



Head and Neck Cancer Follow Up 'Care Closer to Home' Evaluation

Thames Valley Cancer Alliance

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1. Executive Summary

Head and neck cancer is a relatively small cancer site compared to others such as breast, prostate and lung. However, incidence in the UK is increasing, with rates highest in people over 70. NHS Specialist Services requirements are for head and neck cancer to be managed in a tertiary centre. Ensuring access to high quality clinical care is expected to improve patient outcomes compared to services that do not have enough patient throughput/ clinical workforce to deliver consistent high-quality delivery. However, having services in centralised locations often results in many patients having to travel significant distances to access treatment, rehabilitation and follow up care.

In 2018, a pilot service 'Care Closer to Home' was introduced to enable patients from Swindon and Wiltshire to receive their rehabilitation and follow up care at Great Western Hospitals NHS Foundation Trust, after receiving treatment at Oxford Hospitals NHS Foundation Trust. The concept for the pilot came from extensive scoping work undertaken by Macmillan Cancer Support, including identifying the initial patient need. Funding for the service was provided by Macmillan Cancer Support, Thames Valley Cancer Alliance and the two providers. A dedicated team of Ear, Nose and Throat and Maxillo-Facial consultants, Clinical Nurse Specialist, Allied Health Professionals, Clinical Psychologist, and a Patient Pathway Co-ordinator were recruited to deliver the GWH service.

The pilot aimed to achieve the following benefits:

- Improved patient experience through reduction in frequent long journeys
- Improved quality of service for patients from Swindon and Wiltshire
- Improved access for patients and reduction of delays in the diagnosis of recurrence and treatment
- Improved capacity for Clinical Nurse Specialist, Restorative Dentistry and Allied Health Professional input
- Development of local expertise in Swindon which can be built on in the future

- Ensuring the long-term sustainability of the whole networked service, with a pathway that has the resilience to cope with increasing referrals
- Completion of more Holistic Needs Assessments to enable patients to be referred for appropriate support
- Increased patient education and focus on prevention of recurrence to enable patients to feel more in control of their own health and wellbeing
- Development of a blueprint for localised follow up which can be replicated across the Thames Valley

To provide an independent assessment of the pilot and support decision making on the future of the pilot, Thames Valley Cancer Alliance commissioned NHS South, Central and West Commissioning Support Unit to carry out an evaluation of the service.

The primary aims of the evaluation were identified by the pilot Steering Group:

- Evaluate the impact of the redesigned pathway on patient experience, including factors such as quality of life and clinical outcomes
- Generate an evidence base to support the economic case for the pilot
- Consider the effect of the COVID-19 pandemic on the head and neck cancer pathway
- Provide an assessment for wider roll-out of the interventions, considering the 'critical success factors'

The evaluation took place May 2021– August 2021, and consisted of patient and staff interviews, surveys and analysis of relevant quantitative activity, workforce, outcomes, and finance data.

Evaluation findings included significant benefits to patient experience including a reduction in fatigue and stress. Travel and waiting times were reduced which resulted in financial benefits for patients. Both patients and staff report satisfaction with the new service. Positive patient outcomes included reduced A&E attendance and hospital admission following A&E attendance. Patients now report concerns about recurrence and adverse treatment effects much earlier, which can be resolved quickly, before they become more significant.

Patients and staff welcome having a dedicated multi-disciplinary team, which includes the Oxford clinicians being present at the Swindon clinic. The Patient Pathway Co-ordinator role has been instrumental to providing both patient and staff support enabling a single point of access to the team. The role releases specialist clinical time creating efficiencies.

The development of the Swindon clinic has resulted in capacity improvements at Oxford. Improved clinic attendance, reduced A&E admission, and emergency admission from A&E result in financial benefits and more efficient use of resources. Taking a value-based healthcare approach, the pilot provides improved patient outcomes and service efficiencies, which can partly offset the cost of clinic set up. In the current post-COVID-19 recovery period the efficiencies generated assist elective care backlogs.

Recommendations to realise more patient, organisational and financial benefits include reviewing the criteria for timing of patient transfer to Swindon and, developing a Personalised Stratified Follow Up protocol that enables more patients to go onto a self-managed pathway. Key to this is the collection of patient outcome data, including holistic needs assessments and the delivery of patient education, currently not undertaken.

The COVID-19 pandemic caused changes to the service model including the rapid shift to virtual consultation. Patient responses indicate they are largely accepting of the changes, and although the service has returned to the original delivery model, implementation of learning from the changes has resulted in some long-term service improvements.

The 'Care Closer to Home' pilot has delivered either fully or partly on most anticipated requirements and can be considered a success for the primary aim of improving patient experience and outcomes. There are financial and capacity efficiencies demonstrated by the service, and recommendations are made to deliver further benefits. Critical success factors and recommendations for consideration of a wider roll out across the Thames Valley Cancer Alliance region are provided.

2. Introduction

Head and neck cancers arise principally in the oral cavity, oropharynx, nasopharynx, hypopharynx, larynx, and nasal sinuses. It is the 4th most common cancer in the UK in males with around 8,500 new cases and 13th most common cancer in females, with around 3,800 new cases (2017). Incidence rates are highest in people aged 70-74 (2015-2017) and there has been a 33% increase in incidence of head and neck cancer since the early 1990s. Incidence rates in the most deprived quintile compared to the least are 64% higher (females) and 101% higher (males) (2013-2017)¹.

This data from Cancer Research UK highlights that 46-88% of head and neck cancer cases are preventable. Tobacco smoke exposure is linked to 17-64% cases of head and neck cancer and alcohol consumption 22-38% of cases. The risk of recurrence for head and neck cancer is relatively high, with 50-60% of patients reported to have a recurrence within 2 years of initial diagnosis².

Treatment for head and neck cancer can include surgery, radiotherapy, chemotherapy, or a combination of treatments and can result in significant life changing effects on patients i.e., speech and swallow disorders, upper limb and neck mobility restrictions, pain, fatigue, loss of function and psychological issues³.

Patients often require long term follow up to provide support, rehabilitation, management of consequences of treatment and identification of recurrence or new primary cancer. They require access to a full range of services to meet their rehabilitation needs and ensure high quality patient centred care. These can include dietetics, speech and language therapy, restorative dentistry, physiotherapy, occupational therapy, clinical nurse specialists (CNS), lymphoedema services and clinical psychology.

¹ [Cancer Research UK Cancer Statistics by Cancer Type](#)

² [Clin Exp Otorhinolaryngol](#). 2016 Dec; 9(4): 287–297

³ <https://www.nice.org.uk/guidance/csg6/resources/improving-outcomes-in-head-and-neck-cancers-update-pdf-773377597>

National Context

One of the NHS Long Term Plan⁴ ambitions for cancer included the NHS service model changing so that:

“People will get more control over their own health, and more personalised care when they need it.”

This means that:

- *By 2021, where appropriate every person diagnosed with cancer will have access to personalised care, including needs assessment, a care plan and health and wellbeing information and support*
- *By 2023, stratified, follow up pathways for people who are worried their cancer may have recurred. These will be in place for all clinically appropriate cancers.*

This will be achieved by having national adoption of Personalised Stratified Follow Up (PSFU) pathways as follows:

- by 2019/20 for breast cancer
- by 2020/21 for prostate and colorectal cancers
- by 2023/24 for other cancers where clinically appropriate

The focus for Cancer Alliances and their provider organisations has been to introduce PSFU to breast, colorectal and prostate cancers initially, then roll out to other cancers. The National Evaluation of PSFU⁵ carried out in 2020 identified that the focus for roll out has largely included cancers such as lymphoma, other haematological cancers, gynae-oncology, and skin. However, some Cancer Alliances had started to introduce PSFU to cancer sites with a traditionally high level of medical follow up and poorer outcomes e.g., lung, head and neck and upper gastrointestinal cancers. Thames Valley Cancer Alliance are considering developing PSFU for head and neck cancer patients in 2022.

⁴ <https://www.longtermplan.nhs.uk/areas-of-work/cancer/>

⁵ NHS South Central and West Commissioning Support Unit *National PSFU Evaluation* (2020): Available on request

The Improving Outcomes for Head and Neck Cancer report recognises two competing influences on the organisation of head and neck cancer services. Due to low incidence of cases, with a variety of complexities and the requirement for a wide range of expertise required to support safe and effective care, services are often centralised within a region. However, many of the patients who require diagnosis, treatment and follow up are poorly placed to travel. It is recommended that a wide range of support services should be provided to all head and neck cancer patients, throughout the cancer pathway, from pre-treatment assessment until completion of rehabilitation. This has a positive effect on reducing anxiety, improving nutritional status, function, quality of life, and reducing future hospital admissions.

Local Context

Within the Thames Valley Cancer Alliance, all head and neck cancer patients follow a model of centralised care as recommended by the Improving Outcomes for Head and Neck Cancer report and NHS Specialist Services. Surgery is undertaken at Churchill Hospital, part of Oxford University Hospitals NHS Foundation Trust (OUH), with chemotherapy and radiotherapy provided at either OUH or Royal Berkshire Hospital (RBH). Patients who live in the Swindon and Wiltshire region are referred from Great Western Hospital NHS Foundation Trust (GWH) Swindon to OUH for all their treatment.

On completion of treatment, there is an extensive period of follow up and rehabilitation. They number on average 25 visits per patient over five years plus additional appointments with Allied Health Professionals (AHPs) both at OUH and locally. Large travel distances and the related costs of appointments are major issues for patients. Post-treatment effects for head and neck cancer patients can be significant, unpredictable and cause distress and anxiety for patients. Having a local head and neck cancer service can provide reassurance and timely access if patients experience adverse treatment effects or symptoms of cancer recurrence.

To address many of these issues, Thames Valley Cancer Alliance introduced a pilot redesign of head and neck cancer follow up in 2018. This enabled

residents of Swindon and Wiltshire to receive an increased proportion of their follow up and rehabilitation much closer to home at GWH in Swindon. The project, funded by Macmillan Cancer Support, Thames Valley Cancer Alliance and the two providers focussed on improving patient outcomes and experience of care. It also aimed to provide additional capacity at OUH to address increasing patient numbers, improve timely access for patients and reduce delays in the treatment and diagnosis of recurrence.

The pilot was developed following a scoping report⁶ of the rehabilitation support for head and neck cancer pathways across the former Thames Valley Cancer Network in 2015. Macmillan Cancer Support were instrumental in identifying the initial patient need for the service, and they contributed significantly to the scoping work. The project had active support and participation from patients, Macmillan Cancer Support, clinical and managerial staff from all the Thames Valley Providers and CCGs, and the Cancer Network.

Recommendations from this report included:

- Patients should be offered personalised stratified follow up (PSFU) pathways
- Local specialist head and neck cancer teams should be developed
- There should be an increase in the number of rehabilitation staff at cancer units
- There should be increased restorative dentistry services
- There should be a programme of learning opportunities and protected training time

Pilot Service Expected Benefits

The pilot aimed to realise numerous benefits including:

- Improved patient experience through reduction in frequent long journeys

⁶ Thames Valley Head and Neck Cancer Scoping Report (2015)

- Improved quality of service for patients from Swindon and Wiltshire, with an innovative stratified pathway that stretches across their input at GWH and OUH. This ensures patients are managed by the most appropriate service for their needs but in a local setting where appropriate.
- Improved access for patients and reduction of delays in the diagnosis of recurrence and treatment
- Improved capacity for Speech and Language therapy, Dietetics, Clinical Nurse Specialist support and Restorative Dentistry
- Development of local expertise in Swindon which can be built on in the future
- Ensuring the long-term sustainability of the whole networked service, with a pathway that has the resilience to cope with increasing referrals including the projected rise in incidence of oral cancer and expected increases in population in both Swindon and Wiltshire
- Completion of more Holistic Needs Assessments to enable patients to be referred for appropriate support
- Increased patient education and focus on prevention of recurrence to enable patients to feel more in control of their own health and wellbeing
- Development of a blueprint for localised follow up which can be replicated across the Thames Valley

Pilot Design

The pilot's model of care aimed to recognise the balance between meeting the specification of NHS England Specialist Services that require the co-location of relevant specialties involved in treatment and care, and the local provision of services that promotes the principle of seamless care closer to home. Travel to a specialist centre is considered acceptable only when there is a clinical reason. Patients were to receive follow up and rehabilitation at OUH for a minimum period of four-six months, prior to being offered follow up at GWH.

The local follow up service for Swindon and Wiltshire patients at GWH comprises a weekly Multi-Disciplinary Team (MDT) head and neck cancer clinic including input from Ear, Nose and Throat (ENT), Maxillo-Facial (Max-Fax)

Dietetics, Speech and Language Therapy (SLT), Clinical Nurse Specialists (CNS) and a Patient Pathway Co-ordinator. As patient education is a key element of the pilot, a head and neck cancer specific rehabilitation education programme was to be created to enable more self-care and prevention of recurrence.

Four risk stratified pathways were developed with a significant proportion of the follow up pathway taking place at GWH after specific time periods of follow up and rehabilitation at OUH. Appendix One provides the details of these pathways.

Local Clinical Commissioning Group (CCG) and Provider Objectives

The pilot supported achievement of several objectives included in the Swindon CCG Five-Year Plan, notably to co-locate cancer services as far as is possible within the current estate at GWH and to improve patient experience of cancer care.

The pilot meets the objectives of the Wiltshire Health and Wellbeing Strategy which advocates that “*care should be personalised and delivered in the most appropriate setting, wherever possible in the community and at, or closer to home⁷*”.

⁷ <http://www.wiltshire.gov.uk/adult-care-joint-health-and-wellbeing-strategy>

3. Evaluation Aims and Methodology

To support decision making on the future of the pilot, Thames Valley Cancer Alliance commissioned NHS South, Central and West Commissioning Support Unit (SCW) to carry out an independent evaluation.

The primary aims of the evaluation were identified by the Head and Neck ‘Closer to Home’ Pilot steering group:

- Evaluate the impact of the redesigned pathway on patient experience, including factors such as quality of life and clinical outcomes
- Generate an evidence base to support the economic case for the pilot. The evaluation will set out to assess the financial sustainability and support discussions with commissioners. A core requirement of this will be to identify organisational and where possible, generate patient level efficiencies
- Consider the effect of the COVID-19 pandemic on the head and neck cancer pathway, and how the introduction of virtual consultations has impacted this patient group
- Provide an assessment for wider roll-out of the interventions. This would consider the ‘critical success factors’ which would allow similar results to be secured in other contexts, and the extent to which the evaluation findings support the wider roll-out of the interventions across Thames Valley

The Head and Neck ‘Closer to Home’ Pilot Steering Group identified a range of benefits they hoped to see from the introduction of the new service at the outset of the project and the outputs of this were to form part of the evaluation.

