# Supplementary material

## ARCP outcomes from April 2020

Outcome 1 Outcome 7.1*	Satisfactory progress – Achieving progress and the development of competences/capabilities at the expected rate. Satisfactory progress in or completion of the post.
Outcome 2	Development of specific competences/capabilities required – Additional training time not required.
Outcome 7.2*	Development of specific competences/capabilities required – Additional training time not required.
Outcome 3	Insufficient progress – Additional training time required.
Outcome 7.3*	Inadequate progress by the trainee.
Outcome 4	Released from training programme – With or without specified competences/capabilities.
Outcome 5	Incomplete evidence presented – Additional training time may be required.
Outcome 7.4*	Incomplete evidence presented.
Outcome 6	Gained all required competences/capabilities – Will be recommended as having completed the training programme (foundation, core, or specialty).
Outcome 8	Out of programme for clinical experience, research, or a career break (OOPE/OOPR/OOPC).
Outcome 10.1:	Progress is satisfactory but the acquisition of competencies/capabilities by the trainee has been delayed by COVID-19 disruption. The trainee is not at a critical progression point in their programme and can progress to the next stage of their training. Any additional training time will be reviewed at the next ARCP.
Outcome 10.2	Progress is satisfactory but the acquisition of competencies/capabilities by the trainee has been delayed by COVID-19 disruption. The trainee is at a critical progression point in their programme and additional training time is required.

\*Outcomes 7.x are for those in fixed-term training posts such as 'locum approved for training' (LAT) posts – not in recognised training programmes, but whose experience can contribute towards training experience.

#### Full search strategies for all databases and grey literature sources

Searches were carried out with support from an information specialist. The strategy was first developed for Ovid MEDLINE and then translated for Ovid Embase and ERIC. Grey literature was identified through a controlled web search using DuckDuckGo. Forward citation searching was also performed.

The searches were initially conducted on **17 January 2023**, and updated on **5 June 2024**. All searches were limited to material published from **2019 to June 2024**, in **English language**.

#### Database: Ovid MEDLINE(R) ALL <1946 to March 6, 2023>

1	COVID-19/ or exp COVID-19 Testing/ or COVID-19 Vaccines/ or SARS-CoV-2/
2	(coronavirus/ or betacoronavirus/ or coronavirus infections/) and (disease outbreaks/ or epidemics/ or pandemics/)
3	(nCoV* or 2019nCoV or 19nCoV or COVID19* or COVID or SARS-COV-2 or SARSCOV-2 or SARS-COV2 or SARSCOV2 or
	SARS coronavirus 2 or Severe Acute Respiratory Syndrome Coronavirus 2 or Severe Acute Respiratory Syndrome
	Corona Virus 2).ti,ab,kt,nm,ot,ox,rx,px
4	((new or novel or "19" or "2019" or Wuhan or Hubei or China or Chinese) adj3 (coronavirus* or corona virus* or
	betacoronavirus* or CoV or HCoV)).ti,ab,kf,ot.
5	(longCOVID* or postCOVID* or postcoronavirus* or postSARS*).ti,ab,kf,ot.
6	((coronavirus* or corona virus* or betacoronavirus*) adj3 (pandemic* or epidemic* or outbreak* or
	crisis)).ti,ab,kf,ot.
7	(Wuhan or Huhei) adi5 pneumonia) ti ah kf ot
-	
8	1 or 2 or 3 or 4 or 5 or 6 or 7

