



ELECTIVE SURGERY DURING COVID-19

INTRODUCTION

When COVID-19 hit the UK earlier this year, the NHS transformed itself beyond recognition to respond to the looming crisis. Beginning in February, tens of thousands of planned operations were cancelled, as staff and resources were redirected to fighting the virus. Fewer than 5,000 people are now in hospital because of COVID, down from the April peak of more than 16,000. Accordingly, over recent weeks, the NHS has turned its attention back to the task of restoring the full breadth of its services. But the possibility of a second wave lingers, so long as the virus persists in the community.

Knowing that outcomes from surgery are very poor if a patient has COVID or contracts it during a hospital stay, the NHS is re-designing services to make them safe. The creation of 'COVID-light' pathways is key to making surgery safe for patients, and involves regular testing of staff and patients, speedy tests results to inform clinical decision-making, sufficient PPE to schedule in operations and clean / separate scanners and facilities. If we cannot establish COVID-light pathways, a further risk is that if there is a second wave, it will bring surgery to a standstill again. This would be a huge disappointment to all those patients who have renewed hope of getting their operation now an operation that could relieve pain, enable them to return to work or enjoy a better quality of life.

One month ago, as levels of the virus were subsiding, we produced guidance to support the recovery of surgical services¹. One month on, we wanted to establish whether or not surgery has been able safely to re-start, what challenges remain and how surgical teams have adapted to the new environment.

1,741 surgeons and surgical trainees participated in this survey, which ran from 8 June 2020 to 15 June 2020. Their responses highlight the range of challenges faced by surgical teams as they attempt to return to operating theatres. Slow access to test results, continuing difficulty accessing COVID-light facilities and a lack of interdependent services such as diagnostics are just some of the challenges cited. Accordingly, we are making today a series of urgent recommendations for action, to restore surgery safely across the country, in this time of COVID.

Policy recommendations:

- The speed at which test results can be returned is a crucial factor in enabling more elective surgery to take place safely. The aim should be for surgeons to have access to same-day test results, so they can test patients both before and upon admission, and again upon discharge.
- Surgical staff working in COVID-light sites should be tested regularly - up to twice a week where practical.
- Surgical teams in every part of the UK need access to COVID-light sites for their patients, so that people waiting for time-sensitive operations can safely be treated again.
- 4. A quarter of surgical teams depend on the independent sector to provide COVID-light facilities, so contracts with the independent sector need to be extended and include opportunities for surgical trainees to progress their training.
- 5. Good use must continue to be made of recently retired surgeons who have returned to support the NHS through the crisis, with extension of the temporary registers which underpin this.

^{1.} Royal College of Surgeons of England (2020) Recovery of surgical services during and after COVID-19: https://www.rcseng.ac.uk/coronavirus/recovery-of-surgical-services/

SUMMARY OF FINDINGS

1. Re-starting elective surgery

- Resuming elective surgery that was shut down because of COVID, has been a challenge for a considerable number of surgeons and surgical trainees. Overall 33% said they had been unable to undertake any elective or planned procedures in the last four weeks. Of those who had resumed surgery, 30% reported that this was only possible for cancer patients, meaning patients with other painful, disabling conditions continue to wait with deteriorating health.
- Lack of access to interdependent services
 (such as diagnostics, anaesthesia and
 sterile processing) was the most commonly
 reported barrier to re-starting elective surgery,
 with 46% of those who had been unable to
 undertake planned procedures saying this
 was a factor. Other issues included lack
 of staff (35%), lack of access to testing or
 swift results (33%) and lack of sufficient
 PPE (21%). Respondents also proactively
 highlighted a lack of theatre space and a lack
 of COVID-light pathways as problems.

