

ONCOLOGY AND HAEMATOLOGY SERVICE AND ORGANISATIONAL DEVELOPMENT REVIEW

Sponsored by the Director of Innovation and Improvement

Received by the Group Managing Director (SRO)

July 2021

CONTENTS

SECTION NUMBER	SECTION	PAGE NUMBER
1	Executive Summary	5
2	Introduction	7
3	Project Purpose	7
4	Review Approach	9
5	Care Group Context	11
6	Cancer Reports	12
7	Oncology Department Service Description	25
8	Section One - Oncology Service Review	29
9	Section Two - Organisational Development Review	37
10	Section Three - Focus on Specific Areas	40
10a	Medical Staffing Review	40

10b	Nursing Review	47
10c	Multi-Disciplinary Team (MDT) Working	61
10d	Communication and Engagement	66
10e	Private Practice	66
10f	Radiotherapy	72
10g	Demand and Capacity	75
10h	Administrative Processes	77
10i	Pharmacy and Prescribing	81
10j	Patient Pathways and Guidelines	83
10k	Risk and Governance	88
10l	Mental Health and Wellbeing Support	89
10m	Financials and Staffing Capacity	92
11	Future Service Provision	97

12	Next Steps	98
	Annexes	102

1. EXECUTIVE SUMMARY

This comprehensive report, sponsored by the Director of Innovation and Improvement, has been produced as part of the organisation's and the Care Group's commitment to promoting the delivery of high quality patient services and the provision of first class leadership and teamwork. The focus of the report is on the Oncology Department (haematology and oncology) and combines an evaluation of current service capacity and provision with a recommended approach for improving performance. The report's findings are based on a review of documentation and data, an extensive range of interviews with staff and knowledge about best practice with regard to the clinical specialty and ways of working elsewhere.

The Department delivers a wide-range of clinical services, working with other providers to meet the needs of patients. There is plenty of good practice together with an ambition to improve the quality, accessibility and organisation of services. The report represents an opportunity for the Department to improve in both efficiency and effectiveness – and proposes a set of actions which can be implemented in order to do so.

At the heart of the report are a number of sections which focus in one specific aspect of the Department's staffing, organisation and ways of working. Each section includes some principal observations, relevant data and evidence, and a list of recommended actions. The **medical staffing** review has shown that there is the opportunity for improved communications and joint working with others, and whilst there is the need for additional clinical leadership (two sessions per week) overall there is sufficient staffing capacity and capability. The **nursing** review has demonstrated that extended job roles need to be introduced with the more effective deployment of staff on the back of refreshed job plans. Subject to how additional support for the MDTs is provided, there is sufficient nursing capacity, especially when less time is spent on undertaking administrative duties. The evaluation of **multi-disciplinary team (MDT) working** has identified the need for an increase in support to improve organisation and effectiveness, probably from extra coordinator staff if not available from the existing team.

With regard to **communication and engagement** there is the need for an all-round improvement in how staff communicate and work together both within, and between, teams. The **private practice** review has set out the need for an overhaul in how it is governed and organised so that it can generate additional revenue for the benefit of service improvement and development. The review of **radiotherapy** builds on the organisation's previous assessment of the opportunity to provide this service locally subject to further work on the financials and how best to do this. The work on **demand and capacity** has shown that there is sufficient capacity for current demand but there is more to do to forecast future demand, and therefore be able to model required capacity, once better quality data and information is produced. The review of **administrative processes** has demonstrated that there are substantial opportunities to improve the efficiency and safety of processes, especially by reducing the dependency on manual systems. At least until there is full-scale digitisation, there is the need for additional dedicated administration staff, to keep up with demand and take on some of the work being done by clinical staff.

The **pharmacy and prescribing** review has set out a number of improvements to processes and identified the need to make sure that costs are correctly matched to budget. The assessment of **patient pathways and guidelines** set out previous analysis with updated suggestions for improving the patient pathway which will be good for the patient. The **risk and governance** review has demonstrated that the Department needs to implement the organisation's recommended model this so business as usual follows best practice. The **mental health and wellbeing support** analysis describes the range of services which are available to both patients and staff with some opportunities to extend the offer. And finally, the review of **financials and staffing capacity** has set out the need for a zero-based budgeting approach which establishes a realistic income and expenditure position so that the Department can be incentivised to find ways of being more cost-effective.

It is initially proposed that the analysis and recommendations in the report are considered by the Department, the rest of the organisation and stakeholders. Subsequently, the report can be used to produce a project plan for scheduling the implementation of the proposed actions.

2. INTRODUCTION

This report has been commissioned as part of the organisation's and the Care Group's commitment to promoting the delivery of high quality patient services and the provision of first class leadership and teamwork. This report has been sponsored by Dr Annuschka Muller in their role as the Director of Innovation and Improvement. The focus of the report is on the Oncology Department (haematology and oncology) and combines an evaluation of current service capacity and provision with a recommended approach for improving performance. The report is divided into three main sections: one which sets out the service review; one which addresses the opportunities for organisational development; and one which focuses on specific topics with dedicated action plans.

3. PROJECT PURPOSE

Improvement Opportunity Description

The brief description of this improvement opportunity is "to provide a review of the current Jersey Oncology service". This review will enable the service to understand its future trajectory in providing cancer care in line with the Jersey Care Model. It will give a greater insight in to the current staffing establishment and practice. As well as identifying the excellent work, the improvement opportunity will be delivered by identifying any gaps, duplication and potential improvements in provision. This will enable the team to produce recommendations leading to the development of the Jersey Cancer Strategy. The review will include benchmarking against services in similar jurisdictions.

Terms of Reference

The terms of reference for this review are to:

- A. Define and Review all components of Cancer services provided at JCH (Medical and Clinical Oncology, Haematological oncology, Chemotherapy/ SACT, radiotherapy, TYA cancer care, Palliative Medicine, Acute oncology, Chemotherapy Day Unit and Outpatient Clinics).
- B. Optimise the governance structure and relevant indicators for quality of Care for Cancer Services at JCH/HCS to enable preparation of services for Peer Review.
- C. Review the capacity and demand for tumour sites in relation to premises and resource allocation with future trajectory. Maintain sustainability of SACT delivery model on Island and optimise repatriation and self-sufficiency.

- D. Improve processes to efficiently utilise the human and other resources and skill set to support clinical practice.
- E. Identify any unsatisfied current and future needs to maintain state of the art cancer services at JGH/HCS.
- F. Align the services provided with other related services and the JCM/ Cancer strategy. These services include MDU, family nursing, ambulance, ED, dietetics, physio, Mental Health and Les Quennevais.
- G. Review of administrative processes including pathways, chemotherapy prescriptions and booking systems to ensure efficiency and patient safety. By the end of 2021 we will have implemented changes to the service which reduce wasted appointments to no more than 10% by 2022
- H. Review alignment of Medical and Nursing leadership.
- I. Review and implement Cancer MDT resource and processes both on island and interface with tertiary centres to peer review standard.
- J. Improve the relationship of Cancer Services and speciality medical and surgical departments and primary care (including cancer pathways).
- K. Review opportunities to support and optimise Oncology private practice.

In-Scope Staff

In-scope staff for the review include:

- Oncology medical and nursing staffing
- Le Quesne administrative staff
- Haematology medical and nursing staff
- Medical Services Care Group Leadership Team.

4. REVIEW APPROACH

The review has taken place during June and July 2021 based on a plan to present recommendations in August 2021. The production of this report has been based on a review of the Oncology and Haematology Departments through: an evaluation of relevant documentation; interviews with key members of staff; and knowledge of best practice elsewhere in the health care industry. This approach has drawn on available information and data about current service performance. The following lines of enquiry were used in the interviews with staff:

1. **Activity and demand:** Forecasts on likely changes to future demand for clinical services.
2. **Key clinical relationships:** How are these relationships working in terms of the clinical pathway within the organisation and externally. How could these change in order to make clinical care more efficient and effective.
3. **Governance:** How could governance be improved (prevention and reaction) to be more effective.
4. **Organisation and administration:** How could organisation and administration be improved to reduce bureaucracy and make the service and processes more efficient.
5. **Communications and engagement:** How well do communications and engagement operate to produce clear leadership, involvement in problem-solving and decision-making, and promote team-building and professional development.
6. **Workforce:** What skill mix changes and new roles could produce a higher quality and more accessible service.
7. **Finance:** How can the budget match cost – or cost match the budget.
8. **Priorities:** What are the top priorities (development, reform, investment) for the service during 2021/22 and 2022/23.
9. **Best practice:** What best practice, delivered by other oncology and haematology services, could be adopted by this service.

The following members of staff have been interviewed as part of the review:

- [REDACTED] - Associate Specialist in Palliative Medicine
- [REDACTED] - Laboratory Manager for Blood Sciences
- [REDACTED] - Clinical Nurse Specialist covering oncology

- [REDACTED] - Acting CEO Jersey Hospice Care
- [REDACTED] - Nurse Manager Haematology and Oncology
- [REDACTED] – General Practitioner
- [REDACTED] - Head of Health and Social Care Informatics
- [REDACTED] - Lead Nurse and Clinical Lead Acute Medicine
- [REDACTED] - Private Patient Income Supervisor
- Dr [REDACTED] - Consultant Oncologist
- [REDACTED] - Clinical Nurse Specialist Haematology and Oncology
- [REDACTED] - Clinical Nurse Specialist (Band 6) covering Lung and Metastatic Melanomas
- [REDACTED] - Finance Business Partner Advisor
- Dr [REDACTED] - Consultant Haematologist and AMD Medical Care Group
- [REDACTED] - Manager of Analytics and Management Information
- [REDACTED] – General Manager, Medical Services
- [REDACTED] - Clinical Nurse Specialist Haematology and Oncology and Deputy Manager
- Dr [REDACTED] - Consultant Oncologist. Locum on 6 month contract
- [REDACTED] - Teenage and Young Adult Clinical Liaison
- [REDACTED] - Deputy Chief Pharmacist
- [REDACTED] - Staff Grade Acute Medicine
- [REDACTED] - Associate Director of Improvement and Innovation
- [REDACTED] - Finance Business Partner
- Dr [REDACTED] - Consultant Haematologist (one year fixed-term - ends Sept 2021)
- Dr [REDACTED] Consultant Clinical Oncologist
- [REDACTED] – Non-Clinical Support Supervisor
- [REDACTED] - Non-Clinical Support Supervisor
- [REDACTED] - CNS Colo-rectal and Upper-GI

5. CARE GROUP CONTEXT

The Oncology Department is part of the Medical Services Care Group. The Care Group is planning to undertake a series of service reviews in order to make sure that there is sufficient capacity and capability to meet future demands and that quality and access standards are delivered.