9	limit 8 to yr="2019 -Current"
10	exp Education, Medical, Graduate/ed, mt, st, td [Education, Methods, Standards, Trends]
11	((medicine or medical or doctor* or clinician* or physician* or surgeon* or consultant*) adj2 (educat* or course* or training or teach* or graduate* or postgrad* or post grad* or student* or trainee* or intern* or apprentice* or Junior* or Resident* or Residency)).mp. [mp=title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
12	Education, Medical, Continuing/mt, og, st, td [Methods, Organization & Administration, Standards, Trends]
13	((((((((((((((((((((((((((((((((((((
	psychology, medical/
15	13 or 14
16	10 or 11 or 12 or 15
1/	Curriculum/ed, mt, st, td [Education, Methods, Standards, Irends]
18	[(curricul* or syllab* or program* or study or studies or timetable* or time table* or schedule* or module* or subject* or trend* or assessment* or assessing or assess or assessed or framework* or frame work* or structure* or strateg*) adj2 (change* or adjust* or adapt* or derogation* or new)).mp. [mp=title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
19	17 or 18
20	9 and 16 and 19

#### Embase Classic+Embase <1947 to 2023 January 17>

- 1 COVID-19/ or exp COVID-19 Testing/ or COVID-19 Vaccines/ or SARS-CoV-2/
- 2 (coronavirus/ or betacoronavirus/ or coronavirus infections/) and (disease outbreaks/ or epidemics/ or pandemics/)
- 3 (nCoV\* or 2019nCoV or 19nCoV or COVID19\* or COVID or SARS-COV-2 or SARSCOV-2 or SARSCOV2 or SARSCOV2 or SARS coronavirus 2 or Severe Acute Respiratory Syndrome

Coronavirus 2 or Severe Acute Respiratory Syndrome Corona Virus 2).ti,ab,kf,nm,ot,ox,rx,px.

4 ((new or novel or "19" or "2019" or Wuhan or Hubei or China or Chinese) adj3 (coronavirus\* or corona virus\* or betacoronavirus\* or CoV or HCoV)).ti,ab,kf,ot.

5 (longCOVID\* or postCOVID\* or postcoronavirus\* or postSARS\*).ti,ab,kf,ot.

6 ((coronavirus\* or corona virus\* or betacoronavirus\*) adj3 (pandemic\* or epidemic\* or outbreak\* or crisis)).ti,ab,kf,ot.

7 ((Wuhan or Hubei) adj5 pneumonia).ti,ab,kf,ot.

8 1 or 2 or 3 or 4 or 5 or 6 or 7

9 limit 8 to yr="2019 -Current"

10 exp Education, Medical, Graduate/ed, mt, st, td [Education, Methods, Standards, Trends]

11 ((medicine or medical or doctor\* or clinician\* or physician\* or surgeon\* or consultant\*) adj2 (educat\* or course\* or training or teach\* or graduate\* or postgrad\* or post grad\* or student\* or trainee\* or intern\* or apprentice\* or Junior\* or Resident\* or Residency)).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word]

12 Education, Medical, Continuing/mt, og, st, td [Methods, Organization & Administration, Standards, Trends]

13 (((((((allergy and immunolog\*) or An?esthetics or dermatolog\* or diagnostic radiolog\* or emergency medic\* or family medic\* or general practic\* or Internal medic\* or Acute internal medic\* or audiovestibular medic\* or audio vestibular medic\* or Cardiolog\* or endocrinolog\* or Gastroenterolog\* or geriatric medic\* or Genitourinary medic\* or genito urinary medic\* or Haematology\* or medical oncolog\* or metabolic medic\* or palliative medic\* or Medical genetic\* or neurolog\* or nuclear medic\*OR obstetrics) and gyn?ecolog\*) or opthalmolog\* or Pathology\* or P?ediatric\* or physical medicine) and rehabilition) or rehabilitation medic\* or renal medic\* or nephrolog\* or respiratory medic\* or rheumatolog\* or sports) and exercise medic\*) or preventive medic\* or Psychiatr\* or learning disabilit\* or medical psychotherapy or intensive care medic\* or Histopatholog\* or histo patholog\* or diagnostic neuropatholog\* or radiation oncolog\* or Surge\* or public health or Urolog\* or vascular Surgery\* or neurosurge\* or plastic surge\* or trauma) and orthop?edic surge\*) or p?ediatric surge\* or Otolaryngolog\* or core surge\* or general surge\* or oral) and maxillofacial surge\*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word]

