided, staffed by appropriately trained consultants.

Recommendation	Actions	Timeline
13. Review the approach to providing care for patients who require urgent surgery for urinary tract trauma and related conditions.	**13A:** Trusts to consider options for improvement locally.	December 2018.
	13B: BAUS and GIRFT to develop guidance for local adoption.	To be determined in agreement with BAUS.
	13C: Trusts to implement guidance as appropriate.	June 2019.
	13D: GIRFT to discuss workforce issues with HEE.	From January 2019.

Reorganising services and adopting a network model

This report has focused on opportunities to improve patient care – from diagnostic investigations to emergency admissions through to follow-up appointments. It recommends making more extensive use of outpatient services and day surgery, as well as encouraging earlier definitive treatment (often using specialist equipment) as opposed to interim procedures.

While all of these recommendations make sense from the patient perspective, there are undoubtedly challenges in implementing them in all providers. With 147 hospital trusts offering urology services – some to comparatively small numbers of patients – it is neither practical nor desirable for every hospital to provide a full range of services. UIUs are not required at every one of these hospitals; emergency care can be shared or delivered through a smaller number of providers.

Urology is already familiar with the idea of working within a network, as urological cancer services are provided in this way. However, if the specialty is to meet the expectation that patients should have access to high quality care, irrespective of their urological condition and where they live, there is a clear need to extend the scope of networking between urology departments and to build a collegiate approach within the networked urology departments.

The underlying arguments for such a move are the same as for other specialties: a network model means that providers (and their patients) can benefit from the resources and expertise of their network partners. That in turn can mean that high-cost specialist equipment need only be bought and operated by one provider in the network and that patients with rarer conditions can be looked after by consultants with a specific interest in, and wider experience of, managing their condition.

The benefits of a network model for urology

There are also some specific reasons why urology may be suited to a network approach. Firstly, there is the considerable variation in populations served by different trusts, which is not necessarily reflected in the size of the department's team. One trust could be serving a million-strong population with 10 consultants while at its neighbouring trust, seven consultants support 400,000 patients. Even if the larger department is doing everything right, it will face greater challenges in meeting wait times than its smaller neighbour.

Secondly, as cited earlier, urology has long been at the forefront of technological change – a pattern that continues today. However, specialist equipment such as lithotripters and surgical robots are expensive; they also require specific skills to use them. To date, there has been little or no specialty-wide strategy for the location of the equipment; some trusts have been able to invest more in equipment than others. This in turn means that patients of providers with the wider range of equipment will have access to a wider range of treatment choices.

The profession as a whole has also had long-standing concerns about its workforce, with BAUS reports consistently noting an increase in workload but a shortfall in consultant and trainee numbers. The pattern of consultant retirements is a further pressure, as an inconsistent pattern of retirements is not matched by flexibility in trainee numbers. The GIRFT deep-dive visits have emphasised that there are also shortages in the specialist nursing workforce.

While the majority of urology departments are generally performing well, a small number have, for a long period, and for different reasons, been repeatedly identified as "failing". In discussions with the GIRFT team, some clinicians at these units expressed frustration that they were unable to access relevant support to improve performance. Staff morale then drops and recruitment becomes increasingly difficult. With solutions inside the hospital hard to find, a move to a network model could help reduce the pressure and provide fresh ideas and impetus for change.

One particular concern that clinicians across the country have raised is the gaps in access to interventional radiology services, which are essential for the safety of urology patients. Network arrangements for urological services will need to ensure that the inter-relationship with interventional radiology is taken into account and services are aligned.

Existing networks in urology

Already, there are established networks for urology cancer care, with certain providers acting as regional centres for particular types of cancer. Reconstructive urology services are also provided through networking, but in a less formal and structured way. These networks generally work reasonably well, with established referral processes and effective resource allocation.

These existing networks could form the basis for a more comprehensive model, which helps balance provision with population size, makes better use of existing resources and gives patients greater choice. A network model could directly assist with implementing some of the recommendations that are set out earlier in this report, including extending the use of UIUs, improving pathways for stone care and increasing the use of consultant-delivered emergency care.

Retaining local care and sub-speciality expertise

That said, a network model must not compromise some of the advantages of the current urology service. It is important that general urology services continue to be readily accessible across the country; in particular, core diagnostic services and post-surgical follow-up should be available in local hospitals, to serve the high numbers of patients that access urology care.

In developing networked service delivery models therefore, it will be important to minimise the risk of unintended adverse consequences. Increased travel times for some patients could, in effect, reduce the availability of specialist care. Smaller, more peripheral units must retain a viable portfolio of urological care, while larger, central units cannot become "overheated" and chaotic.

Regarding sub-specialisation, the aim should not be to centralise all sub-specialties at a single network hub. Where a urology department has developed expertise and experience in a particular condition and has specific resources, processes and relationships (e.g. with other specialties or post-operative care providers), then it makes sense for the network to benefit from that, thereby opening up the network model to one where different sites act as centres for different urological conditions.

Overall, therefore, the aim of urology networking will not be to concentrate all resources in a single location, but to encourage trusts to work together to balance workload, provide timely and appropriate care (especially emergency care) and ensure patients are treated by teams with greater experience in their condition. This in turn means no set model is required; instead, it is proposed that the GIRFT team works with NHS England, STPs/Integrated Care Systems and other relevant stakeholders to identify some core criteria for a network model, including the size of the population and descriptions of the urology services that should be provided within a networking arrangement, creating 'Urology Area Networks'. In doing so, they will also have to set out how patient flows will be supported by administrative and financial mechanisms that allow a network to function seamlessly.

Recommendation	Actions	Timeline
14. Establish urology area networks (UANs), comprising several urology departments that provide comprehensive coverage of urological services, beyond existing network arrangements, to optimise quality and efficiency.	**14A:** GIRFT National Team, BAUS and BAUN, drawing on advice from NHSE, to develop guidance for model urological area networks, to support service specification development and service design locally.	In agreement with BAUS, BAUN and NHSE.
	14B: GIRFT Hubs and clinical lead, working with STPs and local partners, to identify pilot areas for development of UANs.	Upon completion of 14A.
	14C: Pilot UANs to be implemented and evaluated within STPs	Upon completion of 14B.
	14D: Concurrently, GIRFT Hubs to identify further network areas in a way which leads to a coherent model of urology UANs that covers the whole country.	Upon completion of 14C.
	14E: STPs to progress implementation of UANs.	On completion of 14C and D, with a targeted completion time frame of one to three years.

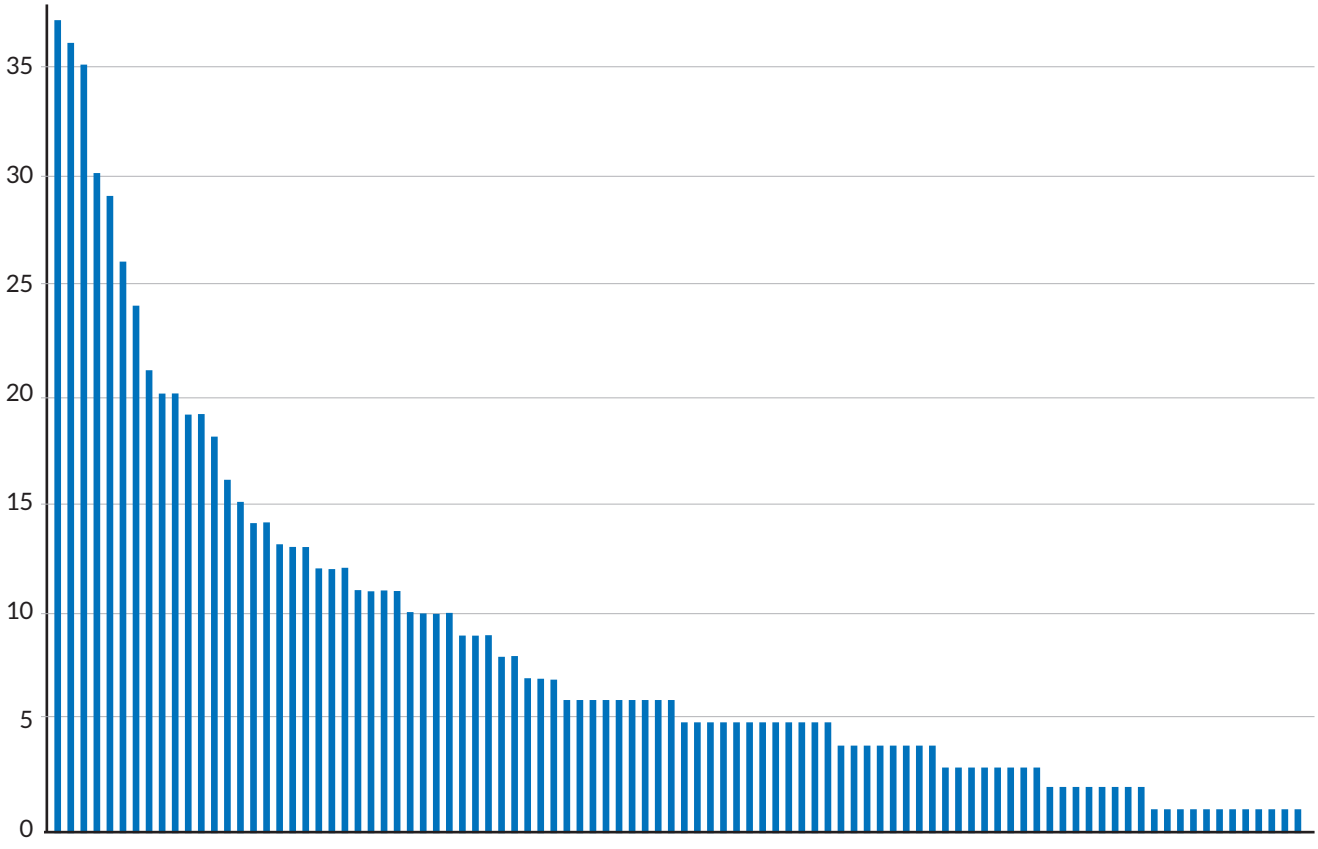
Using network resources to ensure specialist surgery is conducted at the best equipped provider

A central advantage of the network model is that it makes it easier to ensure that patients in need of specialist or rarer procedures are treated by teams with more experience in those procedures.

