Witness Name: Gerard Hanna
Statement No.:
Exhibits:
Dated: 21 June 2024

UK COVID-19 INQUIRY

WITNESS STATEMENT OF Professor Gerard Hanna

I, Gerard Hanna, Consultant in Clinical Oncology, previous Chair of Division for Cancer and Specialist Medicine (between the 12th December 2022 and 5th April 2024), and former Clinical Director for Oncology (between the 5th July 2021 until 14th August 2023), Belfast Health and Social Care Trust and former Director of Radiation Oncology at the Peter MacCallum Cancer Centre, Melbourne, Australia (28th October 2018 and 1st July 2021), having collated my findings from previous clinical directors, existing service managers and other oncology team members, will say as follows: -

1. This is my first witness statement to the UK Covid-19 Public Inquiry. The documents that I refer to in this witness statement can be found in the exhibit bundle marked GH1

2. The Northern Ireland Cancer Centre (NICC) at Belfast Health and Social Care Trust (BHSCT) provides non-surgical oncological care both as a Cancer Unit for the Belfast metropolitan area and as a tertiary referral centre for specialist care for all of Northern Ireland. The unit sees approximately 5000 new patients per annum and has a staff complement of approximately 500. NICC provides a comprehensive range of both systemic anti-cancer

therapy (SACT) and radiotherapy services and has both outpatient and inpatient areas. The inpatient areas include two large ward areas with 49 beds, a long day case SACT ward, the Acute Oncology and Haematology Unit (AOHU) and brachytherapy theatre. The AOHU provides an acute assessment facility for patients with complications following anti-cancer treatment and is ordinarily open between 9am and 12 midnight. In addition the NICC outpatient areas comprise:

a. Belvoir Park Suite, where new patient and outpatient clinics are conducted;
b. Bridgewater Suite, where the SACT assessment clinics are held and where the Planned Treatment Unit (PTU) conducts day case minor procedures such as peritoneal aspirations and blood transfusions;
c. Radiotherapy planning clinics, where patients are assessed and consented prior to radiotherapy treatment. This also includes the radiotherapy mould room and the two computed tomography radiotherapy planning scanners, used to help plan radiotherapy;
d. Radiotherapy on-treatment review clinics where patients are reviewed during radiotherapy treatment;
e. Radiotherapy Nursing Clinic, where patients receive wound care, have blood tests and other outpatient procedures related to their radiotherapy treatment;
f. Radiotherapy Emergency Holding Bay, which is a 2 bedded unit to stabilize and assess patients attending the radiotherapy department as outpatients or from other care facilities;
g. Radiotherapy Treatment Halls, which house the 10 linear accelerators in a system of bunkers

3. The Northern Ireland Cancer Clinical Trials Unit (NICCTU) is located within the NICC. This provides early phase and late phase clinical trials across a range of tumour sites.

4. Medical staff from NICC also provide a visiting oncology service to Antrim Area Hospital (Northern Health and Social Care Trust), Craigavon Area Hospital (Southern Health and Social Care Trust) and the Ulster Hospital Dundonald (South Eastern Health and Social Care Trust).

5. Referral patterns are largely determined by the tumour site and the vast majority of referrals are received directly from the relevant tumour site Multidisciplinary Team meeting (MDT) directly to the appropriate clinical team within NICC (approximately 99%). Referrals from BHSCT MDTs for the common cancer types (e.g. breast cancer, bladder cancer, colorectal cancer, lung cancer and prostate cancer) for SACT will largely include patients form the Belfast Metropolitan area. Referrals from regional MDTs hosted at the BHSCT for the other cancer types (e.g. central nervous system tumours, germ cell cancers, gynaecological cancers, head and neck cancer, hepatobiliary cancers, lymphoma, skin cancer, melanoma, neuroendocrine tumours, thyroid cancers, upper GI cancers) will include patients from across Northern Ireland. Radiotherapy referrals are made by clinical oncology teams. Patients living in the Western Trust area and in postcodes BT51-BT57, who also have breast, lung, prostate, bladder, lower gastrointestinal and head and neck cancers, receive their radiotherapy treatment at the North West Cancer Centre, Altnagelvin Area Hospital, Western Health and Social Care Trust For those patients with breast, lung, prostate, bladder, lower gastrointestinal and head and neck cancers living elsewhere in Northern Ireland and for those patients with any other tumour sites living anywhere in Northern Ireland, they will receive their

radiotherapy treatment at the NICC. Specialist radiotherapy techniques (e.g. brachytherapy, stereotactic ablative radiotherapy and stereotactic radiosurgery) are delivered only at the NICC.

Paediatric cancer treatment is largely conducted at the Royal Belfast Hospital for Sick Children (BHCST) with all SACT delivered at this site. NICC provides radiotherapy, where indicated, for paediatric patients with cancer.

6. As described above, patients with breast cancer, bladder cancer, colorectal cancer, lung cancer and prostate cancer will usually have their diagnostic work-up, MDT discussion, surgical treatment and, where indicated, their SACT treatment at their local Trust Cancer Unit. Referrals from the Unit MDT for all Trusts to the Oncology Service, are managed through the NICC medical records system for all Trusts (except Western Trust). The secretarial teams at NICC will then arrange the initial outpatient assessment at the local Trust Oncology outpatient clinic. Following an initial clinic assessment, the local Trust will arrange any subsequent SACT clinic assessment and treatment appointments at the local Trust Cancer Treatment Unit. For patients with breast cancer, bladder cancer, colorectal cancer, lung cancer and prostate cancer who live in the Western Trust area, referrals are usually made from the Western Trust MDT to the relevant clinical secretarial team in Western Trust. These patients are then appointed to the relevant new patient clinic in Western Trust.

7. During all phases of the Covid-19 pandemic, the NICC worked collaboratively with all relative stakeholders:

- **The wider Belfast Health and Social Care Trust:** In terms of the NICC working with the wider BHSCT, the following summary provides a description of the wider

BHSCT response and NICC was part of this. Covid-19 was declared a pandemic by the World Health Organisation on 11 March 2020. By this point, the NHS had already declared Covid-19 a Level 4 National Incident and the UK Government had published its coronavirus action plan. The Belfast Trust implemented a robust command and control structure through the formal establishment of a Covid-19 Oversight Group on 6 March 2020 to oversee and lead on the Covid-19 plan. The Covid-19 oversight group was supported by a small number of senior managers and administrators and reported through to the Executive Team.

The Covid-19 oversight group operated in a similar fashion to an incident management team, coordinating information and updates from each directorate and division on a daily basis to inform decision making at Trust level and to inform reports to Silver Command (HSCB & PHA) for onward submission to Gold Command (DOH). Executive Team held a daily safety huddle meeting to review:

- Daily activity;
- Assess capacity to deliver ongoing services;
- Staff availability and safety;
- Provision of PPE stocks and usage;
- Receive a report from Covid-19 Oversight team;
- Decision making and identify issues for further escalation.

The Covid-19 Oversight Group utilised the Charles Vincent Model based on the Measurement and Monitoring of Safety to inform how we prepared on a daily basis. This considered 5 basic parameters:

- Past Harm;
- Reliability of Process;

- Sensitivity to operations – are we safe today;
- Anticipation and preparedness;
- Integration and Learning.

The key functions of the Covid-19 oversight group were:

- Comprehensive surge plans to inform regional surge plans. These were reviewed and updated regularly;
- Daily Sitrep report which included information from each directorate on key issues across hospital and community settings, including the number of Covid-19 patients, numbers ventilated, number of deaths, available beds, staff absence, staff numbers tested, PPE fit testing, stocks and usage. The Sitrep report was used to inform Silver and Gold discussions as appropriate;
- Issues/ concerns were escalated to Silver Command (HSCB) to highlight key risks or concerns which were then fed into the Gold Command call;
- The Cancer and Specialist Medicine Divisional Team (Co-Director/ Chair of Division and Divisional Nurse) formally met with the Covid-19 oversight group on a weekly basis to discuss the issues pertaining to changes to infrastructure, engagement of external accommodation or facilities, expansion and retraction of services, workforce planning and communications.