The Medical Services Care Group has set the following priorities for 2021:

A. The Medical Model (Q1):

A change to the medical model providing consultant led care across all elements of the patient pathway in medicine, this will provide high quality integrated care for our patients. The model will provide increased medical support to patients admitted to the surgical bed base as well as the intensive care unit. To unify medicine and improve accessibility to physical health weekly medical consultant input will be provide to the following units St Saviours & Sandybrook Care Home this closely aligns to the Jersey Care Model of providing an integrated service across all domains of the patient pathway from community to primary care and secondary care.

B. Acute Assessment Unit (Q2):

Aligned to one of the Jersey Care Model's objectives to improve the patient pathway for emergency care the formation of the acute assessment unit will provide integration between medicine & surgery. The Acute Assessment Unit will be the route of unscheduled admissions to the hospital for both specialities staffed appropriately to ensure timely patient care is delivered to patients in the acute phase of their pathway. The unit will be medically staffed by the acute physicians and an emergency surgeon. The unit will operate the Enhanced Care Area whereby patients requiring level 1+ care can be safely managed in a non-intensive care setting. A training needs analysis is underway and relevant study days to support this.

C. Outpatient Project (Q2):

Currently across medical services the six outpatient departments are managed within the care group independently, the outpatients project seems the centralisation of outpatients through single line management, this improvement will ensure consistency from both a patient & staff perspective in how outpatient services are operated within the care group.

D. Hospital Wide Clinical Handover (Q3):

To improve patient outcomes and the quality of care which is delivered a hospital wide clinical handover meeting will be introduced by the Medical Care Group. The meeting will be chaired by the Clinical Coordinator and will support the timely escalation of deteriorating patients across the hospital at shift changeover times.

E. Specialist Nurse Review (Q4):

The specialist nurse review will analyse the activities currently undertaken by this workforce within the medical service care group to review opportunities to further utilise specialist nurses across the care group, this is aligned to the nursing workforce strategy in particular the implementation of Advanced Care Practitioners.

F. [REDACTED] (Q4):

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

6. CANCER REPORTS

This section incorporates a combination of excerpts from, and summaries of, the main recent reports which address clinical performance and strategy at both international and Jersey levels.

Channel Islands Cancer Report – 2017

The report provided basic statistics on cancer in residents of the Channel Islands between 2001 and 2014. Information on age-standardised rates of incident (newly diagnosed) cancer and deaths from cancer are provided for 21 cancer types/sites by three year rolling averages and for the latest five years available (2010-2014).

Incidence - Jersey

The rate of all cancers (excluding non-melanoma skin) in Jersey is higher than in the South West and England. The age-standardised rate (ASR) is 893 per 100,000. The rate in the South West is 777 per 100,000. The rate in England is 775 per 100,000. It is higher than the highest ASR in the England regions, which is 822 per 100,000. Around 599 new cases in Jersey are diagnosed each year.

The rate of head and neck cancers in Jersey is higher than in the South West and England. The ASR is 43 per 100,000. The rate in the South West is 28 per 100,000, and in England is 30 per 100,000. It is higher than the highest ASR in the England regions, which is 35 per 100,000. Around 30 new cases of head and neck cancer are diagnosed each year. The main risk factors are smoking and excessive alcohol use, especially when in combination.

The rate of hepatobiliary cancers in Jersey is higher than in the South West and the England average. The ASR is 21 per 100,000. The rate in the South West is 15 per 100,000, and in England is 16 per 100,000. It is similar to the highest ASR in the England regions, which is 20 per 100,000. Around 14 new cases of hepatobiliary cancer in Jersey are diagnosed each year. The main risk factors are smoking, hepatitis B or C infection, and excessive alcohol consumption.

The rate of kidney and ureter cancer in Jersey is lower than in the South West and the England average. The ASR is 16 per 100,000. The rate in the South West is 26 per 100,000 and in England it is 25 per 100,000. The rate is lower than the lowest ASR in the England regions, which is 23 per 100,000. Around 11 new cases of kidney and ureter cancer are diagnosed each year in Jersey. The risk of kidney cancer is increased by being overweight or obese, by smoking and by certain genetic conditions.

The rate of lung cancer in Jersey is higher than in the South West and the England average. The ASR is 120 per 100,000. The rate in the South West is 84 per 100,000 and in England it is 101 per 100,000. It is lower than the highest ASR in the England regions, which is 143 per 100,000. Around 77 new cases of lung cancer are diagnosed each year. Smoking is responsible for about 86% of lung cancers.

The rate of malignant melanoma in Jersey is higher than in the South West and England. The ASR is 68 per 100,000. The rate in the South West is 42 per 100,000, and in England it is 31 per 100,000. The South West has the highest incidence of malignant melanoma in England. Around 47 new cases of malignant melanoma are diagnosed each year. The major risk factor is UV exposure through sunlight or sunbeds.

The rate of male urogenital (excl. Prostate) cancer is similar to the South West, but higher than the England average. The ASR is 17 per 100,000. The rate in England is 12 per 100,000. The rate is similar to the highest ASR in the England regions, which is 13 per 100,000. Around 7 new cases of male urogenital cancer are diagnosed every year in Jersey.

The rate of non-melanoma skin cancers in Jersey is higher than the recorded rate in the South West and England. However, care must be taken as not all parts of England record non-melanoma comprehensively. The data registration in the Channel Islands and the South West is comparable, so we can be confident that the ASR is higher than in the South West. The ASR in Jersey is 567 per 100,000 and the rate in the South West is 373 per 100,000. Around 377 new cases are diagnosed each year. The risk factors are the same as those for malignant melanoma.

The rate of prostate cancer in Jersey is higher than in the South West and the England average. The ASR is 292 per 100,000. The rate in the South West is 239 and in England is 229 per 100,000. It is higher than the highest ASR in the England regions, which is 244 per 100,000. Around 89 new cases of prostate cancer are diagnosed each year in Jersey. No major environmental/lifestyle risks for prostate cancer are known; risks are increased in those having a family member with the disease, or in black men.

The rate of all cancers (excluding non-melanoma skin) among paediatric patients in Jersey is higher than in the South West and England. The ASR is 25 per 100,000. The rate in the South West is 16 per 100,000, and in England is 16 per 100,000. It is higher than the highest ASR in the England regions, which is 17 per 100,000. Around 5 new cases of paediatric cancers are diagnosed each year. Risk factors for childhood cancer are not well understood, some paediatric cancers have been linked to genetic predispositions or previous radiation treatment.

Mortality

The death rate for colorectal cancer is lower in Jersey than in the South West and England. The age-standardised rate (ASR) is 26 per 100,000. The rate in the South West is 36 per 100,000, and in England is 37 per 100,000. It is lower than the lowest ASR in the England regions, which is 34 per 100,000. Around 17 people in Jersey die of colorectal cancer each year.

The death rate for head and neck cancers in Jersey is higher than in the South West and England. The ASR is 13 per 100,000. The rate in the South West is 7 per 100,000, and in England it is 8 per 100,000. It is similar to the highest ASR in the England regions, which is 10 per 100,000. Around 9 people in Jersey die from a head and neck cancer each year. The high death rate is likely to be reflective of the high incidence.

The death rate for hepatobiliary cancer in Jersey is higher than in the South West but similar to the England average. The ASR is 15 per 100,000. The rate in the South West is 11 per 100,000. It is similar to the highest ASR in the England regions, which is 15 per 100,000. Around 10 people in Jersey die from hepatobiliary cancer each year. The high death rate is likely to be reflective of the high incidence.

The death rate for lung cancer in Jersey is higher than in the South West but similar to the England average. The ASR is 84 per 100,000. The rate in the South West is 65 per 100,000. It is lower than the highest ASR in the England regions, which is 112 per 100,000. Around 53 people in Jersey die from lung cancer each year. The high death rate is likely to be reflective of the high incidence.

Source: Channel Islands Cancer Report 2017 -

<https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Channel%20Islands%20Cancer%20Report%202017%2020170725%20DS.pdf>

The National Lung Cancer Audit – 2018

The National Lung Cancer Audit (NLCA) reported that there had been continuing improvements in data completeness with 85% completeness seen for performance status (PS), 96% for stage and 64% for recording of lung function in patients potentially suitable for curative treatment, as compared with 82%, 96% and 56% respectively in the previous reporting period.

Key findings:

- For the first time, we report the proportion of patients with stage I/II disease and PS 0–1 who have pathological confirmation of cancer – the result of 89% only just misses the audit standard of 90%.
- 30% of patients are missing out on access to all the benefits of specialist nursing support.
- Systemic anti-cancer treatment rates in patients with NSCLC and advanced/good PS increased from 62% to 65%; this is the first time that our audit standard of 65% has been met.
- Chemotherapy rates in SCLC increased from 68% to 71%, exceeding our audit standard of 70%.
- Surgery rates in NSCLC increased from 17.5% to 18.4%.
- The curative treatment rate in early stage/good PS patients is relatively high at 81%, but we believe there is scope for this to be increased.
- One-year survival rates (37%) are unchanged.

Report on Help2Quit Stop Smoking Services – 2018

Key findings:

Setting a quit date

- The number setting a quit date has fallen over the last five years from 1055 to 849.
- This reduction may be in part owing to an increase of e-cigarettes which are widely available. This drop has also been seen in services in England.

Successful self-reported quitters

- The number of self-reported quitters fell in 2017, but there has been a rise in quitters for 2018 (350 vs 388 respectively). The self-reported quit rate for 2018 is 46%.

CO validated quitters

- A total of 341 successful quitters had their four week quit validated by CO (88%).