14 "psychiatry and psychology (non mesh)"/ or medicine/ or addiction medicine/ or adolescent medicine/ or "allergy and immunology"/ or anesthesiology/ or bariatric medicine/ or behavioral medicine/ or clinical medicine/ or community medicine/ or dermatology/ or emergency medicine/ or forensic medicine/ or general practice/ or genetics, medical/ or geriatrics/ or global health/ or hospital medicine/ or integrative medicine/ or neurology/ or osteopathic medicine/ or palliative medicine/ or pathology/ or pediatrics/ or perioperative medicine/ or "physical and rehabilitation medicine"/ or psychiatry/ or public health/ or specialties, surgical/ or colorectal surgery/ or general surgery/ or osteopathic

surgery/ or orthopedics/ or otolaryngology/ or surgery, plastic/ or surgical oncology/ or thoracic surgery/ or traumatology/ or urology/ or sports medicine/ or optometry/ or psychology, medical/

- 15 13 or 14
- 16 10 or 11 or 12 or 15
- 17 Curriculum/ed, mt, st, td [Education, Methods, Standards, Trends]

18 ((curricul\* or syllab\* or program\* or study or studies or timetable\* or time table\* or schedule\* or module\* or subject\* or trend\* or assessment\* or assessing or assess or assessed or framework\* or frame work\* or structure\* or strateg\*) adj2 (change\* or adjust\* or adapt\* or derogation\* or new)).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word]

- 19 17 or 18
- 20 9 and 16 and 19
- 21 limit 20 to yr="2019 -Current"

## ERIC (via ProQuest platform)

Date searched: 17 Jan 2023 and 5 June 2024 Filters applied:

- Peer-reviewed only
- English language
- 2019–2024

(UK OR "United Kingdom" OR England OR Scotland OR Wales OR "Northern Ireland") AND

("postgraduate medical education" OR "medical training" OR "graduate medical education" OR "clinical education" OR "foundation programme" OR "residency training")

AND

(COVID-19 OR pandemic OR coronavirus OR SARS-CoV-2)

AND

(curriculum OR assessment OR ARCP OR derogation OR change OR adaptation OR exam OR examination OR rotation OR redeployment)

## Grey Literature: DuckDuckGo Web Search

Date searched: 17 Jan 2023 and 5 June 2024

## Search terms used:

The first 20 pages of results were screened for each of the following queries:

- "UK postgraduate medical education" AND COVID-19 AND curriculum changes
- "ARCP outcome 10.1 10.2" AND pandemic
- "GMC COVID-19" AND training derogations
- "COVID-19 changes to UK medical training"
- "NHS training pandemic adaptation site:\*.gov.uk OR site:\*.nhs.uk"

## Inclusion criteria:

- English language
- Full-text accessible

- UK context
- Published from 2019 onwards

## List of papers included in the scoping review, with key study details summarised

Study details, listed alphabetically	Key study details	Specialty/population	In-text reference number
Raju, S.A., Harris, R., Cook, C., Harvey, P. and Ratcliffe, E., 2022. UK-wide study of the opinions of gastroenterology trainees: COVID-19, shape of training and the future workforce. <i>Frontline</i> <i>Gastroenterology</i> , <i>13</i> (5), pp.386-391.	Cross-sectional survey in 2020, comparison with previous (2018) survey data	Disseminated by British Society of Gastroenterology to higher speciality trainees in gastroenterology. 348 responses (51% of all gastroentereology HSTs). Majority of respondents were male (57.6%) and worked full time (88%). 7.7% also had an academic appointment	15
Subramaniam, J., Durrant, F., Edwardson, S., El- Ghazali, S., Holt, C., McCrossan, R., Pramanik, I. and Wong, D.J.N., 2022. Recruitment to higher specialty training in anaesthesia in the UK during the COVID-19 pandemic: a national survey. <i>Anaesthesia</i> , 77(5), pp.538-546.	Cross-sectional survey 2021, survey constructed using modified Delphi	Those eligible to apply for anaesthetics ST3 post in Aug 2021, due to transition to new curriculum. Data from 50.8% of the 1056 candidates who applied or, alternatively, 46.8% of the 697 candidates who were unsuccessful in obtaining an ST3 post in this application round	42
Chua, E.P., Tan, Y., Mercer, L.K. and Wig, S., 2022. OA03 Impact of the COVID-19 pandemic on rheumatology training: results of the regional survey from the North West of England.	Cross-sectional, web- based survey Aug 2020- April 2021, second wave of the pandemic	Rheumatology trainees from the Northwest and Merseyside deaneries - 34 of 42 trainees completed the survey	16