2. COVID-light sites

- 62% of survey respondents said that they
 were able to access COVID-light sites for
 their patients, where measures were being
 taken to actively minimise the risk of infection
 to make it as safe as possible for elective
 procedures to re-start. However, 26% had
 not been able to access such facilities at all.
- 26% had accessed COVID-light facilities through the independent sector. Regional analysis of our data suggests that where the NHS's COVID-light capacity has been limited, the independent sector has been helping to make up the shortfall. The current agreement between the NHS and independent sector, which is due to end this month, will need to be extended to maintain COVID-light pathways.

3. Testing and PPE

- 91% of respondents who had been able to resume planned procedures said that patients were receiving pre-operative tests for COVID-19, in line with recommendations from NHS England. RCS England believes the aim should be for surgeons to have access to same-day test results, so that they can test patients both before and on admission, and again upon discharge. Currently just 10% of surgeons say that they can get test results for surgical patients within 8 hours, with a further 31% saying test results were available in 24 hours.
- In terms of staff testing, 60% of respondents said they thought it was necessary to test staff at least once a week in order to maintain COVID-light sites. We have called for staff tests in COVID-light sites to be conducted at least once a week, and up to twice a week where pragmatic.
- One in six (17%) survey respondents said that they did not have a sufficient supply of PPE to do their job safely. While this is an improvement from our previous survey in late April when 33% of respondents said this was the case, it indicates that access to PPE remains a concern for a significant minority of surgeons. As elective surgery re-starts the demand for PPE will increase again, so it is crucial that systems are in place to procure sufficient PPE. In particular, the recommendation that patients self-isolate for 14 days prior to surgery, necessitates forward-planning and confidence among surgeons that a stockpile of PPE will be ready for an operation they are planning two weeks' time.

4. How have surgeons adapted?

- **91%** of survey respondents said that they had used video or telephone conferencing to undertake patient consultations and outpatient clinics during the pandemic, helping to ensure that patients have only had to attend hospital when absolutely necessary. 83% of surgeons have also conducted team meetings remotely. Increasing use of such systems could help improve NHS productivity if maintained in future, and RCS England will soon be publishing a guide to support clinicians undertaking virtual consultations.
- 38% of respondents said that surgeons had been redeployed to alternative roles during the pandemic, and 69% said that there had been redeployment of surgical trainees. As the NHS moves beyond the immediate response to the outbreak and elective surgery resumes, surgeons and trainees will increasingly need to support surgery and finish their training. To support this process, RCS England believes that clinicians who have returned to the health service during the outbreak should be encouraged to stay on if they are willing and able to. This will require clarity from Government about the status of the temporary registers.



of surgeons and surgical trainees have been unable to undertake elective or planned surgery

in the last four weeks









of surgeons have accessed **COVID-light sites** through the independent sector

Surgeons and surgical trainees said they could get the results of COVID-19 tests for patients within...



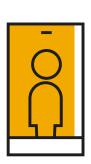
8 hours



24 hours



48 hours



of surgeons and surgical trainees had used telephone or video conferencing to undertake patient consultations and outpatient clinics

1 RE-STARTING ELECTIVE SURGERY

NHS England's most recent waiting times figures for consultant-led treatment demonstrate the scale of the challenge the NHS faces as it tries to return to providing a full breadth of treatment and care, having seen off the first wave of COVID-19. The stats show that in April, 1.13 million patients were waiting for longer than the statutory 18 week target - the highest number recorded since January 2008².

Within these figures are hundreds of thousands of operations – brain, spine, heart operations and joint replacements. While many of these operations may be deemed "non-urgent", since there is not an immediate risk to life, extended delays do lead to worsening symptoms. deterioration in conditions which then necessitate more complex surgery later, pain or disability and – in some cases – a significant risk of death. Re-starting planned or elective surgery is therefore essential to the health and functioning of society. Having postponed or cancelled surgery for several months because of the pandemic, the NHS is looking at how to re-start a greater range of these services and address the sizeable backlog of procedures that has built up.

Late in May, NHS England published its 'Operating framework for urgent and planned services in hospital settings during COVID-19', setting out how planned and elective surgery could re-start with COVID still endemic³. At the same time RCS England published guidance on the recovery of surgical services⁴, advising our colleagues on how they might re-start surgery, provided regular testing, PPE and separate pathways were in place to keep patients and staff as safe as possible.