Skin Cancer Strategy for Jersey - 2020

The purpose of the report was to agree next steps for the leadership of skin cancer prevention in Jersey and ensure appropriate placement of strategic co-ordination within the Government of Jersey. It was proposed that discussion and decision for the transference of skin cancer prevention strategic actions to be led clinically within HCS with shared responsibility for health promotion and education with HCS and CYPES. This is in accordance with recommendations of a full review highlighting the need for a refreshed focus for prevention efforts towards early diagnosis and treatment, education for sun safety at primary school levels and regulation for reducing health risks. Responsibility for presenting regulative options for sunbed use to Ministers would fall with SPPP.

Channel Islands Cancer Report - 2020

The Channel Islands Cancer Report, produced by the Public Health England National Cancer Registration and Analysis Service for the Guernsey and Jersey Medical Officers of Health, was published in 2020 based on data up to 2016. This report provides basic statistics on cancer in residents of the Channel Islands between 2003 and 2016. Information on age-standardised rates of incident (newly diagnosed) cancer and deaths from cancer are provided for 21 cancer types/sites as three year rolling averages and for the latest five years available (2012-2016). Rates are compared to the South West region and to England as a whole.

Incidence

The rate of all cancers (excluding non-melanoma skin) in Jersey is higher than in the South West and England. The age-standardised rate (ASR) is 838 per 100,000. The rate in the South West is 787 per 100,000. The rate in England is 784 per 100,000. It is higher than the highest ASR in the England regions, which is 834 per 100,000. Around 593 new cases in Jersey are diagnosed each year.

The rate of brain and CNS cancers in Jersey is lower than in the South West and England. The ASR is 7 per 100,000 in comparison to 12 and 11 per 100,000 for the South West and England respectively. Approximately 5 cases are diagnosed in Jersey per year.

The rate of head and neck cancers in Jersey is higher than in the South West and England. The ASR is 43 per 100,000. The rate in the South West is 29 per 100,000, and in England it is 32 per 100,000. It is higher than the highest ASR in the England regions, which is 37 per 100,000. Around 32 new cases of head and neck cancer are diagnosed each year. The main risk factors are smoking and excessive alcohol use, especially when in combination.

The rate of kidney and ureter cancer in Jersey is lower than in the South West and the England average. The ASR is 17 per 100,000. The rate in the South West is 28 per 100,000 and in England it is 27 per 100,000. The rate is lower than the lowest ASR in the England regions, which is 25 per 100,000. Around

12 new cases of kidney and ureter cancer are diagnosed each year in Jersey. The risk of kidney cancer is increased by being overweight or obese, by smoking and by certain genetic conditions.

The rate of leukaemia in Jersey is lower than in the South West or England. The ASR is 15 per 100,000 in comparison to 22 and 21 per 100,000 in the South West and England respectively. There are around 10 cases diagnosed in Jersey per year.

The rate of lung cancer in Jersey is higher than in the South West however is not statistically different to the England average. The ASR is 103 per 100,000. The rate in the South West is 85 per 100,000 and in England it is 102 per 100,000. It is lower than the highest ASR in the England regions, which is 143 per 100,000. Around 70 new cases of lung cancer are diagnosed each year. Smoking is responsible for about 86% of lung cancers.

The rate of malignant melanoma in Jersey is higher than in the South West and England. The ASR is 72 per 100,000. The rate in the South West is 44 per 100,000, and in England it is 33 per 100,000. Around 52 new cases of malignant melanoma are diagnosed each year. The major risk factor is UV exposure through sunlight or sunbeds.

The rate of other gynaecological cancer (excluding ovary and uterus) in Jersey is lower than the South West however is not statistically significantly different to England. The ASR is 15 per 100,000 in comparison to 23 and 20 per 100,000 for the South West and England respectively. Approximately 6 cases are diagnosed in Jersey per year.

The rate of non-melanoma skin cancers in Jersey is higher than the recorded rate in the South West and England. However, care must be taken as not all parts of England record non-melanoma comprehensively. The data registration in the Channel Islands and the South West is comparable, so we can be confident that the ASR is higher than in the South West. The ASR in Jersey is 606 per 100,000 and the rate in the South West is 387 per 100,000. Around 421 new cases are diagnosed each year. The risk factors are the same as those for malignant melanoma.

The rate of prostate cancer in Jersey is higher than in the South West and the England average. The ASR is 275 per 100,000. The rate in the South West is 240 and in England it is 233 per 100,000. It is higher than the highest ASR in the England regions, which is 250 per 100,000. Around 90 new cases of prostate cancer are diagnosed each year in Jersey. No major environmental/lifestyle risks for prostate cancer are known; risks are increased in those having a family member with the disease, or in black men.

Mortality

The death rate for colorectal cancer is lower in Jersey than in the South West and England. The ASMR is 27 per 100,000 in comparison to 35 and 36 per 100,000 for the South West and England respectively. It is lower than the lowest ASMR in the England regions, which is 33 per 100,000. Around 18 people in Jersey die of colorectal cancer each year.

The death rate for head and neck cancers in Jersey is higher than in the South West and England. The ASMR is 14 per 100,000. The rate in the South West is 8 per 100,000, and in England it is 9 per 100,000. Around 10 people in Jersey die from a head and neck cancer each year. The high death rate is likely to be reflective of the high incidence.

The death rate for lung cancer in Jersey is higher than in the South West, however, it is not statistically significantly different to England. The ASMR is 78 per 100,000. The rate in the South West is 63 per 100,000. It is lower than the highest ASMR in the England regions, which is 109 per 100,000. Around 53 people in Jersey die from lung cancer each year. The high death rate is likely to be reflective of the higher incidence than the South West.

Next Review

Data for the next four-year period (2017-2020) is not yet available through NCRAS, and discussions with Public Health England about the timings of the next iteration of this report are ongoing at the moment.

Source: Channel Islands Cancer Report 2020 -

<https://www.gov.je/SiteCollectionDocuments/Health%20and%20wellbeing/R%20Channel%20Island%20Cancer%20Report%202020.pdf>

Cancer Care: Development of an Island-wide Strategy - 2020

The work completed on the cancer strategy to-date outlines improvements in cancer care that could be subdivided into low, medium, and high costs initiatives that would facilitate HCS to provide a comprehensive, patient focused, high quality cancer pathway for islanders. It is recognised that some of the requirements for change have already started to evolve around improved digital communications, for example, Radiology and Pathology Order Coms and the introduction of new on island diagnostics such as EBUS. In alignment with the Jersey Care model the intention is to recommence the work around developing a cancer strategy in 2021. The model for formulating the strategy will remain intact. This has been deferred to 2022.

London Personalised Cancer Care Key Performance Indicators – 2020

The following report has been included, as a guide, as the Jersey Department of Oncology and Haematology does not currently have key performance indicators so may wish to consider adopting some or all of the following. The Transforming Cancer Services Team, Macmillan Cancer Support, North Central & East London Cancer Alliance, RM Partners and South East London Cancer Alliance have developed regional key performance indicators (KPIs) for

personalised cancer care interventions and personalised stratified follow-up pathways. The following were agreed in March 2020 as core principles and KPIs for London:

Core Principles and Key Performance Indicators
We will continue to strive for ambitions set out by previous commissioning intentions, and collect a level of data that is more detailed than recommended by the NHS England/Improvement 2020/21 planning guidance for cancer alliances. This is because we recognise all the hard work and collaboration that has taken place in London since the National Cancer Survivorship Initiative (2013), with the aim of improving care and support for people and their families.
We support the NHS ambition to be a paperless NHS and so will reduce the number of HNAs and TS forms completed in hard copy.
NHS England/ Improvement’s expectation to report metrics via the COSD for HNA and TS is welcomed. This will support standardisation in reporting and raise visibility of these interventions taking place across England. It will also help to reduce the burden of reporting by patient facing teams. It is recognised however, that the majority of London services are not reporting to the latest version of COSD at present and changes are required to make this happen. Furthermore, there is a significant lag between data capture and national reporting (up to 18 months behind data capture).
London continues with its ambition that copies of the HNA (including care plan) and TS will be shared with the patient and their GP practice within one week (electronically where possible) to support patients to self-manage and for continuity of care.
London recognises that HNAs can take place at any time along the pathway and care plans should be refreshed as part of this process. Please refer to the following draft national metrics (circulated in June 2019): LWBC004 – A, B, LWBC005, LWBC006 – A,B, LWBC007 – A, B.
<p>Since London started measuring the implementation of the interventions, it is evident that variation in data collection and reporting exists. Through feedback, discussion and evaluation, it is acknowledged that flexibility is required in data collection because of:</p> <ul style="list-style-type: none"> ○ Pragmatic, reporting reasons ○ Ensuring we measure what matters to patients. <p>Therefore, the London KPIs are flexible in recognition of these two factors and are in the best interests of both patients and services.</p>
It is also recognised that consistent reporting via dashboards and exception reporting is welcomed across London. RM Partners kindly produces once-for-London dashboards on a quarterly basis. An exception report template has been designed for use by London’s cancer alliances to share with regional and

sub-regional boards.
<p>LDN KPI 1-3, 5 – Denominators will vary for a range of reasons. It is recognised that this may generate some double counting unless the intervention is directly linked to individual NHS numbers. The following approach is to be taken to allow for flexibility:</p> <ul style="list-style-type: none"> ○ Date patient is informed of diagnosis (Faster diagnosis standard). Where this date is not recorded, then use; ○ Date of decision to treat. Where this is not recorded, then use; ○ Date of diagnosis
<p>LDN KPI 2 - End of treatment is to remain defined as 'the end of a planned phase of treatment'. Alliances will need to work with Trusts to develop their own Standard Operating Procedures (SOPs) to localise this definition by cancer site.</p>
<p>LDN KPI 1, 2 - London will capture all of the national HNA metrics, but the primary KPI for reporting on dashboards will be the “percentage of HNAs with a care plan” conducted around diagnosis and end of treatment.</p>
<p>LDN KPI 2-5 – End of Treatment HNAs, Treatment Summary and Health & Wellbeing Interventions (HWBI) completion rates by cancer type should correlate (or exceed) stratified follow up rates where PSFU is being implemented. Where these do not correlate, Alliances will work with their Trusts to develop improvement plans for the quality and safety of personalised follow up/long term condition management.</p>
<p>LDN QIP 4 – London has agreed a change in focus regarding the health & wellbeing information and support offer for patients and their loved ones. This will now be measured as a quality improvement project rather than key performance indicator. We have revised our London definition to ensure it is meaningful for patients and the wider system, whilst also meeting the minimum standard of the draft national metric. This will take the form of an annual census to ensure patients receive adequate information and support to self-manage. It also includes reference to the recently published NHS England/ Improvement self-assessment checklist.</p>
<p>KPI 5 – as some patients are referred from one trust to another for their treatment, it is recognised that this will impact a treating Trust’s achievement against this standard. After consideration, it has been agreed that London will wait until there is a nationally defined process for re-allocating numbers of patient from treating Trusts back to their referring Trusts.</p>
<p>KPI 5 - An additional metric has been included to record the numbers of patients on stratified follow up pathways for cancer types other than breast,</p>

colorectal and prostate. There will be no denominator or threshold for this metric and therefore is not a KPI.

