Achieving optimal cancer surgery for all patients in England

February 2020 roundtable discussion organised by Cancer Research UK

Aim

This roundtable, held in February 2020, aimed to garner a range of perspectives on the current surgical environment in England. We looked at key themes and developments in the space, that will inform Cancer Research UK's (CRUK) position and policy development.

Attendees were drawn from a range of expert organisations including Cancer Research UK, the Royal College of Surgeons (RCS), the National Cancer Research Institute (NCRI), the NHS England Getting It Right First Time (GIRFT) programme, as well as clinicians working at leading London hospitals.

Context

The NHS Long Term Plan[i] (LTP) sets bold ambitions to improve cancer survival, including a welcome aim to diagnose 75% of patients at an early stage. If achieved, this shift will have significant implications for the design of cancer services in future and could mean a greater use of curative cancer surgery. With focus on early diagnosis and a likely increase in patients being diagnosed, ensuring patients have optimal access to high-quality surgery services should be recognised as an emerging priority for policymakers and a natural corollary of the Government's LTP ambitions.

With a likely increase in patients requiring surgery as a result of early diagnosis, there is increasing pressure to optimise surgical services and real opportunity to have impact for patients and staff. Cancer Research UK's last report on surgery services in England was published in 2014.[ii] Since then there have been several developments in the space. This roundtable aimed to feed into a project evaluated the current state of services and possible development of CRUK work in this area.

Between October 2019 and February 2020, Cancer Research UK undertook a focused research programme to refresh our understanding and positions on the surgical policy landscape. This involved semi-structured interviews with stakeholders that included researchers, clinicians and policymakers, as well as site visits and desk-based research.

From this work several key themes have emerged:

- Restructure of surgical services: There has been a move towards centres of excellence, which has both negative and positive impacts. In some areas there have been reports of centralisation increasing variation in access to treatments, while in others it has meant patients are more likely to see a specialist for their treatment. There are several ongoing research studies that are bridging the knowledge gap in this area.[iii] [iv]

- Improvements in surgical technology: Technology has advanced in the last six years, and there is a real drive towards innovation in surgery. The Royal College of Surgeons is prominent in this space, publishing the Future of Surgery Report in 2019[v] and CRUK-funded researchers have led on some key projects including the iKnife.[vi]

- Changes to the capacity and training of surgical staff: Across the healthcare sector, the workforce crisis has been a mounting concern since 2014[vii] and this includes the surgical field. The physical space regarding surgical capacity has been discussed with stakeholders as an impact on surgical capacity. Health Education England mentioned collaboration with the RCS to develop a training pilot in some specialties in 2019 in the report 'Facing the Facts, Shaping the Future'[viii].

- Quality and performance: Since CRUK hosted a workshop on surgical quality metrics there has been progress in determining quality in surgery and work has been taken forward by NHS England and Public Health England.

Discussion: what is the current state of surgical services in the UK?

The following sections report feedback and discussion from roundtable attendees, building on the themes identified in Cancer Research UK's initial research as summarised above.

Time- based targets

- At present there are huge issues around the time targets in surgery, and clear evidence that improve patient outcomes is lacking.
- The 62 day wait target was discussed in terms of its challenges to deliver if further diagnostic testing is required before a treatment decision is made. The 28 day faster diagnosis standard will also have great implications for cancer surgery as cancers diagnosed earlier are likely to require surgery as a primary treatment.

Data

- Attendees reported that it is becoming extremely complex to get data from NCRAS, especially for less common cancers. Even basic surgical metrics that were taken forward by NHS England after the last CRUK surgery roundtable are not recorded centrally or to a consistent standard. Data extraction from local sources is a big challenge.
- There was agreement about the possibility of using other sources of data beyond NCRAS and national audits. COSD is an option but isn't always filled in by the right individuals and doesn't have the right data (e.g. performance status) for many cancer types.
- In relation to centralisation, there is limited hard data to support a volume-outcome relationship. Attendees were concerned that the lack of knowledge on centralisation could result in poor workforce planning and the closure of small, yet effective centres. A national audit for specific cancer types may support the development of an evidence base in this area.
- With all the data concerns, it was clear that resourcing was the main issue, in terms of who extracts the data from NCRAS, processes it and how it can be effectively used.
- Data may be able to help identify optimal surgical practices; if we mandated data collection on certain procedures, we could see the outcomes of patients across the board. At present, data is variable across different sites and procedures, and relies heavily on individual surgeon's practice.
- There is a movement towards surgery specific reviews by the CQC, who are requesting specific surgical quality outcome measures to assess services.
- NHSE are encouraging commissioners to use data in conversations with local health providers to iron out variations.
- There are huge questions around what the right model for data capture in the future is.