Table 1: Head and Neck ‘Closer to Home’ Pilot Anticipated Benefits

1.	The patient/carer has a reduction in travel to OUH for follow up treatment
2.	Potential increase of patients on stratified pathway can ensure optimum resource allocation by ensuring each patient’s risk is apportioned appropriately

3.	To create a dedicated team in GWH and develop local expertise
4.	Increased capacity/ staffing will allow for more Holistic Needs Assessments (HNAs) and Health & Wellbeing assessments to be completed
5.	Healthcare professional increased job satisfaction through development and opportunities to progress - creation of new posts within the Trust
6.	Patients more knowledgeable of conditions and risks of recurrence so present before complications set in
7.	Improved communication and integration between GWH and OUH head and neck cancer teams
8.	Alignment of standards with national best practice guidance

The full Benefits Realisation Plan is shown in Appendix Two.

The evaluation consisted of a mixed-methods approach with both quantitative and qualitative analysis. Following the creation and agreement of the relevant data sharing agreements from GWH, OUH and Thames Valley Cancer Alliance (part of NHSE SE Region), SCW commenced with evaluation fieldwork in late May 2021.

Quantitative data sources identified included the following:

- Secondary Uses Service (SUS) patient level secondary care data from OUH
- Outpatient contacts at GWH, including follow up clinics and rehabilitation services
- Finance information provided by both the GWH finance team and Bath and North, East Somerset, Swindon, and Wiltshire (BSW) STP
- Outcomes data from speech and language therapy and dietetic services
- Electronic Holistic Needs Assessment numbers and timing provided by Macmillan Cancer Support and the GWH CNS

Quantitative Data

The patient cohort for the quantitative data analysis was defined by SCW with input from the head and neck cancer clinical and managerial team at OUH. The cohort included the following:

- All patients admitted to OUH for inpatient spell with Primary Diagnosis of Head and Neck Cancer (ICD-10 codes - C00-C14, C30-C32), with admission date since 1 April 2016 (some patients had more than one inpatient spell)
- Inpatient spells that were completed after 31 December 2015

Spells with only diagnostic procedures were excluded

The patient cohort was split in two ways:

- Patients from Swindon and Wiltshire (by Local Authority of Residence), and patients from elsewhere
- Patients who had their latest inpatient spell prior to the Swindon Clinic opening, and patients who had their latest inpatient spell after the Swindon Clinic opened (1 September 2018)

The GWH clinic opened in September 2018 and was fully operational by December 2018.

All patient data came from SUS and was obtained through the National Commissioning Data Repository (NCDR)⁸, which provides a pseudonymised patient identifier code in lieu of NHS number. This ensured that SCW were unable to directly identify any of the patients included. The pseudo-NHS numbers were used to establish the Outpatient and Emergency Department activity relating to those cohorts.

⁸ Please note, as per guidelines in using National Commissioning Data Repository data, that this report is for NHS operational and management purposes, and is not to be used as official statistics for general public use

Table 2: Patient Cohort Data

Patient Residence	Last Inpatient spell prior to GWH Clinic	Last Inpatient spell after GWH opened	All Head and Neck Cancer patients
Swindon and Wiltshire	73	146	219
Others	386	686	1072
Total	459	832	1291

Patients from Swindon and Wiltshire make up 21% of all patients referred to OUH. The age range of patients is 38-95, with the majority being over 65 years of age.

Table 3: OUH Inpatient Data Treatment Function Codes

Treatment Function Code	Description	Count of Patient Numbers
144	Maxillofacial Surgery Service	742
120	Ear, Nose and Throat	681
370	Medical Oncology Service	169
301	Gastroenterology Service	134
800	Clinical Oncology Service	45
160	Plastic Surgery Service	42
260	Paediatric Medical Oncology Service	34
141	Restorative Dentistry	19
315	Palliative Medicine Service	14

Both ENT and Max Fax patients seen at the GWH clinic are coded under the ENT Treatment Function Code (120). Where the report refers to the GWH clinics it includes both ENT and Max/ Fax patients.

The following qualitative data was sourced:

Pre-Existing:

- Report of patient experience survey carried out by project team at GWH (commenced in September 2018)

Analysis carried out by SCW:

- Staff Surveys (GWH Team): 5 completed responses
- GWH and OUH staff interviews: 12 interviews undertaken
One of the interviews was with the Thames Valley Cancer Alliance Clinical Director in her capacity as OUH Consultant Maxillo-Facial Surgeon. This was declared as a possible conflict of interest. All interview information was directly related to observations of the clinical role being undertaken.

Appendix Three provides further detail about the staff interviews

- Patient survey: 31 completed responses
- Patient interviews: 10 interviews undertaken

Patients were asked if they wished to participate in the evaluation by the Head and Neck Patient Pathway Co-ordinator during routine clinic visits. If they agreed, paper copies of the survey were provided by the Pathway Co-ordinator. Patients could reply anonymously, and results were shared with SCW. Patients were asked if they were willing to have a short telephone interview with one of the SCW evaluation team and if so to leave contact details. Staff surveys were carried out using the SCW *Join the Conversation* (JTC) online engagement forum.

All relevant staff working in the GWH clinic were sent a link to the JTC staff survey and were asked to participate in a virtual interview. Relevant OUH staff were contacted to participate in a virtual interview. All interviews followed a 1:1 semi-structured format, followed by application of a framework analysis.

4. Patient Outcomes and Experience

The principal reason for establishing the 'Care Closer to Home' pilot was to improve patient outcomes and experience of care. The evaluation team used findings from surveys and interviews, and data related to travel to assess how successful the pilot was in delivering these outputs. Prior to the SCW evaluation the pilot service team carried out a patient survey focussed on travel, and the findings are summarised below.

Project Group Patient Survey

This was devised by the Head and Neck Clinical Nurse Specialist (CNS) and cancer audit manager and sent to patients at two time points: initially on referral for follow up, and again six months into follow up at GWH. Patients reported the overall visit time to Swindon had decreased with reduced cost of journeys and time waiting to be seen, compared with appointments in Oxford. Many cited the stress and tiring nature of the experience of travelling to Oxford and they welcomed the opportunity for an easier, quicker trip that was less expensive and offered easier parking. Several people took the opportunity to praise the clinical team at OUH and desire for continuity of care as they transferred to the team at GWH. The survey was started in September 2018 and is ongoing. The results seen by the SCW team are up to April 2021.

SCW Evaluation Findings

The remainder of report findings are from fieldwork and data collected by the SCW evaluation team.

Patient Reported Benefits related to Travel

Responses to the SCW patient survey and interviews provided further strong positive feedback about the benefits related to having access to a clinic closer to their homes, where parking is easier and results in reduced costs to them. There is less reliance on friends and family related to accessing the GWH clinic. Some patients were even able to walk to the clinic which has associated wellbeing benefits. Patients reflected that the GWH clinic resulted in an improved quality of life.

'Parking at Churchill is a nightmare, and you have to allow at least five hours for the travel time, time to park and waiting time for a 10-minute review. Effectively that means a day off work for one short meeting. Going to GWH means I only need to take an hour off work and that's far more convenient.' (Patient feedback)

Staff Perception of Travel Benefits for Patients

A similar response was reported by staff about the perceived travel benefits for patients. Patients report less travel distance, savings in time and money, and that it is less tiring and stressful for them. Patients are pleased to be offered the opportunity for follow up at GWH.

'Every time I do clinic, at least one patient, if not more, say to me this is so great that I haven't had to come to Oxford' (Head and Neck Cancer Consultant)

'Some of our patients are elderly with other health conditions therefore the journey can be tiresome, and some do not have access to their own transport and thus rely on public transport.' (Head and Neck Cancer Patient Pathway Co-ordinator)

Quantitative Impact of Reduced Travel

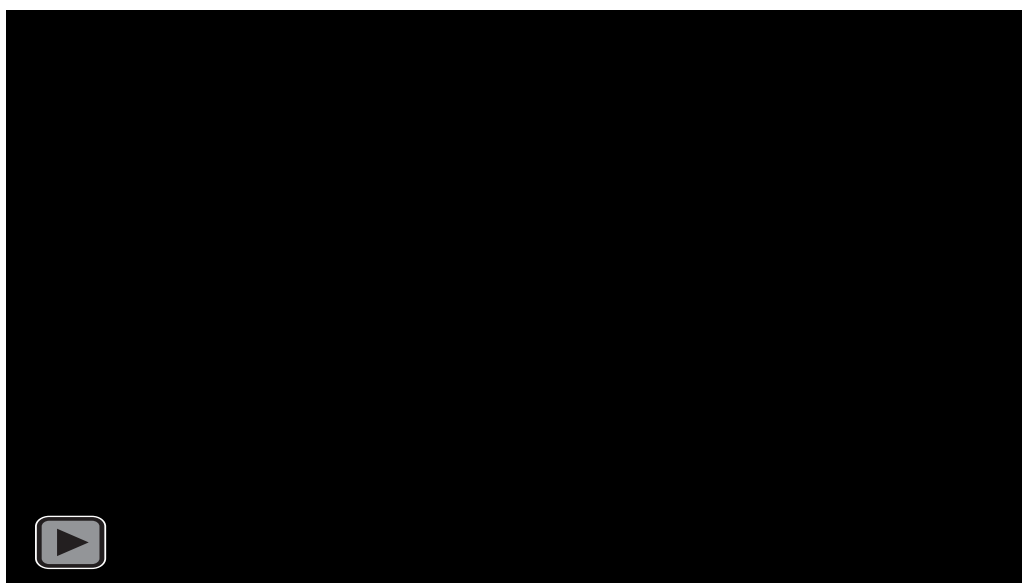
The SCW Geographical Intelligence and Mapping (GIS) team carried out analysis of the impact on patient travel times. Using the patient cohort dataset derived from SUS, the patient journey start point was defined as their GP practice and the destination was the Provider Site (GWH, OUH or other). This cohort was selected as it includes all patients attending the GWH clinic.

Travel times were mapped for ENT service appointments in consecutive years from 2016-2020 and are shown as an animated series below. Further analysis considered the potential environmental impact in terms of carbon consumption.

Table 4: Average Travel Time per ENT Appointment for Swindon and Wiltshire Patients

Year (from 29 June each year)	Average Travel Time (hours)	Average Reduction (minutes)	Change since 2016 (minutes)
2016	01:11:47		
2017	01:09:46	2.01	2.01
2018	01:09:06	0.40	2.41
2019	00:47:41	21.65	24.06
2020	00:41:06	6.35	30.41

Figure 1: Interactive Maps showing ENT Travel Times (2016-2021) with Chart Legend



The largest reduction in travel times was between 2018 and 2019 after the GWH clinic opened. Further reduction between 2019 and 2020 is likely due to the COVID-19 pandemic, which commenced in March 2020 resulting in face-to-face appointments being changed to virtual. The environmental impact of the reduction in travel times has been evaluated. The calculation of the carbon released (in kg) per appointment journey is based on the journey distance (in km) for an average sized petrol, diesel, hybrid or electric car, using the [Gov.UK 'Government conversion factors for company reporting of greenhouse gas emissions'](#).

Figure 2: Carbon Emission Data related to ENT Appointments

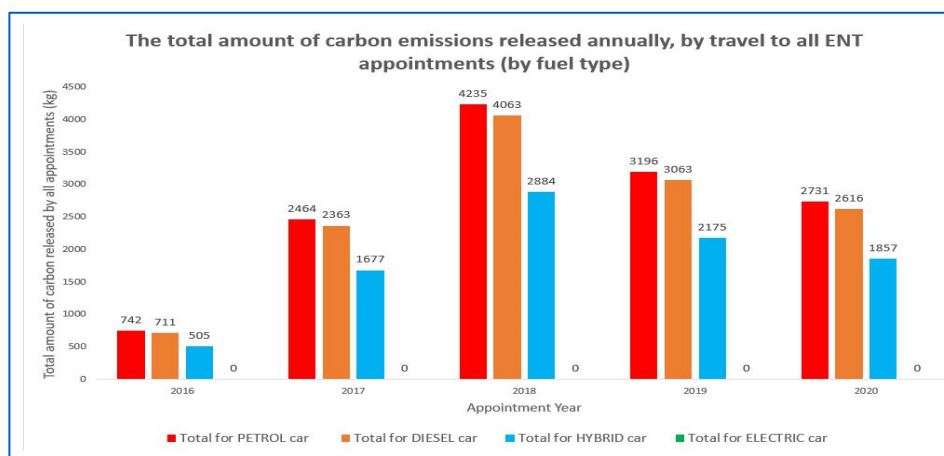
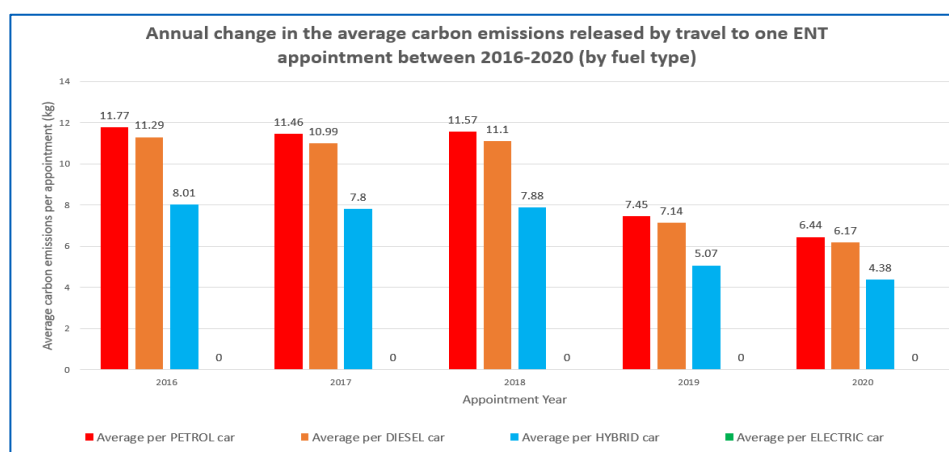


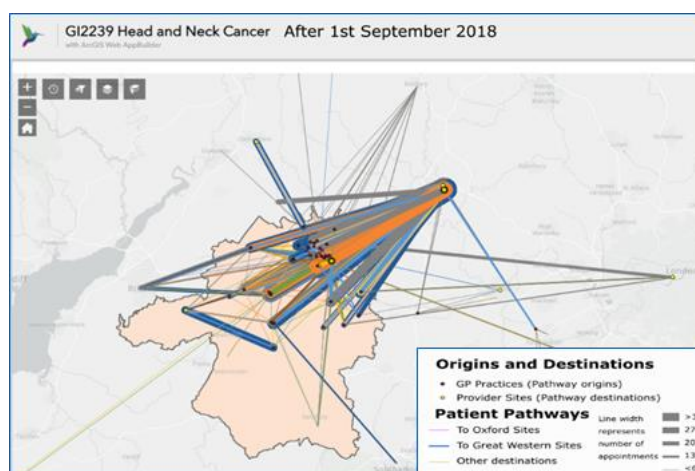
Figure 3: Average Carbon Emissions released per ENT Appointment



Further analysis of all patient outpatient appointment journeys was undertaken and shown below. Although there are significant reductions in average travel times for ENT appointments, it is evident that head and neck cancer patients are still travelling significant distances for healthcare appointments.