<i>Rheumatology,</i> <i>61</i> (Supplement_1), pp.keac132-002			
Veerasuri, S., Vekeria, M., Davies, S.E., Graham, R. and Rodrigues, J.C.L., 2020. Impact of COVID-19 on UK radiology training: a questionnaire study. <i>Clinical</i> <i>radiology</i> , <i>75</i> (11), pp.877-e7.	29/ 47 radiology registrar s training within a regional radiology school during the time of the first wave of Covid-19	29/47 radiology registrars training within a regional radiology school during the time of the first wave of COVID-19	17
Fossey, S., Ather, S., Davies, S., Dhillon, P.S., Malik, N., Phillips, M. and Harden, S., 2021. Impact of COVID-19 on radiology training: Royal College of Radiologists Junior Radiologists Forum national survey. <i>Clinical Radiology</i> , 76(7), pp.549-e9.	Cross-sectional survey, July 2020	The Royal College of Radiologists Junior Radiologists Forum ran the survey - sent to all radiology training programme representatives across the UK	18
Harmer, M.J., Southgate, G., Raja, M. and Alam, S., 2022. Paediatric trainees' training experiences during the COVID-19 pandemic: a national survey. <i>Archives of Disease</i> <i>in Childhood-</i> <i>Education and</i> <i>Practice</i> , 107(1), pp.64-70.	Cross-sectional national survey May- August 2020	Disseminated by RCPCH to paediatric trainees, any grade. Balance of training grades and locations	19
Jayatilaka, M.L.T., As-Sultany, M., Gabr, A., Thornton, L., Graham, S., Mason, L., Farrar, N.G., Abdalla, S., A'Court, J., Allport, J. and Andrew, S., 2021. Collaborative Overview of	Cross-sectional national survey May 2020	Circulated to all trauma and orthopaedics trainees in UK through TPDs and trainee reps. A total of 185 T&O specialty trainee level 1 to 8 (ST1-ST8) trainees from all training regions across the UK completed the online survey. A freedom of information request in 2019 revealed that there were 975 ST3-ST8 T&O trainees across the UK. This gives a representative sample of approximately 18% when excluding the run-through ST1 and ST2 T&O trainees.	20

