International Journal of Surgery 36 (2016) S20–S23

Contents lists available at ScienceDirect

International Journal of Surgery

journal homepage: www.journal-surgery.net

Editorial

Consultant outcomes publication and surgical training: Consensus recommendations by the association of surgeons in training

Keywords:
Consultant outcomes publication
Surgeon-specific outcomes
Surgical training

A B S T R A C T

Consultant Outcomes Publication (COP) has the longest history in cardiothoracic surgery, where it was introduced in 2005. Subsequently COP has been broadened to include all surgical specialties in NHS England in 2013–14. The Association of Surgeons in Training (ASiT) fully supports efforts to improve patient care and trust in the profession and is keen to overcome potential unintended adverse effects of COP. Identification of these adverse effects is the first step in this process: Firstly, there is a risk that COP may lead to reluctance by consultants to provide trainees with the necessary appropriate primary operator experience to become skilled consultant surgeons for the future. Secondly, COP may lead to inappropriately cautious case selection. This adjusted case mix affects both patients who are denied operations, and also limits the complexity of the case mix to which surgical trainees are exposed. Thirdly, COP undermines efforts to train surgical trainees in non-technical skills and human factors, simply obliterating the critical role of the multidisciplinary team and organisational processes in determining outcomes. This tunnel vision masks opportunities to improve patient care and outcomes at a unit level. It also misinforms the public as to the root causes of adverse events by failing to identify care process deficiencies. Finally, for safe surgical care, graduate retention and morale is important – COP may lead to high calibre trainees opting out of surgical careers, or opting to work abroad. The negative effects of COP on surgical training and trainees must be addressed as high quality surgical training and retention of high calibre graduates is essential for excellent patient care.

1. About ASiT

The Association of Surgeons in Training (ASiT) is a professional body and registered charity working to promote excellence in surgical training for the benefit of junior doctors and patients alike. With a membership of over 2700 surgical trainees from all 10 surgical specialities, the Association provides support at both regional and national levels throughout the United Kingdom and Republic of Ireland. Originally founded in 1976, ASiT is independent of the National Health Service (NHS), Surgical Royal Colleges, and specialty associations.

2. Introduction and background

Consultant Outcome Publication was first introduced in cardiothoracic surgery in 2005 and later broadened to include most surgical specialties in England and some non-surgical interventional

Abbreviations: ASiT, Association of Surgeons in Training; COP, Consultant outcome publication; FTR, Failure to rescue; GMC, General Medical Council; HQIP, Healthcare Quality Improvement Partnership; NHS, National Health Service.

http://dx.doi.org/10.1016/j.ijsu.2016.09.077

specialties including cardiology in 2013–14 [1]. The introduction of Consultant Outcome Publication followed two major enquiries into patient care: the Bristol Heart Inquiry for Cardiothoracics, and subsequently the Mid-Staffordshire Inquiry [2,3]. While NHS England reports the aim of COP is to "spread best practice and identify any issues that need investigating", ASiT is concerned about the potential risks of COP [4].

Patient safety and excellence in surgical training are key priorities of the Association of Surgeons in Training. Continued efforts to enhance the patient experience and deliver high quality care are essential. However, the method used to try and improve patient outcomes must be evidence based and must not have negative effects that outweigh the gains. ASiT has serious concerns about the use of COP as a tool to improve patient outcomes, as it has potentially deleterious effects on surgical training, and the data in its current form is open to misinterpretation.

3. How might COP affect surgical training and patient care?

Surgical training is an essential component of providing quality healthcare to both current and future patients. It has been well described that involvement of surgical trainees in operations with appropriate supervision is safe [5–11]. For example, Montroni et al. have recently demonstrated equivalent oncological accuracy and 30-day mortality for open right hemicolectomy performed by an attending (consultant) surgeon compared to a trainee [12].

Already, surgeons in training have reduced case exposure to operations than their predecessors, due to a combination of factors including the advancement of technology leading to a shift in certain procedures from a junior to a senior level, and the introduction of working hour restrictions without sufficient measures to safeguard training time [13–15]. This is reflected in studies of consultants reporting they feel inadequately trained to manage complex operative cases [16].