It's generally agreed, across all specialties, that better surgical outcomes are achieved when the team is more accustomed to the procedure. More experienced teams are more likely to understand and respond appropriately to the different issues and complications that can arise; they are likely to deliver care in a streamlined way that maximises the use of resources.

In urology, there are a number of complex surgical procedures that are performed in relatively low numbers. These include some reconstructive surgical procedures and complex stone surgery. A further example is nephrectomy (kidney removal), which today is increasingly conducted as keyhole surgery, as this offers faster recovery times and less patient discomfort. Up to the late 1990s, the standard approach was open surgery, which was routinely conducted by the majority of urology surgeons. However, as figure 12 below shows, this is now less frequently undertaken: while there were around 800 open nephrectomies undertaken in 2016, only 27 trusts carried out more than 10 such procedures. In most departments, the procedure will be conducted by just one or two surgeons.

Figure 12: Number of open radical nephrectomy procedures conducted by trust, 2016



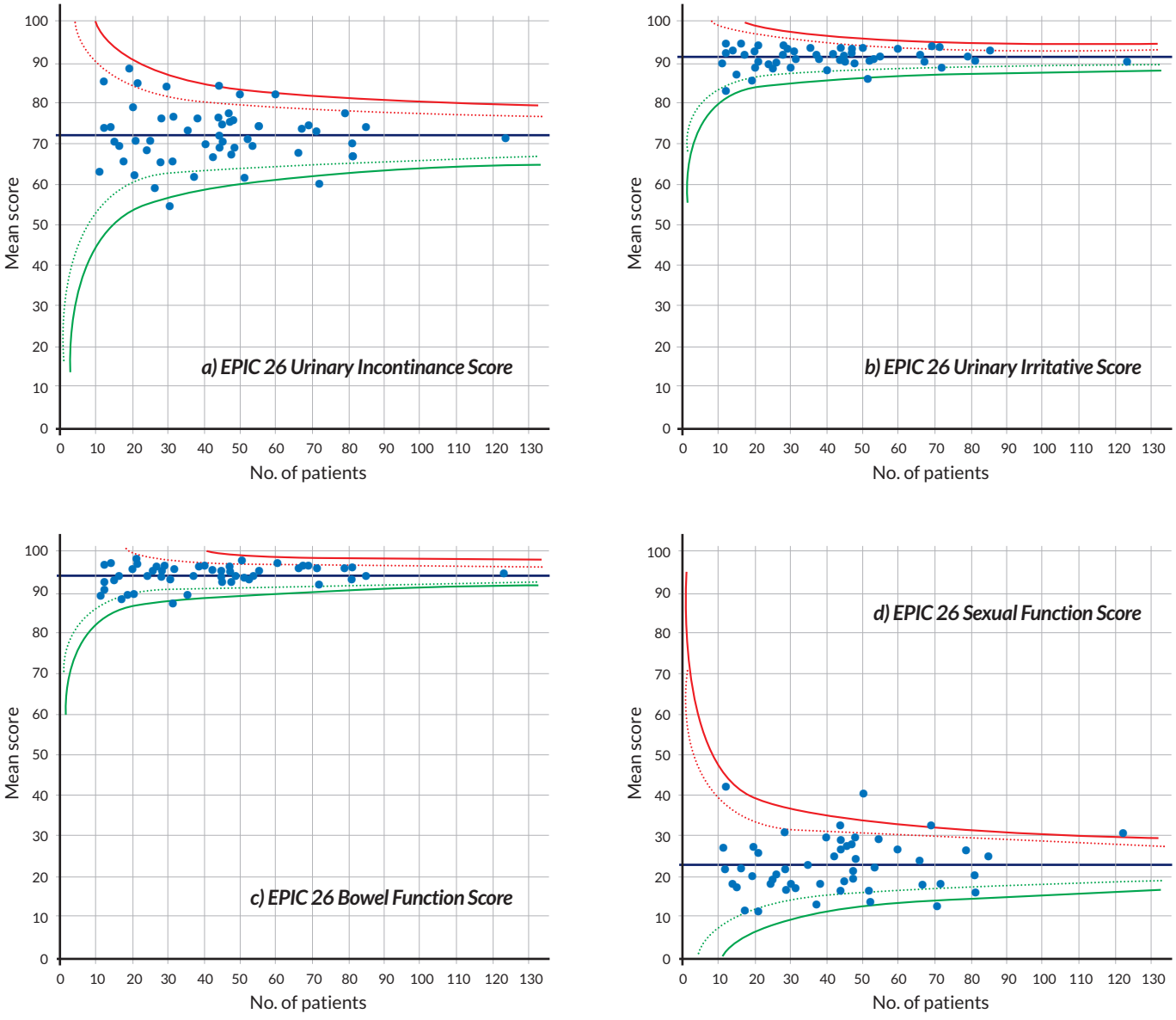
Source: HES

Given the complexities associated with open nephrectomy, it seems reasonable to propose that the procedure be carried out by surgeons and teams that perform an appropriate volume of cases. Within a network, one site might be deemed the location for this procedure – and resources allocated and patients transferred accordingly. This would reduce the need for teams with little current experience to conduct this higher-risk surgery.

There are a number of other complex urological procedures that are only carried out in small numbers in some urology departments. The GIRFT team believes that it would be prudent for providers undertaking small numbers of these procedures to refer patients to a network partner which carries out the operation in larger numbers in order to reduce risks.

However, it must be recognised that, as in other specialties, the data to support the argument that larger surgical volumes deliver substantially better outcomes is limited. Core GIRFT outcome data – such as length of stay, readmission rates and mortality – do not show a clear-cut benefit from having urological operations being performed in larger centres. The National Prostate Cancer Audit data also fails to demonstrate a volume-outcome effect, when looking at patient-reported rates of urinary and sexual dysfunction after radical prostatectomy – which are outcomes that are likely to be strongly linked to the technical accuracy of surgical care. On this basis, further study of the relationship between volume and outcomes is required, in urology as in other fields.

Figure 13: Outcomes from individual surgical centres following radical prostatectomy: patient-reported EPIC - 26 domain scores for urinary incontinence, urinary irritative symptoms, bowel function and sexual function.



Source: NPCA 2016[6]

[6] *National Prostate Cancer Audit (NPCA) Third Year Annual Report – Results of the NPCA Prospective Audit and Patient Survey. National Prostate Cancer Audit, 2016. Reproduced with permission.*

In the meantime, a pragmatic approach should be applied – recognising that the results of complex surgery are more likely to be unsatisfactory in hospitals that carry out very low numbers of those procedures, and by surgeons that perform those procedures infrequently. In considering surgical volumes, it is relevant to note that some areas of surgical practice involve skills that are readily transferrable from one specific procedure to another. Absolute numbers of a particular procedure that a surgeon or centre carries out should therefore be considered in the context of the wider surgical work of that individual or department.

The need for providers to ensure they can refer patients to a network partner with relevant recent experience could inform decisions about how UANs should be constituted and which providers should work together. Beyond UANs, there may need to be effective referral protocols to nationally-recognised centres of expertise for particularly rare conditions.

Recommendation	Actions	Timeline
15. Reduce the numbers of complex surgical procedures that are carried out in small volume centres, using UANs as they develop. *(Note: A "procedure" refers to a specific operation e.g. radical cystectomy, laparoscopic pyeloplasty etc. For very rarely performed operations it might be appropriate to consider a bundle of operations where the procedures clearly utilise a common surgical skill-set).*	**15A:** GIRFT, with the support of BAUS, to initiate or support further research to investigate the volume-outcome relationship in urology, with a view to defining minimum and optimum volumes for specialist urological procedures including complex stone surgery, surgery for Peyronie's disease, urethroplasty, neurological urology and specialist female urology.	In agreement with BAUS.
	15B: Ahead of this research, clinicians and providers should reduce low-volume operating within trusts based on the following guidelines: • complex cancer surgery should be performed by surgeons carrying out 20 or more procedures a year; • complex surgery for conditions other than cancer should be carried out by surgeons performing more than 10 procedures per year	December 2018.
	15C: When developing plans for UANs, STPs/ICSs should consider the following guidelines ahead of further research: • complex cancer surgery should be performed in centres performing 40 or more procedures per year; • complex surgery for conditions other than cancer should be performed in units performing more than 20 procedures a year.	On completion of 15A. .