8. The NICC, through the Cancer and Specialist Medicine Divisional Team, participated in the 08:45 COVID- 19 BHSCT Sitrep Call, where they fed back on current status and received direction on the Trust's current policy on:

- PPE for staff and patients;
- Covid testing for staff and patients;

- Covid outbreak declaration and management;
- Cohorting of Covid patients;
- Requests for staff re-deployment elsewhere in the Trust to support Covid care.

9. Within the NICC, there was an initial approach to have NICC maintained as a 'green' (Covid-free) area. The Café Chat premises within the NICC reception area was moved to 'take away' only on the 16 March 2020 and closed on the 23 March 2020 to reduce footfall within NICC. During March 2020, the Belfast City Hospital (BCH) tower was transformed into a Nightingale Hospital. Given the need for social distancing, and to protect the vulnerable immunocompromised oncology patient group from exposure to Covid in the BCH tower, the Oncology SACT administration service was moved to level 3A within the NICC building on the 30 March 2020. It was subsequently decided to move the Regional Haematology and Bone Marrow Transplant Unit from Level 10 North BCH Tower to level 3 of the Cancer Centre due to high risk of Covid to their immunosuppressed patient population. To facilitate this, the Oncology SACT assessment and administration service was moved to the Ulster Independent Clinic on 06 April 2020. This also had the benefit of maximizing social distancing. The AOHU was moved to Bridgewater Suite to help maintain the 'Green' status of NICC.

10. To avoid the need for patients to attend NICC in person, joint working between NICC and BHSCT Pharmacy Teams established the COVID-19 SACT Medicines Delivery Service. This service delivered oral SACT medicines directly to the patient's home and the first delivery made on the 23 March 2020. Where an oral SACT regimen was at low risk of discontinuation, patients were provided with an extended supply

of medicine (e.g. 84-day supply rather than a 28-day supply) this change was supported with regular telephone assessments, in place of face to face clinic visits (see GH/08 [INQ000470850]).

11. In the inpatient areas, all Oncology patients were Covid tested prior to being allocated an inpatient bed. In the event any patient tested positive, they were referred to the Mater Hospital to manage any respiratory related symptoms. Later such Covid positive patients were admitted and cohorted in a designated area on Level 11(North) of the Belfast City Hospital tower block.

12. The radiotherapy department considered how best to minimize the risk of Covid transmission to patients and staff through a range of practical measures. The agreed measures are described in the 'RADIOTHERAPY DEPARTMENT COVID-19 – Response Plan' (see GH/01 [INQ000470843]) and included the following:

- The use of exemplary infection prevention control (IPC) practices, good hand and respiratory hygiene, use of PPE in line with national guidance and frequent cleaning;
- Communications to patients on treatment appointment letters and by telephone prior to treatment starting to inform them not to attend the Radiotherapy Department if they have Covid-19 symptoms, recent onset of a new continuous cough or a high temperature or a loss of, or change in, normal sense of taste or smell;
- Patients were contacted by telephone prior to their first appointment and asked if they have any of the symptoms described above. Any patient with suspicious

symptoms were assumed to be an infectious carrier of the disease and were advised accordingly after discussion with their Consultant Clinical Oncologist;

- Patients were advised not to attend early for appointments to help with social distancing in the waiting areas;
- Patients and visitors were screened on entrance to the NICC, and asked to wear fluid shield surgical facemasks (provided by staff at all entrances) during their visit to the Radiotherapy Department;
- Waiting rooms were reconfigured to ensure social distancing is observed.
- Buzzers and magazines were removed;
- Wherever possible and appropriate patient consultations were moved from face to face visits to telephone reviews;
- A reduction in visitor access, whereby patients were asked to attend alone unless they required help to access the department, in which case they were permitted to bring one accompanying person to the clinic or treatment visits;
- To reduce the risk of transmission of Covid to other patients, 2 treatment machines (Linear Accelerators LA9 and LA10) were designated for patients who were suspected or had symptoms of Covid-19. Patients who were Covid positive were treated at the end of the day, to facilitate appropriate cleaning;
- The establishment of a designated area (OTR 1) to either to isolate patients after screening or to carry out urgent On Treatment Review appointments, where Covid screening results were not immediately available;
- Reduction in staff-to-staff transmission by encouraging working at home where feasible and the use of other social distancing measures in the radiotherapy treatment areas;
- Staff were mandated to eat their lunch in pre-arranged 'bubbles';

- Mandatory use of face coverings for all staff when moving around the Radiotherapy Department;
- Staff were required to declare all Covid-like symptoms and were mandated to not attend clinical areas for work if unwell;
- The radiotherapy department regularly reviewed national guidance on testing staff and patients for Covid and updated local protocols accordingly, depending on the prevalence of the infection and capacity to test.

13. During all phases of the pandemic, the visiting Oncology service to the other Cancer Units was maintained. The BHSCT Oncology service at NICC worked in partnership with the other 4 Trusts and Cancer Units through regular meetings facilitated by the Northern Ireland Cancer area Network (NICaN). Coordinated through, the NICaN SACT Clinical Reference Group (CRG) BHSCT clinicians worked with colleagues in other Trusts to draft the "NI SACT Solid Tumours Prioritisation List during COVID 19" (see GH/02 [INQ000470844]). This prioritisation was to be invoked in the event of the Oncology service encountering severe and persisting shortages of staff and this list set out which SACT regimens which would be deferred or not given based on the relative clinical impact of deferral. Thankfully, Oncology staffing was maintained at a level such that we never needed to invoke the prioritisation list.

14. Similarly, for radiotherapy, the NICaN tumour site specific CRGs (e.g. NICaN breast CRG) held meetings in March 2020 involving colleagues from BHSCT and the North West Cancer Centre to consider how best to continue radiotherapy services during the pandemic and how best to protect patients. International consensus had recommended changing to shorter duration radiotherapy regimens with fewer

radiotherapy fractions (treatments) but at a higher dose per fraction across a range of tumour types to ensure that efficacy of radiotherapy was maintained. These Covid specific regimens were implemented where there was existing clinical trial evidence or prior historical usage of the proposed new dose and fractionation regimen. These were then adapted into the BHSCT radiotherapy protocols for usage (See GH/03 [INQ000470845]). In a similar manner to the NICaN SACT prioritisation plan, the initial Radiotherapy Response Plan stratified appropriate adjustment of the clinical service dependent on the staffing level. The following principles were adhered to:

- Where possible those treatments that provide a chance of long-term cancer control or 'cure' will be provided and prioritised;
- Treatments aimed at palliation alone or a minimal extension of life will have to be temporarily suspended during the peak of a COVID-19 outbreak;
- Those treatments in which deferral for a 1-3 month period will have a minimum clinical impact should be deferred e.g. hormonally responsive prostate cancer;
- Where a patient is receiving treatment as part of a clinical trial, this should be prioritised and continued where possible;
- Patients who have commenced a course of radiotherapy or chemotherapy should be prioritised and supported in completing their treatments.

15. **The Health and Social Care Board and subsequently the Strategic Planning and Performance Group:** Interactions between the Health and Social Care Board (Now the Strategic Planning and Performance Group) and NICC were largely conducted under the auspices of NICaN and NICaN related meetings. NICaN provided a central meeting point for oncology departments across Northern Ireland and included representatives of the Health and Social Care Board.

16. **The Department of Health:** Similarly, interactions between the Department of Health and NICC were largely conducted under the auspices of NICaN and NICaN related meetings.