Commissioning

- There is lots of interest in consistent surgery standards, but these have not progressed locally because of resource issues. This is underpinned by limited capacity for NHS England's Specialised Commissioning Team to drive specific issues, again attributed to a lack of resource.

- Specialist commissioning has had a major knock on effect for local health economies with the movement from NHS England to seven outer regions. As a result, there has been pushback on service specification, which is creating a barrier for NHSE.
- There is a real need to consider whether commissioning would be more effective if it considered local audit data, that demonstrates the real-time capabilities and standards of the site.
- In terms of commissioning robotic infrastructure, there is concern that equipment is being used for procedures without an appropriate evidence base demonstrating safety and need. This could be causing significant harm to patients.
- Use of equipment for non-commissioned procedures must be systematically recorded to enhance evidence base on use of technology and ensure evidence based practice.

Workforce

- There are discussions ongoing about the benefit of specialist vs generalist skills in surgical training. Considering the drive for early diagnosis, and a possible shift away from emergency surgery to more elective procedures, the specialist skills of cancer surgeons may become more prominent.
- Attendees agreed that the expectations of the new generation of surgical trainees are different – there is demand for flexible working and shorter hours. This needs to be promoted to encourage an influx of surgeons into the profession and to retain existing surgeons.
- For the surgical workforce, we must also consider other specialties such as nursing, whose staffing affects both pre- and post-operative care, but also theatre care – often contributing to restricted theatre capacity because of working hours and ways of working.
- With an increasing number of patients, reducing resource in the NHS and often poor technological support, the surgical workforce capacity is often restricted because of staff taking on administrative responsibilities rather than being in operating theatres.
- Attendees discussed the possibility for digital technology to help free up time for the workforce, for example digitising consent forms.
- The surgical workforce also throws up the complex issue of how to define a 'good surgeon'. Often a surgeon's performance reflects the performance of a whole team, but that is not considered.
- There were anecdotal reports of some areas not offering lung health checks because of ward and capacity for surgery.

Innovation and technology

- Attendees reported a huge buzz around technology at present, but there is limited evidence on whether robotics in particular have better outcomes for patients.
- There is an absolute need for a national database to record robotic surgical activity, requiring data to be recorded.
- With innovative technology it was generally felt that centres with high volumes do have better outcomes, but again data remains limited on this.
- Surgical research needs to become more commonplace to grow the evidence base on innovative methods and to support this there must be greater resource in theatres. The IDEAL framework[ix] does support surgical research and this must be driven across the space.

- NHS England are very keen to understand outcome metrics, but it remains unclear across the space what performance indicators should be and there is reluctance from specialised commissioners to use Commissioning through Evaluation because of concerns regarding data quality and the extent of evaluation.
- High status innovations are seen to be driving patient self-referral to centres where these are available.
- It was considered whether a 'license to innovate' should be implemented, enabling only centres with high standards and good data practice, to use and try the new technologies to determine patient outcomes. This concept is underpinned by concerns that Commissioning through Evaluation is not the safest option for patients.

Patient factors

- It is important to remember the patient demographics and general trends in healthcare. We are seeing an ageing population, with more comorbidities.
- With a move towards early diagnosis, more patients will be likely to need surgery.
- Over the last 10 years we have seen a huge rise in the number of bariatric patients, which affects not only the type of surgery but also the workforce and infrastructure capacity.

Discussion: how can optimal surgical care be achieved?