Enabling continual quality improvement

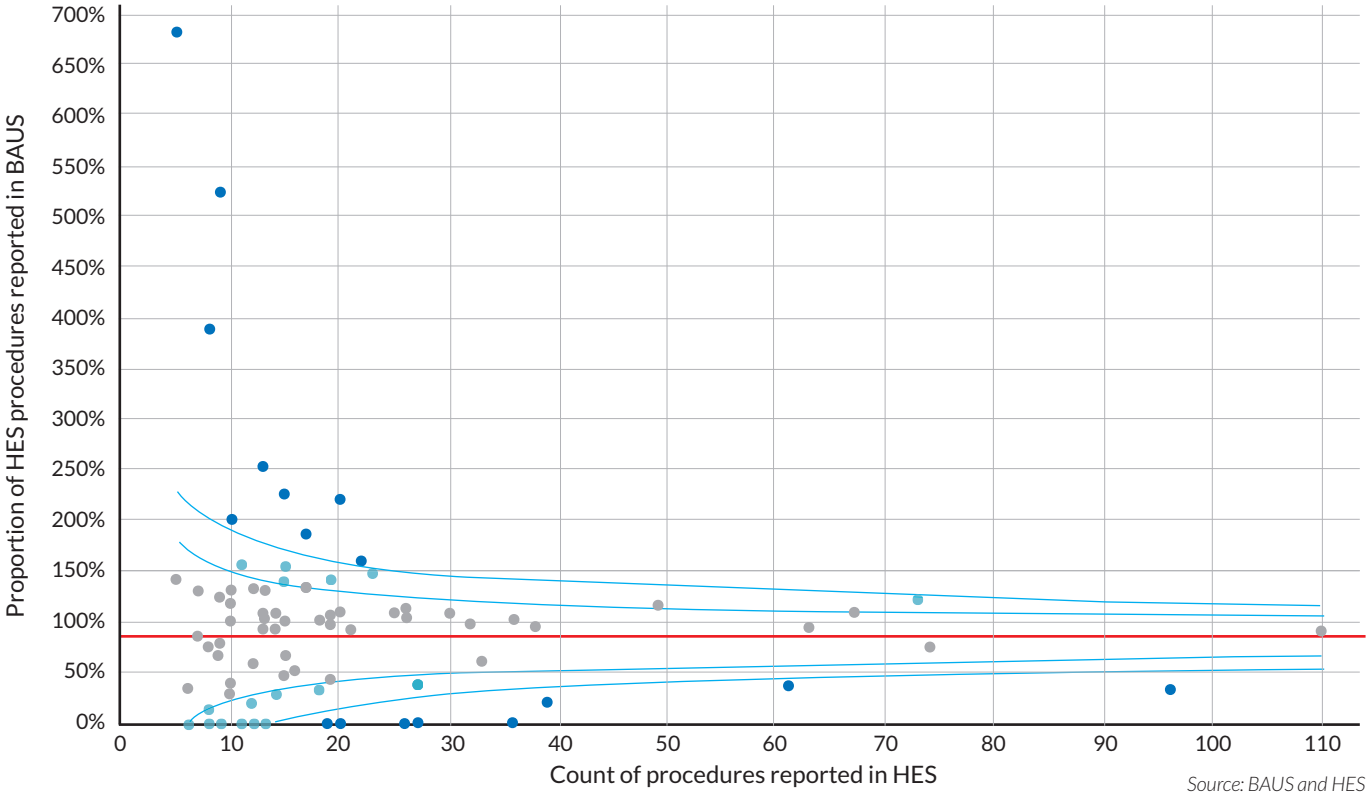
The GIRFT process is built on comprehensive data analysis, and the underlying principle that where data demonstrate variation, there may an opportunity for beneficial change.

As a specialty, urology has long benefited from the volume and range of data collected about its work. In particular, BAUS operates a series of registries for surgeons to help build a picture of specialty activity; there are also national audits, such as the National Prostate Cancer Audit, trust-level data and NHS sources such as Hospital Episode Statistics (HES).

While each is extremely valuable, the GIRFT process has highlighted that there is a significant lack of consistency between these different databases. To take just one example, both HES and BAUS registries ask for data to be recorded about the numbers of percutaneous nephrolithotomy operations (PCNL, an endoscopic procedure for removing kidney stones) that are carried out.

In seven trusts, the BAUS registry recorded twice as many PCNL procedures as were recorded in HES. By contrast, some trusts which had entered records of the procedure in HES had none in the BAUS database. Similar issues were identified in relation to other procedures (albeit with less extreme differences).

Figure 14: Proportion of PCNL procedures reported in the BAUS registry as a proportion of those reported in HES, by trust, 2016



Source: BAUS and HES

This inconsistency means it is not clear which source – if either – provides an accurate record of urology workload. That in turn has potential consequences in terms of issues such as workforce planning; it could also affect decisions about network configuration.

Aside from the differences in recording procedural data, the GIRFT process identified significant gaps in the urology data set. The first of these relates to patients who – though seen by urologists – did not undergo an operation. Patients whose care only involves investigations and medical management make up a major part of urological activity, but comparatively little data are gathered about the pathways they are offered, or their outcomes.

For example, current data collection systems do not record the outcome of conservative management of urinary tract stones; did the patient ultimately require a procedure? This is of obvious importance to understanding the effectiveness of conservative management, but also to monitoring the overall workload and performance of the department. In theory, the "success rate" for surgery in a particular urology department could be increased by choosing to operate on low-risk patients in whom conservative management might have been equally effective; alternatively, if the data showed that a large proportion of patients subsequently had surgery, this could indicate poor initial decision-making and a poor patient experience.

Overall, there was a lack of useful outcome data related to urology. This is an issue that also affects most other specialties, with readmissions one of the few outcome measures available. There are few patient-reported outcome measures; the use of surveys about incontinence and sexual function post-operation is a positive example of the kind of insights that can be gained into the effectiveness of procedures.

Data about clinical performance are only of value if they can be placed in the appropriate context. That context is provided by a description of "what good looks like". Good practice can be defined in terms of the processes that are followed and by the outcomes that are delivered.

The contribution of the National Institute for Health and Care Excellence (NICE) in developing a wide range of rigorously researched clinical guidelines cannot be overestimated. NICE guidelines that are relevant to urology include guidelines dealing with the major urology cancers, lower urinary tract symptoms, urinary incontinence, urinary tract infection and fertility. In addition, there are NICE documents that deal with the role of a variety of interventional procedures.

A wide range of other organisations and initiatives have sought to define good clinical practice. BAUS and BAUN are currently producing a series of documents which seek to define best practice across a range of conditions. In addition, clinical standards have been published by international organisations, such as the European Association for Urology, European Association of Urology Nurses and the American Urological Association, which can be adapted to UK practice.

It is important that data collection is aligned to well-developed clinical standards, or otherwise targeted, in a way which allows conclusions to be reached about the quality of the care that is being assessed. The clear objective of data collection should be to improve standards of care.

Recommendation	Actions	Timeline
16. Align data collection efforts across urology and ensure that data are collected that are relevant and has a value that is in proportion to the resources needed for its collection.	**16A:** GIRFT, NHS Digital, NHSE, NHSI, BAUS and BAUN to collaborate in order to achieve this.	June 2020.

Reducing procurement costs

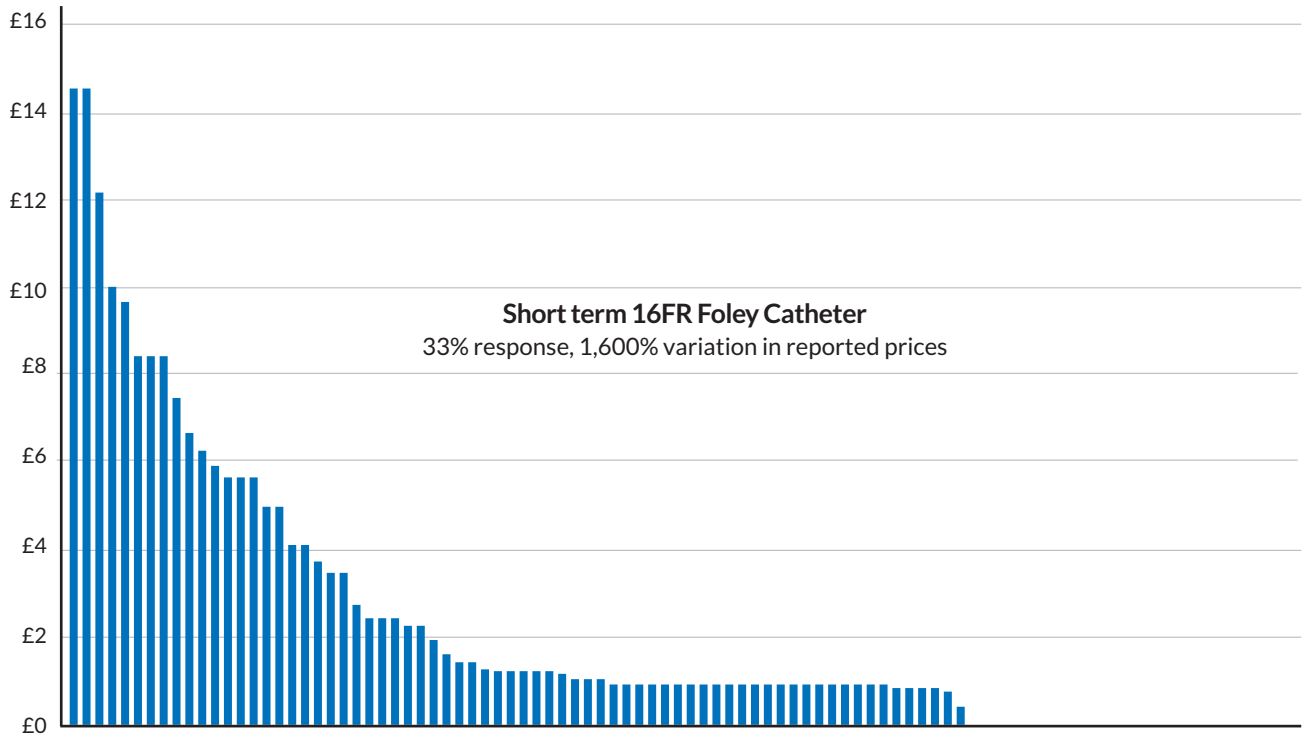
Urology is a specialty that has developed through technological innovation; indeed, it was the development of endoscopic surgery for benign prostatic enlargement that catalysed the separation of urology from general surgery in the 1970s and 1980s. Modern urology relies on high-cost, high-technology equipment and devices such as lasers, lithotripters and surgical robots. In contrast, surgical implants are used in relatively small numbers, although artificial urinary sphincters, penile prostheses and sacral nerve stimulation devices can deliver life-changing benefits.