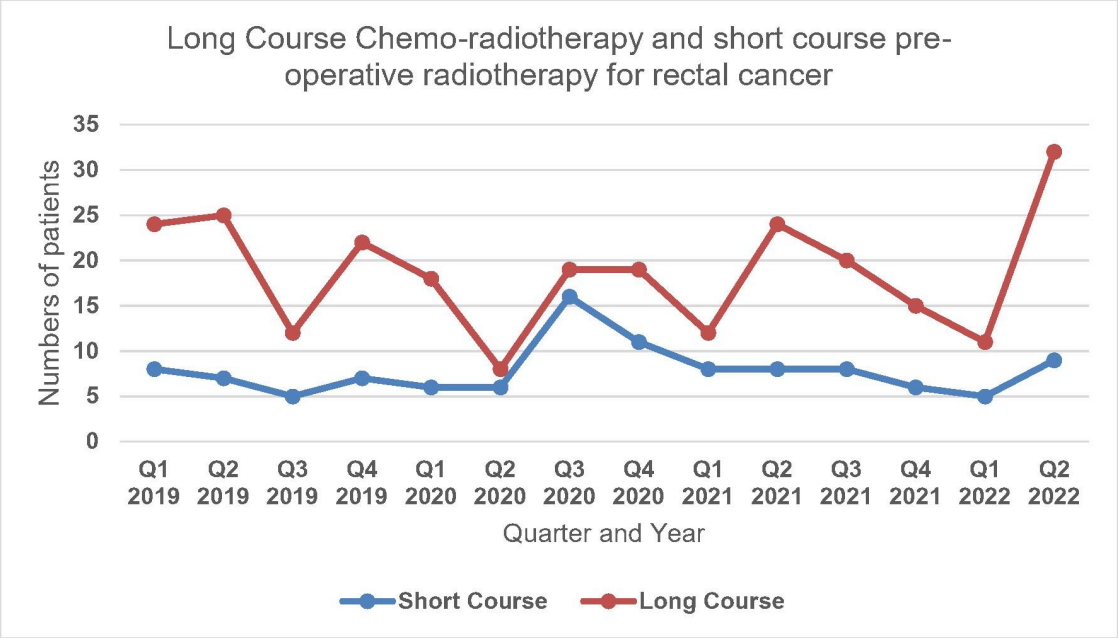
17. **Direct interactions with the NI Government from BHSCT** were led by the Belfast Trust Executive team. Any specific urgent oncology related matters would have been escalated through this route. All decision-making regarding protocols was largely undertaken via the NICaN structures, involving both the Health and Social Care Board and the Department of Health. Both of these agencies reported to the Minister for Health.

Impact of Covid-19 on the diagnosis and treatment of colorectal cancer

18. The Oncology service did not change the criteria for managing patients with colorectal cancer during the pandemic. There was no change in the management pathway involving a change or referral to the NICC rather than referral to the local acute hospital for treatment of colon cancer. For patients with rectal cancer, the treatment pathway normally involves short-course pre-operative radiotherapy, followed promptly by definitive surgery. This may also be followed adjuvant SACT. Patients with locally advanced rectal cancer are usually referred for combined chemo-radiotherapy to downstage the tumour and increase the chance of successful surgical clearance. For these patients, surgery is typically scheduled six weeks after the completion of neo-adjuvant chemo-radiotherapy.

19. During the early stages of the pandemic, patients who may were of borderline suitably or fitness for long course chemo-radiotherapy were considered for short-course radiotherapy instead. This was approach was endorsed by international guidelines [1] (See GH/04 **INQ000381149**), by The Association of Coloproctology of Great Britain and Ireland's publication "Considerations for Multidisciplinary Management of Patients with Colorectal Cancer during the COVID-19 Pandemic" (see GH/05 [INQ000401725]) and by the Royal College of Radiologists (see GH/06 [INQ000470848]) . The patient numbers for long course chemo-radiotherapy and short course pre-operative radiotherapy are described in figure 1 below for the relevant period. This shows a sharp drop in treatments with long course chemo-radiotherapy in Quarter 2 of 2020, with an associated rise in short course chemo-radiotherapy in Quarter 3 of 2020. Over the next year, these figures begin to revert back to their original baseline activity. It should be noted, that where long course chemo-radiotherapy continued to be delivered to those patients where this was clinically indicated throughout the relevant period.

Figure 1: Long Course Chemo-radiotherapy and short course pre-operative radiotherapy for rectal cancer.



20. The Northern Ireland Cancer Registry publication "Recent trends in incidence, survival and mortality of colorectal cancer in Northern Ireland. (A comparison between April-December of 2021, 2020 and 2018-2019)" [2] reports a drop in the numbers of patients diagnosed with colorectal carcinoma in Northern Ireland for the year 2020 as compared to years 2018 and 2019. In particular there is sharp drop in colorectal cancer incidence rates in April 2020. There is then a relative increase in the numbers of colorectal cancer diagnoses for 2021. The key extracted graphic from this publication is illustrated in Figure 2.

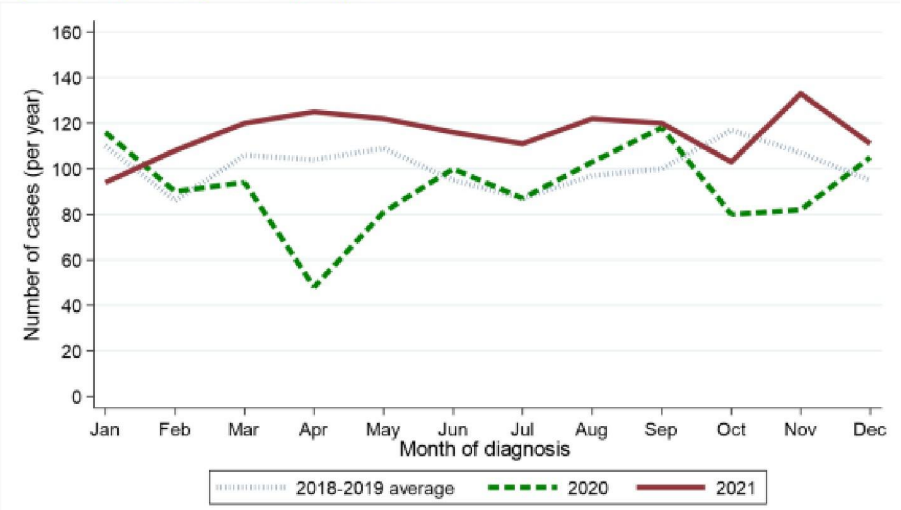
Figure 2: Recent trends in colorectal cancer from Northern Ireland.

Table 1: Number of colorectal cancer cases diagnosed in 2018-2021 by month and year of diagnosis

Period of diagnosis	Annual total	Month diagnosed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2018-2019*	1,211	110	86	106	104	109	95	87	97	100	117	107	95
2020	1,104	116	90	94	48	81	100	87	103	118	80	82	105
2021	1,385	94	108	120	125	122	116	111	122	120	103	133	111

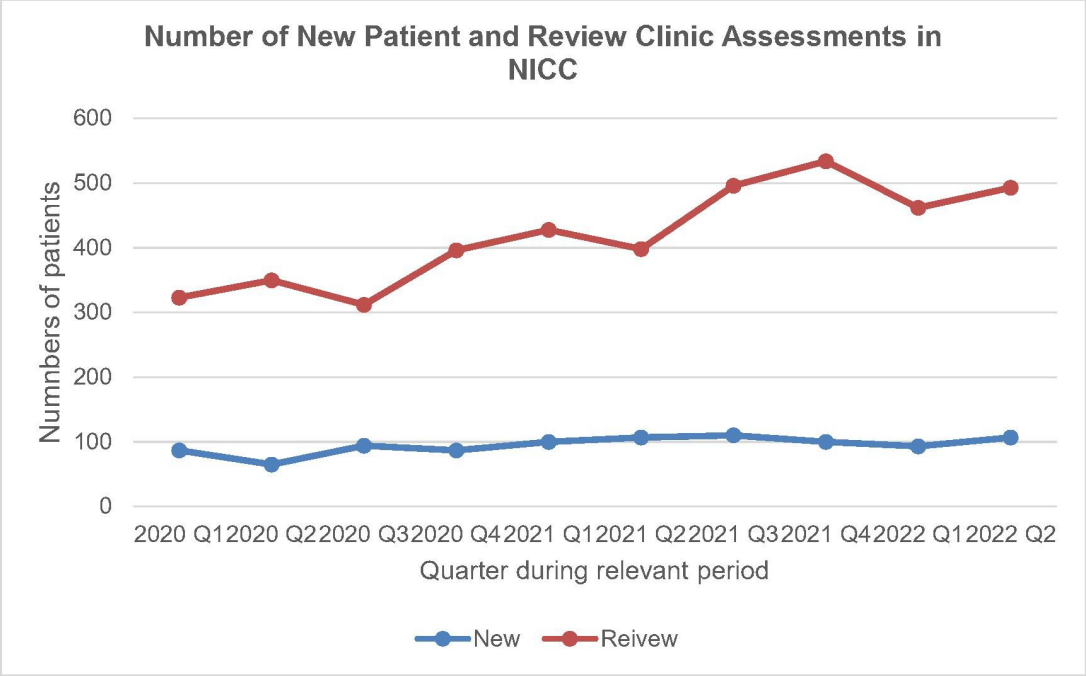
** Average cases per year rounded to the nearest integer. Row sums may thus differ slightly from the total.*