Our survey has found that resuming elective services has been a challenge for considerable numbers of surgeons and trainees across the UK. Overall 33% of respondents said that it had not been possible to undertake any planned or elective surgery in their Trust or Health Board in the previous four weeks, with particularly high numbers of trauma and orthopaedic surgeons (56%) and dental surgeons (70%) reporting that this was the case.



33%

of surgeons and surgical trainees have been **unable to undertake elective or planned surgery** in the last four weeks

On a regional basis, the number of surgeons who said they had been unable to resume elective services was especially high in London and the East Midlands (42% and 40% respectively, compared to an average of 31% across all English regions). Analysis of responses from Northern Ireland also suggests that re-starting elective procedures has been particularly difficult, compounding problems that existed before the pandemic where surgical waiting times were amongst the worst in the UK.

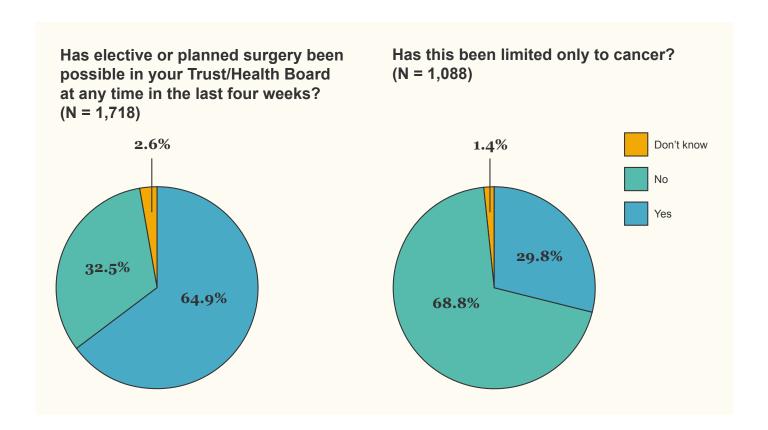
^{2.} Figures taken from NHS England's Consultant-led Referral to Treatment Waiting Times Data for April 2020: https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/rtt-data-2020-21/

^{3.} NHS England (2020) Operating framework for urgent and planned services in hospital settings during COVID-19: https://www.england.nhs.uk/coronavirus/publication/operating-framework-for-urgent-and-planned-services-within-hospitals/

^{4.} Royal College of Surgeons of England (2020) Recovery of surgical services during and after COVID-19: https://www.rcseng.ac.uk/coronavirus/recovery-of-surgical-services/

"There is a lack of theatre space as it has been taken over by ITU for COVID-19 patients, and as concern remains over a second wave. There are no plans to reopen elective theatres in the next few months"

Consultant, Trauma and Orthopaedics, North West England



In some cases, while elective procedures have re-started this has been limited only to cancer surgery. While this is understandable to an extent, it means it will not have been possible to undertake surgical procedures for other painful, disabling conditions, and in many cases patients' health will continue to deteriorate while they wait.

In total **30%** of those who had been able to re-start planned procedures said that only cancer operations were taking place. The figure was particularly high amongst plastic surgeons **(62%)** and general surgeons **(43%)**, and on a regional basis in the West Midlands **(44%)**.