Many of the head and neck cancer patients are over the age of 75, and therefore more likely to have other co-morbid conditions. They often live in more deprived areas with poor access to transport.

Figure 4: All Appointments for Swindon and Wiltshire Head and Neck Cancer Patients by Treatment Code after September 2018



The coloured lines in the chart above relate to the different outpatient clinics accessed by the patient cohort (Appendix Four)

GWH Clinic Patient Feedback

Patients reported feeling well supported by the GWH team, and found them friendly, helpful, and easy to communicate with. Clinics were felt to be prompt and efficient and seeing the same clinicians in both Oxford and Swindon was supported by patients. Positive feedback for the GWH non-medical clinical team, including CNS, Patient Pathway Co-ordinator, AHP's and Clinical Psychology was reported.

'All the team have been excellent both with check-ups (to make sure it hasn't come back) and referrals to lymphoedema clinic, dietitian and psychologist'
(Patient feedback)

One patient highlighted the support from the Maggie's Centre in Oxford was extremely beneficial to them and access to this type of support at Swindon would be welcomed. Macmillan are funding a staffed cancer information hub in the new radiotherapy unit. This is due to open next year and will provide information and support for patients. Although follow up was welcomed in Swindon, one patient commented that Oxford was recommended for treatment. The lack of oncology service at Swindon was something that patient suggested could be improved.

Perceived Patient Clinical Benefits

'I think having care closer to home not only allows the patient to feel more at ease but gives confidence to both parties that emergency care, new problems, advice, is all available on hand and within a close travel distance, saving patients time and money.' (Head and Neck Cancer CNS)

The new service was reported to result in improved patient outcomes, with problems being resolved before they become more significant and difficult to manage. Examples such as resolving leaking speaking valves and carrying out tracheostomy changes were highlighted, and it was reported that patients often acted on these issues more quickly as the care was local to them. Because the Swindon team have developed a greater knowledge of the patients, they can provide a better experience if they are admitted to GWH, through effective and timely communication with ward staff. Having access to the specialist AHP services was highlighted as a key benefit to patients, providing advice and support outside of the clinic.

Communication and continuity of care benefits of the GWH clinic were highlighted. Seeing the same clinicians at both OUH and GWH gives patients confidence in the service. The Patient Pathway Co-ordinator role has been highlighted by many staff members as a positive addition to the service.

'The dedicated pathway coordinator means that they (patients) have one person who knows that community well and has got to know the patients and the team very well...She can direct their queries quickly and efficiently and from a team point of view, I think it's been really, really positive.' (Head and Neck Cancer Consultant)

This role provides regular communication to patients, managing and triaging patient calls to reduce the burden on the CNS and other health professionals. Patients have a single point of contact with the service, which alleviates worrying concerns in a quick and effective way. If patients require a clinic appointment following a call, this can be expedited quickly which is welcomed by patients and provides positive clinical outcomes.

Quantitative Clinical Outcomes for Patients

Data provided by the Patient Pathway Co-ordinator reported that 19 patients were referred back to Oxford with recurrence of cancer, and six patients in follow up who subsequently died. The true number of deaths is unknown as the evaluation team was unable to source this data from SUS records.

It is clear from staff interviews that collection and sharing of clinical outcomes in all professional groups is at an early stage of development with no evidence of clinical audit being undertaken within or across the MDT. While individual professions are collecting some outcome measures, there was no agreed systematic approach in place. This was disappointing, but not unique as highlighted in this quote from the 10th (and last published) National Head and Neck Cancer Audit 2014⁹ *'Multi professional audit has taken a number of years to mature and data quality issues remain, particularly for speech and language, dietetics, clinical nurse specialists and dental assessment, making meaningful reporting in these areas difficult.'*

The clinical teams are keen to understand more about the clinical outcomes for the service, and to share outcomes across wider head and neck cancer teams.

'I don't know what our quality of care is like in Swindon from a clinical outcomes perspective. And I think we need to share outcomes, and data on expectations.'

(Head and Neck Cancer Consultant)

Holistic Needs Assessments

One of the evaluation criteria was to assess the number and timing of Holistic Needs Assessments (HNA) performed with analysis of the issues highlighted by patients. HNAs ensure people's physical, practical, emotional, and social needs are identified and addressed at the earliest opportunity, helping people take an active and empowered role in their cancer care¹⁰. The GWH service was set up with the intention to increase the uptake of electronic HNAs using the Macmillan

⁹ <https://www.hqip.org.uk/wp-content/uploads/2018/02/ueT19r.pdf>

¹⁰ <https://www.macmillan.org.uk/healthcare-professionals/innovation-in-cancer-care/personalised-care>

eHNA platform. Using an electronic form of HNA is acknowledged nationally as good practice for the following reasons:

- Detailed understanding of individual patient concerns and issues
- Improved data capture to understand and analyse different cohorts of patients
- Enables services to be put in place to meet need at a local or regional level

Across the Thames Valley, the Macmillan eHNA¹¹ system is used in several providers, including both OUH and GWH. From discussion with the GWH CNS team and analysis of data from Macmillan, it is apparent that very few HNAs are occurring at GWH. The staff interviews highlighted ambiguity and confusion on when an 'end of hospital treatment' HNA should be undertaken, with few being done as a result. It is recommended that more education about the purpose and benefit of carrying out HNAs may be required at GWH, and a protocol agreed for who and when these will be undertaken. The regional Macmillan team have indicated that they are keen to work with the OUH and GWH CNS teams to map the HNA process and facilitate increased uptake.

There is an additional resourcing issue, with the burden of HNA delivery currently falling to the CNS to perform. Other models could be employed with HNA completion shared with other members of the AHP team, and/or a support worker taking responsibility for coordinating HNA and triaging completion, escalating to clinical colleagues as needed. It was apparent that COVID-19 negatively impacted on the implementation of eHNA.

¹¹ <https://www.macmillan.org.uk/healthcare-professionals/innovation-in-cancer-care/holistic-needs-assessment>

Table 5: Electronic HNA Data for GWH and OUH (Source: Macmillan Cancer Support)

Provider	Assessments set up	Assessments submitted
GWH	8	5
OUH	97	72

Macmillan eHNA data for head and neck cancer across the whole Thames Valley region, shows the top 10 concerns by number of assessments relate mostly to head and neck cancer specific issues. This data is non-patient identifiable. The table below shows that transport or parking is reported as the 3rd highest concern across the region.

Table 6: Top Ten Concerns by Average Score

Concern name	Ranking of Concern (1 = highest; 10 = lowest)
I have questions about my diagnosis	1
Housing	2
Transport or parking	3
Unable to express feelings	4
Laundry or housework	5
Regret about the past	6
Dental health, teeth	7
Preparing meals or drinks	8
Person who looks after me	9
Mucus	10

The top referrals for services in Thames Valley for head and neck cancer are wide ranging and reflect the range of issues faced by patients.

Table 7: Top Referrals for Thames Valley

Speech and Language	Housing services
Psychologist	Physiotherapy
GP	Welfare Benefits
Maggie’s Centre	Substance misuse clinic
Dietitian	Cancer Rehab services (RBH)
Health and wellbeing services	Lymphoedema services
Support groups	Information services
Dental services	Macmillan Work service
Complementary therapies	

The data above relates mostly to the other providers in the Thames Valley. It is not possible to understand what the top concerns for GWH patients were, and therefore not possible to evaluate the extent to which these have been met by the local GWH service.

In many other cancer services across the country, the Cancer Support Worker role undertakes either all or part of the HNA and triages more complex concerns to the clinical team. The ‘Care Closer to Home’ pilot does not have a specific Cancer Support Worker role; however, the evaluation team feel this would be a significant and cost-efficient addition to the team. Redesigning the Patient Pathway Co-ordinator role would seem logical, as they have close communication with patients and staff, and could initiate and triage HNAs. This would enable referral of patients with complex issues to the relevant members of the clinical team.

Patient Education Programme

The setting up of a patient education programme was one of the ambitions of the pilot when it was set up. The evaluation team were unable to quantify the impact of this, as it was apparent that it had not yet been developed. This is possibly due to the pilot workforce not having capacity. Small numbers of each profession working in the pilot make it difficult to have the time available to design and develop a programme which meets the needs of the patients.

Patient education is crucial to support patients to identify possible signs of cancer recurrence, and to recognise and act on adverse treatment effects. If patients know what to look out for, they can act on the findings early and prevent delays in diagnosis and treatment. Education about how to maintain a healthy lifestyle is a key feature. This can be delivered in a 1:1 or group format. A group format allows for patient peer support, which can be beneficial for patients, connecting with people who have been through similar experiences.

Patient education is traditionally delivered in the form of a Health and Wellbeing event at the end of treatment, to support patients transitioning to follow up care¹². However, alternative models, including early post-diagnosis patient education have been introduced across other areas of the country. Delivering patient education at or near the point of diagnosis can provide patients with support to self-manage their condition and make health and lifestyle improvements from the outset of their cancer journey. Advice on issues such as physical activity, nutrition, emotional support and managing fatigue can be provided, as well as information to alleviate common concerns for patients such as financial support and accessing the hospital for treatment.

In certain centres early health and wellbeing clinics are delivered by Cancer Support Workers and are open to all cancer diagnoses. This approach enables enough patients to justify running the clinic on a regular basis. For a cancer service like head and neck where there are smaller numbers of patients, this

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<https://be.macmillan.org.uk/Downloads/ResourcesForHSCPs/MAC16500HWBEGuideWeb.pdf>

model is recommended for future consideration by the wider GWH Cancer Service. The specialist GWH MDT could then deliver an effective head and neck cancer specific patient education programme once commencement of follow up.

It has been highlighted to the evaluation team that GWH have received funding from Macmillan for two Health and Wellbeing CNSs. One of the post holders is in post and the other is due to commence in October 2021 and will run the generic cancer Macmillan 'Help Overcome Problems Effectively' ([HOPE](#)) courses. Macmillan are planning to fund two Personalised Care AHP roles at GWH. Both the CNS and AHP roles will provide additional support within GWH to develop patient education programmes.

National Cancer Patient Experience Survey Data

The evaluation team considered the National Cancer Patient Experience Survey data for head and neck cancer patients at GWH published in 2020¹³. There were only two respondents who completed the survey; therefore, no meaningful data could be analysed. The small number of responses is in line with other smaller tumour sites, both at GWH and nationally.

¹³ <https://www.ncpes.co.uk/wp-content/uploads/2020/06/CPES-2019-Trust-Great-Western-Hospitals-NHS-Foundation-Trust-RN3.pdf>

5. Economic Evidence Base and Financial Sustainability Assessment

Part of the evaluation was to understand the economic effect of the pilot, and to provide an assessment of the financial sustainability of the pilot becoming a business-as-usual service. The SCW Business Intelligence (BI) and Finance teams analysed a range of patient activity and finance data to produce the findings presented in this section of the report.

Outpatient Activity

Prior to the GWH clinic opening there was a limited number (just over 10%) of head and neck cancer outpatient appointments delivered at GWH. Half of these were for dietetics input, with the rest split between a range of treatment functions. Following the opening of the GWH clinic, outpatient activity has increased to an average of 28% of the total number of all head and neck cancer patients treated from across the region at OUH.

Figure 5 shows the increase in outpatient activity at GWH since April 2017 as a proportion of all head and neck cancer activity. Figure 6 shows how GWH activity compares with activity at John Radcliffe Hospital and The Churchill Hospital in Oxford. It is noted that all follow up oncology, including radiotherapy, and most restorative dentistry appointments are in Oxford.