Figure 1: Number of colorectal cancer cases diagnosed in 2018-2021 by month/quarter and year of diagnosis
(a) Number of cases diagnosed by month of diagnosis



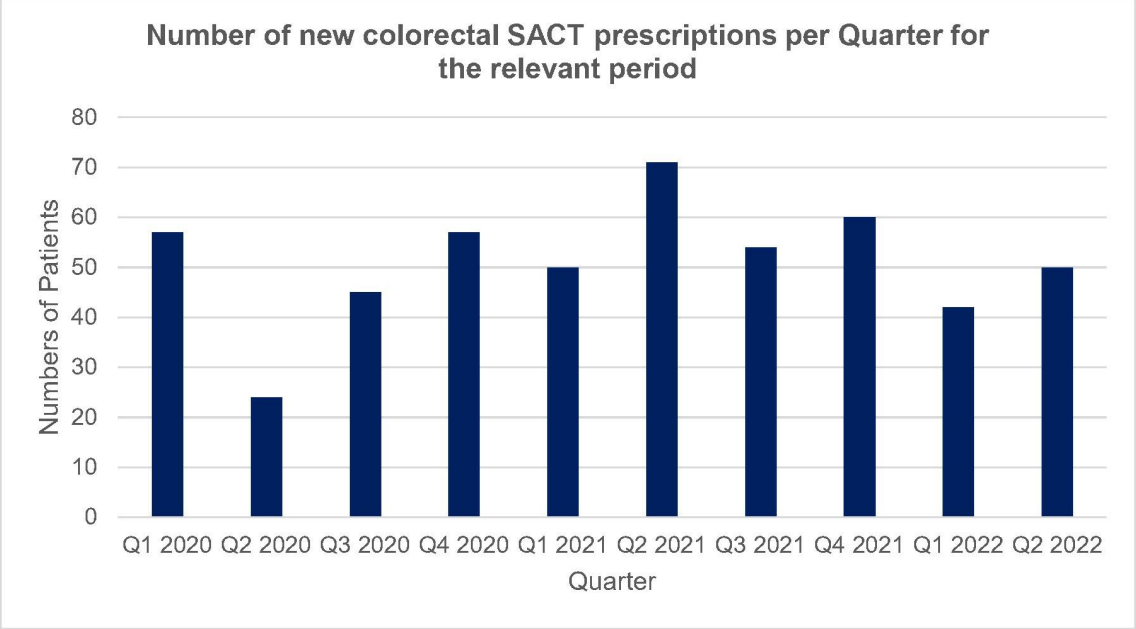
21. As described above, there was a drop in new patient registrations of colorectal cancer in 2020 as compared with previous years. The total number of new patient clinical assessments for patients with colorectal cancer fell from an average of 95 per quarter to 65 in quarter 2 of 2020. This rebounded to 94 in quarter 3 of 2020. The data for the relevant period is summarized in Figure 3. Although, NICC does not hold specific data on the reason for this drop in referrals, this was possibly due to a combination of a reduced likelihood of patients presenting to the health service if they had symptoms related to colorectal cancer, to a reduction in screening activity, a reduction in diagnostic procedures such as colonoscopy and a reduction in colorectal surgical activity.

Figure 3: Number of New Patient and Review Clinic Assessments in NICC.



22. The data for radiotherapy is illustrated in Figure 1. With regard to SACT, from late 2019 to Quarter 2 of 2022, the NICC on average, commenced 51 new courses of SACT for patients with colorectal cancer per quarter. This fell sharply to 24 patients for Quarter 2 of 2020 as illustrated in Figure 4 below. There is a relative rebound by Quarter 2 2021, with 71 new courses of SACT commenced. The relative drop in radiotherapy and SACT activity for patients with colorectal cancer was likely due to the reduction in referrals of new cases of colorectal cancer, as described above.

Figure 4: Number of new colorectal SACT prescriptions per Quarter for the relevant period.



23. During the relevant period, the referral pathway to Oncology did not change. Patients with colorectal cancer continued to be managed through their trust MDTs as described above with the initial oncology assessment arrange in the local Trust Cancer Unit. We are not aware of any change in policy or criteria which involved the referral of patients with colorectal cancer to the NICC for treatment rather than to local acute hospitals.

24. The NICC is not involved in the commissioning or delivery of screening, cancer diagnosis or investigation. We also do not collect or provide data on this. Oncology clinical teams would have concerns regarding the impact of any pause of such screening services.

25. NICC clinical teams were aware of delays in patients presenting with symptoms related to colorectal cancer. In the early phase of the pandemic, the public health message was to stay at home. Many patients were anxious about attending health care facilities for assessment and treatment, including for cancer treatment. When this became apparent, the team at NICC, alongside a number of national organisations (e.g. Royal College of Radiologists) undertook social media messaging to encourage patients to attend for diagnostic tests and cancer treatment, with the message that "We are here for you."

26. The NICC is not involved in the commissioning or delivery of colonoscopy. We also do not collect or provide data on this. However, clinical teams would have concerns regarding the impact of any pause of such services.

27. Similarly, the clinical teams would have concerns regarding the impact of any reduction in the availability of these services and did not issue any advice to limit the referral of patients by GPs with suspected cancer to secondary services. Any patients referred directly to the Oncology service with suspected cancer relapse were managed through our normal channels.

28. Within Oncology we initiated virtual clinics, using telephone assessment for patient review appointments. New patient referrals and patients with suspected cancer relapse were, for the vast majority, assessed face-to-face in person. Figure 5 illustrates the numbers of outpatient appointment types for all patients with cancer seen by NICC and Figure 6 illustrates the numbers of appointment types for patients with colorectal cancer seen by NICC during the relevant period. This illustrates the rapid adoption of virtual review appointments in quarter 2 of 2020 as the pandemic unfolded. Through our quality and safety meetings where clinicians could raise concerns, through adverse event (AE)

and serious adverse incident (SAI) monitoring and from direct patient feedback, we are not aware of any detriment to patients with this use of technology.

Figure 5: Changes in appointment types during the relevant period for all tumour types, for NICC clinics during the relevant period. (FTF denotes an in-person "face-to-face" assessment).