coronaVIrus impact on ORTHopaedic training in the UK (COVI-ORTH UK). <i>the surgeon, 19</i> (6), pp.e331-e337.			
Duggan, I., Hablase, R., Beard, L., Odejinmi, F. and Mallick, R., 2022. The impact of COVID-19 on O&G trainees; where are we now?. <i>Facts,</i> <i>Views &amp; Vision in</i> <i>ObGyn, 14</i> (1), p.69.	Cross-sectional survey, 6 weeks of data collection, in 2022. Topics explored included mental and physical wellbeing, redeployment, obstetric training, gynaecology surgical training, annual training outcomes, teaching and educational opportunities	O&G trainees in Kent, Surrey and Sussex - 53% of trainees responded (67 / 127)	39
Slater, T. and Round, J., 2022. Shielding during medical training: an exploration of effects, consequences and best practices. Future Healthcare Journal, 9(3), p.291.	Postgraduate doctors in training with experience of shielding from three different training regions in England were invited via HEE to partake in non- incentivised focus groups	Twenty-three doctors expressed interest at being involved and 17 took part in focus groups or follow-up interviews. Foundation trainees and non-patient-facing specialties (ie public health) were excluded. Thirteen participants took part in one of five focus groups held between November 2021 and January 2022. Focus groups included two or three participants (in addition to the facilitator) with a range of specialties attending each group. A further four participants were involved in focused interviews	30
Prince, S. and Adhiyaman, V., 2021. What was the impact of COVID-19 on the foundation training programme in north Wales?. <i>Future Healthcare</i> <i>Journal</i> , 8(1), p.e5	Cross-sectional survey June 2020	3 hospitals in North Wales - foundation trainees. 29 out of 134 trainees responded, of which 21 were foundation year 2 trainees.	34
Bodansky, D., Thornton, L., Sargazi, N., Philpott, M., Davies, R. and Banks, J., 2021. Impact of COVID-19 on UK orthopaedic training. <i>The</i> <i>Bulletin of the Royal</i> <i>College of Surgeons</i> <i>of England</i> , 103(1), pp.38-42.	Propective study via online data collection tool – 16 March and 3 May 2020, with trainees invited to log changes to their routine clinical practice due to the COVID-19 pandemic. Loss of training opportunities were recorded for cancellation of	All trauma and orthopaedic trainees in the West sector of the North West training region (n=57) were invited to provide data, with 46 (81%) participating in the study	21

	clinical activities or redeployment to other areas in the hospital		
Sasitharan, A., 2020. COVID-19: The impacts on foundation training in district general hospitals in the East of England and the East Midlands. <i>Clinical Medicine</i> , 20(6), p.e253.	A qualitative online survey was disseminated to FY1 doctors across several district general hospitals in the East of England and East Midlands deaneries	FY1 doctors East of England/ East Midlands - 49 responses were received from participants working in a range of specialties across general medicine and surgery. Only one participant was in a community placement	33
Caruana, E.J., Patel, A., Kendall, S. and Rathinam, S., 2020. Impact of coronavirus 2019 (COVID-19) on training and well- being in subspecialty surgery: a national survey of cardiothoracic trainees in the United Kingdom. <i>The Journal of</i> <i>Thoracic and</i> <i>Cardiovascular</i> <i>Surgery</i> , 160(4), pp.980-987.	Cross-sectional online survey, April 2020	Circulated to all nationally appointed trainees in cardiothoracic surgery in the United Kingdom in April 2020. 76 responses / 118 trainees. Representing all training grades and each of the 14 training regions in the United Kingdom and the Republic of Ireland. Of these, immediately before the onset of the pandemic, 53% (n = 40) were working in adult cardiac surgery, 28% (n = 21) in general thoracic surgery, 5% (n = 4) in mixed cardiothoracic practice, and the remaining 13% (n = 10) in other specialties	40
Gonzi, G., Gwyn, R., Rooney, K., Boktor, J., Roy, K., Sciberras, N.C., Pullen, H. and Mohanty, K., 2020. The role of orthopaedic trainees during the COVID-19 pandemic and impact on post- graduate orthopaedic education: a four- nation survey of over 100 orthopaedic trainees. Bone & joint open, 1(11), pp.676-682.	Cross-sectional survey May - June 2020	A total of 101 orthopaedic trainees, representing the four nations (Wales, England, Scotland, and Northern Ireland), completed the questionnaire. Distributed via Training Programme Directors	38