However, the specialty uses very high numbers of disposable products such as catheters, stents and laparoscopic instruments. Getting the choice and pricing of these products optimised is vital if we are to deliver excellent clinical outcomes in a cost-effective way. As with other specialties examined in the GIRFT process, the review team sought to analyse the variation in procurement costs across trusts to identify opportunities for savings.

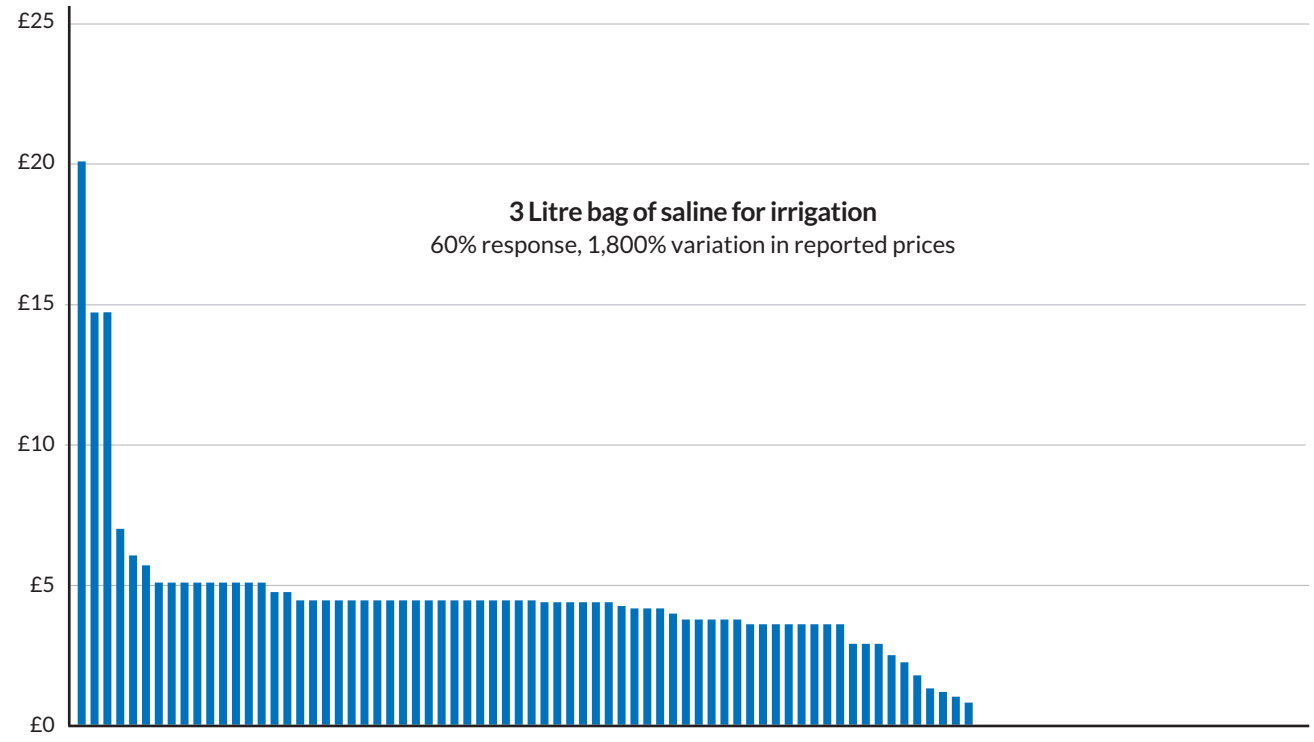
Data gathered via a questionnaire, sent out to all trusts ahead of their deep-dive visit, suggested there is significant variation in prices paid for consumables in urology care such as Foley catheters, ureteric stents and stone removal baskets. Caution needs to be exercised in viewing these data as some errors may be present due to manual data collection by a variety of different individuals. Nonetheless, it was clear that even for high-volume "everyday" disposable items, many trusts were relatively unaware of the choice of comparable products available and as a result their costs were not well controlled.

Further, the very fact that a number of trusts couldn't readily access this price information is a cause for concern.

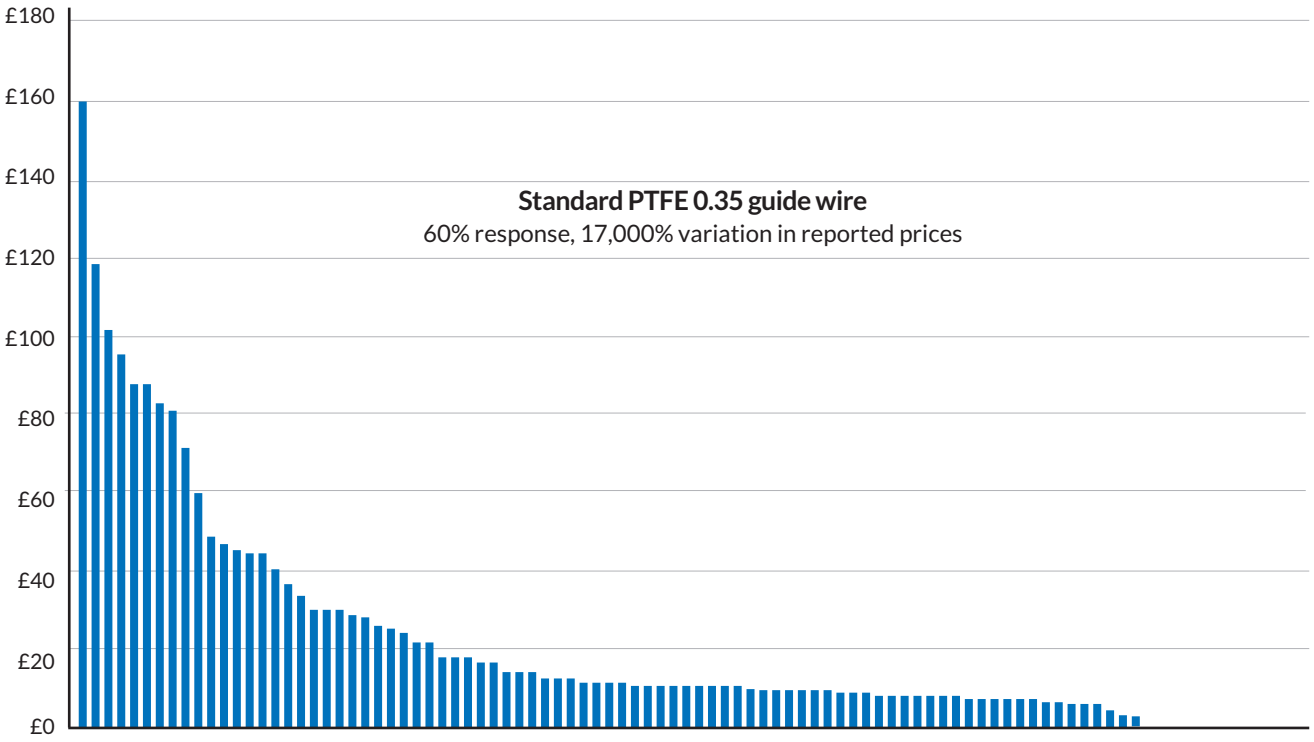
Figure 15: Prices paid for selected consumables, by trust, as recorded in pre-visit questionnaires



Source: Trust data, reported to GIRFT



Source: Trust data, reported to GIRFT



Source: Trust data, reported to GIRFT

Given these emerging issues, the review team turned to NHSI's Purchase Price and Index Benchmarking (PPIB) data to analyse procurement spend in urology.

What the PPIB data shows

PPIB data reveal that the NHS spends around £12m a year on products used in urology procedures such as catheters, ureteric stents, stone retrieval baskets and irrigation fluids. Most trusts purchase non-endourology items from NHS Supply Chain, yet ,even here, PPIB reveals there is significant variation in brands, prices and products used as Table 2 below shows.