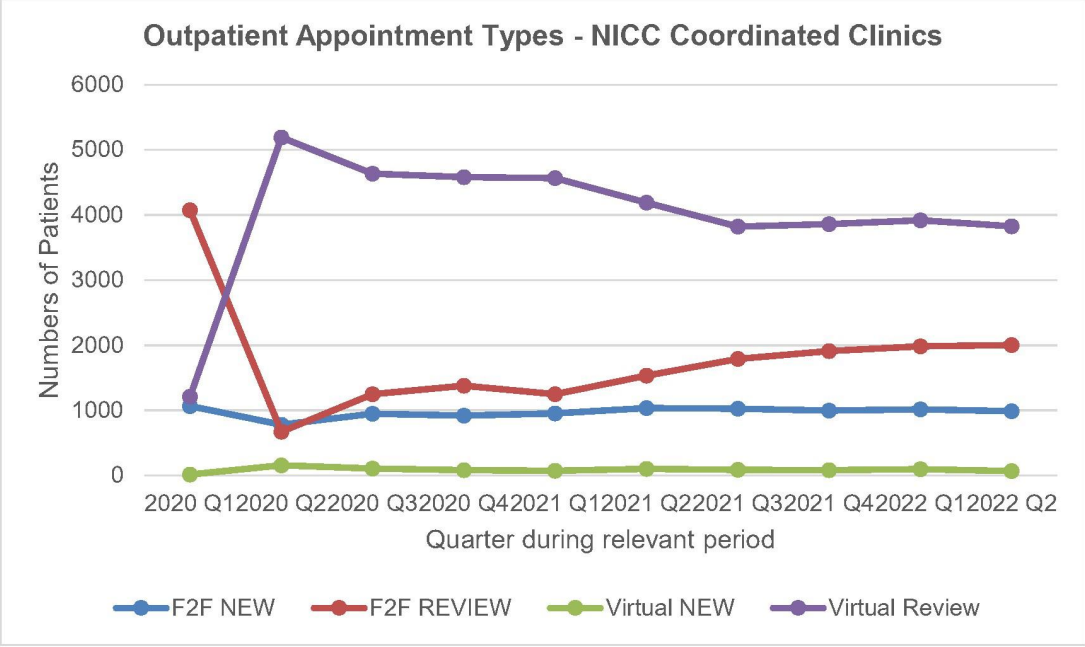
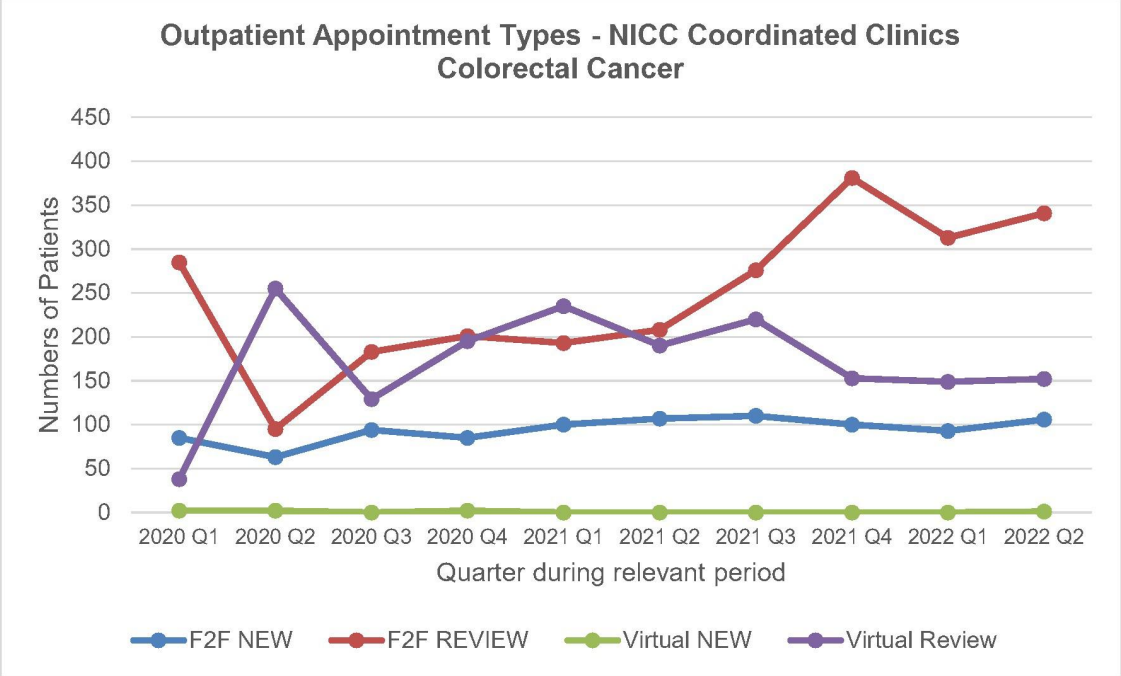
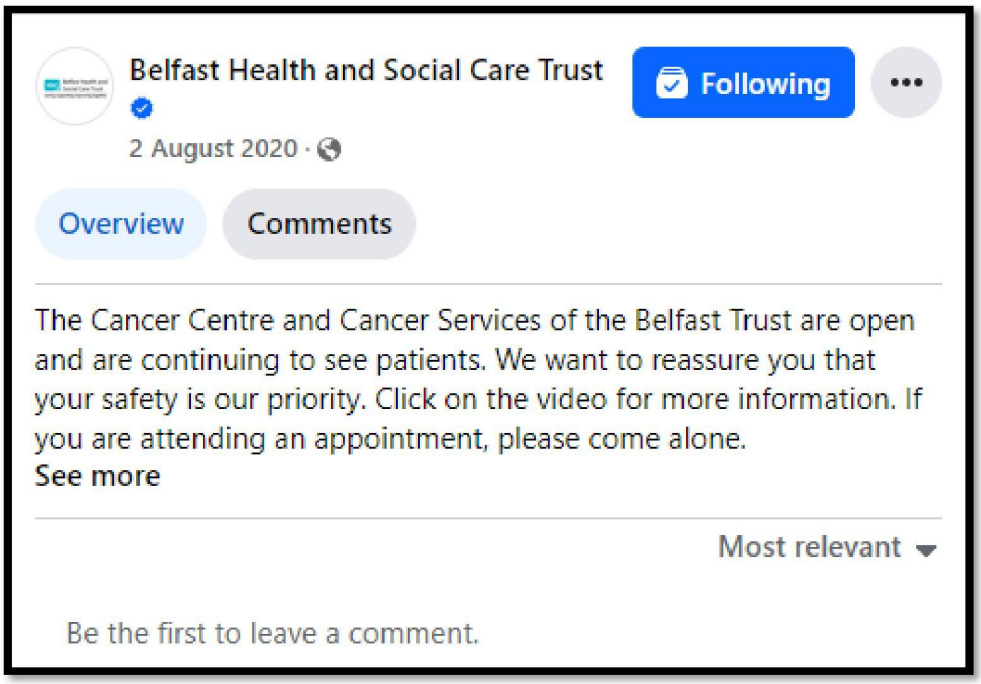


Figure 6: Changes in appointment types during the relevant period for all patients with colorectal cancer, for NICC clinics during the relevant period. (FTF denotes an in-person "face-to-face" assessment).



29. NICC clinical teams were aware of delays in patients presenting with symptoms related to colorectal cancer. In the early phase of the pandemic, the public health message was to stay at home. Many patients were anxious about attending health care facilities for assessment and treatment, including for cancer treatment. When this became apparent, the team at NICC, through BHSCT Media teams, alongside a number of national organisations (e.g. Royal College of Radiologists) undertook social media messaging to encourage patients to attend for diagnostic tests and cancer treatment. A screenshot example of such a social media post from the 2nd of August 2020 is illustrated in Figure 7 below.

Figure 7: Example of a social media post from NICC and BHSCT encouraging patients to attend for appointments.



30. Any drop in the numbers of new patients referred with colorectal cancer for treatment at NICC (as described above) carries the concern of a delayed presentation of cancer, and with this delay the risk that the cancer has progressed. Thus, patients may present with a higher stage of disease, reducing the survival chance for patients. NICC clinical teams were very concerned about patients presenting at a more advanced stage of disease or with metastatic disease during the pandemic. For a population or cohort of patients, the design of staging systems and designation of staging groups across a range of tumour types are mainly based on survival outcomes. Thus, outcomes for cohorts of patients diagnosed with a higher stage of disease have poorer outcomes and a reduced 5-year overall survival from cancer. The Northern Ireland Cancer Registry data presented in their report "Recent trends in incidence, survival and mortality of colorectal cancer in Northern Ireland" [2] (See GH/07 [INQ000470849]) records no significant difference in the

relative proportions of patients presenting with stages I to IV colorectal cancer (see figure 8). Given this and given the relatively recent timelines it may be too early fully detect an impact of the pandemic on patients with colorectal cancer in terms of survival outcomes.

