

What is the current status of revalidation in urology?

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The aim of revalidation (or maintenance of certification) is to reassure patients, the general public, employers and other healthcare professionals that an individual is fit to practice. It may lead to a reduction in near misses or adverse events. The process of revalidation entails a commitment to the provision of lifelong learning and assessment of clinical practice that ultimately ensure patient safety. Lifelong learning addresses knowledge and skills, whereas assessment of clinical practice ensures quality of care. Various learning and assessment tools are available in clinical practice; however, the tools for revalidation are not validated at

What's known on the subject? and What does the study add?

Revalidation encourages consolidation of clinical knowledge through active reflection on surgical practice. Current guidelines fall short of recommending structured and evidence based guidelines for specialist revalidation.

This article describes the process of revalidation for urologists, highlights challenges in its practical application and suggests potential improvements to the current strategy of revalidation.

specialist level. Further research is needed to develop and implement evidence-based structured programmes of revalidation that consider the holistic needs of modern urologists.

KEYWORDS

urology, recertification, assessment, lifelong learning, revalidation

INTRODUCTION

In recent years there have been a series of high profile medical adverse events resulting from inadequate regulation of healthcare provision [1,2]. Patient safety is now a priority within modern healthcare systems. It has been shown that clinicians who have been in practice for a long time may be at risk of providing inadequate quality of care, therefore, they may need quality improvement interventions [3].

Urology is a discipline in which there are continuous diagnostic and therapeutic innovations. Integration of novel technologies and procedures into clinical practice is challenging and potentially damaging to patient safety. Unstructured professional development driven by passion and personal interest alone is no longer sufficient for maintaining standards in urology [4]. In 2007, the UK government published 'Trust, assurance & safety: The regulation of health professionals in the 21st

century' [5]. This document described reforms to healthcare regulation in the UK, including a mandatory programme of revalidation for all UK specialists, similar to the 'Maintenance of certification' programme used in the USA [6].

The aim of revalidation (or maintenance of certification) is to reassure patients, the general public, employers and other healthcare professionals that an individual is fit to practice [7]. Evidence from its application in other developed healthcare systems suggests that revalidation may lead to a reduction in the frequency of adverse events, resulting in an improvement in patient safety [8,9].

The present paper aims to (i) describe the process of revalidation for urologists in the UK; (ii) highlight potential challenges in the practical application of revalidation (amalgamation of recertification and relicensing); and (iii) describe potential improvements to the current strategy of revalidation.