"We are prioritising cancer, trauma and other urgent cases with limited resource. Anaesthetists are on an on-call rota so not all are available for elective lists. We are recommencing at only half capacity"

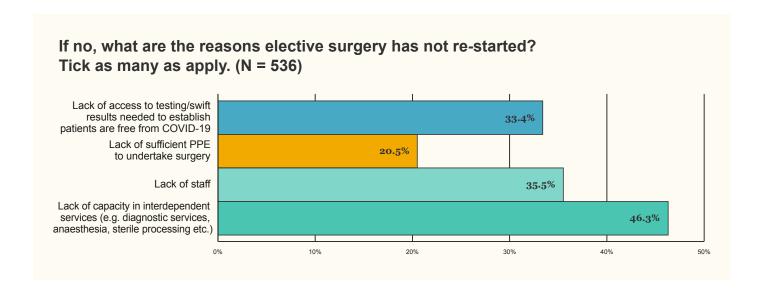
Consultant, Plastic Surgery, Thames Valley and Wessex

Barriers to restarting surgery

Where respondents had not been able to re-start elective procedures, our survey asked them about what barriers they were encountering. Nearly half (46%) said that a lack of capacity in interdependent services – such as diagnostics, anaesthesia and sterile processing – was a factor preventing them from resuming planned procedures. 35% cited a lack of staff and 33% said that a lack of access to testing for patients, or swift results, was an issue. 21% indicated that a lack of sufficient PPE was a barrier. In free text

comments, a number of surgeons cited a lack of theatre space or capacity, while others reported that a lack of COVID-light pathways was a problem.

From a devolved nations' perspective, staffing levels were highlighted as a particular issue in Northern Ireland where this has been a long running challenge. In Wales, difficulties in accessing COVID-light sites and interdependent services emerged as key themes from the responses that we received.



"We have been unable to reopen existing facilities (currently not in use) due to a lack of staff returning after redeployment"

Consultant, Oral and Maxillofacial Surgery, Yorkshire and The Humber

Addressing these barriers will be crucial to resuming planned procedures in those areas where this has not been possible yet. If surgeons are unable to access interdependent and perioperative services, they may need to consider engaging with external partners, including in the independent sector, for temporary support. It is therefore essential to ensure that the NHS continues to have access to independent sector facilities. Regular testing for both patients and staff, and sufficient PPE for surgical teams to meet increasing demand as elective activity is stepped up will also be crucial. We consider each of these points in further detail later in this document.

Creating distinct pathways to separate COVID-positive patients from elective patients is a key priority, as made clear in our members' responses. **71%** of surgeons who had been able to re-start planned procedures confirmed these happen in separate facilities that were not shared with COVID-positive patients⁵. Data from a recent international cohort study published in The Lancet suggests that the 30-day mortality rate for elective patients with COVID-19 is **18.9%**, underscoring how crucial it is that elective patients avoid infection in hospital⁶. Ensuring that surgeons can access COVID-light facilities for their patients is therefore essential, as discussed in the next section.

^{5.} N = 1,087

^{6.} COVIDSurg Collaborative, 'Mortality and pulmonary complications in patients undergoing surgery with perioperative SARS-CoV-2 infection: an international cohort study', The Lancet (29 May 2020): https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31182-X/fulltext

2 COVID-LIGHT SITES

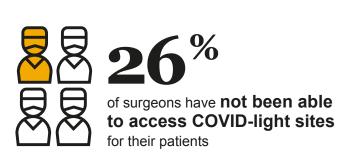
A vital aspect of re-starting elective services is establishing COVID-light sites in which steps are taken to minimise the risk of infection, for example through repeat testing of staff, enhanced cleaning and creating specific pathways for COVID-negative patients. While it will never be possible to guarantee that a setting is entirely COVID-free, these measures provide as much confidence as possible that planned procedures can be undertaken safely. In order for patients across the country to be able to access surgery, every region should provide COVID-light facilities, both in NHS hospitals and by utilising the independent sector if necessary.