Figure 8: New diagnosis of colorectal cancer by stage and by year from 2018 to 2021.

Stage at diagnosis	Period of diagnosis (Apr-Dec)		
	2018-2019*	2020	2021
All stages	619	532	754
Stage I	82 (13.2%)	68 (12.8%)	102 (13.5%)
Stage II	177 (28.6%)	133 (25.0%)	205 (27.2%)
Stage III	139 (22.5%)	135 (25.4%)	192 (25.5%)
Stage IV	149 (24.1%)	130 (24.4%)	170 (22.5%)
Unknown	74 (12.0%)	66 (12.4%)	85 (11.3%)

31. As stated above, within Oncology we initiated virtual clinics, using telephone assessment for patient review. New patient referrals and suspected cancer relapse were assessed in person (see figure 6 for colorectal data). Through the mechanisms described above, we are not aware of any detriment to patients with this use of technology.

32. NICC does do not undertake colorectal surgery including laparoscopic, anastomoses procedures. Any suspension of surgery would be a concern, given the risk of disease progression as described above.

33. The use of pre-operative radiotherapy for rectal cancer is fully described above. From our data we did not detect any significant increase in pre-operative radiotherapy overall, however we did detect a slight shift from pre-operative long-course chemo-radiotherapy to short course pre-operative radiotherapy.

34. Chemotherapy (SACT) was delivered in the Cancer Centre and Cancer Units, as well as through home delivery of oral SACT preparations as described above.

35. For SACT assessments, face to face visits continued for consent for new treatments and for discussion of results such tumour marker tests and imaging. Other visits were largely converted to virtual telephone review. As per above, patients receiving oral SACT treatments, where possible, were provided with an 84-day supply (as compared to the standard 28-day supply) to the patients home through the Medicines Delivery Service, which was established in March 2020. This Medicines Delivery Service remains in place. Also, as described previously for other tumour sites, where radiotherapy treatment could be delivered with fewer fractions (treatments), this was introduced. However, no such protocol change was available in colorectal cancer.

36. Within Oncology we initiated virtual clinics, using telephone assessment for patient review. New patient referrals and suspected cancer relapse for patients with colorectal cancer were assessed in person (see Figure 4).

37. Whilst Northern Ireland and the NICC experienced parallel experiences to that described by Morris et al in their report "Impact of the COVID-19 pandemic on the detection and management of colorectal cancer in England: a population based study", the impact of the pandemic appears to be less pronounced for patients with colorectal cancer in Northern Ireland at NICC (See Exhibit **GH/11** **INQ000489418**) [3]. The relative drop in numbers of patients diagnosed and the relative increase in the usage of short course pre-operative radiotherapy was less pronounced in Northern Ireland and at the NICC that described by Morris et al. This may be related to relatively lower proportion of Covid infections in Northern Ireland during the first wave of the pandemic and thus the relatively better position of the Health Service in Northern Ireland to cope with routine business.

38. Also, as described above, the radiotherapy department considered how best to minimize the risk of Covid transmission to patients and staff through a range of practical measures (See GH/01 [INQ000470843]). In physical and location terms, these include:

- Reconfiguration of the waiting rooms to ensure social distancing was observed;
- Designated treatment machines (LA9/10) for patients who had Covid-19;
- Establishment of a designated area (OTR 1) either to isolate patients after screening or to carry out urgent on Treatment Review appointments.

These changes or measures did not impact on the NICC's ability to deliver the clinical service.

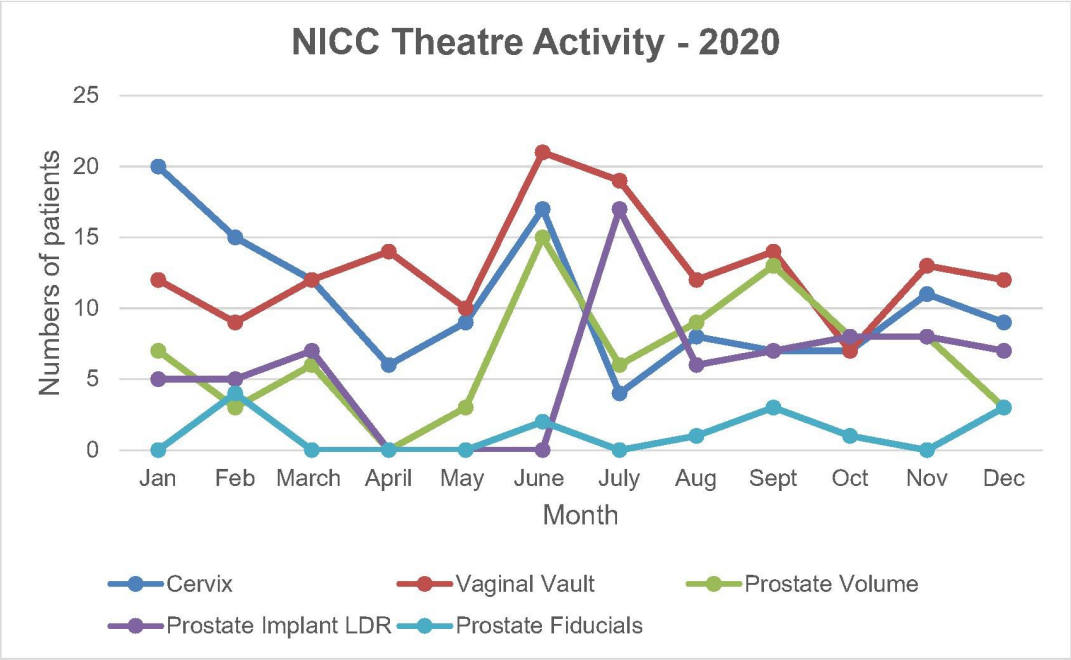
39. Whilst the NICC was aware of the wider concerns regarding the ability of operating theatres and Critical Care Units to provide care, we are not aware of any detrimental impact on the Oncology Service and the ability to deliver either the SACT service or the external beam (outpatient) radiotherapy service.

40. As described above, the NICC has a brachytherapy theatre located on level 3 of the NICC building. This does not provide treatment for colorectal cancer but provides brachytherapy treatments for both gynaecological cancers (cervical and uterine cancer) and for prostate cancer. Access to this theatre and anaesthetic support was not constrained during the relevant period owing to lack of staff. However, there were initial concerns regarding theatre throughput and thus capacity due to air flow changes in theatre between patients. Given this and given the concern about the wider healthcare system

being overwhelmed, it was decided to postpone prostate brachytherapy during the initial months (March 2020 to June 2020) to allow the Brachytherapy service to focus entirely on time-critical gynaecological brachytherapy. Deferring patients with prostate cancer being considered for brachytherapy was safe to do, given that these patients are either established on hormone therapy or have low risk disease and for whom a delay of a number of months should have no detectable impact on clinical outcomes. These patients with prostate cancer, who had their treatments deferred in March, April and May 2020, had their procedures undertaken in the subsequent months of June, July and August 2020. The summary data on patient numbers is described in Figure 9 below.

41. One further change related to reducing the risk of spread of COVID, was the avoidance of aerosol generating procedures (AGP). If appropriate, the use of general anaesthetic (which is an AGP) were avoided and a spinal anaesthetic was used. If a general anaesthetic was required, the Brachytherapy Team introduced a lag time in theatre to allow for air flow changes. Ordinarily for brachytherapy, spinal anaesthetics are preferred, but are not suitable for all patients. Other changes introduced was the requirement for patients to isolate at home for a week prior to the procedure and the introduction of Covid screening for patients prior to each procedure.

Figure 9: NICC Brachytherapy Theatre Activity during 2020.