Table 2: Variation in suppliers and total NHS England spend on key disposable items in urology

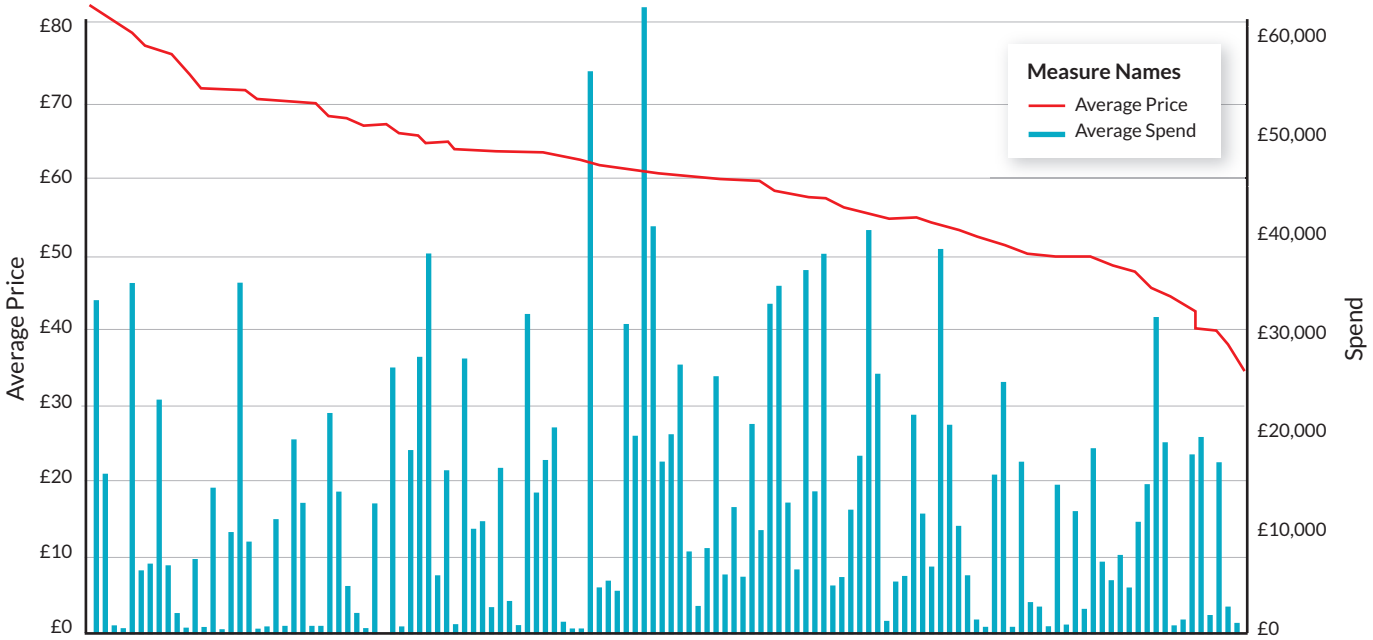
Category	No of suppliers	No of brands	Total spend
Urology stents	20	36	£2.8m
Urology catheters (of all types) (of which Foley catheters 16FR)	34 (12)	Multiple types & specifications	£4.8m (£450k)
Stone retrieval baskets	8	24	£1.8m
Disposable laser fibre	13	20	£1.6m
Other devices e.g. guide wires	Multiple Suppliers	Multiple Brands	£1m
		Total NHS spend in England	**£12m**

Source: PPIB

As we know from other specialties, such a proliferation of suppliers and brands usually leads to significant variation in prices paid by trusts, with the NHS, overall, paying significantly more than is needed. PPIB data reveals that urology is no exception.

For example, there are some 36 different brands of ureteric stents used across trusts, costing over £2.8m, but with no clear understanding of which strike the best balance between clinical suitability and value for money. There is significant variation in prices paid between suppliers and brands, even for the same brand from the same manufacturer. Some of this variation will be appropriate, as a minority of patients will need to have a specific stent used because of their clinical circumstances, but this variation in patient populations is likely to account for a relatively small proportion of the observed variation in cost.

Figure 16: Average price paid for all urology stents and total annual spend on stents, by trust, 2017-18

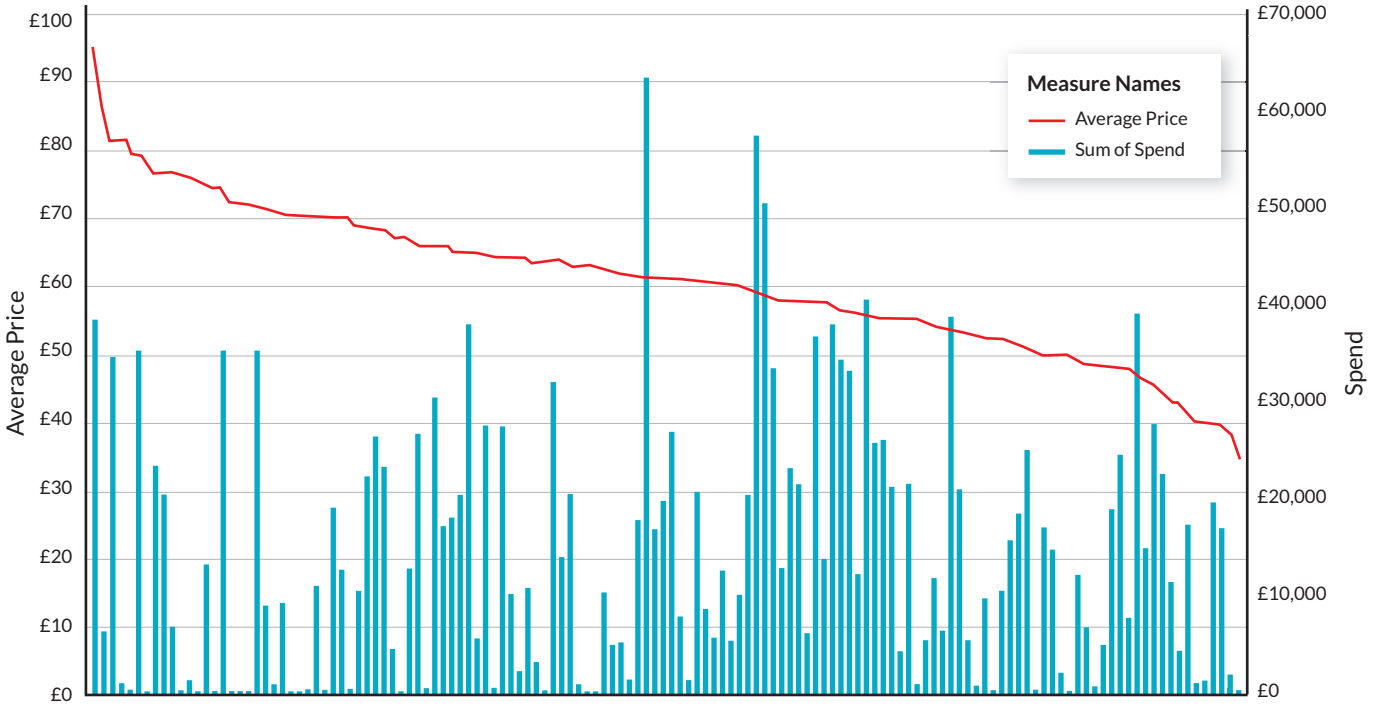


Source: PPIB

For the most widely used brands of stent, average trust prices paid varied from £35 to £95. The brands are available from NHS Supply Chain within a tighter price range of £35-£78.

Figure 17 below shows the different prices paid by trusts for these high usage stent brands. It demonstrates that volumes purchased and total spend have little bearing on prices and that there is no consistent pattern of discounts for high-volume customers.