Although the majority of KPIs are quantitative, providers are encouraged to collect qualitative data at a local level, to look at the impact of personalised care interventions on patient experience and impact. For example, UCLH NHS Foundation Trust has developed quality guidelines for delivering HNAs.

Source: https://www.healthylondon.org/wp-content/uploads/2020/03/London-personalised-cancer-care-KPIs_Sept-2020.pdf

NHS Perspective on Cancer Performance and Prospects – 2020

Understanding NHS Cancer Performance

Cancer remains one of the leading causes of mortality in the UK, with 1,000 new cases each day and half of the population born after 1960 expected to be diagnosed with the disease during their lifetime. Although data indicates that UK cancer survival rates are improving, the country still lags behind other comparable countries. There are many, complex reasons that could explain this trend. It is clear, however, that much progress still needs to be made in the UK in relation to timely diagnosis and swift access to treatment, both of which are essential in delivering better health outcomes and increased survival rates. Cancer waiting times are a key performance measure and the access standards are set out in the NHS constitution. Since their introduction in 2009, the waiting times targets were initially met on a consistent basis in England. But over the past two years performance has deteriorated and data for 2019/20 to date indicates that performance has now reached an all-time low since the standards were introduced.

The latest data for November 2019 saw performance against the two week urgent referral standard (GP referral to consultant appointment) some way below the 93% target, and this has now been missed for 18 of the past 20 months. The 31-day standard (decision to treat to a first treatment) was also below target in the latest figures, and while this was previously thought of as a given, it has now been missed five times this year. The third of the three headline standards (62 days from GP urgent referral to first treatment) has also consistently been missed, in this case having not been met since December 2015, and performance currently sits eight percentage points below the 85% target. Demand for cancer services has never been higher, mirroring the pressures experienced across the whole of the NHS. This blog, updated with the latest figures available in January 2020, outlines the current performance trends against the cancer targets and quality indicators, as well as discussing the key priorities for improving outcomes for cancer patients within the wider health landscape.

The Current Cancer Waiting Time Targets

There are currently eight operational standards for cancer waiting times and three key timeframes in which patients should be seen or treated as part of their cancer pathway; two weeks, one month (31 days) and two months (62 days). Following the recommendations from the Independent Cancer Taskforce in 2015, NHS England will also be introducing a new 28-day diagnosis standard from April 2020 as part of the focus on improving early diagnosis

and treatment. The ongoing clinical review of standards being carried out by NHS England is underpinned by an ambition to reflect modern clinical practice and increasing personalisation of treatment. Subject to the final recommendations of the review team, the revised standards, including a new suite of metrics for cancer services, may be rolled out to trusts over the year ahead. NHS performance against each standard in November 2019 is listed alongside each target in table one below, as well as the number of trusts meeting the target.

Effect of Rising Demand on Waiting Times

Demand for cancer services has increased year-on-year, with 2018/19 seeing over 2.2 million patients referred by their GP for suspected cancer, more than double the number in 2011/12. A number of factors are driving this increase, including the changing age profile of the population, increased awareness of the disease and prompts to take early action highlighted in national campaigns, as well as changing medical practice, guidelines and referral thresholds.

As the number of people being referred by a GP has risen, a larger proportion are now having to wait longer than two weeks to see a specialist. For a time, it appeared that the service was able to accommodate the rising demand with only a slight drop in performance against this standard between 2011-2017. However, since April 2018 this target has been missed nearly every month, and a tipping point may well have been reached where key shortages in workforce and equipment are resulting in performance not keeping pace with demand.

Another area of high concern is the 62-day standard, which has been consistently missed at a national level since 2013/14. In the most recent figures, national performance was 77.4%, with only a third of trusts able to meet the 85% target. This means that more than one in five cancer patients are now waiting longer than 62 days to start treatment following an urgent GP referral. This target is the only current waiting time standard which takes into account the patient's entire pathway from a referral to treatment, which may explain why performance has been worse relative to some of the other cancer standards. Proposals to introduce new standards for cancer services that provide further insight into time to diagnosis within the pathway will be out for consultation in 2020.

Delays in any area of care have an impact on patients. But in cancer care, the amount of time a patient waits for diagnosis and treatment can significantly affect outcomes and experience. The data suggests that the increased number of referrals is placing additional strain on cancer services, and while the system has responded by seeing more people within the standard, the proportion being seen within target is falling as demand outstrips the resources available. These pressures are also evident across other NHS performance measures including the elective care waiting list, in emergency departments, and in mental health, ambulance and community services, signifying the challenges the NHS is facing in meeting current levels of demand across the board.

Sustaining the Focus on High Quality Care

Although performance has slipped against the cancer targets, there are some positives to note which emphasise the exceptional care that trusts continue to provide to cancer patients. The NHS has been working to streamline diagnosis for people with suspected cancer, using rapid diagnostic centres rolled out under the NHS long term plan following pilots in various parts of the country.

New screening tests are also being promoted: a new bowel cancer test making it easier for over four million people to use; primary HPV testing is being introduced which will see three million women tested each year; and targeted lung health tests are being offered in mobile locations around the country in a drive to catch conditions earlier. The recently concluded independent review of adult screening programmes makes a number of recommendations around improved governance and effectiveness. In another positive step, since September 2019 the HPV vaccine is now being offered to boys as well as girls, with many thousands set to benefit. Continuing to develop and deliver these methods will be essential as the NHS long term plan includes a goal of saving an extra 55,000 lives each year within a decade by catching three quarters of all cancers early.

The results of the 2018 national cancer patient experience survey provide further evidence of the increasing challenges in delivering services for cancer patients. On a positive note, patients gave the same overall rating of their care in 2018 as they did in the 2017 survey (8.8 out of 10), and higher than the 2016 survey (8.74). Additionally, several questions on the provision of information saw improved responses from the previous year, indicating some progress in aspects of communication. However, responses for many of the questions regarding access to care deteriorated, and this is likely to remain a challenge as demands on staff and resources increase. Responses to select questions from the survey are outlined below in table two.

What Next for NHS Cancer Services

The demand figures and performance data clearly illustrate the immense strain on trusts to deliver high quality cancer services. The government's recent election manifesto commits to increase capital funding and proposes steps to grow the NHS workforce, which both are positive for cancer services. It is also encouraging to see that patient satisfaction remains broadly high. However, this will be increasingly difficult to maintain as operational pressures rise across the whole of the NHS. Two issues stand as major hurdles to overcome: workforce shortages and lack of capital investment.

Some progress has been made against the cancer workforce plan (part of the *Five year forward view*). An initial report published earlier this year identified increases in a number of staff groups, alongside the creation of new routes into the cancer workforce. However, we continue to hear from trust leaders about worsening shortages of cancer nurse specialists who are able to administer chemotherapy, certain specialist oncologists, as well as huge gaps in the diagnostic workforce including radiographers and endoscopists. Making matters worse is the ongoing NHS pension's crisis, which is seeing consultants and other senior staff reducing their hours, undertaking fewer waiting list initiatives and in some cases taking early retirement to avoid large unexpected

pension tax bills.

Equipment and facilities are another key consideration, as recognised by the recent announcement of an extra £200m for new scanners and diagnostic equipment across 78 trusts. While encouraging, this needs to be viewed in the wider context of the current NHS capital regime. There is a lack of efficient and effective mechanisms for prioritising, accessing and spending NHS capital based on need. Our *Rebuild the NHS* campaign calls for a multiyear capital funding settlement and improved processes. This is particularly relevant for trusts providing cancer services that need the best technology and facilities to deliver world leading services.

The ambitions in the long term plan and the ongoing clinical review of standards are commendable but certain areas need specific attention to enable trusts to deliver essential improvements in cancer services. These include sufficient and effective funding, the right workforce, adequate screening for early diagnosis and the right technology. All must be prioritised to provide services that are fit to cope with the needs of a population where one in two people will get cancer in their lifetime.

Source: NHS Providers Briefing – January 2020

Our Hospital Project – Functional Brief Requirements - 2020

Medical Oncology, Haematology and Chemotherapy

Treatment Facilities provided in the Our Hospital will primarily be outpatient-based treatments by a Haematology and Oncology Multi-Disciplinary Team (MDT), who will provide particular expertise to patients for the systemic treatment of cancer with hormonal treatment, conventional cytotoxic therapy and newer molecular targeted treatments.

The design of the Medical Oncology, Haematology and Chemotherapy area will enable the infusion cubicles to be used flexibly across patient groups if required. Patients' medical conditions will range from the medically unstable to the fully ambulant. The hospital would wish to ensure that all patients have equity of access and it must be recognised that the local population mirrors that nationally with an increasing proportion of older patients accessing healthcare.

The design should support the delivery of efficient operational processes, providing maximum visibility of patients and minimising staff travel distances. Organisation of care will be patient focused and co-ordinated from a central staff base. The patient environment should, wherever possible, have an external view. The privacy and dignity of patients must be maintained at all times.

At least one wash-hand basin will be provided between two infusion cubicles. Patient handling will be kept to a minimum. A mobile hoist will be available to assist patients getting onto/off the treatment chairs.

There will be a number of single rooms with an en-suite WC provided for patients who require privacy and isolation whilst undergoing their treatment. Intrathecal chemotherapy may be provided in these rooms. Some patients may remain within these rooms for prolonged periods as their treatment dictates.

During infusion sessions, staff may attend to patient's clinical requirements on a one-to-one basis. This may necessitate the need for a curtain to be drawn across the bay in line with patient privacy and dignity requirements. Alternatively, patients may be taken to the treatment room or single room should more invasive intervention (e.g. insertion of lines and/or PD catheters) be necessary.