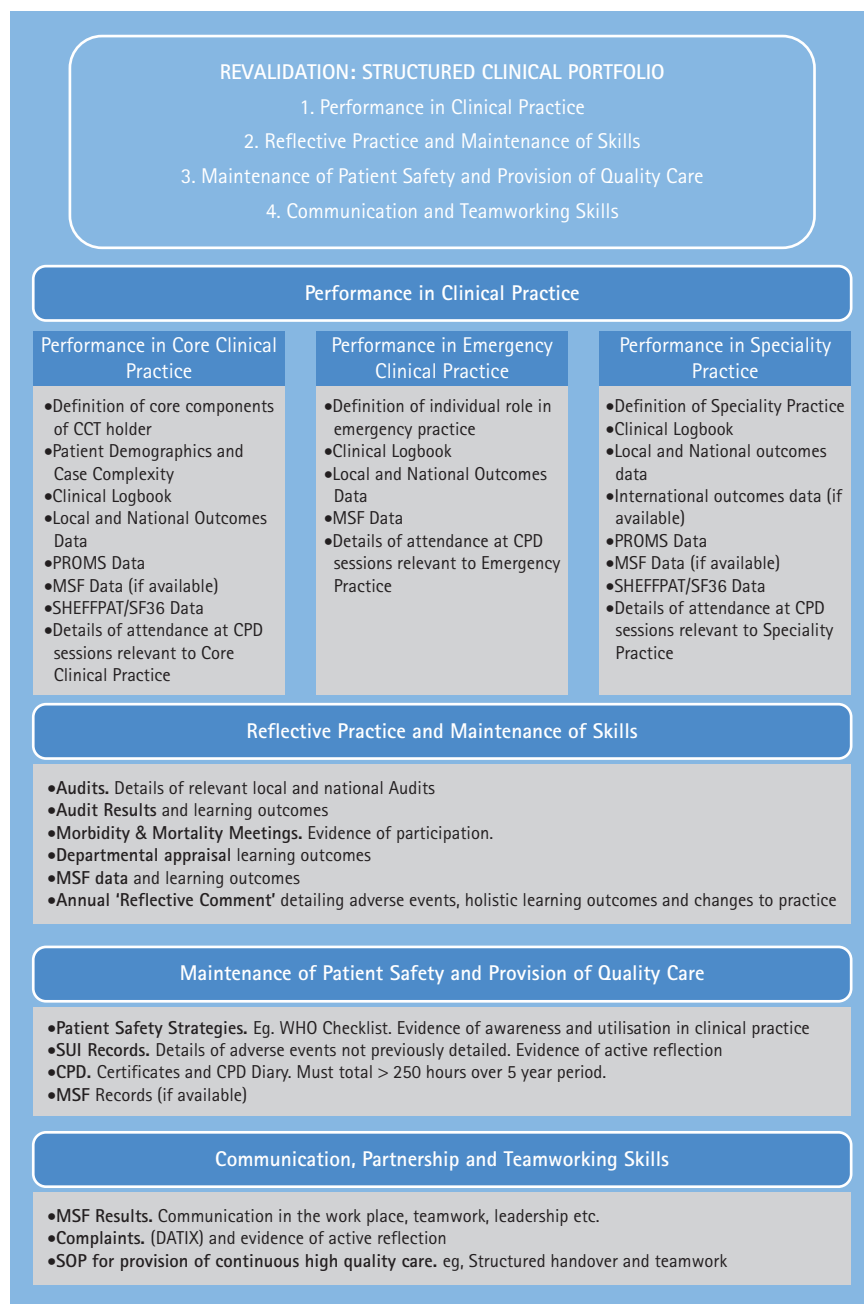
FUNDAMENTAL COMPONENTS OF REVALIDATION

The fundamental components of recertification or revalidation across different regions are similar [10,11]. In this section we elaborate on the guidelines for revalidation [12] with reference to the General Medical Council's (GMC) Good Medical Practice framework [13] and discuss their practical application in the field of urology. The framework includes (i) Knowledge, skills and performance, (ii) Safety and quality, (iii) Communication, partnership and teamwork, and (iv) Maintaining trust (Fig. 1).

KNOWLEDGE, SKILLS AND PERFORMANCE

Performance evaluation is a challenging area of practice [11]. Concerns have been raised regarding the quality-of-outcomes information currently available. In response, organizations such as the BAUS have invested heavily in national clinical audits. This strategy is intended to improve the

FIG. 1. Proposed structure of the clinical portfolio for revalidation in urology.



quality-of-outcomes data by involving regional centres across the UK. This will, in turn, help urologists meet the requirements for revalidation.

The BAUS requires that urologists participate in all relevant national audits funded and regulated by the society. Relevant audits should ideally be identified at an early stage in the revalidation process, in conjunction with local responsible officers. Audits,

currently available online at the BAUS website, address a wide range of standards in oncology, andrology and endo-urology, including suprapubic catheter insertion, botulinum toxin for overactive bladder, urethroplasty, penile prostheses and treatment of penile curvature [14]. There are plans to expand the spectrum of national audits to cover a broader range of topics relevant to patient safety [12]. The BAUS requires that individuals also take part in

local audits wherever possible and continue with routine data collection.

At the enhanced appraisal, individuals will provide written evidence of participation in audits as well as evidence of active reflection on results in relation to clinical practice. This may be shown through participation in local morbidity and mortality meetings and departmental appraisals. It is likely that, in the future, a system of multisource feedback (MSF) will be used to collect constructive feedback in order to assess individual team working skills [12].