Figure 5: Outpatient Activity for Head and Neck Cancer Patients at GWH

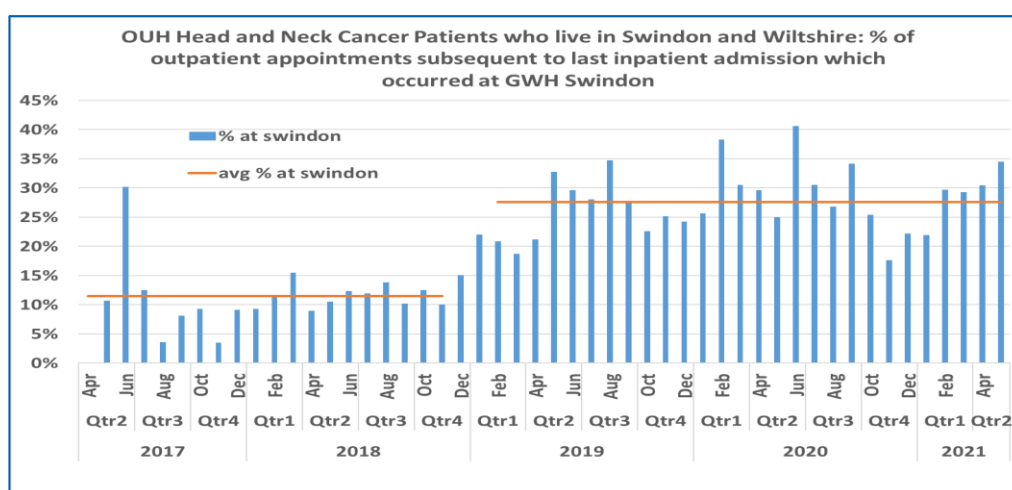
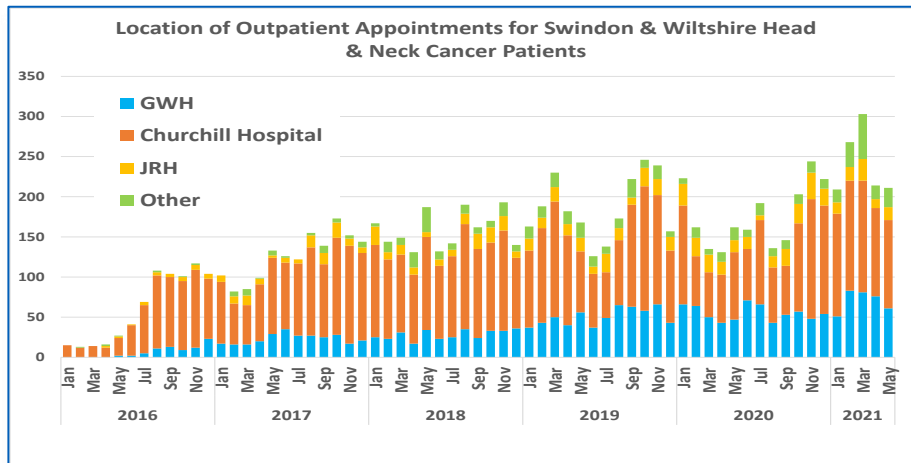


Figure 6: Location of Outpatient Appointments

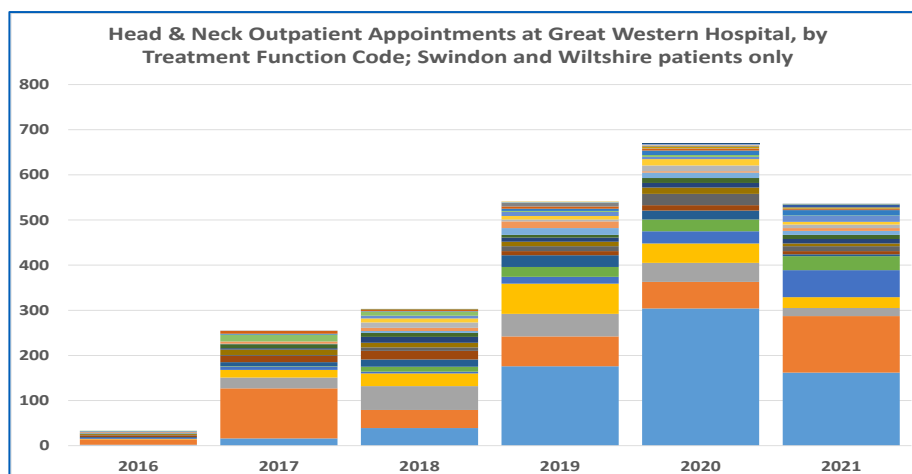


The charts below show the significant growth in head and neck cancer outpatient activity at GWH, and the growing variety of outpatient services offered to head and neck cancer patients. In 2016, Swindon and Wiltshire head and neck cancer patients were offered outpatient appointments in 13 different Treatment Functions, with over a third in Dietetics.

During 2020, Swindon and Wiltshire patients attended appointments in 29 different Treatment Functions, with ENT being the most common with 305 appointments accounting for 45% of all appointments (this includes both ENT and Max Fax patients). The full list of outpatient Treatment Function Codes can be seen in Appendix Four. Dietetics is shown as orange and ENT pale blue in the chart below.

Data for Speech and Language Therapy (SLT) is not included in the SUS data, as SLT input is provided through a separate community provider contract, although the activity is carried out at GWH. Specific SLT and CNS appointment data can be seen below along with referrals made to psychology services.

Figure 7: GWH Head and Neck Appointments by Treatment Function Code



Data for SLT contacts was obtained through records held by the Patient Pathway Co-ordinator and is split into three sections:

Table 8: Speech and Language Therapy Appointment Data

Type of Intervention	Number of Contacts
Present at meeting but no role specific advice given/ needed	121
Role specific advice provided	48
Sessions organised outside of clinic time for provision of one-to-one or group treatment	36

Table 9: CNS Contact Data by Quarter and Method of Contact

	Email	Face to Face	Post	Tele- phone	Telephone (Prevents OPA)	Not recorded / Other	Total
Q3 2018/19		9					9
Q4 2018/19		35					35
Q1 2019/20		51		2	3		56
Q2 2019/20		50		1		1	52
Q3 2019/20		44	1			1	46
Q4 2019/20		22				2	24
Q1 2020/21	1	27		2	7	3	40
Q2 2020/21		62			2		64
Q3 2020/21		44		2		3	49
Q4 2020/21	3	30		6			39
Not recorded		4				1	4
Total	4	369	1	13	12	11	410

The amount of CNS contact increased from clinic inception to a peak during Q1/2 2019/20. Q4 2019/20 and Q1 2020/21 were affected by COVID-19 and the resultant redeployment to ward areas. This period also saw an increase in telephone contacts. Most CNS interventions are categorised as either Level 3 (short-term involvement for multiple problems) or Level 4 (ongoing specialist advice and support for complex patients).

Data for clinical psychology contacts was provided by the psychology manager. No specific data on physiotherapy referrals/ contacts could be sourced.

Table 10: Clinical Psychology Appointment Data

Time Period	Number of appointments offered	Number of patients seen
Feb 2019 – March 2020	Unknown	65
April 2020 – March 2020 * (*Includes three months of sick leave by the postholder)	32	27

Restorative Dentistry Service

The data below shows attendances from the defined head and neck cancer patient cohort for Restorative Dentistry. This specialty was intended to be introduced into GWH as part of the pilot scheme, to help reduce out of area travel. However, all attendances have occurred outside GWH, meaning patients have still had to travel for this service.

Table 11: Restorative Dentistry Appointment Sites

Site Name	Pre-GWH Clinic	Post-GWH Clinic
RA709: University of Bristol Dental Hospital	0	22
RTH02: Churchill Hospital	10	26
RTH08: John Radcliffe Hospital	78	280
TOTAL	88	328

Financial Impact of the Service on Outpatient Costs

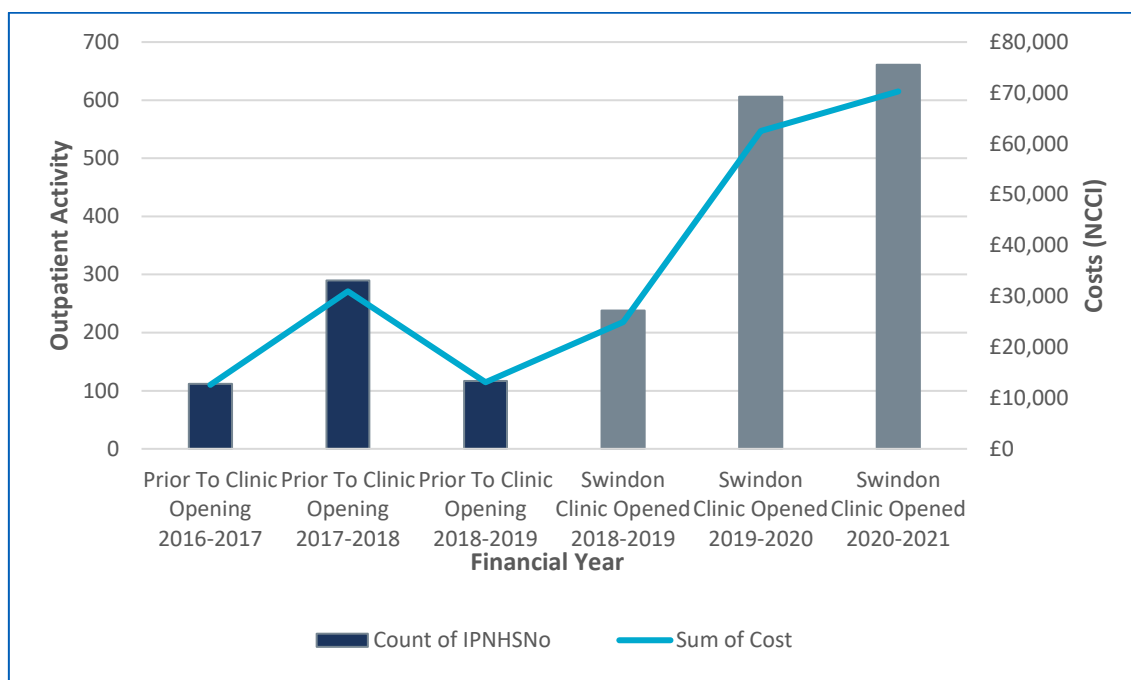
To try and measure the impact on GWH outpatient costs since the start of the head and neck cancer service, activity from 29 different Treatment Function Codes (TFCs) over five years was costed using a weighted average cost. This was established by reviewing the National Cost Collection Index (NCCI) for GWH in 2018/19 and 2019/20 which provided actual costs and activity for consultant/non-consultant led appointments for the TFCs in question. The percentage of consultant versus non-consultant led activity for each TFC and the costs of each type of appointment were established and this was then used to create one weighted cost per unit of activity.

The decision to use NCCI rather than National Tariff Payment System (NTPS) was made as the former is considered a better reflection of the costs incurred by a specific provider in delivering care, whereas NTPS is based on cost relativities (not how much a specific unit of activity costs, but how that cost compares to other units of care activity) and is averaged out across the country.

Data was converted from calendar year to financial year based on appointment attendance date. Activity is classed as an attended appointment or administrative event. Do not attend's (DNA's) and cancelled appointments are not included. Every attendance before 1 September 2018 is classed as "Before GWH Clinic" and everything on or after is classed as "GWH Clinic Open".

Figure 8 shows the change in GWH head and neck cancer appointments and associated cost change from 2016-2021 for all 29 TFC's combined. It shows that costs have increased in line with the increase in activity over the same period.

Figure 8: GWH Head and Neck Cancer Outpatient Activity and Costs



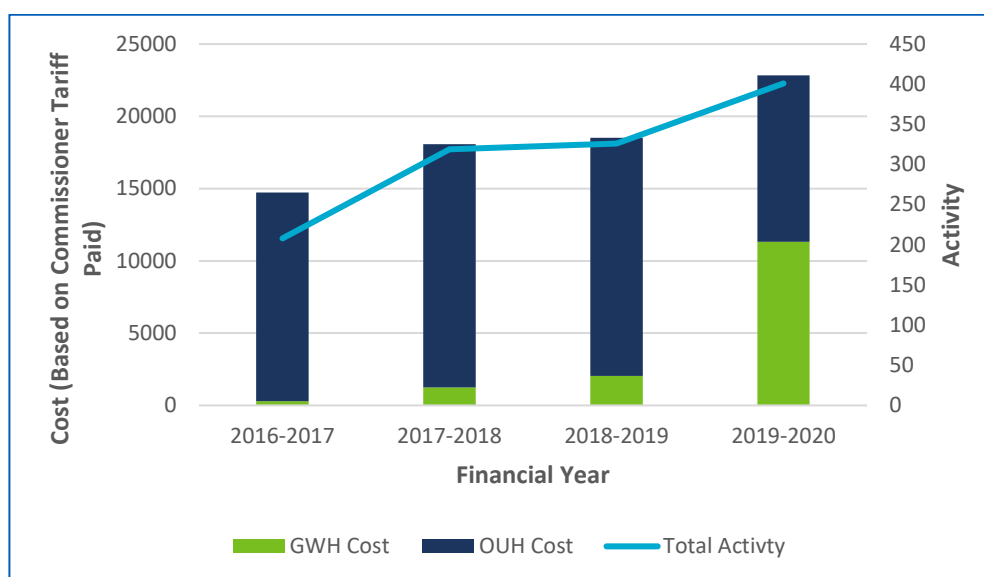
ENT Outpatient Activity and Costs

The BSW STP commissioners provided activity and cost data for ENT follow up appointments from 2016-2020 shown below.

Table 12: Activity and Cost Data for ENT Follow Up Appointments

Financial Year	GWH Activity	OUH Activity	GWH Costs (£)	OUH Costs (£)
2016-2017	4	204	283	14,439
2017-2018	22	297	1,246	16,822
2018-2019	36	290	2,045	16,470
2019-2020	199	202	11,327	11,498

Figure 9: Swindon Patient ENT Follow Up Activity at OUH and GWH



OUH ENT follow up appointments have reduced in 2019/20 from 290 to 202 while activity in GWH over the same period has increased from 36 to 199. OUH costs have decreased by £5,000 and GWH costs have increased by £9,000.

The expectation from the original pilot business case is that the pilot service would see increased costs at GWH offset by reduced costs at OUH, however, as of 2019/20 (the most available data), ENT activity and cost has only fallen by roughly 30% (88) at OUH, while activity and cost had increased by 450% (163) at GWH over the same period.

Outpatient activity across selected Treatment Function Codes

Growth pre and post GWH clinic opening for eight specific specialties was analysed and the results shown below in Table 13. These specialties were felt by GWH to be the most appropriate services related to the clinic. There has been growth in some of the specialties connected to the new service at GWH. A small reduction in 2020/21 activity can be seen in five of the eight services, most likely due to the impact of COVID-19. Table 14 considers total outpatient activity at GWH for the select specialties. Despite the rise in the head and neck cancer cohort ENT clinic attendances, overall activity is trending downwards for ENT.