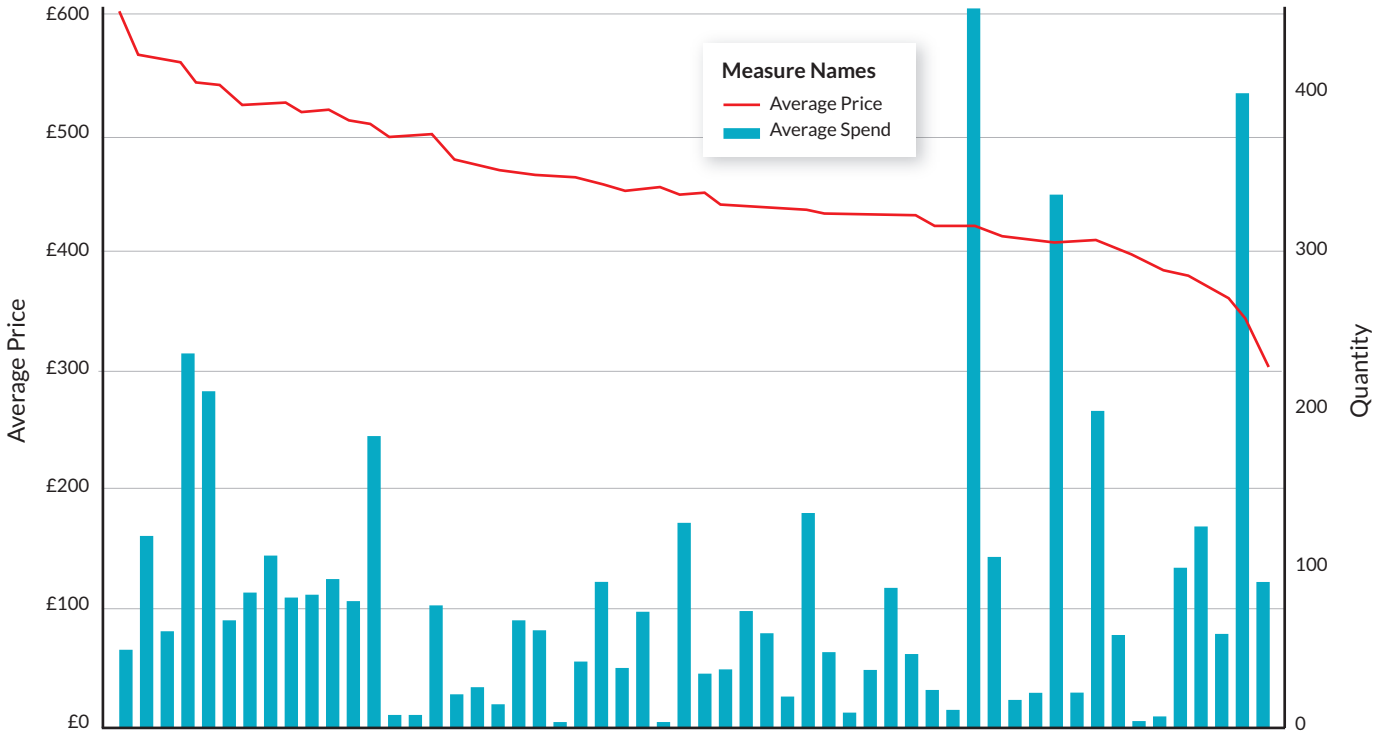
Figure 17: Average price paid per stent for highest volume brands, by trust, and total spend, by trust, 2017-18



The same level of variation occurs across other product areas. For example, the average prices paid by trusts for stone retrieval baskets ranges from £140 to £210, and for laser fibres from £118 to £250. This indicates a substantial opportunity to drive efficiency savings through use of the NHS's overall buying power.

Furthermore, this variation can have a significant impact on trusts' profitability against tariffs. For example, a typical endoscopic procedure to treat a ureteric stone might entail the use of a ureteric stent, a laser fibre, a stone retrieval basket and two guidewires. By aggregating the costs paid by trusts for this bundle of products, it can be seen that the average cost of materials per procedure ranges from £300 to £604. While it appears that the three trusts who conduct this procedure most frequently have costs at the lower end of the spectrum, there is still substantial variation which could easily be reduced.

Figure 18: Average material costs for a standard kidney stone removal procedure by trust, plus procedure count



Material costs based on 1 x ureteral stent, 1x laser fibre, 1 x stone retrieval basket, and 2 guide wires). Data is included for trusts that have used products in each category that have been assessed as being equivalent in clinical utility.

Source: PPIB and GIRFT procedure product grouping

As has been seen in other specialties, this level of product variation may also have a significant impact on patient safety. There is a lack of good evidence on which to base rational decisions about product selection, with the plethora of different devices available in each product area hampering attempts to get a clear picture of the clinical capabilities of a device in particular clinical circumstances. The problem of poor product evaluation is most dramatically highlighted in the field of implanted devices and products, exemplified by concerns about the safety and efficacy of surgery for the treatment of stress urinary incontinence and pelvic organ prolapse in women using mesh devices. A more systematic approach to assessing evidence and evaluating products is needed.

In the coming months, the GIRFT team will be working with trusts to understand why this price and product variation exists. Inherent in this question is the recognition that there will often be sound clinical reasons behind the choice of devices and of treatment methods, and that patient quality outcomes, product evidence and product innovation are key considerations, alongside supply chain efficiency and best value. As part of this exercise, the GIRFT team will provide a curated Clinical Procurement Benchmarking and PPIB data-pack to trusts' heads of procurement for validation and feedback before any conclusions are drawn or more specific recommendations made.

The Department of Health and Social Care is also expecting the new procurement Category Towers, which are due to replace NHS Supply Chain, to help trusts reduce this level of variation and exploit the purchasing power of the NHS. The GIRFT team will be working closely with the new category towers and trusts to support rationalisation and standardisation.

Recommendation	Actions	Timeline
17. Enable improved procurement of devices and consumables through cost and pricing transparency, aggregation and consolidation, and the spreading of best practice.	**17A:** GIRFT to work closely with sources of procurement data such as PPIB and PLICS, and use relevant clinical data to identify optimum value for money procurement choices, considering both outcomes and cost/price.	September 2018.
	17B: GIRFT to identify opportunities for improved value for money, including the development of benchmarks and specifications, and locate sources of best practice and procurement excellence, identifying factors that lead to the most favourable procurement outcomes.	October 2018.
	17C: Trusts and STPs to work with GIRFT and the new Category Towers, to benchmark and evaluate their products and seek to rationalise and aggregate demand with other trusts to secure lower prices and supply chain costs.	November 2018.

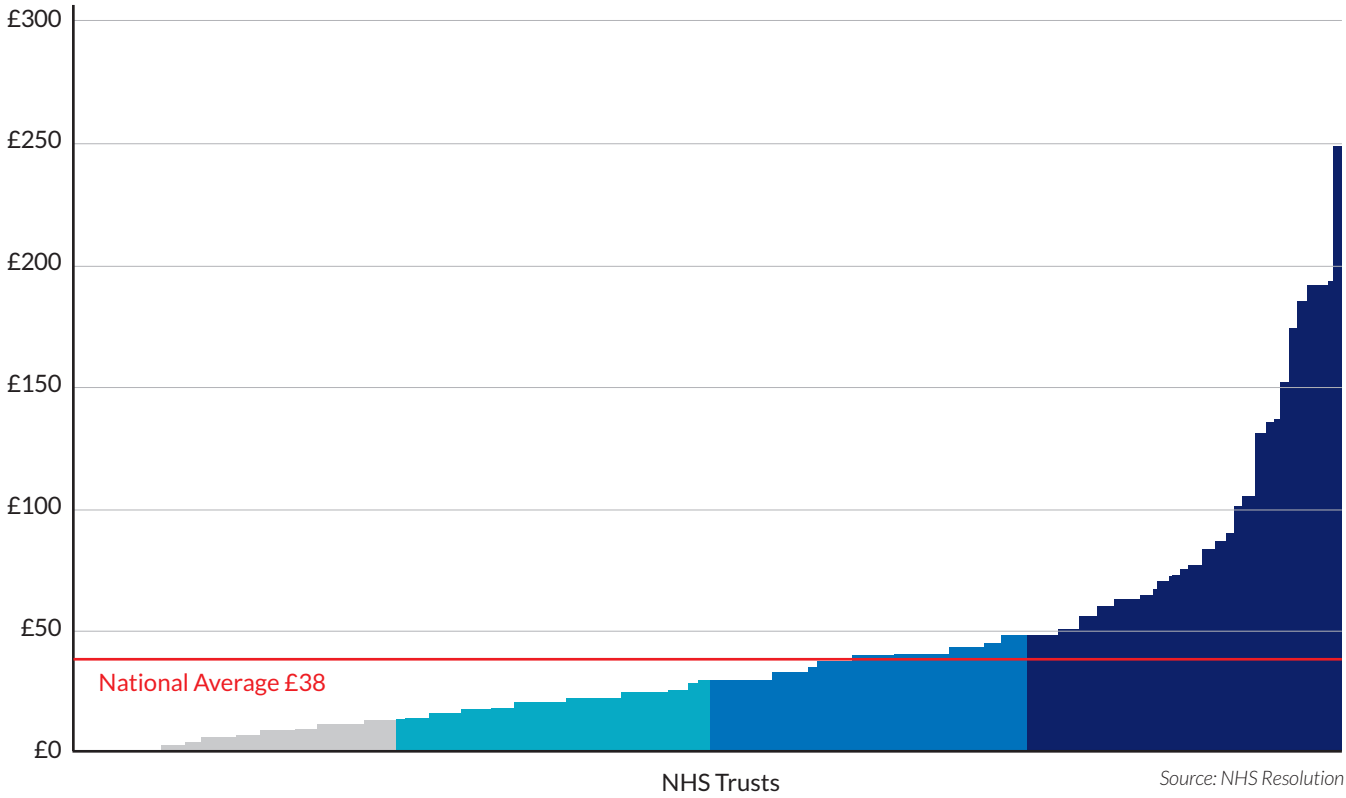
Reducing the impact of litigation

As well as addressing variation in clinical practice, each of the GIRFT programme teams has been asked to examine the impact and causes of litigation in their field – with a view to reducing the frequency of litigation and, more importantly, the incidents that lead to it. Ensuring clinical staff have the opportunity to learn from claims, complaints, serious untoward incidents (SUIs) and inquests will lead to improved patient care and reduced costs, both in terms of litigation and the expense of managing avoidable clinical complications.

Data obtained from the NHS Resolution shows that clinical negligence claims in urology were estimated to cost between £15.7 and £33.0 million per annum over the last five years. The average estimated cost of litigation per urological admission was £38.