Individuals will be required to show that they meet the core competency requirements of a CCT holder in three areas of practice: (i) lower urinary tract endoscopy; (ii) inguino-scrotal surgery; and (iii) outpatient investigation and diagnosis. This will require clear presentation of departmental outcomes data (elective and emergency cases) at appraisal. The BAUS recognizes that there are limitations in the interpretation of such data [15]. It is therefore recommended that individuals present local outcomes data alongside evidence of patient demographics and case complexity. There are national databases such as 'Hospital Episode Statistics' (HES) that can be used to access information regarding patient demographics and crude outcomes data, such as length of stay in hospital and patient waiting times. Individuals may wish to formally compare their outcomes with similar departments in the local area and nationally. Peri-operative care will be assessed at appraisal through analysis of patient-reported outcomes measures (PROMs) and, in the future, through MSF. Data collected from validated questionnaires will be used to assess non-technical skills, focusing on communication and patient satisfaction in the outpatient setting. Pilot studies are underway to evaluate questionnaires already validated in other specialities such as the Sheffield Patient Assessment Tool (SHEFFPAT) questionnaire. The BAUS describes the potential use of the SHEFFPAT questionnaire in conjunction with the 36-item short-form health survey forms in order to meet GMC requirements. Again it will be the individual clinician's responsibility to collate and present this data at appraisal. In addition to performance indicators, evidence of reflective practice must be provided. This may be demonstrated through a well

presented clinical logbook and yearly 'Reflective Comment' reports detailing analysis and learning outcomes of deaths and adverse events that have occurred within the department. Finally urologists must show an awareness of up-to-date clinical guidelines and recent advances in general urology technologies and techniques. This should be shown through the accumulation of at least 50 continuing professional development/continuing medical education (CPD/CME) credits per year.

There is huge variation in specialist practice amongst UK urologists, so much so that guidelines have hinted at an international review process to allow comparisons of performance indicators [12]. It is therefore necessary for each individual to define accurately and clearly specialist practice before appraisal. Standards to be met are yet to be defined by individual sections, but it is likely that evidence will be required similar to that described above.

SAFETY AND QUALITY

The application of patient safety strategies is arguably the most important change to surgical practice in recent years. It has led to significant reductions in patient morbidity and mortality [16]. In practice, this requires urologists to use patient safety tools such as the WHO checklist [17] and participate in reflective clinical meetings as routine. At appraisal, a commitment to patient safety should be shown through evidence of clinical planning from attendance at multidisciplinary team meetings, documented use of the WHO surgical checklist, records of serious untoward incidents (SUIs) and attendance at morbidity and mortality meetings.

Continuing professional development, a term often used interchangeably with CME, is essential for maintaining patient safety as the speciality evolves. At appraisal, clinicians will be required to show evidence of having participated in a minimum of 250 h of CPD over the previous 5 years. It is recommended that individuals present certificates of attendance and a well maintained 'CPD diary' of events attended. As new technologies and techniques are integrated into everyday practice, urologists will need to show awareness of local Trust and National Institute for Health and Clinical

Excellence guidelines regarding their role in clinical practice. Compliance with guidelines must be demonstrated by appropriate documentation.

Non-technical skills, including communication and teamwork, are essential for the maintenance of patient safety [11]. Data collected through MSF from patients, peers and colleagues will be used to evaluate the individual application of non-technical skills in the workplace. Required competency levels are yet to be published by the Royal Colleges or the BAUS.

COMMUNICATION, PARTNERSHIP AND TEAMWORK

The GMC requires that urologists are able to communicate effectively with colleagues and patients. Evidence from MSF will again be relevant here. Patient complaints records (e.g. DATIX) must also be presented, alongside evidence of active reflection and changes to practice. Teamwork should be demonstrated by detailing local standard operating protocol (SOP) for provision of continuous high quality care. This will include details of strategies for maintenance of patient safety, through structured handover between shifts for example [18].

Leadership is a crucial skill for urology specialists [19]. A consultant surgeon must show situational awareness, group management skills and be able to motivate a team, both in and out of theatre. Performance in this domain will probably be evaluated through MSF, however, there are few details currently available from the BAUS.