Table 13: GWH Head and Neck Cancer Patient Cohort Activity for Select Specialties

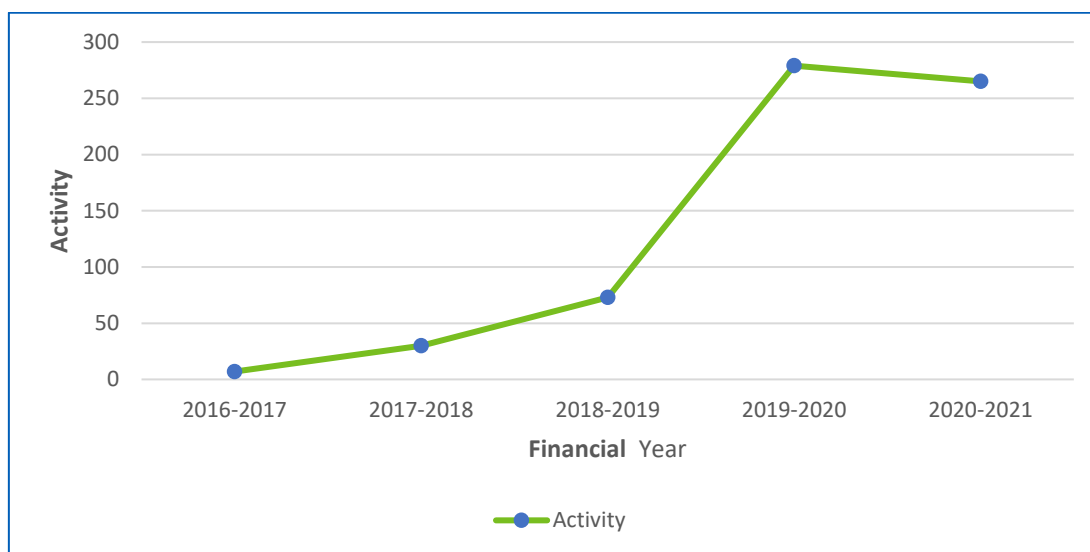
Specialty	Financial Year					Total
	2016/17	2017/18	2018/19	2019/20	2020/21	
120: Ear Nose and Throat	7	30	70	289	258	654
130: Ophthalmology	0	6	13	26	37	82
140: Oral Surgery	7	49	41	60	22	179
160: Plastic Surgery	4	7	13	5	5	34
370: Medical Oncology	0	5	11	3	18	37
650: Physiotherapy	6	26	54	53	32	171
654: Dietetics	54	86	53	55	123	371
800: Clinical Oncology	8	10	22	30	5	75
Total	86	219	277	521	500	1603

Table 14: Total GWH Activity for the Select Specialties

Specialty	Financial Year					Total
	2016/17	2017/18	2018/19	2019/20	2020/21	
120: Ear Nose and Throat	21,547	18,651	17,424	18,151	13,861	89,634
130: Ophthalmology	48,570	47,942	49,924	55,258	44,333	246,027
140: Oral Surgery	10,992	9,545	10,079	10,920	5,525	47,061
160: Plastic Surgery	4,526	4,383	4,375	4,228	4,500	22,012
370: Medical Oncology	4,715	5,089	6,238	7,241	8,113	31,396
650: Physiotherapy	50,417	44,190	47,430	48,543	28,307	218,887
654: Dietetics	7,827	7,511	7,665	7,927	9,416	40,346
800: Clinical Oncology	5,006	5,229	5,802	6,195	5,668	27,900
Total	153,600	142,540	148,937	158,463	119,723	723,263

Reviewing total outpatient activity for the eight specialties, overall activity is trending downwards for ENT and Oral Surgery, static for Plastic Surgery and Clinical Oncology, and trending upwards in all others (excluding potential drop offs for COVID-19 impact). Conversely, ENT activity in the head and neck cancer cohort has increased annually since the inception of the clinic, despite the reduction on overall ENT activity. This growth is reflected below.

Figure 10: ENT Growth in the Head and Neck Cancer Cohort at GWH



The tables below compare findings for the patients who attended the clinic during 2019/20 and 2020/21 with the initial modelling in the business case. The business case assumption was the anticipated numbers of patients are split equally across the three groupings, and there is a 20% drop off each year of patients receiving follow up due to death or discharge.

Table 15: ENT Clinic Modelling (From Original Business Case)

	Group 1	Group 2	Group 3
Number of Patients	20	20	20
Anticipated Appointments: (Assumes a 20% reduction in number of patients each year)			
Year 1 Post Treatment	60	80	60
Year 2 Post Treatment	64	96	96
Year 3 Post Treatment	39	39	52
Year 4 Post Treatment	22	33	33
Year 5 Post Treatment	18	18	27
Total	203	266	268

There was predicted to be a total of 737 patient appointments per annum across the five-year cohort of patients receiving follow up. Each year the cohort

will grow to account for new patients starting their follow up at GWH. Considering actual patient cohort activity, for years one and two since the clinic opened, numbers are similar to the original modelling in the business case.

Table 16: Actual Number of ENT Clinic Appointments in 2019/20 and 2020/21 compared to Business Case Modelling

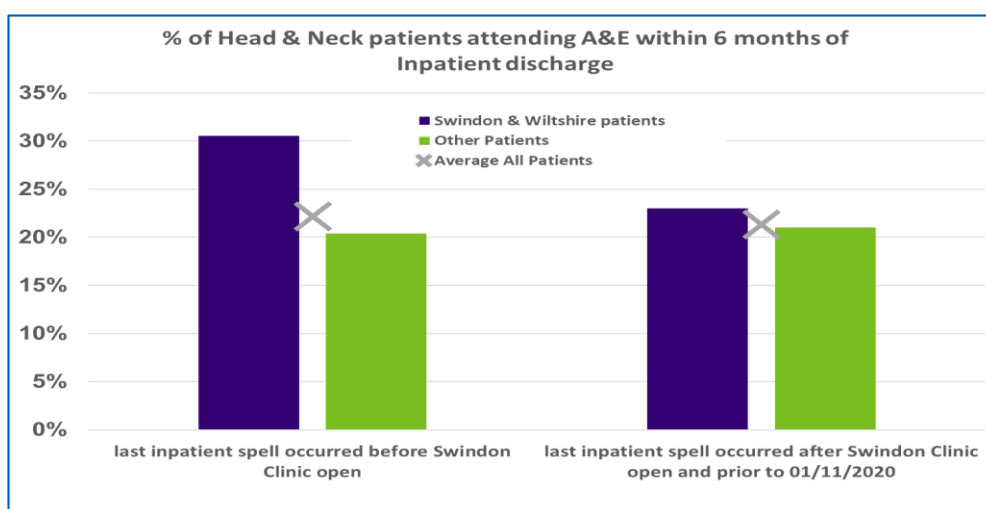
Financial Year	Business Case	Actual
2019-2020	200	205
2020-2021	256	235

Accident and Emergency (A&E) Activity

The proportion of head and neck cancer patients who live in Swindon and Wiltshire who experience an attendance at either GWH or OUH A&E in the six months following their last inpatient spell has fallen from 31% of patients to 23% of patients since the GWH clinic has opened.

Prior to September 2018, there were an average of 0.71 A&E attendances per Swindon and Wiltshire head and neck cancer patient. Since the GWH clinic opened there have been 0.34 A&E attendances per patient. This indicates that patients are >50% less likely to have repeated A&E attendances.

Figure 11: Proportion of Head and Neck Cancer Patients attending GWH and OUH A&E

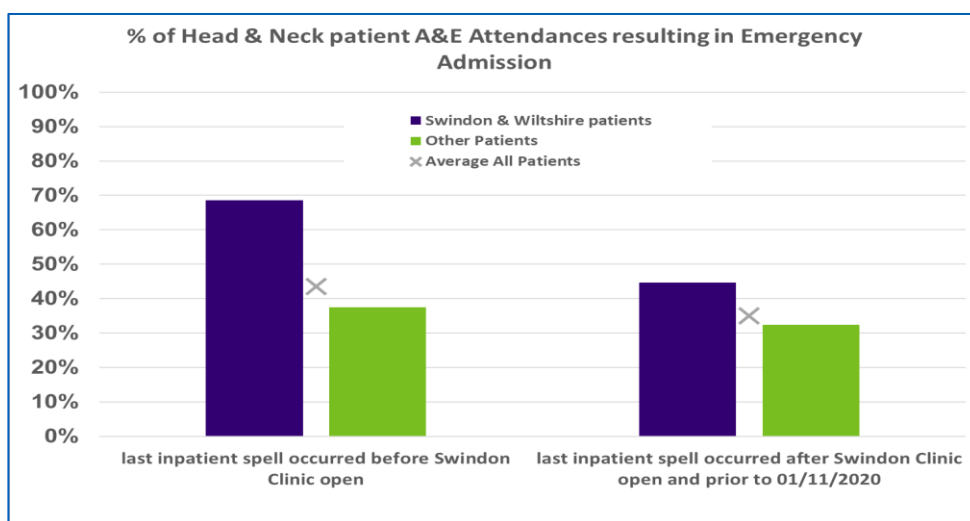


Hospital Admissions following A&E Attendance

Before the GWH clinic opened just over two-thirds (69%) of A&E attendances by patients living in Swindon and Wiltshire resulted in a hospital admission. Since the clinic opened, this level has fallen to less than half (46%) of attendances resulting in emergency admission.

Swindon and Wiltshire head and neck cancer patients now appear less likely to attend A&E within six months of their treatment, and if they do attend, it is less frequently, and they are less likely to experience an emergency admission.

Figure 12: Proportion of GWH and OUH A&E Attendances resulting in Emergency Admission



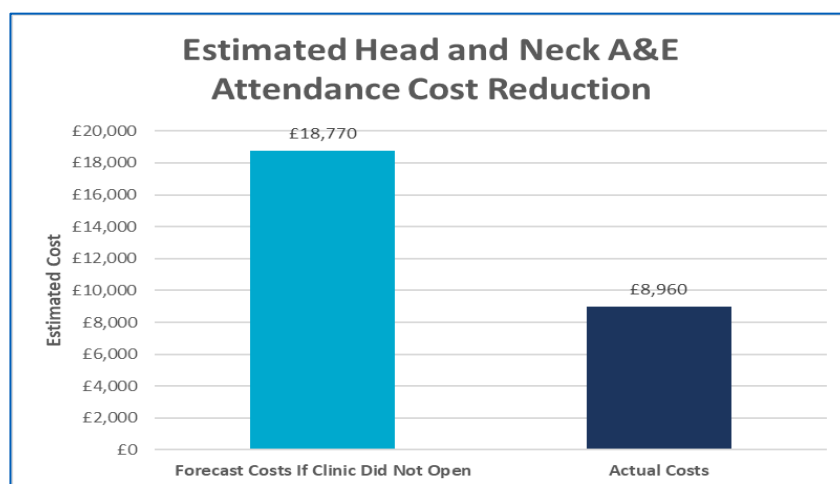
Costs associated with A&E Attendance

The chart below shows the estimated costs if head and neck cancer patients had attended A&E at the same rate before the GWH clinic opened. Had the clinic not been opened and A&E attendances within six months of last inpatient stay continued at the same rate, there would have been a 50% increase in A&E attendance.

Using pre and post GWH clinic activity to review the reductions in A&E attendances since the beginning of the GWH clinic, enabled a comparison of costs to be made. This used the assumption of head and neck cancer patients continuing to attend A&E at the same rate as pre-GWH clinic opening. The cost

per attendance was based on 2019/20 NCCI for GWH – £190.64 for Type 1 (Not Admitted). It should be noted that A&E patient attendance was at either GWH or OUH, therefore any financial benefit can be proportioned across both organisations.

Figure 13: Estimated Head and Neck Cancer A&E Attendance Cost Reduction



Using a weighted average of Non-Elective Admissions (NEL) from NCCI data, the SCW Finance team established an estimated cost of £3,400 per admission. Using this and the percentage change in emergency admissions from A&E for Head and Neck patients from Swindon and Wilts, it is possible to calculate an estimated non-cash-releasing benefit / saving of £107,500 as follows:

Table 17: Non-Cash Releasing Benefit of Reduced Emergency Admission from A&E

	Financial Year	Swindon /Wilts Patients	Patients admitted from A&E Based on % of Pre-Clinic Admissions	Cost of Admission Based on Weighted NNCI NEL	Patients admitted from A&E Based on % of Pre/Post Clinic Admissions	Cost of Admission Based on Weighted NNCI NEL	Impact
Pre-Clinic	2016/17	45	31	£104,151	31	£104,151	£0
	2017/18	33	23	£77,273	23	£77,273	£0
	2018/19	23	16	£53,755	16	£53,755	£0
Post-Clinic	2018/19	31	21	£70,554	12	£40,316	-£30,237
	2019/20	31	21	£70,554	12	£40,316	-£30,237
	2020/21	44	30	£100,791	16	£53,755	-£47,036
Total		207	142	£477,077	110		-£107,510

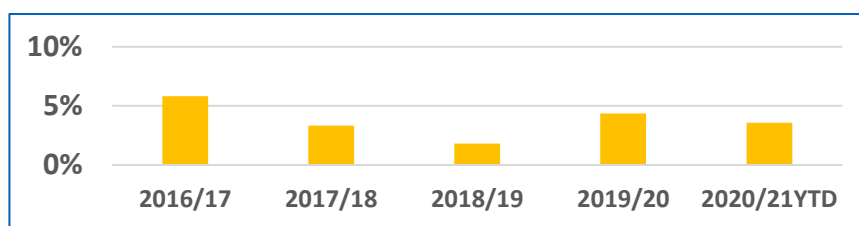
Impact on Outpatient Capacity at OUH

Cancer Performance Standards

Quantitative data shows an improvement in Two Week Wait (2WW) performance at OUH following the GWH clinic opening but no specific change in 31-day or 62-day performance standards. The head and neck cancer pathway is small and not considered to significantly affect the performance impact, however any improvements seen contribute to overall provider compliance.

Figure 16 below shows the breach percentage since April 2016. The period from March 2020 was impacted significantly by the COVID-19 pandemic with the subsequent reduction of 2WW referrals. This was seen in all cancer pathways both locally and nationally, therefore the validity of this data beyond March 2020 is significantly reduced.

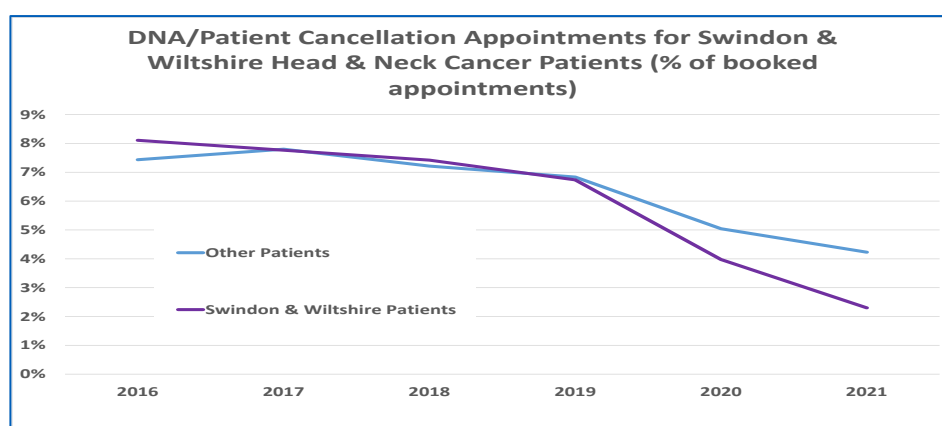
Figure 14: Percentage Breaches of Two Week Wait Standard: Suspected Head and Neck Cancer



Outpatient Do Not Attend (DNA) or Patient Cancellation Rates

Whilst Outpatient DNA and Patient Cancellation rates have reduced for all OUH head and neck cancer patients, the improvement is most marked for head and neck cancer patients from Swindon and Wiltshire. In 2016, 8.1% outpatient appointments were recorded as a DNA or Patient Cancellation; at 2021 YTD this figure is below 2%.