Patients may take a light snack and access the individual entertainment system and/or BYO devices whilst undertaking their treatment. Patients' snacks are delivered to the unit and then prepared for distribution in the unit's beverage snack preparation area. A member of housekeeping staff will subsequently serve snacks and drinks to patients on the unit as directed by the nurse manager. Patients will be responsible for the operation of entertainment systems.

The pharmacy department will incorporate facilities for the preparation of the cytotoxic drugs and Total Parenteral Nutrition (TPN). Such items will be produced on a bespoke basis for each patient and transferred directly from assurance to the infusion area

Source: Our Hospital Project – Functional Brief Requirements – Government of Jersey November 2020

7. ONCOLOGY DEPARTMENT SERVICE DESCRIPTION

This section provides a profile of the main features of the Oncology Department, which includes: provision of clinical services; staffing levels; and management and staffing organisational structures.

Clinical Services Provision

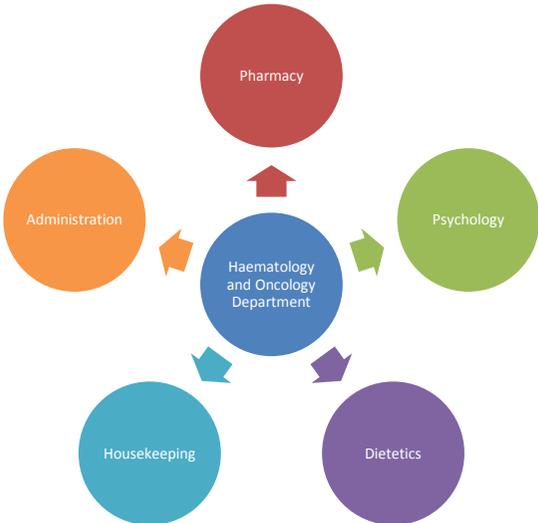
The Oncology Department provides the full range of clinical services associated with a standard acute district general hospital. Tertiary care is referred to Southampton General Hospital. The Oncology Department provides the clinical management of conditions [A full list is set out in Annex A] across the following areas:

Clinical Conditions

- Lung cancer
- Melanoma and other skin tumours
- Gastro-intestinal
- Gynaecological (Royal Marsden)
- Breast
- Bladder
- Prostate
- Kidney
- Primary cancers of the brain
- Hodgkin lymphomas
- Bone marrow transplant

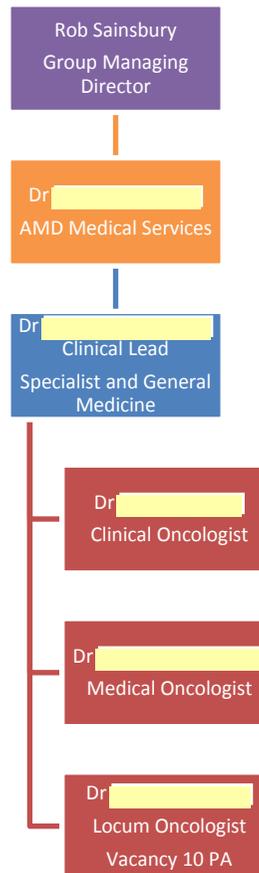
- Leukaemia
- High grade lymphomas
- Myelomas
- Supportive therapies
- Urological (Addenbrooke's)
- Neuro-endocrine
- Sarcomas
- Head and neck
- Primary – unknown
- Testicular

Haematology and Oncology Department Interfaces

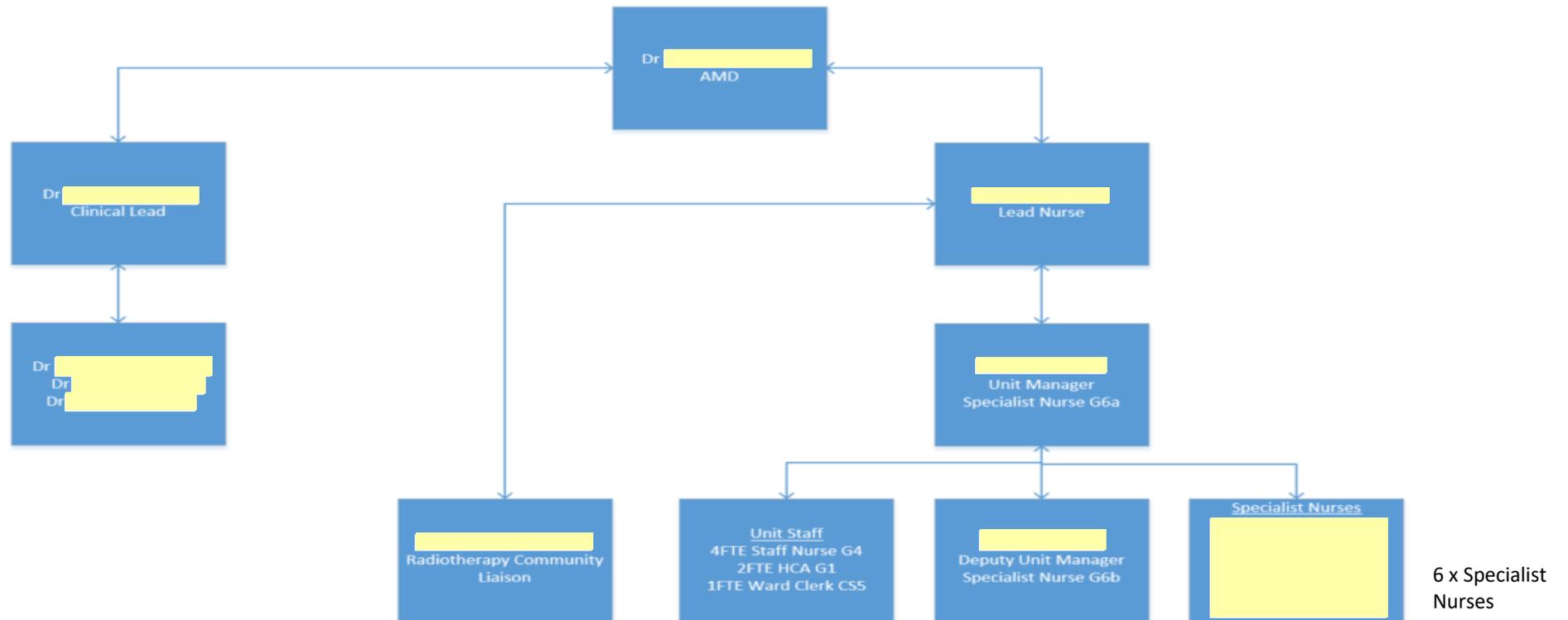


Staff and Management Structures

Medical Staffing Structure



Oncology Department Structure



Note: There is a vacant palliative care medicine medical post – 45% hospital; 55% hospice – which links to Dr. [redacted]

8. SECTION ONE: ONCOLOGY DEPARTMENT SERVICE REVIEW

This section of the report provides a summary, with analysis, of the Oncology Department's service provision and capacity. This approach enables a baseline to be established so that a view can be taken on whether the capacity and capability of the Department is able to meet future demands on the service. In doing so, this review establishes a thorough baseline from which future service developments and changes can be introduced and monitored.

This section covers a range of aspects of the Department's service provision and capacity, which includes: areas of progress; service activity; financials; complaints; compliments; policies and guidance; and job planning. The Annex (B) includes more detailed data reports [marked with *] from which the headline data and information below has been drawn.

Areas of Progress

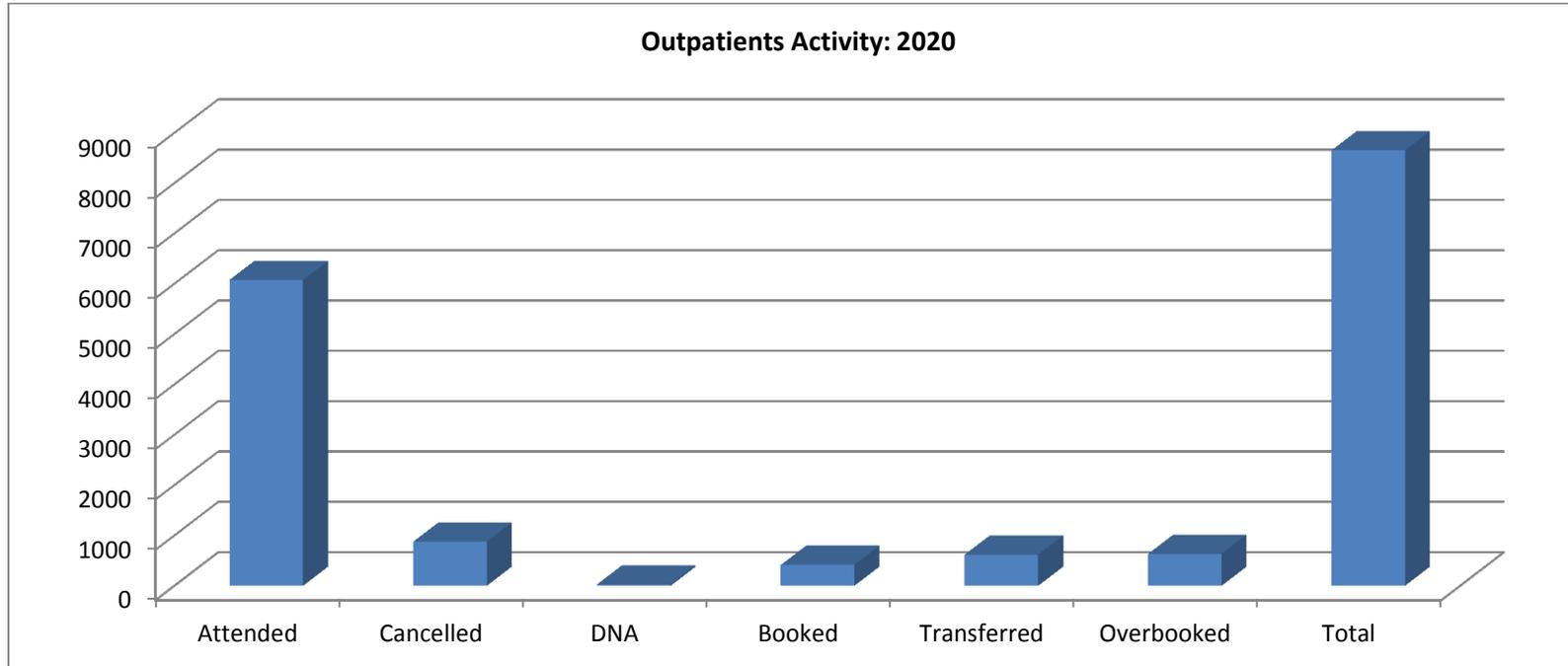
The Department has made significant progress in a number of areas, such as:

- Maintaining services during the pandemic
- Training
- Teenage and young adult service
- Specialist practice innovation
 - Survivorship (proposal submitted) follow up clinic post Systemic Anticancer Therapy (SACT) led by Oncology CNS
 - Nurse-led peripherally inserted central catheter (PICC) service
 - Acute Oncology/Haematology service
- Bone marrow clinic
- Education and teaching
 - Medical students
 - Nursing students – inspiring the generation of cancer nurses
 - Family nursing
- Non-medical prescribing
 - Repatriation avoidance for testicular cancer.