MAINTAINING TRUST

The BAUS requires that urologists be open and honest at all times, including through the entirety of the revalidation process. Maintaining patient confidentiality is a key part of this standard. Currently no specific evidence is required for presentation at audit [5].

CHALLENGES IN INTEGRATING REVALIDATION INTO CLINICAL PRACTICE

At present there is a paucity of evidence to describe the efficacy of revalidation

tools in meeting the goals of revalidation in urology. Notably, in current guidelines there is a heavy reliance on MSF for assessment of non-technical skills, including professionalism, communication and teamworking. This is not evidence-based at the specialist level. In internal medical specialties, peer assessment is an established, acceptable and feasible method of performance evaluation [20]. The application of MSF to surgical practice will be more challenging. Successful integration of MSF into routine clinical practice requires communication and collaboration between healthcare professionals from different specialities. Given the highly multidisciplinary nature of urology, data collection will be challenging and may require considerable input from both financial and human resources. Concerns have been raised that inadequate data collection may lead to assessment of performance in isolated areas of practice rather than in the urological community as a whole [21]. This is potentially damaging to individual practitioners. Whilst there is preliminary evidence to suggest that MSF is a feasible tool for evaluation of surgeons' non-technical skills on a local level [22], further evidence should be gathered before its widespread integration into surgical practice.

National audit is an established strategy for collection of performance data. It is likely to return large volumes of valuable information that may be used as evidence during the revalidation process. There is a danger, however, that public reporting of clinical outcomes through publication of national audit data could compromise patient safety. Poor outcomes data may reflect patient selection, systems error or poor surgeon performance. Diligence is required at all times when interpreting outcomes data. Unfortunately, in practice, systems error and patient demographics may be ignored in favour of a more simplistic interpretation of clinical outcomes data. This is potentially damaging to an individual's career prospects within a fiercely competitive speciality such as surgery. There is a temptation for individuals to modify their practice in order to avoid such consequences. This may be through exclusion of those patients perceived to be at highest risk of a poor surgical outcome, for example [23]. Regulatory bodies such as the BAUS have a responsibility to support surgeons through

the revalidation process in order to avoid the 'side-effects' of data collection via national audit and maintain patient safety.

Sub-specialisation is increasingly common within the field of urology; a pattern that is likely to continue as technology evolves. It will present novel challenges for the structure of revalidation programmes. Fundamental to the revalidation process is the setting of evidence-based competency levels. Where there are few surgeons performing a particular procedure there will be difficulties in meeting this standard. Policy makers might consider an international revalidation protocol for highly specialized urologists. Such a strategy will carry its own challenges and there are those who would question the validity of international data comparison because of variations in patient demographics and data collection protocols.

Currently a 'one size fits all' approach is advocated for revalidation in urology. It is inevitable that there will be difficulties in practical application of this strategy. Urologists with a substantial private practice will have limited opportunity for data collection and may be unduly penalised as a result. Further, the working environment in private practice may differ significantly from the NHS, invalidating data collected by MSF. Part-time surgeons and academic urologists will be faced with similar difficulties. Perhaps most concerning is the lack of protocol for urologists registered abroad who are practising for short periods in the UK. It is clear that a 'one size fits all approach' to revalidation in urology will be challenging to implement. Policy makers must work to balance the desire for improved patient safety strategy and public accountability against the holistic requirements of modern urological surgeons if revalidation is to work in practice.

Revalidation will become, for most, a routine part of clinical practice. However, it is inevitable that a minority will be unable to meet required standards and will be referred to the GMC. Regulatory bodies faced with this scenario have a responsibility to protect both patients and the urologists referred. Punitive measures are potentially catastrophic to a clinician's career prospects and may be wholly unjustified; yet, a poorly performing clinician represents a major threat to patient safety. The BAUS state that

where there are concerns over a surgeon's performance there should be a 'carefully and sensitively managed process to check the data, investigate the background environment, review the case mix and finally the individual, to understand the contribution of the individual to the overall team and address the concerns appropriately'. However, the regulatory body stops short of detailing how such a process will be implemented in clinical practice and the consequences of continued poor performance. Protocol must be developed to guide local institutions on appropriate action where there is failure to achieve revalidation.