There are vast differences between providers: the best performer is estimated to cost an average of £0 per urological admission, while at the other end of the scale, one provider is expected to generate an average of £251 of litigation costs per admission.

Figure 19: Variation in estimated litigation costs for urology per admission in England between trusts 2012/13 to 2016/17 (Denominator includes daycase, elective and emergency admission for urology, for patients of all ages).



Source: NHS Resolution

The year-on-year data indicates that there is a trend of both increasing volume and increasing estimated costs of claims over this five-year period. Every effort must be made to learn from clinical negligence claims, to improve the quality of patient care, and to reduce the costs of litigation. Effective learning from claims allows good practice to be shared and has the potential to reduce claims and to ensure that resources are not unnecessarily diverted from front line care. Most importantly, this learning means more patients receive the right care first time with fewer failed or ineffective treatments, decreased length of stay, and less care packages needed by patients suffering complications.

Table 3: Volume and cost of medical negligence claims against urology notified to NHS Resolution 2012/13 to 2016/17

Year	No. of Claims	% change in Claims No.	Total costs (£m) (including estimated and reserve values)	% change in Total costs
2012/13	223	-	£15.7m	-
2013/14	273	22.42	£28.6m	81.73
2014/15	287	5.13	£27.2m	-4.75
2015/16	314	9.41	£28.7m	5.44
2016/17	348	10.83	£33.0m	15.08
Total	**1445**	**-**	**£133.2m**	**-**

Source data: NHS Resolution

The most common causes for claims were 'judgement/timing' (739 claims, 51.1%), 'interpretation of results/clinical picture' (324 claims, 22.4%), 'unsatisfactory outcome to surgery' (200 claims, 13.8%) and 'fail to warn/informed consent' (113 claims, 7.8%). The impact of informed consent on surgical claims is more significant than the 113 claims which were directly identified. Lack of fully informed consent has played a role in many of the claims which were attributed to 'unsatisfactory outcome of surgery'. Many of these claims are clearly avoidable through an adequate consenting process in which an informed patient is involved in shared decision making; specialist nurses are already playing an increasing role in building more robust consent processes.

It is deeply concerning to note that there were 64 claims (4.4% of all claims over the period) relating to 'foreign body left in situ' or 'retained instrument post-operation'. These are "never events": the items used (such as swabs, needles, instruments and guide wires) should be subject to a formal counting /checking process at the start of the procedure and a counting /checking process before the procedure is completed. Such events, along with the other surgical never events of 'wrong site surgery' and 'wrong implant/prosthesis' represent system failure and are patient safety issues that can be eradicated by more diligent organisation and closer adherence to tools such as the World Health Organisation (WHO) checklist. Providers and clinicians should also utilise the National Safety Standards for Invasive Procedures to avoid never events, and consistently investigate and learn from such incidents.[7]

Beyond these, it is generally recognised that some of the more common causes of claims are also avoidable. Issues around judgement and timing could be deemed to relate to surgical experience and decision-making – so there is potentially an opportunity to address these through training. There is evidence that some claims cannot be effectively defended because the provider lacks the documentation to demonstrate correct processes have been followed and patient's interests considered.

It was clear during GIRFT visits that many providers had little knowledge of the claims against them. This includes some with high litigation costs per admission as well as those at the low end. As a consequence, very few lessons have been learnt from the claims to inform future practice. Further work is needed at both a local and national level to analyse claims and maximise the opportunity to improve patient care.

[7] *NHS England (2015) National Safety Standards for Invasive Procedures, available via: https://improvement.nhs.uk/documents/923/natssips-safety-standards.pdf*

Recommendation	Actions	Timeline
18. Reduce litigation costs by application of the GIRFT Programme's five-point plan.	**18A:** Clinicians and trust management to assess their benchmarked position compared to the national average when reviewing the estimated litigation cost per unit of activity.	For immediate action.
	18B: Clinicians and trust management to discuss with the legal department or claims handler the claims submitted to NHS Resolution included in the data set to confirm correct coding to that department. Inform NHS Resolution of any claims which are not coded correctly to the appropriate specialty via CNST.Helpline@resolution.nhs.uk	On completion of 18A.
	18C: Once claims have been verified, clinicians and trust management to review claims in detail including expert witness statements, panel firm reports and counsel advice as well as medical records to determine where patient care or documentation could be improved. If the legal department or claims handler needs additional assistance with this, each trust's panel firm should be able to provide support.	On completion of 18B.
	18D: Claims should be triangulated with learning themes from complaints, inquests and serious untoward incidents (SUI) and where a claim has not already been reviewed as an SUI, we would recommend that this is carried out to ensure no opportunity for learning is missed.	On completion of 18C.
	18E: Where trusts are outside the top quartile of trusts for litigation costs per activity, GIRFT will be asking national clinical leads and regional hub directors to follow up and support trusts in the steps taken to learn from claims. Clinical leads and regional hub directors will also share with trusts examples of good practice.	For continual action throughout GIRFT programme.

Potential impact

This report has set out a series of ways to improve the delivery of NHS urology services and offer a better patient experience, within the existing resources available to the specialty. It has made recommendations that focus on reducing stays in hospital and avoiding unnecessary admissions, through increased use of dedicated urological investigations units, outpatients' services and day surgery. It has also identified some opportunities to provide definitive treatments, rather than interim relief – a move that would benefit providers and patients alike. Alongside these changes, the report has recommended some reorganisation of care delivery, which could be accelerated through a move to a network model.

The improvements to the patient experience can be seen in shorter stays, fewer admissions and fewer repeat visits – and potentially shorter wait times. All of these also benefit providers, reducing the costs of common procedures and pathways and freeing up resource for other purposes.

While the impact in some areas is hard to measure, in others there is a clear tangible benefit. For example:

- Savings through increased use of day surgery
- Reducing unnecessary follow up appointments
- Reducing the number of cystectomy patients who have a length of stay greater than 12 days
- Reduce readmission rates for bladder outflow obstruction procedures

Table 4 identifies that the potential financial opportunity from these changes could be between £18.3m and £32.6m a year. This opportunity is in addition to the potential cost savings in procurement, which have been estimated as at least £960,000.

It should be noted that this section does not comprehensively list the opportunities discussed in this report – only selected metrics have been included below as examples of what might be possible. These figures provide a financial value for a wide range of efficiency opportunities which may not be cash releasing.

The GIRFT programme emphasises that these opportunity values are for illustration only. Individual providers and clinicians should assess their own services to determine the unwarranted variation that exists, the associated opportunity and thus the prioritisation of service changes that they wish to deliver. Individual providers may also have other opportunities that are not included here.

Table 4: Potential quantifiable impacts based on current performance

Improvement (opportunities are per annum)	**National mean average or better**			**Top quartile* or better**		
	Target	**Activity opportunity**	**Gross notional financial opportunity**	**Target**	**Activity opportunity**	**Gross notional financial opportunity**
Reduce outpatient follow up rates - national average and "optimal" based on median rate (both set on this basis to allow for some providers to possibly increase rates, where these are low). - gross national opportunity estimated at national average cost for consultant led follow up appointment, 15/16 reference costs. *Source: HES Jan 16 - Dec 16*	2.00	150,000 outpatient follow ups	£13,345k	2.00	150,000 outpatient follow ups	£13,345k
Increase day case rates for urology procedures - national average based on mean for British Association of Day Surgery (BADS) procedures (by procedure). - "optimal" based on BADS targets (by procedure). - gross notional financial opportunity estimated at one bed per spell, at urology national average bed day cost, 15/16 reference costs. *Source: HES Jan 16 - Dec 16*	varies by procedure	12,150 spells (moved to DC setting)	£4,200k	BADS target* - varies by procedure (see table 1)	12,150 spells (moved to DC setting)	£17,600k
Reduce % of patients receiving a cystectomy procedure that have a length of stay greater than 12 days - national average based on mean rate. - "optimal" based on best quartile. - gross notional financial opportunity based on bed days saved costed at estimated at urology national average excess bed day cost, 15/16 reference costs. *Source: HES Apr 12 - Sept 15 (pro-rata to 12 months)*	33.8% or below	1,365 bed days	£470k	23.2% or below	2,580 bed days	£890k
Reduce readmission rates for bladder outflow obstruction procedures - national average based on mean rate. - "optimal" based on best quartile. - gross notional financial opportunity estimated at average PbR price of the readmission spells.	9.6% or below	130 spells	£243k	7.7% or below	385 spells	£720k
TOTAL			**£18,258k**			**£32,555k**

The GIRFT programme

Getting It Right First Time (GIRFT) is a national programme designed to improve medical care within the NHS. Funded by the Department of Health and overseen by NHS Improvement, it combines wide-ranging data analysis with the input and professional knowledge of senior clinicians to examine how things are currently being done and how they could be improved.

Working to the principle that a patient should expect to receive equally timely and effective investigations, treatment and outcomes wherever care is delivered, irrespective of who delivers that care, GIRFT aims to identify approaches from across the NHS that improve outcomes and patient experience, without the need for radical change or additional investment. While the gains for each patient or procedure may appear marginal they can, when multiplied across an entire trust – and even more so across the NHS as a whole – deliver substantial cumulative benefits.

The programme was first conceived and developed by Professor Tim Briggs to review elective orthopaedic surgery and address a range of observed and undesirable variations in orthopaedics. In the 12 months after the pilot programme, it delivered an estimated £30m-£50m savings in orthopaedic care – predominantly through changes that reduced average length of stay and improved procurement.