42. As described above the Acute Oncology Haematology Unit (AOHU) provides an acute assessment facility for patients with complications following anti-cancer treatment and is ordinarily open between 9am and 12 midnight. The AOHU was moved to Bridgewater Suite to help maintain the 'Green' status of NICC. Patients being assessed in the AOHU, who required admission to the NICC underwent Covid screening prior to placement. To maintain the 'Green' status of NICC, any patients who were Covid positive were transferred to the Mater Hospital during the initial months of the pandemic. After this, a cohorting area on Level 11 (North) of the BCH Tower block for Covid positive oncology patients was established. There were no specific issues regarding capacity or capacity impacts on oncology patients specifically.

43. The NICC does not have a dedicated Oncology Critical Care Unit. The NICC normally accesses the BCH Intensive Care Unit for those patients requiring escalated

care. We are not aware of any case where critical or intensive care was denied to a patient in NICC when indicated, owing to the lack of critical or intensive care availability.

44. The NICC does not have a Day of Surgery Admissions Unit. Specific arrangements around the care of patients having brachytherapy is described above.

45. As described above, patients being admitted to the NICC inpatient areas underwent Covid screening. Staff teams worked and took rest breaks in bubbles and adhered to the general Covid-related infection control measures. There were no specific issues (beyond what would normally be encountered) regarding inpatient capacity or inpatient capacity impacts on oncology patients specifically.

46. Beyond the general impacts described above, there was no distinct or specific impact on patients with colorectal cancer.

47. The NICC was not aware and did not encounter any specific impacts that the constraints on critical care capacity nationally had on the treatment pathway for patients with colorectal cancer.

48. During the pandemic regular guidance from the Chief Medical Officer of Northern Ireland and the Public Health Agency was issued regarding protecting immunocompromised patients from contracting Covid. It should be noted that, with relevance to Oncology, the definition of immunocompromised included patients with an active cancer diagnosis as well as those patients receiving SACT or radiotherapy. The advice to shield was essential given that there was a real concern regarding increased morbidity and mortality from Covid infections in patients who were immunocompromised. As such, NICC fully supported and implemented this advice, both in reconfiguring our inpatient and outpatient areas, and forwarding on this advice by letter to our patients.

49. This advice to shield did not have an operational impact on our ability to deliver oncology care to patients with cancer. However, as stated above, this did increase fear amongst patients and their families regarding the risk of contracting Covid when attending NICC, particularly during the earlier period of the pandemic. When this became apparent, BHSCT and the team at NICC, alongside a number of national organisations (e.g. Royal College of Radiologists) undertook social media messaging to encourage patients to attend for diagnostic tests and cancer treatment. A screenshot example of such a social media post from the 02 August 2020 is illustrated in Figure 7.

50. As described above, to facilitate the transfer of the Haematology inpatient unit to level 3 in the NICC, the Oncology SACT assessment and administration service was moved to the Ulster Independent Clinic (UIC) on 06 April 2020. NICC staff provided the same SACT outpatient service at the UIC as delivered in NICC for HSC patients with cancer. The electronic SACT prescribing system was made available on the computer network in UIC. The management and staff at the UIC provided excellent support for our teams both during the relocation and operation period at the UIC. There were no negative impacts identified on the provision of care or treatment as a result of this relocation and no negative impact specifically on patients with colorectal cancer. The SACT service returned to NICC on 24 July 2020.

51. The NICC is not aware of any specific issues relating to inequalities in the diagnosis, treatment or follow-up care for patients with colorectal cancer during the relevant period.

Staffing capacity

52. By consensus staff across NICC minimised their annual leave in the early phases of the pandemic. However, some Oncology staff (Nursing staff and Oncology Registrars) were redeployed to support the Nightingale Hospital. Apart from the deferral of some routine therapy for patients with prostate cancer (which was deemed safe to do), this reconfiguration did not impact on the Oncology service's ability to deliver anti-cancer treatment and all treatment was delivered to our usual quality standards. However, staff did defer both professional continuing development and routine service improvement work to manage the reconfiguration in service. A service to deliver anti-Covid neutralising monoclonal antibody therapies in the treatment of Covid positive high-risk patients (including patients with cancer) was established in the Mater Hospital in December 2021. Our Acute Oncology Nursing staff based in the Royal Victoria Hospital were temporarily redeployed until July 2022 to support this service. The Acute Oncology service advice line was temporarily supported by Oncology registrars. This did impact on our ability to deliver a comprehensive acute oncology service on the Royal Victoria Hospital site and may have had an impact on inpatient flow through the Royal Victoria Hospital site and may have led to increased inpatient stays for patients with cancer. We do not have any data to confirm this.

53. Staff were cohorted and took their breaks in "bubbles". There was also an increase in working from home and meetings were moved from an in-person to a virtual format. This reduced staff interaction and increased isolation. This may have impacted the sense of team culture and increased anxiety, but we do not have documented or measured detriment. To mitigate these impacts, the Oncology management team introduced a

number of staff well-being initiatives such as the 'Radiotherapy Thumbs Up' where staff could nominate exceptional team members for recognition. The Divisional Team hosted virtual "conversational café's" and virtual "touch in sessions" for staff who also had to stay at home and 'shield' due to health reasons. In addition to local initiatives, the BHSCT introduced a number of Trust wide supports such as the "NHS Fit for The Fight Initiative" that enabled staff to avail of a wide range of free, virtual fitness activities for all ranges of abilities including 'HiiT', yoga and Pilates.

54. In the radiotherapy department, plans had been developed prior to the pandemic to support paperless working. This involved facilitating remote access to the radiotherapy planning software (Aria®) through Citrix®. At the start of the pandemic, clinical pathways were developed to manage remote radiotherapy outlining and planning. As well as supporting staff working from home, this also facilitated those staff who had to shield owing to health reasons. We did not detect any significant impact from these changes on NICC's ability to deliver care or on the quality of that care delivered.

55. Clinical review appointments and appropriate SACT assessments were switched to virtual subject to clinical suitability. These were conducted by telephone and with a very small number of video consults. Staff were able to prescribe SACT remotely, given the introduction of paperless SACT prescribing in NICC prior to the pandemic.

56. The NICC did not identify any specific issues regarding an unequal impact on staff by the Covid-19 pandemic and its management within NICC.

Infection prevention and control

55. During the early phase of the pandemic it was recognised that patients with altered airways were vulnerable as their airway did not provide the same protective mechanisms as for patients with a regular airway. These patients were easily identified from the radiotherapy referral form and SACT assessment questionnaires.

56. Alternative options to sitting in a communal waiting area daily for treatment were made available and if patient travelled independently from home, they were asked to remain in their car until their treatment time. They were then escorted by radiographers through a side access door to their treatment unit. This eliminated the need to pass through or wait in high-traffic areas. If patients were travelling on hospital transport, they were allocated a clinic room to wait in the radiotherapy department. This also provided a suitable space away from others to use airway suction where needed while awaiting transport back home.

57. At radiotherapy planning, due to risk of requiring suction, patients with head and neck cancer underwent consent, mould preparation and planning CT acquisition in the same room. These steps are normal undertaken in separate rooms but were co-located to minimise the number of rooms used and subsequently taken out of use for 1 hour if an AGP was performed. Unfortunately, this did result in reduced throughput within the radiotherapy scanners as each altered airway patient required a longer appointment time.

58. Whilst the majority of on-treatment review clinics were moved to telephone reviews, patients with head and neck cancer continued to have face-to-face consultation throughout the pandemic due to communications challenges that this cohort of patients may face.

59. In terms of other infection prevention measures in the management of patients with altered airways, such patients were cohorted to two specific linear accelerators. These treatment units are at end of corridor and thus provided easy access via a side door and were away from high-traffic areas in case an AGP was required and the room the AGP was undertaken became a 'red zone.' Given that these patients have an increased need for tracheal suction, which is an AGP, radiotherapy sessions were scheduled with additional time to allow for room preparation (e.g. such as removing unnecessary equipment from rooms) and clean up.