Clements, J.M., Burke, J., Nally, D., Rabie, M., Kane, E., Barlow, E., Mohamed, W., King, M., McClymont, L., George, M. and Tolofari, S., 2021. COVID-19 impact on Surgical Training and Recovery Planning (COVID- STAR)-A cross- sectional observational study. <i>International</i> <i>Journal of Surgery</i> , <i>88</i> , p.105903.	Anonymised operative logbook numbers were collated from electronic logbook and ARCP outcome data from the Intercollegiate Surgical Curriculum Programme database for trainees in the 10 surgical specialty training specialties. Operative logbook numbers and awarded ARCP outcomes were compared between 2018 and Dec 2020	5599 surgical trainees in 2019, and 5310 in surgical specialty training in 2020 were included	22
Wanis, C., Aulakh, G., Wilson, G. and Moore, R., 2021. Impact of COVID-19 on dental specialty training in the UK: the trainee perspective. <i>Faculty</i> <i>Dental Journal</i> , <i>12</i> (1), pp.23-29.	Cross-sectional survey using an online questionnaire with 38 questions distributed electronically to UK dental specialty trainees.	122 UK dental specialty trainees (49% response rate) from multiple specialties including oral surgery, paediatric dentistry, restorative dentistry, special care dentistry, oral medicine, oral pathology, and dental and maxillofacial radiology. Respondents were predominantly in ST1–ST3 and based mainly in London and Yorkshire & the Humber. Orthodontics and dental public health trainees were excluded.	37
Ibrahim, N., Rich, H., Ali, S. and Whitaker, I.S., 2021. The effect of COVID-19 on higher plastic surgery training in the UK: A national survey of impact and damage limitation. <i>Journal</i> of Plastic, Reconstructive & Aesthetic Surgery, 74(7), pp.1633- 1701.	Cross-sectional survey, November 2020, 1 month data collection	Plastic surgery specialist Registrars (SpR) in the UK. 56 responses - 89% of which held a National Training Number (NTN), with a spread of deaneries excluding Scotland and Ireland which returned no responses. 89% of responding registrars were in full time training and the remaining, less than full-time. A spread of training grades responded, with ST3 being the most representative group (20%)	28
Elghobashy, M., Stout, A., Hatti, A., Smotra, G. and El- Ghobashy, A., 2022. The effect of the measures taken during the coronavirus pandemic on	Cross-sectional survey- 34 questions, June 2020	A total of 101 responses were received from obstetrics and gynaecology trainees around the West Midlands. The response rate was approximately 40%. The majority of respondents were female (69%) and 72 respondents (71%) at specialty trainee (ST) 3–7 training level. 26 trainees (26%) were ST1-2 and three trainees (3%) were post completion of training (post-CCT) fellows. 33% of respondents were between 31 and 35 years old and 26% were between 36 and 40 years old. With regards to	41

specialty trainees in obstetrics and gynaecology in the United Kingdom: an online questionnaire survey in one region. Journal of Obstetrics and Gynaecology, 42(5), pp.1455-1460		ethnicity, 27 (27%) respondents were Caucasian, and 46 (46%) were Asian or British Asian. Overall, 73% of trainees identified as black, Asian and minority ethnic (BAME)	
Payne, A., Rahman, R., Bullingham, R., Vamadeva, S. and Alfa-Wali, M., 2021. Redeployment of surgical trainees to intensive care during the COVID- 19 pandemic: evaluation of the impact on training and wellbeing. <i>Journal of surgical</i> <i>education, 78</i> (3), pp.813-819.	Cross-sectional survey on experiences of redeployment, seems to have been collected 2021	Doctors working at postgraduate years 2 to 4 who were redeployed from surgical specialties to ICU during the COVID-19 pandemic. London hospitals only. Core surgical trainees, foundation year 2 doctors and junior clinical fellows. All surgical specialties, and those redeployed for greater than 4 weeks between the months of March and May 2020 were included. The response rate was 36% (n = 32). This included 19 males (59%) and 13 females (41%), of whom 2 were foundation year doctors (FY2), 9 were clinical fellows, and 21 were core trainees both first and second year (CT1 and CT2). The surgical specialties of the trainees included general surgery (41%), orthopaedic surgery (18%), plastic surgery (12%), and trauma (6%). The other surgical specialties made up the remaining 23%.	36
Hall, L., Bisset, K., Lynch, L., Young, Y., Ruggles, R. and Clinical and Public Health Group, UK Health Security Agency, 2023. Training during the COVID-19 pandemic: the experience of public health registrars in the London and Kent, Surrey, Sussex training programme. Journal of Public Health, 45(2), pp.529-534.	Cross-sectional survey and semi- structured interviews July 2020. Underpinned by grounded theory	Public Health SpRs in the London and Kent, Surrey, Sussex training programme - 35/128 SpRs responded to the survey and 11 were interviewed. SpRs were placed across a range of organisations	29
Jarvis, M.S. and Samuel, K., 2023. Impact of the COVID-19 pandemic on anaesthesia training, recruitment, and	Cross-sectional survey using an anonymised online questionnaire developed in Google Forms. It included both structured	400 UK anaesthetists in training across all levels. The survey was distributed via the Research and Audit Federation of Trainees (RAFT) network and the Royal College of Anaesthetists. Respondents included individuals who had been redeployed, were shielding, applied for training posts, or sat examinations during the COVID-19 pandemic.	23