Throughout the report there is further information about each of these areas of progress [in green boxes].

Service Activity

Outpatients Activity* - 2020



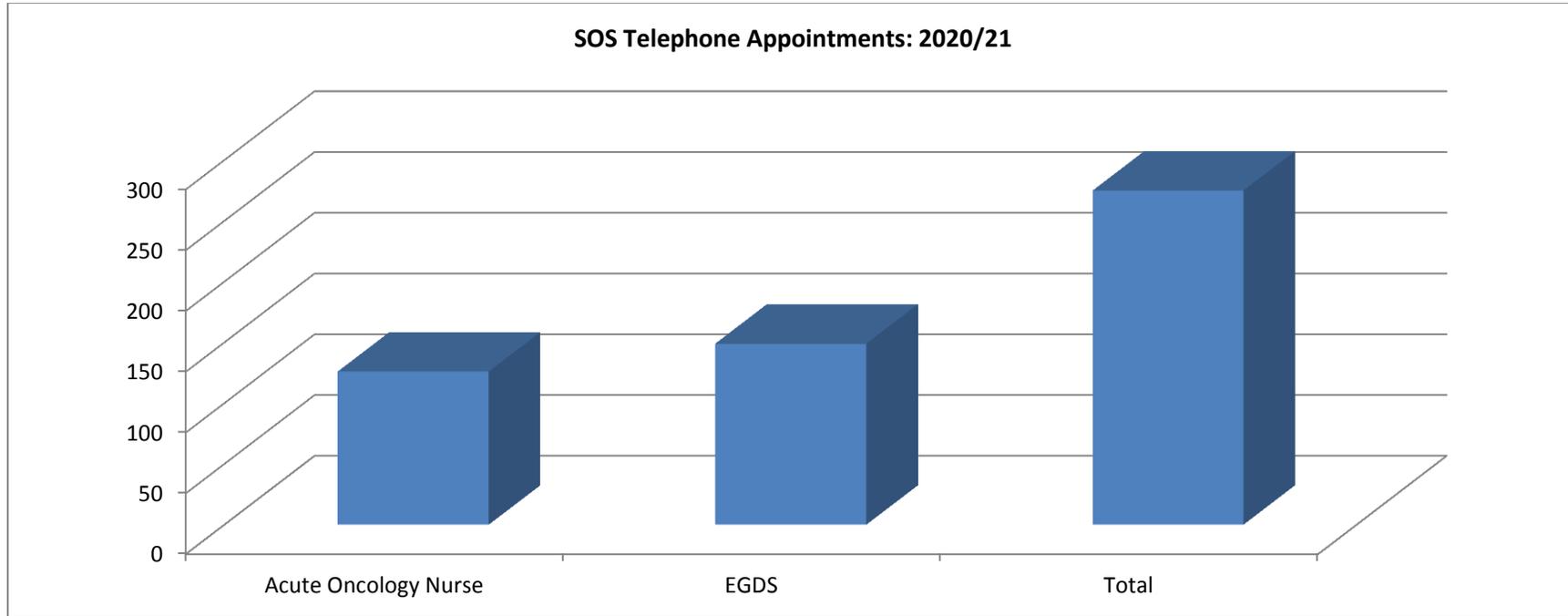
Outpatients Waiting Times – Current Position

Sub-Specialty	0-30 days	31-60 days	Total
Medical Oncology	10	<5	11
Clinical Oncology	<5	0	<5
Total			

--	--	--	--	--

Note: Patients seen between 31-60 days is when they are required to have radiotherapy prior to their outpatient appointment.

SOS Telephone Clinic Activity – 2020/21

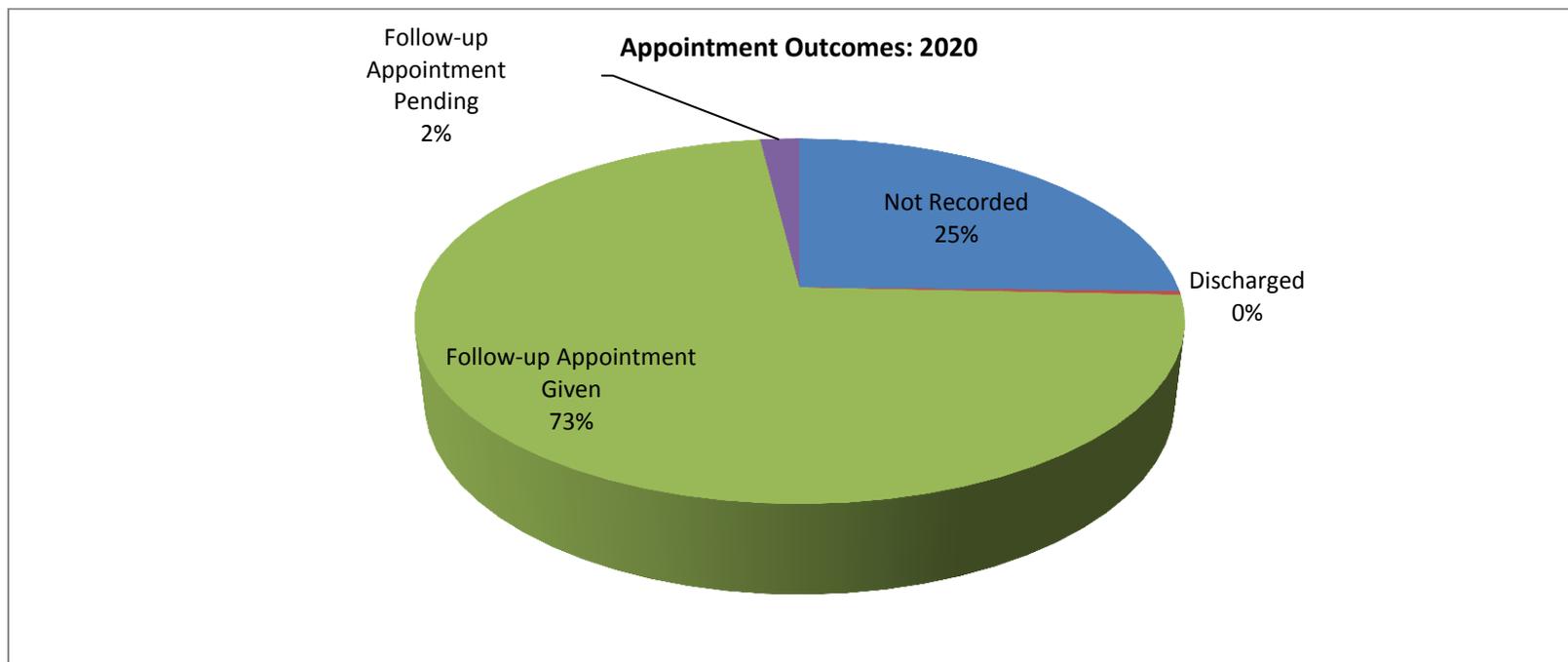


Note:

- is only doctor who directly inputs data.
- The data is underestimated as the SOS is collated in two ways: via the nurse on-call; and if the consultant does not record their received SOS calls.

Source: Informatics

Medical and Clinical Oncology Appointments Outcomes* – 2020



Source: BKG1A TC Report

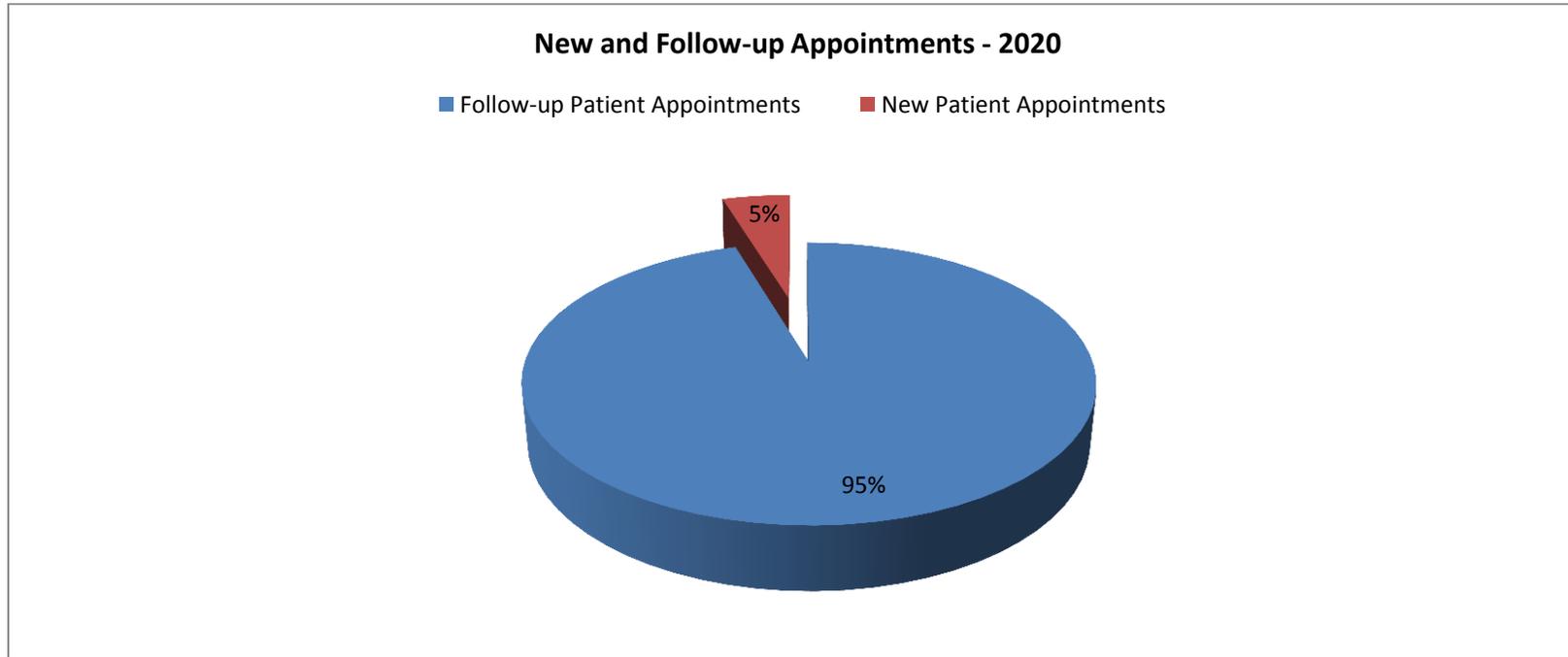
Overseas Referrals Activity – 2020-21

Specialty	2021 YTD	2020 Equivalent YTD	Variance	YTD Variance	% of 2021 Total
Haematology	6	<5	83%	5	1%
Oncology	47	14	70%	33	10%