60. The level of PPE required by radiographers for each individual case was guided by a risk assessment of each patient's likely need for use of suction. If the patient had been risk assessed and known to rarely require any suction, one radiographer was required to wear full PPE (airborne precautions) while the other one or two radiographers wore PPE appropriate for droplet precautions. If patient frequently required the use of suction, both radiographers would wear full PPE (airborne precautions).

61. The ward areas within NICC were maintained as 'Green' areas. Staff followed the appropriate extant guidance for the care of Covid negative patients as per PHA guidance and BHSCT infection, prevention and control policies and procedures. During any ward Covid outbreak, the staff wore the appropriate PPE as per the extant guidance. All nursing and ward medical staff were cohorted to the outbreak area. In communal staffing areas, Perspex dividers were installed to minimise the risk of Covid within staff areas. Staff were required to wear fluid shield surgical facemasks when walking throughout patient facing and non-patient facing areas. The NICC had access to the required PPE through the pandemic.

During the specified period, there were 10 outbreaks of Covid-19 declared on the inpatient wards of the NICC. The numbers of patients and staff infected in these outbreaks are set out in the table 1 below.

Table 1: Details of Covid-19 Outbreaks in NICC during the specified period.

Date Outbreak Declared	Ward	Patients Infected	Staff Infected
06/11/2021	2B Cancer Centre	2	0
30/12/2021	2B Cancer Centre	2	3
28/04/2022	2A Cancer Centre	4	0
28/04/2022	2B Cancer Centre	3	0
13/06/2022	2A Cancer Centre	2	4
Total		**13**	**7**

62. Staff antibody testing for Covid-19 commenced in BHSCT in September 2020. Loop-mediated isothermal amplification (LAMP) testing commenced for asymptomatic staff on 15 January 2021 and finished on 31 March 2022. PCR and/or lateral flow Covid-19 testing for asymptomatic staff and patients commenced in January 2021. The working environment within NICC was modified to limit contact with suspected or confirmed Covid-19 patients to minimise the risk of infection as far as possible. All rooms in NICC had windows which could be opened to enhance ventilation. In outpatient clinical rooms, windows were kept open to enhance ventilation. NICC followed BHSCT guidance regarding the risk of assessment of staff members, with a focus on those who were pregnant or from a Black, Asian and minority ethic (BAME) background. The NICC is not aware of any specific NICC issues regarding the physical attributes of staff hampering correct deployment of PPE. Staff volunteered to be clean shaven when undergoing FIT testing.

During the specified period, every member of staff who notified their line manager of being pregnant, had a risk assessment with their line manager which may have involved an occupational health referral (see Exhibit **GH/09** **INQ000489416**. Where possible, pregnant women were advised to avoid working in those areas with patients with suspected or confirmed COVID-19 infection. Following a risk assessment, if a pregnant worker choose to work in patient-facing roles, they were supported to do so by minimising risk of transmission through established methods. As for all healthcare workers, use of personal protective equipment (PPE) and risk assessments according to current guidance provided pregnant workers with protection from infection.

For pregnant women from 28 weeks' gestation, a more precautionary approach was advised. Women in this category were recommended to stay at home. For many of the NICC staff, this presented opportunities to work flexibly from home in a different capacity, for example by undertaking telephone or videoconference consultations with Patients or undertaking administrative duties.

Whilst important for all staff, managers paid particular attention to reinforce the following for BAME staff:

- Ensure that social distancing is being observed wherever it is practicable to do so;
- Review PPE use to ensure availability, fit, correct donning and doffing etcetera;
- Ensure that BAME staff were aware of the actions to take if they feel unwell with COVID symptoms.

All staff received detailed guidance regarding Covid-19 testing arrangements. This advice was reinforced for vulnerable staff (e.g. BAME Staff or Pregnant Staff). All staff members were asked to do a lateral flow test before commencement of each shift.

63. The wearing of fluid shield surgical facemasks and face shields did present challenges for patients with reducing hearing. At the start of the pandemic there was a moratorium on visiting, with no visitors permit to visit inpatient areas as per Public Health Authority guidance to protect all patients who are severely immunosuppressed. Exceptions were made for visitors to spend time with patients at the patient's end of life. These patients were cared for in single rooms, to provide privacy. Advice leaflets were supplied to patients and relatives stating the restrictions and advice regarding any relatives with symptoms suggestive of Covid-19 and the need to stay at home (See Exhibit **GH/10 INQ000489417**. To support patient contact with family members, the NICC made iPads available and nursing staff assisted patients on their usage. Relatives and friends were encouraged to use telephone contact for receiving updates from patients to maintain contact with patients. Within our clinical teams, clinicians were encouraged to contact the families of patients with updates via telephone. Nursing staff did encounter significant negative feedback from patients and family members on these restrictions. This caused significant distress for the ward-based staff and managers. Following new guidance from the PHA, these restrictions were slowly relaxed and from 01 of July 2021, patients were permitted to have 1 visitor for 1 hour each week, provided the visitor had a negative lateral flow test prior to visiting. The visit must be pre booked via nursing staff and no more than two visitors in 4 patient bay area were permitted at any given time. Visitors had to wear fluid resistant face-masks at all times and were required to use alcohol hand cleanser on entering the ward. Contact tracing details recorded for each visit. The rationale for 1 visit per patient, per week was based on the minimising the risk of transmitting Covid-19 to patients yet supporting patients in maintaining contact with relatives and friends. Visitors

and patients were provided with updated written guidance (See Exhibit **GH/11 INQ000489418**)

These rules were further relaxed in October 2023, with 1 visit daily from 2 nominated people from up to 2 households, per patent being permitted. Then in April 2022, the rules were further relaxed to permit 1 of 3 nominated visitors to visit twice per day for 1 hour. NICC reverted back to normal visiting in April 2023. Of note, during any Covid-19 outbreaks within inpatient ward areas, visiting was temporarily closed, until the outbreak as declared as over by the BHSCT Infection Control Team. All these changes were made following PHA guidance and following consultation with BHSCT Divisional Management Teams. Although patients undoubtedly felt isolated by these measures, we did not detect any detriment to the quality of care or treatment provided.

Other concerns or issues

64. Continuous delivery of a full or nearly full clinical service under the constraints and challenges of social distancing, the wearing of PPE, managing personal home circumstance such as childcare and with the need to constantly adapt to new working circumstance and guidance has been exhausting for our staff. There has been no provision for a much-needed staff recognition and recovery program. I am concerned that the absence of this could reduce staff enthusiasm in the face any future pandemic or similar healthcare challenge.

Specifically within NICC, the management teams implemented a number of working pattern changes to support staff and mitigate against stress and burn out from work. Within the Radiotherapy Department, the management team introduced staggered starts in the mornings and individual patient treatment slot length was increased to 20 minutes to allow staff to under donning and doffing of PPE. To help with staff morale and to recognise and share examples of good practice, we introduced the "Radiotherapy Thumbs Up" initiative. This initiative invites all members of staff to nominate a colleague who has provided exceptional care or brilliance in the workplace and the "RT Thumbs Up" multidisciplinary team process these nominations and select a 'Star Example' bi-monthly. Our associated charity the Friends of the Cancer Centre provide ongoing funding for a token of appreciation for each of the winners. Since its commencement in March 2019 and until March 2023, 106 nominations were received and 29 'Star Examples' rewarded. In terms of more formal supports, all staff had access to Belfast Trust "Here 4 U" support program and to Occupational Health support and to formal counselling services.

65. One fundamental facet of any healthcare system's ability to respond to a crisis, if routine care is not to be compromised, is the presence of redundancy in the clinical capacity (both in terms of staff and facilities). With the further growth in cancer incidence and with increased cancer survival, our clinical services are operating at, or beyond, maximum funded capacity. If we were to face a repeat of the Covid-19 pandemic, we would need to defer significant clinical activity to cope. We need to invest in our healthcare systems, should we wish to avoid significant disruption with any future pandemic.

Statement of Truth

I believe that the facts stated in this witness statement are true. I understand that proceedings may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief of its truth.

Signed: Personal Data

Dated: 21 June 2024

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