Figure 15: Swindon and Wiltshire Head and Neck Cancer Patient DNA/ Cancellation Rates at both GWH and OUH



When applying estimated costs of one Consultant Led ENT Outpatient Appointment (using NCCI value of £108) to each DNA, it shows the cost impact of DNA's and the % DNA rate for each year as follows:

Table 18: DNA/ Patient Cancellation Costs

	Financial Year	All OPA	DNA/ Patient Cancellations	% DNA	Total Cost of all DNAs
Pre-Clinic	2016/17	956	79	8.26%	£8,532
	2017/18	1703	132	7.75%	£14,256
	2018/19	782	55	7.03%	£5,940
Totals		3441	266	7.73%	£28,728
Post Clinic	2018/19	1246	87	6.98%	£9,396
	2019/20	2171	120	5.53%	£12,960
	2020/21	2375	65	2.74%	£7,020
	2021/22	508	7	1.38%	£756
Totals		6300	279	4.43%	£30,132

The mean DNA rate before the clinic opened was 7.73%. The DNA rate once the clinic opened dropped to 4.4%, despite the significant increase in activity. This meant total estimated costs of DNAs were much less than they would have been if the DNA rate had stayed the same level, leading to a non-cash-releasing benefit/ efficiency saving. Table 19 shows the impact of falling DNA rates using the cost per DNA if the mean rate had stayed at 7.73%.

Table 19: DNA/ Patient Cancellation Non-Cash Releasing Benefit

	Financial Year	Estimated Post-Clinic Cost per DNA (Based on Pre-Clinic Mean 7.73%)	Estimated Impact since Clinic Opened
Post-Clinic	2018/19	£10,402	-£1,006
	2019/20	£18,124	-£5,164
	2020/21	£19,827	-£12,807
	2021/22	£4,241	-£3,485
Totals		£52,594	-£22,462

It should be noted that the DNA data used to calculate the above includes all specialties the patient cohort has used, regardless of its relation to head and neck cancer. The cost per DNA has been set at £108. This is based on NCCI data showing a consultant-led ENT appointment costing GWH £108.

Qualitative Feedback related to OUH and GWH Capacity

Staff interviews provided additional insight into the capacity impact at OUH. The OUH CNS team reported that prior to the GWH clinic they received a lot of patient concerns from Swindon and Wiltshire patients, and since the start of the GWH clinic this has reduced significantly. However, the impact on their overall workload had not been significant due to the growing number of head and neck cancer patients. There are anecdotal reports of seeing twice as many patients compared to 10 years ago. Improved survival rates from other medical conditions were also identified as significant.

Diagnostic efficiencies were highlighted during staff interviews as patients were receiving more diagnostic input at GWH which resulted in less duplication of activity at OUH.

'We get a better-quality referral into MDT (from GWH). Patients almost universally have had a dental X-ray...it's a tiny thing, but it makes a massive difference to our 62-day treatment for chemo and radiotherapy, which a large portion of our patients get. The quality of the referral coming in.... that's been much more joined up.... photographs coming through so that we can make a decision and consider MDT comorbidities. If you now visit the Swindon MDT as opposed to two years ago, they've (patients) all got a PET CT scan. They've all got TNM staging. The work up before coming to Oxford is much better now.'
(Head and Neck Cancer Consultant)

It was highlighted that this could be improved further if digital systems were integrated across GWH and OUH. The 2017 head and neck cancer business case makes reference to a plan for a system-wide cancer digital transformation project, which would enable both teams to access patient information and assist the repatriation of patients from OUH to GWH. The Health Information Exchange (HIE) project funded by Thames Valley Cancer Alliance is now live. It

provides a platform for the easier exchange of images between organisations, which for cancer supports MDT discussions. This should assist the head and neck cancer teams working across GWH and OUH.

The follow up stratification criteria which state the point where patients can be considered for follow up at Swindon was highlighted as a barrier to capacity. Patients perceived as lower risk wait between four - six months post-treatment, and high-risk patients can wait a year before accessing the GWH clinic. The OUH therapy team reported that much of the rehabilitation after treatment is done within the first six months, so the burden of care for rehabilitation remains at OUH.

It has been identified by some of the clinical staff interviewed that the current timeframes require review now that the clinic is established, and the staff have more experience and confidence. A more personalised approach based on individual need would enable more patients to transfer sooner to GWH and would be line with the LTP requirements for PSFU.

'Follow up is very directed. I think we can manage capacity better. Some people need extra help, and some people need less.... We want to make it (service) available and approachable for patients because what we don't want is people pitching up in ED (Emergency Department) on a Friday night with some crisis that actually has been brewing for three weeks.' (Head and Neck Cancer Consultant)

Another factor highlighted that would further improve GWH capacity would be to ensure that only the members of the MDT who need to provide assessment and treatment see the patients. This would enable a greater capacity for appointments.

Workforce and Facilities Finance Considerations

The pilot business case identified the workforce, equipment and education programme costs required for Swindon and Wiltshire patients to receive all elements of their follow up care at GWH. The tables below show the comparison of the business case proposal against actuals.

Table 20: Recurrent and Non-Recurrent Costs (from the Business Case)

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Non-Recurrent						
Conversion of Clinic Room and Equipment	102,290					102,290
Recurrent						
Consumables, Room Rental, Diagnostics	33,800	33,800	33,800	33,800	33,800	169,000
Education Programme	4,000	4,000	4,000	4,000	4,000	20,000
Specialised Dentistry	13,000	13,000	13,000	13,000	13,000	65,000
Staff Costs	126,850	126,850	126,850	126,850	126,850	634,250
Total	279,940	177,650	177,650	177,650	177,650	990,540

Table 21: Actual Recurrent and Non-Recurrent Costs

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Non-Recurrent						
Conversion of Clinic Room and Equipment	99,618					99,618
Recurrent						
Consumables, Room Rental, Diagnostics	33,800	33,800	33,800	33,800	33,800	169,000
Education Programme	-	-	-	-	-	-
Specialised Dentistry	-	-	-	-	-	-
Staff Costs	122,850	122,850	122,850	122,850	122,850	614,250
Total	256,268	156,650	156,650	156,650	156,650	882,868

As the education programme was not developed and the restorative dentist was not recruited, actual costs of delivery have been £107,000 less than budgeted for in the business case. However, the consumables, room rental, and

diagnostics have been estimated as the provider has been unable to separate these from their other ENT clinics.

Table 22: Summary of Activity Costs and Savings

Area	Pre-Clinic	Post-Clinic	Change	Per Patient
Outpatient Cost	£22,668	£63,095	£40,427	£940
Reduced DNAs	£52,594	£30,132	-£22,462	-£522
Reduced A&E Attendances	£18,770	£8,960	-£9,810	-£228
Reduced Admission from A&E	£477,077	£369,567	-£107,510	-£2,500
Total	£571,110	£471,754	-£99,355	-£2,310

From the clinic inception, accounting for cohort activity, associated costs, and efficiency savings because of the clinic, the cost per patient has reduced by £2,310.

Financial Summary

As expected, there has been an increase in activity and cost at GWH, with resulting qualitative and quantitative benefits to patients in the cohort. Many of these can be assigned a financial value, albeit non-cash-releasing. The reduced demand on non-elective services (A&E and admissions) and the reduced DNA level in outpatient appointments deliver efficiency benefits but will not mean the provider or commissioner can reduce its costs.

Where activity moved directly from OUH to GWH, the evaluation team could not find evidence that there was a funding transfer from OUH to GWH to follow these patients. It could be that funding flows need to be adjusted to account for the impact of this. The introduction of the GWH clinic aimed to realise capacity benefits at OUH to enable the growing number of new head and neck cancer referrals to be seen in a timely way. This has been achieved with benefits seen in 2WW times.

There have been significant non-cash-releasing benefits/ efficiency savings that can be assigned to this pilot and demonstrate the financial impact of the new service.

6. Impact of COVID-19

The COVID-19 pandemic began in March 2020. It resulted in significant changes to NHS working practice, including restrictions to diagnostic tests, treatments, and follow up. There was a shift from face-to-face to virtual consultations in all clinical areas meaning changes to the original pilot had to be made. Through the surveys and interviews a deeper understanding of the impact of COVID-19 was sought, aiming to assess what changes had occurred, how they were perceived by patients and staff and how the service has changed as a result.

Patient Feedback

Analysis of the patient surveys showed that 21 out of 31 patients reported no adverse impact on their care from the COVID-19 pandemic. This was also reflected in the patient interviews.

'Continued to have six monthly follow up'

'This hasn't been a problem, they managed to keep my appointments regular'

Of the survey responses that highlighted an impact from COVID-19, (10/31), seven reported minor issues and three more significant issues highlighting increased anxiety related to telephone appointments, rather than face-to-face.

'Having to have telephone appointments instead of face to face is not as good'

'Bit scary having telephone check-up, not being seen face to face'

Seven patients reported either a delay or a cancellation of their appointments, but the impact of this was felt to be acceptable to them

'Delayed slightly, but always advised if I felt there was a problem to phone immediately'

'Only missed one appointment'

Staff Feedback

COVID-19 initially resulted in ceasing of face-to-face clinic appointments as routine appointments were suspended. This was in place for a few months, therefore every patient due a follow up was telephoned to ask if they had any concerns and if they felt they needed to be seen. The clinic slowly opened to face-to-face appointments; however, capacity was reduced due to issues with

room ventilation. Capacity returned to normal towards the end of 2020 and patients are now receiving face-to-face appointments and the clinics are mostly at full capacity.

At GWH, COVID-19 resulted in a variation in approach to managing routine ENT activity and cancer referrals and treatment. Routine (non-cancer) ENT assessment and treatment was suspended for approximately four to five months. Suspected cancer referrals followed a RAG rated triage approach:

- Red – High suspicion of cancer. Patient to be seen as per normal 2WW criteria
- Amber – Cancer unlikely and waiting not felt to have a detriment to patient outcomes – patients to have a review within two months of referral
- Green – Cancer not suspected. Patient to wait until routine service re-established

Patients were triaged by telephone, which largely worked well and limited the risk of COVID-19 transmission to both patients and staff. However, trying to perform video nasal and oral assessment was challenging, if not impossible, and this caused significant distress to clinicians.

'I had to make a lot of clinical decisions without being able to see the patients or with the correct resources available. New patients continued to present with head and neck cancer, and it was difficult to treat them which was incredibly stressful.' (Head and Neck Cancer Consultant)

Staff working in head and neck care are at particular risk of COVID-19 transmission due to high contact with aerosol generated particles. The head and neck team (ENT and Maxillo-facial) were particularly impacted by COVID-19, with most of the team either contracting COVID-19 or testing positive for antibodies, indicating exposure to COVID-19, even if the person was asymptomatic. One of the clinical team highlighted the negative effect of COVID-19 on enhancing the retirement rate for clinical staff, in an area where staffing is already a significant challenge nationally.

Another concerning COVID-19 related issue was the impact of dental practice closures on head and neck cancer referrals and the resultant increase in later stage, more complex cancers. It was reported that 50% of suspected head and neck cancer referrals come from dentists, and this was often a factor in achieving early cancer diagnosis.

Some nursing and AHP staff were initially redeployed to cover ward areas, which meant they felt unable to provide the expected level of care to patients, particularly as many staff are single professionals. There appeared to be no formal evaluation on the impact of this on patient outcomes.

'I was redeployed to ICU as well as continuing my other roles, so was very hard to be in so many places at once and still give 100% in each role as each role was different. I felt under pressure as there are no other head and neck CNSs in this hospital.' (GWH CNS)

Staff reported that many patients struggled with telephone or video assessment, especially as the transition to a virtual approach was so sudden.

'Face to face appointments were not possible and some telephone reviews were not possible due to patient's communication difficulties.' (Head and Neck Cancer AHP)

'They didn't particularly like video consultations.' (Head and Neck Cancer Consultant)

However, for some patients being seen from their homes virtually caused less stress if they were particularly anxious or at higher risk of contracting COVID-19. Patients requiring face-to-face appointments had their follow up delayed and this resulted in a backlog of surveillance. These were often the frailer 'at-risk' patients, and it was reported that several patients got lost in the follow up system and only recently re-presented for care. However, staff stressed that any patient who reported new symptoms or concerns was prioritised and seen face-to-face in clinic. Although the patients surveyed and interviewed for this evaluation reported minimal negative effects of COVID-19, this was not felt to be the case for all patients.

'We were unable to examine a patient and detect any recurrences, although we still aimed to see patients that had new worries. Some (patients) say their

problems worsened over COVID without having the correct professional to talk to, even GPs were inaccessible.’ (Head and Neck Cancer Professional)

Staff commented that patients were reluctant to come in for hospital appointments. This was due both to the risk of contracting COVID-19 but also a perception that the hospital teams were overwhelmed with work, and they did not want to burden them with their concerns.

Learning from COVID-19

Social distancing rules and the resultant reduction in clinic room capacity resulted in a new model of care being introduced. Previously clinic rooms often had several professionals present to see the patient together. Changes following COVID-19 now mean that staff only access the room if they know they will be needed, and as they are available if required, they can be present in the clinic area but not in the room itself. This is a more effective model and reflects the OUH approach. Patients often feel overwhelmed by being faced with so many professionals and they often expect to hear bad news when faced with several clinicians. As highlighted in the finance chapter this would have the additional benefit of increasing clinic capacity.

The introduction of a more consistent approach to patient assessment across OUH and GWH following COVID-19 was reported by one of the clinicians. This could be expanded upon and result in the sharing of work between OUH and GWH clinicians, meaning less travel for OUH clinicians and increased clinic capacity.

‘The team in Swindon and the team in Oxford follow the same protocol. We use the national database and questionnaire to triage patients and then see those people who we need to face-to-face and some telephone.’ (Head and Neck Cancer Consultant)

One of the Consultants referenced a new project being carried out by ENT UK to develop a triage tool for two week wait referrals. The outcomes of a meta-analysis of the tool were awaited but it was felt to be something that could help improve the suspected cancer referral process following COVID-19. COVID-19 has also been reported by one of the consultants to have resulted in the

acceleration of PSFU, which was expected to happen nationally because of an increase in virtual consultation.