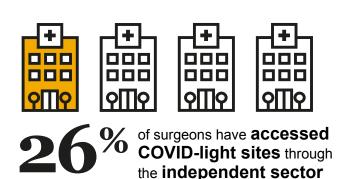
"The greatest challenge is setting up green pathways that work and that patients want to engage with"

Consultant, Trauma and Orthopaedics, Thames Valley and Wessex

Overall, 62% of those who responded to our survey said that they have been able to access COVID-light facilities for their patients. A third (34%) reported that they had been able to do so within their own Trust or Health Board, and a quarter (26%) had done so through the independent sector. A small number of surgeons (2%) said they accessed COVID-light sites by referring their patients to another Trust or Health Board

However, **26%** of those we surveyed said they were unable to access COVID-light facilities. This appears to have been especially challenging in the East Midlands where **42%** of respondents reported this was the case (against an average of **25%** across all English regions), and on a specialty basis for paediatric surgeons **(52%)**⁷, dental surgeons **(40%)**, vascular surgeons **(35%)** and trauma and orthopaedic surgeons **(34%)**.

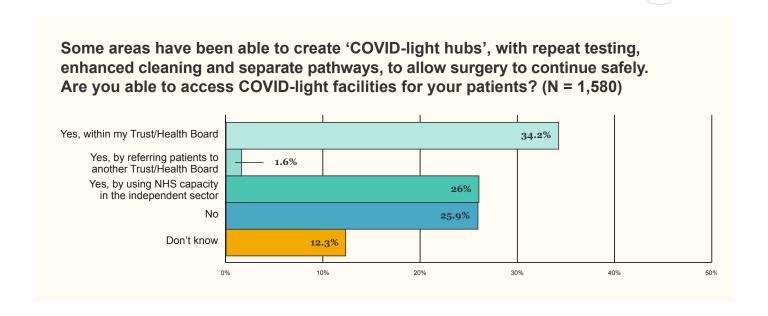




7. It should be noted that the number of paediatric surgeons who responded to this question was small (29).

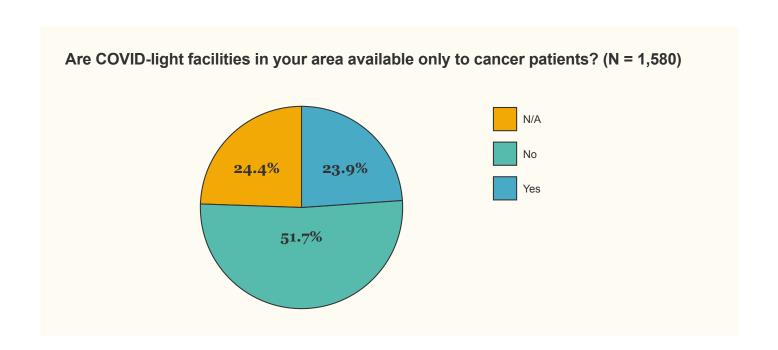
"We lack a protective COVID-light site, or even area, within the Health Board"

Consultant, General Surgery, Wales



A quarter **(24%)** of survey respondents said that COVID-light sites were only available for cancer patients, which would limit the capacity to undertake planned procedures for other conditions. On a regional basis this was particularly high in the East Midlands where

34% of surgeons reported that COVID-light facilities were just focusing on cancer care (against an English average of 23%), and from a specialty perspective for plastic surgeons (38%) and oral and maxillofacial surgeons (31%).



The independent sector

The independent sector has played a major part in supporting the response to the COVID-19 pandemic. In March an agreement was reached enabling the NHS to make use of independent sector beds, staff and other resources, in order to enhance the health service's capacity to deal not only with COVID-19 cases but also other urgent operations and cancer treatments8. If we are to effectively re-start elective services then the independent sector will continue to have a key role in the absence of the NHS finishing a large programme of hospital-building. We therefore support the use of private hospitals as part of the answer to providing COVID-light facilities for NHS patients in the immediate future. It is therefore essential that the agreement between the NHS and independent sector, which is due to end later this month, is extended.

Our survey data reinforce the importance of this, with a quarter of surgeons saying they had utilised COVID-light facilities in the independent sector as noted above. Use of private facilities was particularly high in South West England (36%), South East England (34%), London (32%), the East of England (31%) and Thames Valley and Wessex (31%). In a number of these regions the proportion of respondents who said they could access COVID-light facilities within their Trust was below the national average, which may indicate that where the NHS's COVID-light capacity is limited the independent sector is making up the shortfall ⁹.