Note: There is no contract (SLA) with Southampton and this does not include patients referred overseas for surgery – for example, pancreatic and gynaecological and, rarely, radiotherapy.

Source:

Private Patients Activity* – 2020



Source of Referrals* - 2020

Referral by same consultant after outpatient episode	Referral** by same consultant after inpatient episode	Consultant team hospital	General practitioner	Community	Other community	Other referrer	Specialist nurse	Other consultant private	Total
Medical Oncology*									

27	0	133	6	<5	0	0	0	0	
Clinical Oncology*									
738	<5	190	16		8	<5	<5	<5	
Combined Total									
765	<5	323	22	<5	8	<5	<5	<5	

Notes:

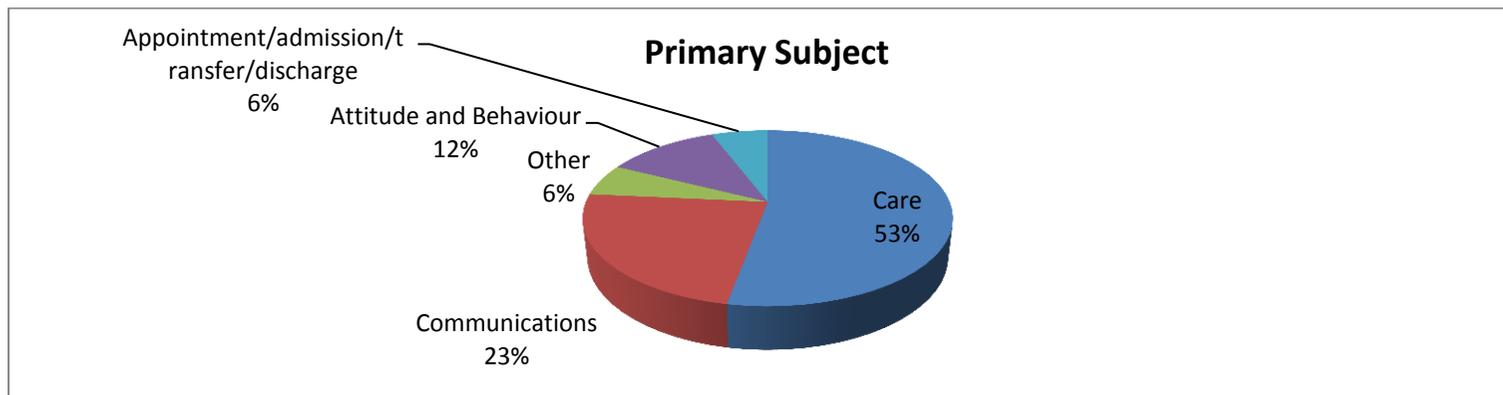
HCS are aware of data quality issues where data entry existed pre-April 2021.

* = The combined totals are accurate but clinical oncology is not provided in Jersey, so is a coding error.

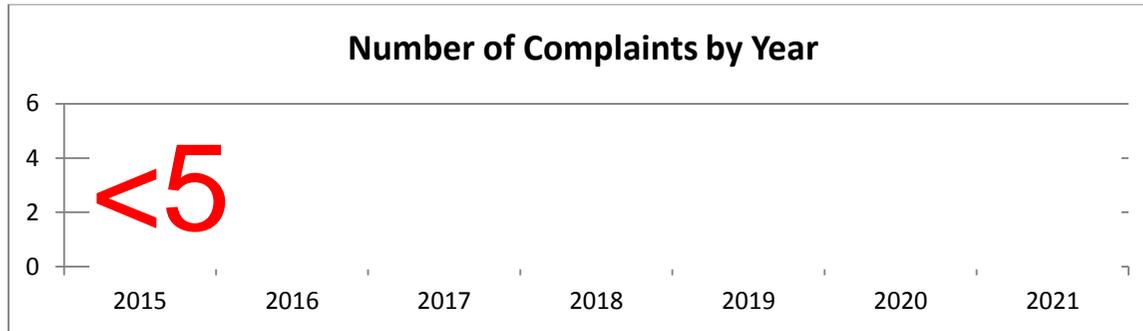
** = consultant to consultant referral. Many are missed if the patient does not attend the oncology unit.

Complaints and Compliments

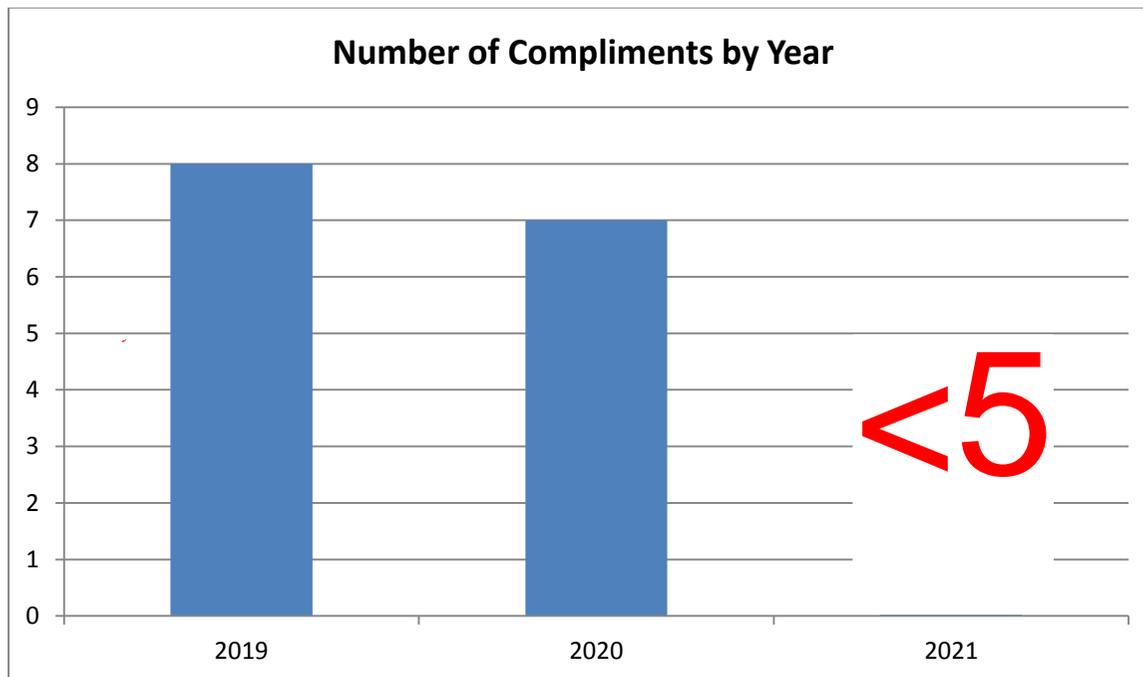
Complaints by Subject Type: 2015-2021



Number of Complaints per Year: 2015-2021



Compliments per Year: 2019-2021



Policies and Guidance

The Department has the following policies and guidelines in place:

- Code of Conduct for Private Practice – Recommended Standards of Practice for Health and Social Services Consultants [January 2005]
- Extravasation Policy [February 2021]
- Immunotherapy Nurse Led Clinic Guideline [February 2021]
- Neutropenic Policy [February 2021]
- Nurse led adult Lymphoma Follow up Clinic Guideline [April 2020]
- Nurse led Bone Marrow Guidelines [February 2021]
- Nurse Led Myeloma Clinic Guideline [February 2021]
- Nurse Led PIC Policy [pending]
- Prevention and Management of Chemotherapy Extravasation in Adults and Paediatrics Guidelines [March 2020]
- Private Patients Policy [March 2017]
- Private Patient - Funding Request for Off Island Treatment [September 2019]
- Special Handling Guidance For Your Medicine – Information for Patients, relatives and Carers [December 2015]
- The management of suspected/ confirmed Neutropenic sepsis [February 2021].

All of the February 2021 policies/guidelines are waiting to be uploaded on the intranet.

Progress Report: Training

Systemic cancer therapy (SACT) is administered in specialist units and requires specialist knowledge and expertise to administer. The Oncology/ Haematology nursing team within Jersey general hospital maintain their knowledge base on best practise through self- learning but also annual updates on SACT therapy. Given the geographical constraints of island living limiting the ability to attend updates off island the Department approached the Royal Marsden to provide bespoke annual training on island. Friends of Jersey Oncology kindly agreed to fund this as an ongoing annual event. The offer was opened to Guernsey colleagues and on the 18th November 2019 there was a very successful joint training event. Due to the COVID pandemic the 2020 update was postponed. There are hopes to arrange further inter-island training when all restrictions are lifted. The Department has been involved in joint - multidisciplinary educational meetings with Guernsey colleagues participating in new drug updates and presenting experiences and data within Breast cancer. Again this has been on hold due to the pandemic but there are hopes to re-instate this.