Although the sudden shift to virtual assessment was initially felt to be detrimental to patients, it was reported that patients can now be assessed for suitability for virtual consultation following an initial face-to-face appointment. This has resulted in more virtual appointments in a manner that is more acceptable to patients. Additionally, if patients could undertake a video consultation for assessments not requiring physical examination, this was reported to be more effective than a phone conversation. There was caution expressed that if patients preferred telephone follow up possible recurrences could be missed, so patient selection based on clinical need was also important.

A flexible approach to working was reported to be a positive benefit for some staff. This enabled administrative functions to be performed from home, especially when access to office areas were restricted due to social distancing.

7. Key Areas of Success/ Suggested Improvements

This section discusses key areas of success and suggested improvements in delivering the 'Care Closer to Home' pilot.

Key Areas of Success

Patient Experience and Outcomes

Patient satisfaction with the new service at GWH has undoubtedly been recognised by all to be the major success factor. Reduced travelling has resulted in less stress and fatigue, and there are savings in terms of time and money. Patients have confidence with the team at GWH, and act on concerns and issues more quickly, which improves clinical outcomes.

Being able to offer clinical care to patients in a location that is nearer to home provides considerable staff satisfaction and this has been reported back from all members of the MDT both at GWH and OUH.

Communication between OUH and GWH Team

There are now good links across all teams, resulting in a joined-up approach to patient care both within GWH and between OUH and GWH. Increased communication and attendance at the GWH outpatient clinic from the OUH ENT and Max Fax Consultants have been key to this, enhancing staff satisfaction and offers training and education opportunities for Continuous Professional Development. This has a positive outcome on patient care.

Multi-Disciplinary Team

The Patient Pathway Co-ordinator role has been highlighted by patients and staff as a significant benefit to the service. The role provides patients with a clear point of access and facilitates closer working between staff. This means patients who have concerns or anxieties about any aspect of their cancer care can contact the co-ordinator, who is able to triage effectively. Clinical concerns can be directed to the relevant staff: CNS, AHP etc and non-clinical concerns can be managed directly by the co-ordinator. This results in a patient-friendly

and efficient service, enabling clinical staff to focus on the complex areas of care in a timelier way.

The range of MDT expertise offered at GWH is seen as another benefit for staff. Access to the speech and language therapist and dietitians within the clinic itself, and wider access to psychology is valued highly by the team.

Staff Education and Training

The clinic has been beneficial for enhancing clinical staff education, including ENT consultants, trainees, and medical students. Staff at GWH feel they have improved knowledge and experience in working in head and neck cancer.

Clinic Facilities

Having a dedicated room which has all the relevant equipment at GWH for the team to use has been highlighted as a positive outcome of the pilot.

Suggestions for Improvement

Range of Services offered at GWH

Having the surgical follow up and rehabilitation at GWH saves patients time and money in travel to Oxford, however there are still a significant number of appointments being carried out in Oxford. As GWH has no head and neck oncology service patients travel back to Oxford for oncology follow up.

As radiotherapy is a key feature in the treatment of head and neck cancer, and the adverse effects of radiotherapy can persist for many months, or years post treatment, many patients will continue to travel to Oxford for their ongoing follow up. The restorative dentistry service is provided at Oxford and Bristol as recruiting to the role in Swindon was unsuccessful.

Consideration of further services being offered at Swindon would have further benefits to patients and result in reduced costs and enhanced capacity at OUH.

Clinical Outcomes

The introduction of clinical outcome measurements would enable the service to identify the clinical benefits and support the development of future service

improvements. Collecting a manageable set of patient outcome measures would enable systematic monitoring of the impact of treatment, including nutrition, swallowing, speech, diet, mobility, and pain, and to manage patient expectations.

Personalised Stratified Follow Up

One of the pilot requirements was for patients to continue to receive follow up and rehabilitation at Oxford for set periods of time. This could be from four - six months to one-year post-treatment before being offered services in Swindon. It has been reported by staff that these criteria should be reviewed to deliver more personalised care and increase clinic capacity. This could include seeing vulnerable and frail patients earlier at GWH to reduce the burden of travel. A patient education programme can enable patients to self-manage and be discharged to open access follow up.

Thames Valley Cancer Alliance are currently reviewing if head and neck cancer will be one their PSFU roll out sites in 2022.

Prehabilitation

Now that the follow up clinic has been established, the introduction of prehabilitation to head and neck cancer patients is seen as an important service improvement to improve patient outcomes. This allows for the identification of likely post-treatment effects and prevent or reduce the impact of this. It starts the patient education process of improving health and wellbeing, including positive lifestyle changes, such as increasing physical activity, improving nutrition, providing emotional support, smoking cessation interventions and moderation of alcohol intake. This will help to improve clinical outcomes in both the early post-treatment phase and longer-term and support wider elective care recovery.

Integrated Digital System

A lack of integrated digital systems has been highlighted as a challenge to working effectively and efficiently across organisations. The use of electronic shared care records, including imaging would improve communication between

clinical teams at all points in the patient pathway, reducing inefficiency of repeated assessments and diagnostic tests, aiding staff education and contributing to improved patient outcomes.

The recent introduction of the HIE is welcomed and will realise improvements. Thames Valley Cancer Alliance is working with ICSs and the NHSE SE Region to deliver wider digital transformation, beyond cancer, which is required to fully enable single system working.

Clinic Room Capacity

Whilst having a dedicated MDT room was felt to be successful, there is now a pressure for a second room for the AHP team. Several staff report the current model being inefficient in terms of MDT staff being present in clinic even if they are not required to see patients. Having access to a second room would enable more patients to be seen efficiently by a variety of professionals.

Workforce

Staffing for many of the professional roles is highlighted as a challenge. The team has recently welcomed a new Max-Fax Consultant which has increased capacity at GWH, however there is an ongoing vacancy for an ENT Consultant. This problem is not unique to Swindon, as there is a national shortage of ENT Consultants. There are risks to senior nursing roles at GWH due to impending retirements and issues recruiting to these roles. There is only one GWH CNS meaning there is no backfill and may present issues of succession planning in the future to such a specialist role.

The dietetic resource available is considered inadequate to meet demand. Not all patients can be seen by the dietetic service, and they are unable to see patients outside of the MDT clinic. Some patients find they are receiving speech and language therapy support at GWH, but still travelling to OUH for dietetic support when they could be accessing the joint therapy interventions. This negatively impacts dietetic capacity at OUH.

Initial plans to recruit a Restorative Dentist were unsuccessful. It is understood that a new specialist dentist has recently started at GWH and is working with

the GWH Clinical Director to understand how the role fits into the head and neck cancer pathway. It is hoped that this role will enable more patients to be seen at Swindon and support Restorative Dental capacity at Oxford.

Although having access to a clinical psychology resource at GWH is seen as valuable, the amount of time available to patients and to staff for clinical supervision is highlighted as inadequate. The clinical psychologist role is currently vacant. BSW STP has just provided GWH Cancer Services with funding for additional Psychology Department support to cancer patients. Whilst not directly head and neck cancer related this additional resource can be utilised to support head and neck cancer patients alongside other cancer patients.

Another factor felt to be missing from the service is access to physiotherapy. The team can refer to the generic physiotherapy service, and patients can experience long waiting times to be seen. As patients can experience significant dysfunction and pain following head and neck cancer treatment, early access to physiotherapy is considered important by the evaluation team. There are plans to provide a cancer physiotherapist post at GWH, which can be used as a point of early access for head and neck cancer patients, as well as being available to other cancer patients.

Communication

It was apparent to the evaluation team that communication channels between the CNS teams at OUH and GWH could be improved upon. The OUH CNS team refer patients back to the Rarer Cancer CNS at GWH and not directly to the ENT CNS. This is a historical issue and continues as the OUH CNS team report being unsure of the pathway of referral back to GWH. Having a clear understanding of the pathway and the different roles of the CNS services would significantly improve communication between the teams and provide a more joined up service for patients. An example of this would be to establish the protocol around the provision of offering HNAs to patients.

Learning and Development: A Community of Practice

The GWH 'Care Closer to Home' pilot has developed into a hub and spoke model between OUH and GWH. Much learning has taken place and informal links have developed within and across clinical teams. It is now timely to consider setting up a 'Community of Practice', to share knowledge and experience, review outcomes and take a regional approach to developing and streamlining services. This would be beneficial if further roll out is being considered, as it would provide a forum for peer support, training, and development within and between professional groups.

8. Summary of Findings

The Thames Valley 'Care Closer to Home' project has been an innovative service development improving the outcomes and experience for head and neck cancer patients who live in Swindon and Wiltshire. As well as significantly meeting the requirement to reduce the burden of travel for patients the development of the Swindon service has enabled many other improvements and outcomes.

Patient experience of the new service is overwhelmingly positive. Travel for ENT/ Max Fax and rehabilitation appointments has significantly decreased, resulting in savings in time and money for patients and demonstrating a positive environmental impact. The evaluation has highlighted that head and neck cancer patients are still travelling considerable distances to access wider outpatient appointments. Some of these are for cancer related issues, such as oncology, including radiotherapy follow up, and for restorative dentistry. Other appointments are not necessarily cancer related. This group of patients are largely older adults who have other co-morbid medical conditions, which requires the need to access wider outpatient treatment functions. This is a system-wide issue that needs consideration if care is going to be delivered closer to home for more patients.

The Swindon service has grown significantly since the opening of the clinic in September 2018 and although the activity has increased most in ENT/ Max Fax outpatient clinics, there are a wide range of treatment functions accessed by Swindon and Wiltshire patients. The activity in Oxford has not decreased at the same rate as the Swindon growth and therefore constitutes a cost pressure; this is likely due to increased incidence of head and neck cancer. To reduce the burden on Oxford and release clinic capacity it has been recommended that reviewing the criteria for the transfer of care from Oxford to Swindon be undertaken.

Delivering on the planned approach for HNA/eHNA and patient education would support more patients to self-manage in line with national PSFU recommendations and reduce demand on outpatient clinics.

The dedicated Swindon MDT, which includes input from the Oxford clinicians provides a seamless service for patients, and education and support for the Swindon based staff. However, the lack of an integrated digital system and patient shared care record impacts on service efficiency.

The role of the Patient Pathway Co-ordinator is especially positive and valued by patients and staff. Redesigning the current role to enable a Cancer Support Worker would realise wider benefits, such as supporting the delivery of HNA/eHNA and patient education.

The development of the specialist workforce is seen as a positive achievement, both for patients and for the Oxford team to have confidence to attend and refer to the clinic. Having an MDT with many single professionals who often only have a limited amount of time allocated to provide care has brought challenges. Issues with recruitment in many roles has been a challenge, and some roles are not currently recruited to. This results in reduced patient experience and provides additional service pressures.

Communication between both sites is positive. Making a few changes to improve communication links and processes would result in enhanced patient care and provide greater staff peer support. Establishing a Community of Practice would provide a regional approach to MDT care, enhance staff development, and improve communication links.

There is evidence of improved clinical outcomes, capacity, and financial benefits with the reduction in A&E attendance and hospital admission following A&E attendance. Patients are accessing care in a timely way which means that clinical issues are resolved quickly and before they become more severe.

Significant efficiency benefits/ savings have been seen demonstrating the positive financial impact of the new service. Further analysis across both providers is required to identify if current funding flows require adjusting. Taking a value-based healthcare approach, the improved patient outcomes and service efficiencies, which can partly offset the cost of clinic set up deliver positive outcomes. In the current post-COVID-19 recovery period the efficiencies generated assist elective care backlogs.

Currently the MDT do not collect measures of clinical outcomes to assess the impact of the service on patients. It is recommended that the MDT team develops an approach that enables the collection of relevant data, and that, if possible, this is adopted across the Cancer Alliance region.

As the MDT has grown in experience, and due to social distancing requirements post-COVID-19, there is a greater requirement for fewer MDT members to be present for all consultations. This has led to a more efficient service model as MDT clinical time is released to provide additional capacity, however it has highlighted the need for more dedicated clinic space.

The COVID-19 pandemic resulted in a change in service model, initially with routine appointments being cancelled and a switch from face-to-face care offered to all to a virtual approach, involving telephone and video consultations. Patient surveys and interviews about the impact on their care suggested most experienced minimal impact in terms of delays or cancellations. The sudden switch to virtual consultations was less well received, however patients appeared accepting of the reasons for the change.

Staff reported patients being less willing to contact them; some due to risk of contracting COVID-19 and some not wanting to burden the team. Several of the team were redeployed initially to ward areas. Concerns were highlighted about the difficulties in assessing for oral cancers via a virtual approach and the impact of dentist closures on later stage, more complex cancer presentation.

Following the increase in use of virtual technology, the team has introduced a new way of working and now assess patients for suitability for virtual consultation following an initial face-to-face consultation. This is reported to be well received by patients, reduces travel, and releases clinic space.

9. Evaluation of ‘Care Closer to Home’ Pilot against Benefits Realisation

Chapter Three included a table of anticipated benefits of the new service which were developed by the ‘Care Closer to Home’ Pilot Steering Group. The SCW team have considered the evaluation findings and provided an assessment of delivery against the benefits realisation, and this is outlined below.

Table 23: Evaluation of Head and Neck ‘Closer to Home’ Pilot Benefits

Benefit	Benefit Description	Fully Met	Partly Met	Not Met
1	The patient/carer has a reduction in travel to OUH for follow up treatment	X		
2	Potential increase of patients on stratified pathway can ensure optimum resource allocation by ensuring each patient’s risk is apportioned appropriately		X	
3	To create a dedicated team in GWH and develop local expertise	X		
4	Increased capacity/staffing will allow for more Holistic Needs Assessments (HNAs) and Health & Wellbeing assessments to be completed			X
5	Healthcare professional increased job satisfaction through development and opportunities to progress with creation of new posts within the Trust	X		
6	Patients more knowledgeable of conditions and risks of recurrence so present before complications set in		X	
7	Improved communication and integration between GWH and OUH head and neck cancer teams		X	
8	Alignment of standards with national best practice guidance			X

There has been considerable progress to design and implement a successful service which delivers local head and neck cancer specialist care to patients

living in Swindon and Wiltshire. Several of the anticipated benefits have been fully realised with significant progress to partly realise other benefits. Further consideration of how to implement HNAs and patient education would result in progress being made in the two areas which are currently not being delivered. COVID-19 significantly affected the service model and likely impacted on project progress.