examinations: a survey of UK trainees. BJA: British Journal of Anaesthesia, 131(1), p.e13.	(quantitative) and free-text (qualitative) responses, analysed using descriptive statistics and thematic analysis.		
Carpenter, S., Graham, Y., Kulkarni, T., Lyburn, I., Vinnicombe, S., Sharma, S., Sharma, N. and Lowes, S., 2022. A national survey investigating the impact of the COVID-19 pandemic on core and higher breast radiology training in the UK. Clinical Radiology, 77(10), pp.749-758.	Cross-sectional survey distributed online using SurveyMonkey, with both structured and free-text responses. Descriptive statistics were used for quantitative analysis, and thematic grouping was used for qualitative data.	69 respondents from all UK radiology training regions, including 33 core trainees, 32 higher trainees (13 in breast radiology, 19 in other specialties), and 4 recently qualified breast radiology consultants. The survey explored experiences of breast radiology training before and during the COVID-19 pandemic.	24
Quyam, S. and Abumehdi, M., 2022. An Interpretive Phenomenological Analysis of paediatric cardiology trainee experiences during COVID-19. Medical Education, 56(5), pp.527-534.	Qualitative study using Interpretative Phenomenological Analysis (IPA), based on two rounds of semi-structured interviews with participants. The analysis followed an idiographic, phenomenological approach focused on individual lived experiences during the COVID-19 pandemic.	Five paediatric cardiology trainees in the UK, purposively sampled from the national training programme (total trainee population = 42). Participants were drawn from four of the twelve UK training regions and represented a balance of gender, race, training grade, and location. Interviews were conducted during two waves of the pandemic to explore changes over time.	25
Martin, A., 2024. Experiences of junior doctors who shielded during the COVID-19 pandemic. The Clinical Teacher, 21(2), p.e13685.	Qualitative study using semi-structured interviews, analysed using thematic analysis following Braun and Clarke's six-step framework. Conducted virtually and designed to explore experiences of junior doctors who were shielding during the COVID-19 pandemic.	Three female junior doctors based in the West of Scotland who were shielding during the pandemic—two due to pregnancy and one due to a medical condition. Participants were at different stages of training (from Foundation to specialty training) and were recruited via volunteer and snowball sampling.	35
Kilday, C., Laughey,	Qualitative study	Twelve UK doctors who completed the Foundation	26