"There is a lack of access to and creation of cold sites within the Trust. We have had to seek independent sector sites further afield to enable re-start of both cancer and benign colorectal surgery"

Speciality Trainee, General Surgery, London

^{8.} NHS England, NHS strikes major deal to expand hospital capacity to battle coronavirus (Press release, 21 March 2020): https://www.england.nhs.uk/2020/03/nhs-strikes-major-deal-to-expand-hospital-capacity-to-battle-coronavirus/

^{9.} Across England as a whole 35% of surgeons and trainees said that they could access COVID-light facilities within their Trust. On a regional the East Midlands (19%), South West England (30%), South East England (31%), the East of England (32%) and London (32%) were all below average. As noted in the main text, in four of these regions – South West England, South East England, London and the East of England – the number of respondents reporting that they had used COVID-light facilities in the independent sector was above the national average for England (26%).

If increasing numbers of elective procedures do take place in independent sector facilities, it will also be vital to make sure that there are appropriate opportunities for surgical trainees within these settings. Providing theatre time for trainees is essential to their development, and in turn to ensuring that we have an experienced and well skilled surgical workforce in the future. To facilitate this, accommodating trainees should be a central part of all independent sector contracts, including continued provision for indemnity.

Indeed, our results indicate that there has been significant redeployment of surgical trainees during the pandemic (69% of respondents said they had seen trainees redeployed, as discussed in more detail in the final section of this report). In the short-term, with international travel restricted and all countries' health systems under pressure, it may be difficult to attract significant numbers of new surgeons from overseas. This underscores the importance of ensuring surgical trainees who are already in the UK can progress and obtain their qualifications.

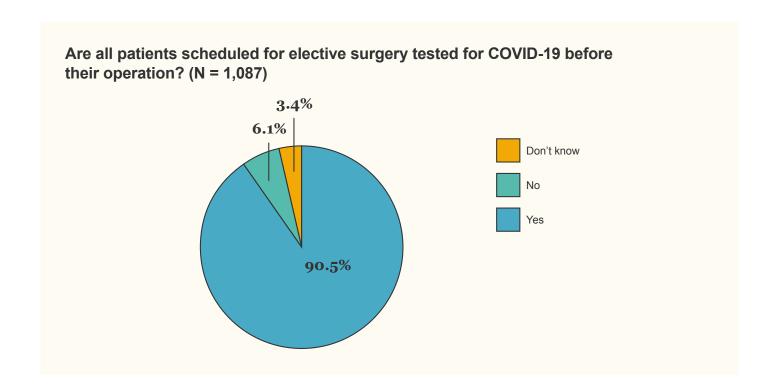
3 TESTING AND PPE

A robust testing regime for both staff and patients is essential to maintaining COVID-light sites and enabling planned procedures to re-start safely. NHS England's 'Operating framework for urgent and planned services in hospital settings during COVID-19' states that elective patients should self-isolate for 14 days prior to admission, and that:

As and when feasible, this [period of self-isolation] should be supplemented with a pre-admission test (conducted a maximum of 72 hours in advance), allowing patients who test negative to be admitted with IPC and PPE requirements that are appropriate for someone who's confirmed COVID status is negative¹⁰.

Our survey found that, where planned surgery has resumed, the vast majority (91%) of surgeons say that all patients scheduled for an elective procedure did receive a COVID-19 test before their operation. Furthermore, 70%

of all respondents indicated that they would not feel confident to proceed with surgery unless pre-operative tests were available for elective patients within 72 hours of admission, in line with NHS England's framework¹¹.



The speed at which tests results can be returned is a crucial factor in enabling more elective surgery to take place. The aim should

be for surgeons to have access to same-day test results, so that they can test patients both before and on admission, and again upon discharge.