10. Wider Roll Out Assessment

The 'Care Closer to Home' pilot for Swindon and Wiltshire patients is of interest to other head and neck cancer teams across the wider Thames Valley region. One of the evaluation aims was to provide an assessment for wider roll out of the interventions. This section details the recommendations for improvements to the GWH service and critical success factor recommendations for wider roll out.

Based on the evaluation findings, SCW would recommend the wider roll out of the service across the Thames Valley Cancer Alliance region. Having dedicated project management throughout the lifespan of the project to facilitate working alongside clinical and managerial teams would support the expected benefits to be realised. Reviewing the financial flows across provider sites, particularly if PSFU is adopted with an increase in self-managed pathways, would realise benefits to both commissioners and providers.

GWH Specific Recommendations

Travel and Outpatient Treatment Functions:	
1	Consider methods to deliver oncology and restorative dentistry in local centres
The GWH clinic does not include oncology follow up and restorative dentist appointments are delivered at either Oxford or Bristol. This results in a significant number of appointments still being delivered at the tertiary centre. Appointment of a new specialist dentist at GWH should help improve this.	
2	BSW STP/ ICS to consider ways to reduce travel for Swindon and Wiltshire patients for wider treatment functions not directly related to cancer care
The recommendations above would support meeting the local objective in the Swindon CCG 5-year plan, to co-locate cancer services as far as is possible within the current estate at GWH and to improve patient experience of cancer care.	

Workforce:	
3	Consider redesigning the Patient Pathway Co-ordinator role to a Cancer Support Worker
The Patient Pathway Co-ordinator role is an essential part of creating an efficient and effective service. A Cancer Support Worker role would provide additional patient support and support delivery of patient education and holistic needs assessments.	

4 Consider ways to increase the resilience of services to enable adequate staffing levels for specific MDT professions. A regional head and neck cancer workforce approach would be advisable

Many of the professions involve single practitioners and several services are highlighted as not having enough resource to deliver appropriate levels of care.

Clinical Outcomes and Implementation of PSFU

5 Review of current transfer of care criteria to introduce a more personalised approach to follow up

This would support the delivery of PSFU, and an increase in self-managed follow up, which would free up capacity at both OUH and GWH.

6 The wider clinical team to agree, introduce and systematically monitor a set of patient outcome measures. This would identify the clinical benefits of services and the impact of care on patients

This should include using the Macmillan eHNA. Specific outcome measure areas to consider should be holistic and include communication, nutrition, eating and drinking, pain, mood, wellbeing, and participation.

7 A patient education programme is developed. It is recommended engaging with the wider GWH cancer service to deliver generic elements of a Health and Wellbeing clinic, possibly post cancer diagnosis

HNA and patient education would support the implementation of PSFU and increase the numbers of patients who can go onto a self-managed pathway.

8 Work with GWH and community physiotherapy services to ensure that head and neck cancer patients can access appropriate and timely physiotherapy input

This would improve patient outcomes by enabling prevention and early rehabilitation of adverse treatment effects, such as pain and reduced neck and upper limb mobility. The appointment of a cancer physiotherapist at GWH will help support the early access to physiotherapy for head and neck cancer patients.

Critical Success Factor Recommendations

The following aspects of the ‘Care Closer to Home’ pilot have been identified as critical success factors when considering setting up future services:

Workforce:

1 Clinics delivered at non-tertiary centres should have appropriate staffing input, including ENT and Maxillo-Facial Consultants, CNS, SLT, Dietitian, Clinical Psychology and Restorative Dentistry

A regional approach to workforce including an educational peer support forum/ Community of Practice for clinicians may help to offset current recruitment challenges and provide additional educational opportunities.

Communication/ Learning and Development:

2 Set up a Community of Practice to provide opportunities for peer support, learning and development, to increase the understanding of roles across the pathway and develop region-wide approaches

A Community of Practice would enable successes and learning to be shared, ensuring services continue to progress and develop across the region. Early stakeholder engagement is seen as key to success by the GWH MDT and important for wider roll out.

3 Develop referral and handover protocols for CNS and AHP services from OUH to remote clinic. To include the most effective way to deliver HNA/eHNA

Establishing introductions and clear handover protocols ensures that teams from different sites fully understand their roles and responsibilities with the process.

Clinical Outcomes and Implementation of PSFU

4 Having a regional approach to developing an effective PSFU protocol

This should be part of a strategy to roll out PSFU to other relevant cancers, which is developed by the Head and Neck Clinical Advisory Group. Thames Valley Cancer Alliance are currently reviewing if head and neck cancer will be part of PSFU roll out for 2022/23. Dedicated project management support would be recommended to increase likelihood of project success.

5	Appropriate clinical outcome measures to be collected by all teams to enable a regional approach and benchmarking of services
If agreed region-wide this would greatly enhance future service improvements for head and neck cancer care.	
6	Establish a regional approach to the delivery of effective patient education at various points in the patient pathway, ensuring adequate resource available to facilitate. This should include the provision of prehabilitation
<p>Expertise and support from Macmillan Cancer Support could assist with development of a head and neck cancer specific patient education ‘syllabus’. This could be agreed across the region and implemented in each locality. The patient education approach could be rolled out nationally as an exemplar for head and neck cancer.</p> <p>Head and neck cancer teams should work together to develop a strategy for introducing an effective regional prehabilitation model.</p>	
7	Ensure timely access to local physiotherapy services to enable prevention and early rehabilitation of adverse treatment effects
Doing this system-wide would increase awareness of the importance of wider cancer rehabilitation.	

Finance, Digital and Facilities:

8 Thames Valley Cancer Alliance to continue working with ICSs and NHSE SE Region on wider digital transformation projects to improve single system integration

This would result in significant improvements to patient care and clinical efficiency.

9 Ensure there is dedicated clinic space with appropriate equipment and capacity to enable efficient working practices

Using the learning from the Swindon clinic pre- and post-COVID-19 would assist in ensuring adequate clinic facilities are identified from the outset of any changes.

10 Thames Valley STP/ ICSs to work together to understand current funding arrangements to support future roll out

This would ensure that any roll out is as cost-effective as possible.

11. Conclusion

The 'Care Closer to Home' pilot has provided an innovative approach to improving the experience and outcomes for head and neck cancer patients who live in Swindon and Wiltshire. It has been an exemplar of pan-organisation partnership working, including the Cancer Alliance, Macmillan Cancer Support, commissioners, and providers. The new service has been well received by patients, and staff at both Swindon and Oxford Hospitals and has been successful in delivering against most of the identified benefits. This includes positive patient and staff experience, improved patient outcomes due to access to local expertise, capacity benefits, and improved communication and integration between Swindon and Oxford.

The COVID-19 pandemic affected the pilot progress and resulted in changes, with initial cessation of certain elements of the services, alongside short and longer-term changes in the delivery model.

Recommendations have been made which would result in delivery of the outstanding benefits, plus realise further improvements both at Swindon and for wider roll out. The evaluation team would recommend continued funding of the Swindon service, and consideration of how to roll out across the Thames Valley Cancer Alliance region.

12. Acknowledgements

The SCW evaluation team would like to thank the following people for their participation:

- Head and neck cancer patients from Swindon and Wiltshire who willingly completed surveys and participated in interviews
- Staff from both Swindon and Oxford who completed surveys, participated in interviews, and provided time and information to support the evaluation
- Members of the 'Care Closer to Home' Steering Group who supported the evaluation team, and in particular the patient representatives for their assistance with the patient fieldwork
- BSW STP Commissioners who provided finance information
- The Thames Valley Cancer Alliance core team

Appendix 1: Risk Stratified Criteria for Patient Follow Up at Swindon defined by the ‘Care Closer to Home’ Team

Group	1	2	3	4
Description	T1-2 N0. Single modality of treatment. Minimal input needed, good functional recovery, good social support	T2-3 N1. Unilateral RT, or limited surgery. Patients with moderate needs, take longer to recover, higher risk of recurrence, less social support	T3/4 N1-3 Major reconstructive surgery. Radical radiotherapy +/- chemo to oro/ nasopharynx. Complex patients treated with curative intent. May have tracheostomy, be PEG dependent or other complications, poor recovery, poor social support.	Known metastatic disease who require palliative care
% Patients	30%	30%	30%	10%
Care Pathway	Discharged to GWH 4- 6/12 post treatment	Shared care 6 -12/12 and then discharged to GWH	Shared care 6-12/12 or at OUH for 12/12 before discharge to GWH	Discharged to GWH or local palliative care team
Patients per Annum	20	20	20	N/A

Appendix 2: Head and Neck Cancer Pilot Evaluation Benefits Realisation Plan (Created Jan 2021)

	Benefit name	What are we looking to achieve?	Who will receive the benefit	What are we doing to achieve this?	How will we measure this?	Responsibility:	When will we measure this?
1	The patient/carer has a reduction in travel to OUH for follow up treatment	Patient Experience is improved Reduction in travel for patient and/or carer saves money and time	Patient	New outpatients follow up clinic in GWH to be opened for patients to attend	Pre and post patient survey	Project Manager/GWH Cancer Audit Manager	Patient Survey
2	Potential increase of patients on stratified pathway ensures optimum resource allocation	potential to cause a reduction in follow up appointments/ patients see the right specialty at the right time	Patient/HCPs/ Commissioner / Providers	Patients need to be on the stratified pathway to meet the criteria for acceptance to attend new FU clinic.	Review/audit of clinic outcomes	HCP	Across the length of the pilot project
3	To create a dedicated team in GWH and develop local expertise	Increase local expertise	Patients/ Providers	New outpatients follow up clinic in GWH to be opened	Staff Survey	Project Manager	Staff Survey
4	Increased capacity/staffing will allow for more HNAs and Health & Wellbeing assessments to be completed	Achievement of national best practice guidance	Patient	Appointment of additional AHPs and administrative posts to support the new outpatients' clinic	Additional HNAs to be completed Achievement of HNA targets	Project Manager	From clinic opening onwards
5	HCP Increased job satisfaction through development and	Increased job satisfaction	HCPs	Creation of additional AHPs and administrative posts to support the new	Staff survey	Project Manager	Staff Survey

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	opportunities to progress			outpatients' clinic			
6	Patients more knowledgeable of conditions and risks of recurrence so present before complications set in	Increased patient education has the potential to improve patient outcomes.	Patients/ Providers	Patient education workshop with a health and wellbeing element.	Feedback after education event. Achievement of H&WB assessments	Project Manager	Patient engagement sessions during the pilot study
7	Improved communication and integration between GWH and OUH Head and neck cancer teams	Improved communication and integrated working	Patients/ Providers	Outpatient follow up clinic in GWH supported by OUH consultants. Staff shadowing opportunities	Staff Survey	Project Manager	Staff Survey
8	Alignment of standards with National best practice guidance	100% completed HNAs due to increased clinical capacity. 100% patients being on a risk stratified pathway. 80% H&WB	Commissioners/ Providers/ Patients	New outpatients follow up clinic in GWH	Achievement of targets for HNA completed, patients on risk stratified pathway, H&WB	Project Manager	Assess against national standard 6/12 and 12/12

Appendix 3: Detail of Staff Interviews

	Staff Role	Work Base	Involved with GWH Clinic delivery
1	Speech & Language Therapist	GWH	Y
2	ENT Consultant	OUH	Y
3	Patient Pathway Co-ordinator	GWH	Y
4	Clinical Nurse Specialist	GWH	Y
5	Dietitian	GWH	Y
6	Maxillo-Facial Consultant *	OUH	Y
7	Psychology Manager	GWH	N
8	Clinical Nurse Specialist	OUH	N
9	Clinical Nurse Specialist	OUH	N
10	Dietitian	OUH	N
11	Dietitian	OUH	N
12	ENT Consultant	GWH	N

❖ Thames Valley Cancer Alliance Clinical Director in her capacity as OUH Consultant Maxillo-Facial Surgeon. This was declared as a possible conflict of interest. All interview information was directly related to observations of the clinical role being undertaken.

Appendix 4: Outpatient Treatment Function Codes accessed by GWH Head and Neck Patient Cohort



Appendix 5: References

1. Cancer Research UK (2021) [Head and neck cancers statistics | Cancer Research UK](#) [Accessed 12 August 2021]
2. Denaro et al (2016) [Follow up in Head and Neck Cancer: Do More Does It Mean Do Better? A Systematic Review and Our Proposal Based on Our Experience \(nih.gov\)](#) *Clinical and Experimental Otorhinolaryngology* [Accessed 31 July 2021]
3. National Institute for Clinical Excellence (2004) [Improving outcomes in head and neck cancers - The Manual \(nice.org.uk\)](#) [Accessed 31 July 2021]
4. NHS England (2019) [NHS Long Term Plan » Cancer](#) [Accessed 20 July 2021]
5. NHS South Central and West Commissioning Support Unit (2020) *National PSFU Evaluation*: Available on request
6. NHS England (2015) *Thames Valley Head and Neck Cancer Scoping Report*: Available on request
7. Wiltshire Council (2019) [Wiltshire's Joint Health and Wellbeing Strategy - Wiltshire Council](#) [Accessed 20 July 2021]
8. NHS South Central and West Commissioning Support Unit (2021) *Guidance for using National Commissioning Data Repository (NCDR)* Available on request
9. HQIP (2014) National Head and Neck Cancer Audit: 10th Annual Report <https://www.hqip.org.uk/wp-content/uploads/2018/02/ueT19r.pdf> [Accessed 20 July 2021]
10. Macmillan Cancer Support (2021) <https://www.macmillan.org.uk/healthcare-professionals/innovation-in-cancer-care/personalised-care> [Accessed 20 July 2021]
11. Macmillan Cancer Support (2021) <https://www.macmillan.org.uk/healthcare-professionals/innovation-in-cancer-care/holistic-needs-assessment> [Accessed 20 July 2021]
12. Macmillan Cancer Support (2021) <https://be.macmillan.org.uk/Downloads/ResourcesForHSCPs/MAC16500HWBEGuideWeb.pdf> [Accessed 20 July 2021]
13. NHS England and NHS Improvement (June 2020) National Cancer Patient Experience Survey 2019 Results: Great Western Hospitals NHS Foundation Trust [Accessed 18 August 2021] <https://www.ncpes.co.uk/wp-content/uploads/2020/06/CPES-2019-Trust-Great-Western-Hospitals-NHS-Foundation-Trust-RN3.pdf>