Revalidation will represent a major change to regulation of healthcare provision in the UK. Its integration into clinical practice will require substantial financial investment. Thereafter, there will be continued monetary requirements to validate existing performance measures, maintain an active revalidation programme and address ongoing challenges. With years of austerity ahead for the NHS it is difficult to foresee where such funding will be obtained. The BAUS has already indicated that there will be no significant government funding for revalidation in urology [12]. Surgeons remain unconvinced over the benefits of revalidation and will be reluctant to foot the bill. Shortfalls in finance of revalidation programmes in urology threaten to undermine the whole process. This may have significant implications for patient safety. Figure 2 summarizes challenges in the application of revalidation strategies to urological practice in the UK.

FUTURE RECOMMENDATIONS

An active interest in validation of assessment strategies from the BAUS and other societies is crucial in convincing clinicians that revalidation is a worthwhile exercise, despite its growing costs. In this section we discuss potential additions to the structure of revalidation in the UK.

Revalidation, in its current format, encourages consolidation of clinical knowledge through active reflection on surgical practice; however, the current BAUS guidelines stop short of recommending structured assessment of clinical knowledge

as part of the revalidation process. This remains a controversial topic. Anecdotally there is little enthusiasm amongst urologists for a formal FRCS(Urol) examination to be taken every 5 years. Instead a form of self-assessment might be more appropriate. A urology equivalent of the 'Self-Education Self-Assessment in Thoracic Surgery' (SESATS) programme adopted by American cardiac surgeons may be a feasible option [24]. In this form of assessment, practitioners are expected to take a web-based self-evaluation module that uses clinical scenarios and radiological images to evaluate clinical knowledge and judgement. SESATS may be adapted for use as a urological tool in the future, but would require substantial investment of academic, human and financial resources.

Assessment of technical skills as part of revalidation in urology is challenging because of wide variations in urological practice. Currently, assessment is through indirect measures such as logbook review and mortality and morbidity data. These lack content validity. The BAUS has not recommended a tool for direct assessment of technical skills. The American board of Medical Royal Colleges and American board of specialists suggest that assessment of technical skill should be performed through direct observation (live or video) of practice in the workplace. This may be by an external appraiser, colleague or an individual governing body [8]. In addition, varying fidelity bench-top, virtual reality (VR) simulation or animal models may be used for specialist skill assessment [11]. VR simulators, such as the 'Uro Mentor', may be used in the future to assess technical skills in urology. A variety of simulations ranging from simple cystoscopy to retroperitoneal radical nephrectomy are already available [25–27]. Performance is assessed using global rating scales and procedure-related checklists. Such scales have shown construct validity when scored by independent assessors [28], but the degree of face and content validity of VR in urology is yet to be determined. Figure 3 summarizes potential changes to the structure of revalidation in the coming years.

CONCLUSIONS

Revalidation is a necessary tool for the maintenance of patient safety in urology,

FIG. 2. Challenges in the practical application of revalidation strategies to urology.