The same model is now being applied in more than 30 different areas of medical practice. It consists of four key strands:

- a broad data gathering and analysis exercise, performed by health data analysts, which generates a detailed picture of current national practice, outcomes and other related factors;
- a series of discussions between clinical specialists and individual hospital trusts, which are based on the data – providing an unprecedented opportunity to examine individual trust behaviour and performance in the relevant area of practice, in the context of the national picture. This then enables the trust to understand where it is performing well and what it could do better – drawing on the input of senior clinicians;
- a final report, that draws on both the data analysis and the discussions with the hospital trusts to identify opportunities for NHS-wide improvement; and
- an implementation phase where the GIRFT team supports providers to deliver the improvements recommended after the clinical specialist visits.

The programme relies on engagement by NHS trusts and foundation trusts. At the outset of the programme, letters are sent from the GIRFT clinical lead for each area of practice to the chief executive, the medical director and the heads of service for the relevant specialty, of all NHS trusts and foundation trusts in England. This letter calls on the provider to engage with the programme, and to date providers have responded well to this call.

GIRFT and other improvement initiatives

The GIRFT programme is founded on using data to understand unexplained variation and provide an opportunity for standardisation and improvement.

It also reflects experience in the NHS and internationally accepted best practice that the most effective initiatives to improve quality, productivity and efficiency are clinically led. As well as support from the Department of Health and NHS Improvement, it has the backing of Royal Colleges and professional associations.

GIRFT is part of an aligned set of work streams within the Operational Productivity Directorate of NHS Improvement. It is the delivery vehicle for one of several recommendations made by Lord Carter in his February 2016 review of operational efficiency in acute trusts across England.

GIRFT has a significant and growing presence on the Model Hospital portal, with its data-rich approach providing the evidence for hospitals to benchmark against expected standards of service and efficiency. The programme will also work with a number of wider NHS programmes and initiatives which are seeking to improve standards while delivering savings and efficiencies, such as NHS RightCare, acute care collaborations (ACCs), and sustainability and transformation partnerships (STPs).

Data analysis

The data analysis exercise brings together a wealth of existing NHS data in an innovative way to paint a comprehensive picture of this aspect of medical practice. It includes Hospital Episode Statistics (HES), relevant registry or professional body data, mortality data, demographic information and patient survey data. Alongside this, a specific questionnaire is sent out to all trusts that have agreed to participate.

The output is a data pack consisting of standard and novel metrics, covering input, activity, process and outcomes. For example, it will typically address issues such as:

- quality of care – using indicators such as mortality and readmission rates;
- factors linked to outcomes – including adoption of best practice, low volumes of procedures, and time to surgery;
- access – e.g. standardised activity per 100,000 population;
- efficiency – length of stay and costs; and
- patient experience.

The resulting data pack provides a detailed, data-led view of the way this area of practice is currently delivered across the country. It shows where there is variation in both provision and outcomes, and helps identify patterns which could indicate opportunities to improve care or deliver efficiencies.

The data sources are selected and the metrics for each area of practice are developed in partnership with GIRFT programme clinical leads for that area, thus ensuring they are relevant to the decisions a senior clinician in that field may have to make. The core sources used to analyse urology are data from the British Association of Urological Surgeons (BAUS) registries and its annual workforce report, as well as the main NHS sources such as Hospital Episode Statistics (HES), trust reference costs and NHS Resolution data.

The deep-dive visits

With the national picture clear, the data analysis team then generates individual reports for each hospital trust that is participating in the programme. These reports compare the trust's performance with the national data, enabling the trust to see how its activity levels, commissioning decisions, costs and patient outcomes for different procedures measure up to those of its peers.

These individual reports are not designed for wider publication but rather to give the trust an insight into this area of practice. They are issued to the trust in advance of a scheduled meeting between clinical leads appointed by the GIRFT programme and senior staff at the trust. At the meeting – known as a deep-dive visit – the clinical leads discuss the individual report with the trust, with a particular focus on the areas where the data show variation between national norms and the trust's performance. Where the data indicate the trust may be underperforming in some way, this is explored in more detail to see whether there is an alternative explanation; where appropriate, the trust can then draw on the expertise of senior clinicians in the field as they discuss specific challenges they face and consider potential changes to practice.

Conversely, where the data indicate the trust is outperforming its peers, clinical leads seek to understand what the trust is doing differently and how its approach could be adopted by others to improve performance across the NHS.

Feedback from trusts has been uniformly positive and, in every case, actionable steps have been identified to improve aspects of local provision.

The report

The Orthopaedic GIRFT pilot project identified that, following about 30 trust reviews, the problems and potential solutions identified were the same across all subsequent trust visits. After all the visits have been completed the clinical lead oversees the creation of a national GIRFT report into their specialty. The report provides an overview of the way this area of practice is delivered across the country, examples of best practice and recommendations for potential improvements at the national level. This is one such report.

Implementation

NHS Improvement reviews the report and recommendations from each practice area examined by the GIRFT programme. It then asks the GIRFT team to co-ordinate an implementation programme designed to help trusts address the issues raised and improve quality. Some recommendations require national action; NHS Improvement identifies the most appropriate body or programme to lead on these recommendations. This will range from working with the Royal Colleges and national professional associations and societies on best practice guidance, to working with NHS England and the Care Quality Commission to ensure that GIRFT recommendations are reflected in any future evolution to regulation or national guidelines.

Where responsibility for implementation rests with individual trusts, NHS Improvement and in particular the GIRFT programme team will ensure there is a range of ongoing support available to help individual providers implement these recommendations locally.

GIRFT regional hubs have been established so that clinical and project delivery leads can visit trusts and local stakeholders in each region on a regular basis. They will be able to advise on how to reflect the national recommendations into local practice and support efforts to deliver any trust-specific recommendations emerging from the GIRFT visits. These teams will also help to disseminate best practice across the country, matching up trusts which might benefit from collaborating in selected areas of clinical practice.

Importantly, GIRFT will be working closely with other NHS programmes working at regional and trust level, such as RightCare and STPs, to ensure a complementary approach and to streamline requests to providers.

Through all our efforts, local or national, GIRFT will strive to embody the 'shoulder to shoulder' ethos which has become GIRFT's hallmark, supporting clinicians nationwide to deliver continuous quality improvement for the benefit of their patients.

Glossary

Medical/surgical terminology

Andrology
Sub-speciality of urology focused on male fertility and sexual function.

Catheter
A flexible tube used to empty the bladder and collect urine in a drainage bag

Cystectomy
Removal of the bladder

Cystoscopy
A procedure used to look inside the bladder. Involves the insertion of a specialist camera called a cystoscope through the urethra into the bladder. Flexible cystoscopy involves a very narrow and flexible cystoscope and can be conducted using local anaesthetic.

Endoscopy
An umbrella term for any procedure where the inside of your body is examined using an instrument called an endoscope. Cystoscopy is a type of endoscopy.

Endourology
Sub-specialty of urology that deals exclusively with laparoscopic (keyhole) surgery and endoscopic techniques.

Extracorporeal shock wave lithotripsy (ESWL)
A procedure that uses high-energy pressure waves to break down urinary tract stones into tiny granules that can then be passed naturally.

Intravesical instillation
A process that allows therapeutic drugs to be inserted directly into the bladder, via a catheter.

Laparoscopy
Type of surgical procedure that allows a surgeon to access the inside of the abdomen and pelvis without having to make large incisions in the skin. This procedure is also known as keyhole surgery or minimally invasive surgery.

Lithotripter
A device used for ESWL.

Nephrostomy
A procedure to insert a drainage tube into the kidney, through the abdominal wall, to relieve an obstruction to urinary drainage.

Nephrectomy
Removal of a kidney or part of a kidney.

Percutaneous nephrolithotomy
An endoscopic procedure for removing kidney stones via a small incision in the loin.

Peyronie's disease
A disorder of the tissue in the penis which causes curved, painful erections.

Prostatectomy
Removal of the prostate.

Stoma
A small opening in the abdomen, intentionally created during surgery to divert the flow of faeces and/or urine.

Stone
In this report, refers to hard lumps of mineral that build up in the kidneys, bladder or urinary tract.

Transurethral
Any procedure that is performed via the urethra – such as a transurethral resection of the prostate (TURP).

Ureteroscopy
A procedure to treat urinary tract stones. Involves the insertion of a long, narrow endoscope into the ureter, allowing the urologist to find a stone and either remove it or fragment it.

Ureteric stent
A thin plastic tube inserted into the ureter to allow urine to flow from the kidneys to the bladder, avoiding any blockage in the ureter (e.g. a stone)

NHS organisations and terminology

Hospital Episode Statistics (HES)
Data collected during a patient's time at hospital and submitted to allow hospitals to be paid for the care they deliver. The aim is to collect a detailed record for each 'episode' of admitted patient care delivered in England, either by NHS hospitals or delivered in the independent sector but commissioned by the NHS.

NHSE
NHS England

NHSI
NHS Improvement

NHS RightCare
Reducing unwarranted variation to improve people's health.
www.england.nhs.uk/rightcare/

NICE - the National Institute for Health and Care Excellence
Improving health and social care through evidence-based guidance.
www.nice.org.uk

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