- Attendees raised the need for considerable work to improve the training of the surgical workforce, with consideration on the ongoing debate between generalist and specialist training.
- There was agreement that siloed treatments are not sustainable – particularly with the move towards interventional radiology, and trainees need to be ready for this.
- There was a strong appetite to think about changing working patterns and move towards portfolio-based balance of clinical skills, research and training.
- The responsibility of an MDT needs to come into play, particularly because of the nature of decision making on high-risk patients.
- Patients are still experiencing poor communications about pre- and post-operative surgical care, which is a vital part of achieving optimal surgery.
- We need to consider the area of survivorship to establish what is optimal surgery, and what considered optimal outcomes for patients.
- The increase in minimally invasive surgery must be considered as we move forward as it could result in reduction in the number of surgeries. Yet further research is needed to understand where this could be both clinically and cost effective.

Cancer Research UK survey of people with experience of cancer surgery: headline results

Ahead of the roundtable, Cancer Research UK carried out a survey of individuals with experience of cancer surgery. This received 105 responses. The headline results are reported below.

- 97% of patients listed surgery as their first choice for cancer treatment, with 69% of patients having open surgery.
- 59% patients stated that healthcare professionals did not make them aware of any innovation during their treatment, such as the use of new techniques or equipment.

- 73% of respondents stated that their surgical team did not talk to them about research or the opportunity to take part in surgical research.
- Strong sense of patients not feeling that they have a choice in their treatment; rather it was presented by their surgical team and they felt their team knew best.
- Real sense of geographical variation, with comments relating to trial availability and travel times for certain types of treatment / surgeons.
- Patients frequently referred to poor communication from staff to them and their families, though with an appreciation that staff were frequently under pressure.

Conclusions

This roundtable raised and flagged several key areas, which have been explored throughout this note. Key areas include:

- Data access and quality
- Diagnostic and theatre capacity
- Protection of future workforce based on service needs
- Specialisation and centralisation
- Patient experience and survivorship
- Innovation and the future of technology

For further information on Cancer Research UK's work into surgical services, please contact Duncan Sim, Policy Adviser: duncan.sim@cancer.og.uk

References

[i] NHS England (2019), NHS Long Term Plan. Available at: https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf

[ii] Cancer Research UK (2017) Cancer diagnosis and treatment options available at: https://www.cancerresearchuk.org/health-professional/cancer-statistics/diagnosis-and-treatment#heading-Three

[iii] SE Versteeg, VKY Ho, S Siesling and M Varkevisser (2018) "Centralisation of cancer surgery and the impact on patients' travel burden" *Health policy* vol. 122, no. 9, pp. 1028-1034.

[iv] NJ Fulop et al. "Reorganising specialist cancer surgery for the twenty-first century: a mixed methods evaluation (RESPECT-21)". *Implementation Science* vol. 11, pp. 155-68, 2016.

[v] Royal College of Surgery (2019) Future of Surgery available at: https://futureofsurgery.rcseng.ac.uk/?_ga=2.177542181.1270342697.1579283319-1151294200.1569237735

[vi] Cancer Research UK Science Blog (2019) The Intelligent Knife: A Potential 'Game-Changer' for Cancer Surgery. Accessed at: https://scienceblog.cancerresearchuk.org/immersive-stories/the-intelligent-knife-a-potential-game-changer-for-cancer-surgery/

[vii] Cancer Research UK (2018) Securing a Cancer Workforce for the Best Outcomes. Available at: https://www.cancerresearchuk.org/sites/default/files/securing_a_cancer_workforce_for_the_best_outcomes_november_2018_short_report.pdf

[viii] Health Education England (2017) Facing the Facts, Shaping the Future. Available at: https://www.hee.nhs.uk/sites/default/files/documents/Facing%20the%20Facts%2C%20Shaping%20the%20Future%20%E2%80%93%20a%20draft%20health%20and%20care%20workforce%20strategy%20for%20England%20to%202027.pdf

[ix] McCulloch et al. (2009) The IDEAL Collaboration. Available at: http://www.ideal-collaboration.net/framework/