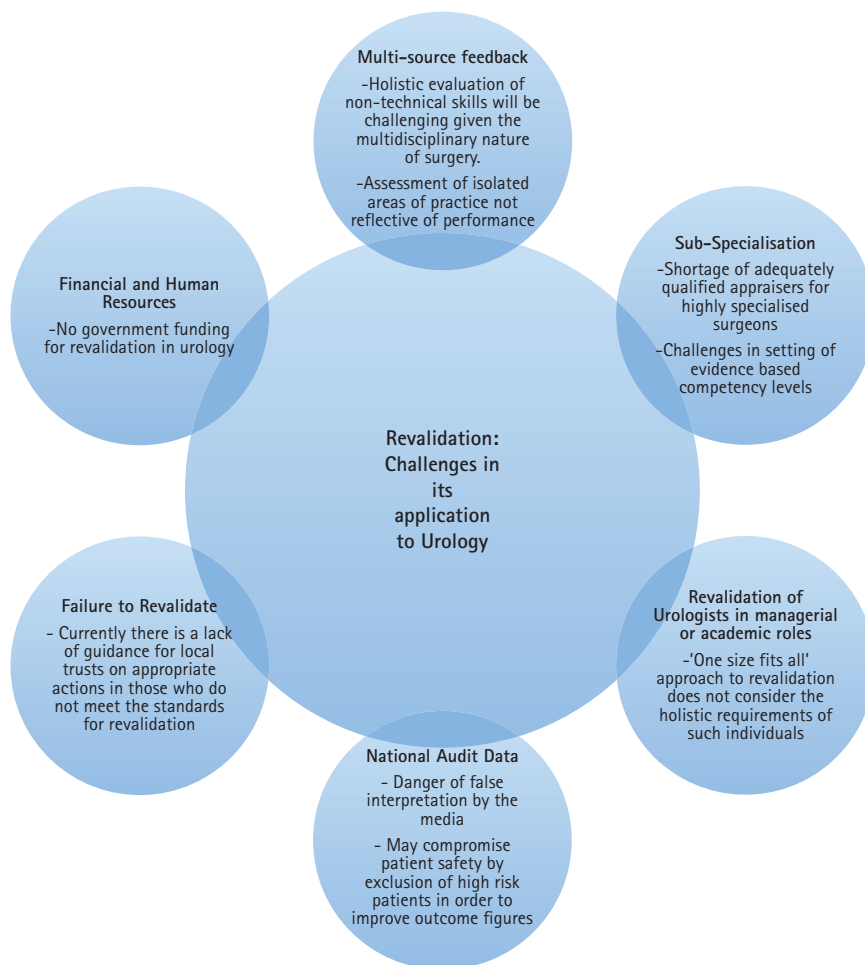
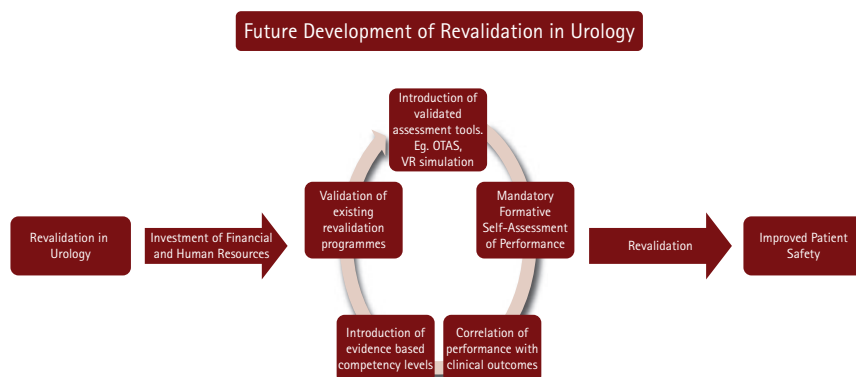


FIG. 3. Development of evidence-based revalidation programmes in urology.



but its application to clinical practice will be challenging for both urologists and policy makers alike. Substantial investment of both financial and human resources are required if a successful revalidation programme is to be implemented in the UK. Further research

is necessary in order that evidence-based, structured programmes of revalidation that consider the holistic needs of modern urologists can be developed and subsequently integrated into routine clinical practice.

CONFLICT OF INTEREST

None declared.

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Abbreviations: GMC, General Medical Council; MSF, multisource feedback; PROMs, patient-reported outcomes measures; SHEFFPAT, Sheffield Patient Assessment Tool; SF36, 36-item short-form health survey; CPD, continuing professional development; CME, continuing medical education; SUI, serious untoward incident; SOP, standard operating protocol; SESATS, Self-Education Self-Assessment in Thoracic Surgery; VR, virtual reality; CCT, Certificate of Completion of Training; DATIX, Datix® Software for patient safety; OTAX, Observational Teamwork Assessment for Surgery.