10. NHS England (2020) Operating framework for urgent and planned services in hospital settings during COVID-19, p 5: https://www.england.nhs.uk/coronavirus/publication/operating-framework-for-urgent-and-planned-services-within-hospitals/

11. N = 1,580

"We are unable to re-start as there are no COVID-free areas – tests take 48 hours to be reported"

Consultant, General Surgery, East of England

Currently 10% of surgeons say that they can get test results for surgical patients within 8 hours, and a further 31% indicated that test results were available in 24 hours. 34% of respondents said test results were being turned around within 48 hours, and 13% said this could take 72 hours. As access to testing and the speed of results improves, nine in ten (90%) surgeons agree that patient testing should take place before admission, upon admission and upon discharge if patients have been in hospital for longer than a day.

Surgeons and surgical trainees said they could get the results of COVID-19 tests for patients within...



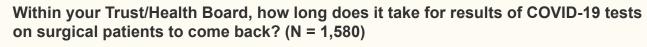
10% 8 hours

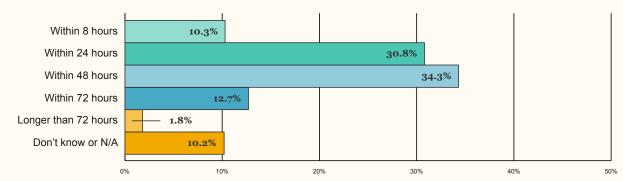


31% 24 hours



34% 48 hours





Regular staff testing is an essential part of infection control in COVID-light sites. Our survey found that six in ten (60%) respondents believe that in order to create and maintain a COVID-light site, staff should be tested at least once a week – 41% said that testing should

take place on a weekly basis, **14%** thought staff tests should be undertaken twice a week, and **5%** believed there should be daily testing as in Singapore, Hong Kong and South Korea¹². RCS England has called for staff tests in COVID-light sites to be conducted at least once a week, and up to twice a week if capacity allows.

12. N = 1,580

Access to PPE

Access to appropriate levels of PPE has been a key issue for many surgeons throughout the course of the pandemic. Our latest survey found that one in six (17%) respondents did not believe that they had an adequate supply of PPE in their workplace¹³. While this is an

improvement from RCS England's previous member survey at the end of April – which found that **33%** of surgeons did not feel that sufficient PPE was available – access to protective equipment clearly remains a concern for a significant minority of surgeons.

"There is a lack of PPE for some such as hoods and respirators"

Consultant, Urology, East Midlands

Several factors, including the fall in the number of COVID-19 patients in hospital and low levels of elective activity, mean that the intense pressure on PPE stocks experienced at the peak of the pandemic has eased. However, as planned procedures re-start the demand for PPE will increase again, so it is crucial that systems are in place that enable this to be managed effectively. This is particularly important given NHS England's requirement for elective patients to self-isolate for 14 days before their procedure, which means that in

order to schedule an operation, surgeons must have confidence that the necessary PPE will be available at least two weeks into the future.

The need for appropriate PPE and regular staff testing is underscored by the fact that over half (57%) of surgeons undertaking planned procedures reported that these involved staff who with both COVID-positive and elective patients¹⁴. Strong infection prevention and control measures – including around the use of PPE and testing – are therefore essential to mitigating the risk of cross infection in hospitals.

"There has been poor coordination of [testing, PPE and interdependent services], especially home testing, and failure to provide COVID-free facilities for planned surgery"

Consultant, General Surgery, Wales

4 HOW HAVE SURGEONS ADAPTED?

Many surgeons have had to make significant changes to their working practices through the course of the COVID-19 pandemic. Some changes, for instance the widespread use of remote consultations, could help to improve NHS productivity if maintained in the future. Others however, such as the redeployment of surgical staff, will not be sustainable as elective procedures resume. Careful thought needs to be given to how the transition to a more "normal" health service is managed, to ensure we retain beneficial changes and address and mitigate the effects of less desirable changes.