W. and Boland, J.W., 2024. Educational impact of COVID-19 on foundation doctors and the decision to take a break from structured approved training programmes in the United Kingdom. The Clinical Teacher, 21(2), p.e13667.	using a hermeneutic phenomenological approach. Semi- structured interviews were conducted and analysed using Braun and Clarke's thematic analysis	Programme during the COVID-19 pandemic (2020 or 2021) and subsequently chose not to apply for specialty training. Participants were recruited via Facebook groups aimed at F3 doctors and represented nine different foundation programme deaneries across the UK. Most had taken one or two years out of training and reflected on educational disruption and career decisions.	
Barter, C.A., Humes, D. and Lund, J., 2024. The Impact of the Covid-19 Pandemic on Annual Review of Competency Progression Outcomes Issued to General Surgical Trainees. Journal of Surgical Education	Longitudinal cohort study using anonymised secondary data analysis of ARCP outcomes recorded in the Intercollegiate Surgical Curriculum Programme (ISCP) database. The study used descriptive statistics, univariate and multivariate logistic regression, and sensitivity analyses to assess temporal changes and demographic associations with outcome trends.	1874 higher specialty trainees in General Surgery in the UK, with 7414 ARCP outcomes recorded between 2017 and 2022. The population included trainees from all UK deaneries and all levels of higher specialty training, including academic and military trainees. Trainees who had left training or with missing demographic data were excluded. Analyses explored variations by sex, age at training start, working pattern (full-time vs LTFT), stage of training, and deanery.	45
Mallick, R., Odejinmi, F., Sideris, M., Egbase, E. and Kaler, M., 2021. The impact of COVID-19 on obstetrics and gynaecology trainees; how do we move on?. Facts, views & vision in ObGyn, 13(1), p.9.	Cross-sectional survey conducted via email using a 33- question questionnaire. Quantitative data were analysed descriptively using SPSS, and qualitative responses were analysed thematically.	87 obstetrics and gynaecology trainees from the Kent, Surrey and Sussex (KSS) region in the UK (69% response rate from 127 invited trainees). Participants were from a range of training levels and reported on the impact of COVID-19 on clinical training, wellbeing, redeployment, PPE access, and views on recovery strategies.	44
Lion, P., McClenaghan, F., Hall, A., Mackinnon, S. and Navaratnam, A.V., 2021. ENT trainees'	Qualitative study using semi-structured interviews analysed through inductive thematic analysis. Data coding was	Seven UK ENT (otolaryngology) specialty trainees (ST4– ST8) redeployed during the first wave of the COVID-19 pandemic. Trainees were from three hospital trusts and had been redeployed to either critical care or medical specialties for between 2 and 12 weeks. Participants were recruited via purposive and snowball sampling, aiming for	32

experience of redeployment during the coronavirus disease 2019 pandemic: a qualitative study. The Journal of Laryngology & Otology, 135(5), pp.391-395.	performed collaboratively by multiple researchers to ensure consistency.	a range of regions and training levels.	
Young, K., Yeoh, S.A., Putman, M., Sattui, S., Conway, R., Graef, E., Kilian, A., Konig, M., Sparks, J., Ugarte- Gil, M. and Upton, L., 2022. The impact of COVID-19 on rheumatology training—results from the COVID-19 Global Rheumatology Alliance trainee survey. Rheumatology Advances in Practice, 6(1), p.rkac001.	Cross-sectional international survey conducted using a 77-question online questionnaire available in English, Spanish, and French. Descriptive statistics were used to analyse quantitative data, and the survey was distributed via email and social media platforms.	302 rheumatology trainees from 33 countries, including adult, paediatric, and combined adult/paediatric trainees. Most respondents (83%) were in adult rheumatology training and 68% were in the first three years of their programme. The survey assessed experiences related to clinical care, education, redeployment, research, and well- being during the COVID-19 pandemic.	31
Rashid, M., Steggall, M. and Brown, G., 2023. How has Covid-19 impacted the training of Urology trainees in South Wales?. Urologia Journal, 90(4), pp.678-682.	Cross-sectional survey using an anonymised online questionnaire designed by the authors. The survey included Likert-scale items and free-text responses and was analysed descriptively.	20 urology core and specialty trainees from the South Wales deanery in the UK (83% response rate). Most had been in training for two years or less. The survey explored the impact of COVID-19 on clinical activities (e.g., operating, outpatient clinics, diagnostics, MDT attendance), academic work, and trainee wellbeing between March 2020 and March 2022.	27