Reduced operative exposure in surgical training has been linked to worse patient outcomes [17]. Therefore, a potential impact of COP on trainee operative experience is highly concerning. This has been demonstrated by Khan et al. who found a significant decrease in trainee operating experience following the introduction of surgeon-specific outcome reporting in cardiothoracic surgery [18].

Secondly, there is a risk of surgeons "cherrypicking" cases, avoiding higher risk but necessary surgeries [19,20]. Penna et al. report that up to 25% of colorectal surgeons surveyed report avoiding operating on higher risk patients because of COP [21]. This is not in patients or trainee's interests as it reduces the complexity of case mix required for senior trainees and denies patients appropriate surgery.

Thirdly, publication of surgeon specific outcomes is in line with the old "Captain of the Ship" model. Under this model, the surgeon has vicarious responsibility for everything that impacts the care of a patient, e.g. a fire in the operating theatre. However, human factors training for surgical trainees now emphasises the importance of the multidisciplinary team and has moved away from this model. The multidisciplinary approach has proven importance in improving outcomes, e.g. surgical site infection [22]. COP risks eroding this teamwork with subsequent detriment to both patient safety and team functionality.

4. Evidence based medicine-does COP measure up?

There has been little evidence to show that publication of surgeon-specific data improves outcomes [19, 23] and a significant concern when publishing COP, is the use of inaccurate or misrepresented data. Manktelow et al. have cautioned that even with risk-adjustment, if patient populations differ in case mix standardised mortality rates may vary even for two clinicians who are performing equally [26]. Accurate data collection, analysis and interpretation are therefore essential. A recent study showed that over 90% of colorectal surgeons surveyed had concerns regarding the current COP reporting method [21]. Hospital resources and infrastructure, rather than the performance of individual clinicians, often contribute to negative patient outcomes. By focusing on the surgeon alone, the complex resource issues that lead to poor outcomes may be missed. Timely identification of a patient with a complication is crucial in avoiding post-operative mortality. Failure to rescue (FTR) is a key outcome in surgery. FTR is influenced by numerous factors outside the individual surgeon's direct control, including medical, nursing and allied healthcare professional staffing levels and availability of critical care support [23, 24]. Ozdemir et al. have demonstrated that modifiable hospital resources affect outcome after ruptured abdominal aortic aneurysm [25]. In the era of multidisciplinary care, comprehensive unit outcome analysis may improve health outcomes, be more helpful to patients and lend greater impetus to developing safe departments than COP. Unit-outcome analysis demonstrates a more true-to-life metric of the patient journey within a hospital, allowing for real sources of potential error to be identified and corrected. In addition, proper adjustment for complexity is essential to avoid promoting "cherry-picking" as described above [20]. Publication of unit-level data may also be more acceptable to surgeons [21].

5. Impact on surgeon well-being-the second victim

Publication of surgeon-specific outcomes in their current form have thus far promoted annual "naming and shaming" of surgeons. This can have a devastating effect on a surgeon's career, confidence and mental health. Without addressing concerns regarding case-mix adjustment and accuracy of data presented, there is the possibility of excellent surgeons being inappropriately vilified by inaccurate and misrepresented data. Negative publicity carries significant risks. For example, the problem of doctor-suicides while under Fitness to Practice Investigation with the GMC is well documented [27, 28]. It is known that surgeons experience significant ill-effects to their mental and physical health following an adverse patient outcome-indeed, this has led to the controversial term the "second victim" [29]. Surgeons often suffer from severe psychological stress when complications arise, which may in fact negatively impact patient outcomes as this may impede their performance [29]. COP may add even further pressure to surgeons in this context, to the detriment of patients and surgical training [19].

6. Graduate retention and attractiveness of a surgical career

Finally, we must consider the attractiveness of surgery as a career with the potential development of a culture of public and personal "naming and shaming". This may affect the recruitment of top calibre candidates into surgery, and the retention of surgical trainees and consultants. Already, there has been a significant decline in UK graduates pursuing a career in cardiothoracic surgery in the NHS over the decade since the introduction of COP [30]. Newly qualified surgeons may be encouraged to seek work outside the UK or NHS, in jurisdictions where they feel less at risk of unfair negative publicity.

7. Recommendations

1. There has been little evidence to show that publication of surgeon-specific data improves outcomes [19,22]. Unit-level