"Some surgeons classed 'vulnerable' due to underlying health conditions are working remotely from home doing telephone and virtual clinies"

Consultant, Trauma and Orthopaedics, North West England

Remote consultations

The vast majority (91%) of surgeons we surveyed reported that they had used telephone or video conferencing facilities to undertake patient consultations and outpatient clinics during the pandemic, helping to ensure that patients have only had to attend hospital when absolutely necessary. Furthermore, 83% of survey respondents said they had conducted team meetings (including multi-disciplinary team meetings) remotely. Increasing the use of these systems beyond the COVID-19 outbreak could make a valuable contribution to improving

efficiency in the NHS, and RCS England will soon be publishing a new guide for clinicians to support the use of virtual consultations.



91%

of surgeons and surgical trainees had used telephone or video conferencing to undertake patient consultations and outpatient clinics

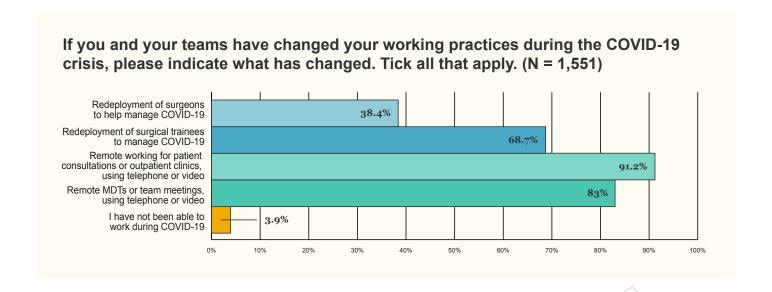
"We are undertaking regular telephone reviews of patients on the waiting list"

Consultant, General Surgery, Yorkshire and The Humber

Redeployment

Redeploying surgical staff is another way in which working practices have changed during the pandemic. 38% of those we surveyed reported that surgeons had been redeployed to alternative roles, and as mentioned earlier in this report, **69%** said that they had seen the redeployment of surgical trainees. As the NHS moves beyond the immediate response to the outbreak and elective surgery resumes, surgeons and trainees will increasingly need to support surgery and finish their training. In order to support this process, and ensure the NHS has the capacity to deal with any new surge of COVID-19 cases alongside re-starting planned operations, we have called for those clinicians who returned to the health service during the pandemic to be encouraged to stay on, if they are willing and able to, in appropriate roles.

This will require clarity from Government around the status of the temporary registers. At the outset of the pandemic medical regulators were given the power to grant temporary registration to clinicians who were not practising, enabling them to return to the NHS to support the response to COVID-19¹⁵. Once the emergency is formally declared over these temporary registers will be closed, but RCS England believes this situation should be reviewed to enable those clinicians who have come back to be retained. While it is not desirable for 'out-of-practice' surgeons to return to the operating theatre, those with very recent experience could provide welcome additional workforce capacity. Others can support with patient clinics and decision-taking in multi-disciplinary teams, an increasing number of which are now taking place on a virtual basis, enabling a greater range of expertise to be brought in from different locations.



"We get 15-20 consultants at a zoom trauma meeting each morning to give consensus to some of the very difficult decisions we have been required to make"

Consultant, Trauma and Orthopaedics, North West England

^{15.} This measure was taken by the Government using emergency powers available under Section 18a of the Medical Act 1983.

METHODOLOGY

Survey fieldwork ran from 8 June 2020 to 15 June 2020. The survey received responses from 1,741 surgeons and surgical trainees.

This report sets out the key findings of the survey. The number of respondents (N) to each question is shown either in the relevant chart, or else is given in the footnotes if no chart has been provided.

In general the figures are given on a UK-wide basis across all specialties and career grades, although in some areas we have highlighted regional and specialty-specific trends where they are of particular interest. Geographic breakdowns of the figures have focused on England, reflecting the distribution of responses, but where possible we have supplemented this with thematic analysis from devolved nations to provide a wider perspective.

Full data tables are available on request. If you have any queries about this report please contact publicaffairs@rcseng.ac.uk.