9. SECTION TWO: ORGANISATIONAL DEVELOPMENT REVIEW

This section evaluates the data and information which has been produced for this report. It provides a SWOT (strengths, weaknesses, opportunities and threats) analysis and key observations about the main features of the Department. It also includes a summary of the latest business case(s) which have been submitted for consideration by the organisation. The section concludes with an assessment of proposed service improvements designed to enhance efficiency and effectiveness.

Progress Report: Education and Teaching

Best standards of practice through education

As a team, there is a continuous commitment to maintain best standards of practice through education. All registered nurses within the Department are SACT qualified. The new member of the team completed in May 2021 with a letter of commendation for her excellent work. All members of the team are either on a pathway or have completed a post graduate qualification at either degree or masters level.

Medical students

The Department was approached by the medical education department to run training sessions on PICC and Port care and maintenance. The request was initiated by the junior medical team who had seen an increase in the use of these lines within the hospital and yet they had received no training on their use. CNS [REDACTED] is the expert resource within the Oncology/Haematology Department and therefore she took up this request and provided weekly interactive study sessions commencing in November 2020. Pandemic restrictions have meant that these education sessions have been on hold, however it is anticipated that these will start again in September 2021. The sessions proved to be very popular and the feedback received was positive. Below are some quotes from the feedback:

“Really useful teaching. Should be compulsory for all junior doctors”

“Absolutely excellent. Very grateful for this teaching session. Very comprehensive. Very clear. All very useful and relevant. Has definitely built up my confidence. This session should be available every year for the new intake of doctors”

“Relaxed and useful session. Good to have the knowledge passed on from someone who is so experienced “

Nursing students – inspiring the generation of cancer nurses

Following an assessment by the Department of Nurse Education in 2019, the Haematology/Oncology unit was deemed as an appropriate learning environment for student nurses. This was based on the wide range of learning opportunities in the unit, the academic and teaching qualifications of the nursing staff and their enthusiasm to share knowledge and support students. Positive feedback from students who had requested to spend time in the unit was so successful that a placement in the Haematology/Oncology unit is now included in the student curriculum.

Family nursing

Family nursing has recently approached the team to request PICC and PORT training. CNS [redacted] is currently devising a teaching programme to meet their needs alongside a video demonstrating care and maintenance that will be available to all on the intranet. CNS [redacted] is also producing updated guidelines to support the care and maintenance of these central lines.

SWOT Analysis

Set out below is a summary of the strengths, weaknesses, opportunities and threats (SWOT) facing the Oncology and Haematology Department:

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> • Wide range of services • Patient-friendly Department • Commitment to innovative professional development 	<ul style="list-style-type: none"> • Old-fashioned appointment booking system • Weak budgetary management • Insufficient MDT working • Undeveloped private practice • Lack of inclusive teamwork involving all staff • Undermanaged and lack of leadership • Lack of joined up working across the Department • Limited intra-Department communications and engagement • Lack of staffing capacity to meet demand • No E-prescribing and nor EPR • Underdeveloped links with other oncology departments 	<ul style="list-style-type: none"> • Improved performance from better joint working • Introduction of electronic systems for booking, recording, referring and ordering • Comprehensive governance system • Better understanding of costs, budget and income • Income generation to support the Department from better organised private practice 	<ul style="list-style-type: none"> • Never events caused by inadequate administrative systems • Costs greater than income and budget

Progress Report: Maintaining Services During The Pandemic

The Covid pandemic brought challenges for all. The Department witnessed oncological treatments being deferred/cancelled and even stopped within the NHS. As a team, staff worked hard to produce a contingency plan that meant no patient's plan of treatment was deferred or stopped, with the exception of a few supportive therapies that would not affect patient outcomes. To support colleagues in the phlebotomy department and to aid shielding of the vulnerable group of patients staff took on the added workload of setting up its own phlebotomy service within the Department. This increased the daily workload by approx. 15-20 patients daily and without an increase in waiting times. Safety of the patient group was maintained at all times and have had no department-related Covid infections to date. This service has reverted back to the phlebotomy department with the exception of PICC lines, ports and on the day requests for patients receiving chemotherapy the same.

Business Case(s)

This section reviews the most recent business cases which have produced in order to make the case for revenue and capital investment on the Oncology Department.

BookWise Oncology Software Proposal

A business case had been produced in 2018 to implement BookWise which was developed to produce a streamline electronic booking service aimed specifically for Oncology Day Units. The product is designed to improve communication on resource availability and activity levels within the Department in order to maximise utilisation.

The system gives instant access to data, which at present is manually entered on a diary. The current manual capacity management is time and human resource intense. The BookWise system will reduce the consumption of staff and time resource, enabling departments to collect data on activity levels through the many features/applications on offer in BookWise, such as: diary, search facilities, system administration, booking form and reports.

The system can be utilised as a stand-alone system without the need for integration with TrakCare and would allow for a stand-alone Electronic Chemotherapy prescribing system in the future. The cost is £1,000 with an expected payback within twelve months due to: reduced drug wastage; improved scheduling resulting in more appointments; and improved reporting of activity resulting in better recovery of costs

The main aims of this initiative are to:

- Reduce treatment waiting times via appointments booking system
- Develop an overall streamlined electronic booking service
- Improve the patients experience of care by giving them certainty and choice
- Allow access to data to continue and build on the work of the recent chemotherapy demand and capacity projects which will enable the units to manage their own demand and capacity.
- Improve communication between Chemotherapy unit and Pharmacy aseptic suite
- Reduce wastage of chemotherapy treatment
- Enable units to collect treatment activity and provide reports
- Record uptake on NICE approved drugs

A pre-expenditure form has been completed to fund the project through the gift fund. The non- functional assessment form has been completed and returned to the technology team.

10. SECTION THREE – FOCUS ON SPECIFICS AREAS

This section addresses principal observations and proposed action plans for the following specific areas:

a) Medical Staffing Review

Medical Model Review – October 2020

A report was produced, for the AMD meeting, in October 2020 which provided an overview of the proposed changes of the medical model operated by the Medical Services Care Group across Health & Community Services. It noted that the current medical model provides operates a 1:8 system for on-call with consultants spending 4 weeks on ward and 4 weeks off ward. It also noted that there is a disparity between the level of consultant delivered care on EAU and the general medical wards with a daily consultant delivered ward round taking place on EAU and twice a week on general medical wards. Anecdotal feedback from junior doctors has highlighted that they feel a lack of consultant presence on the wards for support but also from an education perspective. Additionally, consideration must be made to the current lack of management of physical health within the mental health services within Health & Community Services. There is also a lack of formal medical review within orthopaedic/surgical wards and intensive care unit. Within serious incidents this has led to the need for unification and medical accountability of the clinical episode has been identified as a lesson learnt.

The report proposed that the medical model should provide 7 day consultant presence across all medical wards within the General Hospital, moving the general hospital from operating a model of general medicine to a model of acute care which has seen success within acute care in the UK, this would be provided as per the consultant delivered schedule.

The report noted that in order to support this, the model implementation will require a business case to support the funding of an additional 3PAs of consultant time per week to cover the weekend provision. In addition to this the Medical Services Care Group will also include within this business case the proposed funding of the Clinical Fellow on-call hours which is currently only part funded and with the rota supported by bank requests rather than rostered hours.

Key features of the medical model:

Monday AM – 1x Ward Round (1PA)

Wednesday – 1200-1300 Board Round (0.25PA)

Friday AM – 1x Ward Round (1PA)

On-call

1:8 weekends

1PA (3hrs) Saturday

1PA (3hrs) Sunday

This model has been adopted.

Source: Proposed changes to the Medical Model – October 2020

Progress Report: Bone Marrow Clinic

The Department runs a nurse-led bone marrow procedure service one morning per week for planned procedures and is available ad-hoc as per patient need (emergency admissions). Training for the role was initiated by the clinical nurse specialist who attended a comprehensive course run by the Royal Marsden Hospital. The service was set up not only as an extension to the clinical nurse specialist's role, but to enhance their relationship with the patient at the inception of their journey, enhance continuity of care and free up Consultant clinicians to focus on other aspects of their demanding jobs. Since its

inception in February 2018, the service has successfully performed 158 procedures which has increased service capacity. A recent audit carried out in April 2021 showed that as a service, there have been 0% infections/ bleeding complications post procedures. To enhance future practice, improve patient comfort and satisfaction, the practitioner is looking into increasing the types of analgesia available: Pentrox, Lorazepam and Entonox sedation for very anxious patients. Lessons from working during Covid times have highlighted the need to deliver care closer to patients' homes where plausible and therefore we are looking into repatriation from tertiary centres of follow-up bone marrows. The tertiary centres have also begun requesting local bone marrows prior to transplant to avoid an unnecessary journey off island.

Medical staffing - Job Planning Review

Activity	Dr [Redacted]					
Summary	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]

Activity: DCC PAs						
Clinics						
Patient admin				1.5	2.5	1.5
Ward rounds						
MDTs						
Meetings						
Acute oncology						
Oncology/radiology reviews						
Chemotherapy patients reviews						
Patient comms						

Ward referrals						
Activity: SPA PAs						
Meetings						
CPD						
Other SPA						
Job plan						
Activity Indicators (Dr)	Outpatient clinic templates are structured to comprise on average: <ul style="list-style-type: none"> • Pre-chemotherapy – 6-9 patients per session • Review – 6-8 patients per session. For the Haematology Oncology Unit: <ul style="list-style-type: none"> • Outpatient referral numbers average 35-45 new patients per month. 			Outpatient attendances average 350 per month Chemotherapy treatments average 240-250 per year. DNA rate – averages 3.8%. Ward referrals fluctuate weekly, however, on average the numbers are 3-4 per week.		

Job Planning Prompts

1. Job plans:

- Produce up-to-date job plans for all of the consultants and when the new post has been recruited to.
-
- Once all the job plans have been completed, it is then worth checking relative amounts of time allocated to the different activities.
- Produce a schedule of expected clinical volumes for each type of activity.

2. Private practice:

- Check whether any private practice is done outside or within scheduled times.

3. Objectives:

- Evaluate which of the 2019-20 objectives have been completed.
- Produce new objectives for 2021/22 using the SMART approach, which include clinical (which also directly relate to the use of SPA time) and management ones.

4. Clinical admin time:

- Clinical admin time is to support all activities, not just outpatient work, although the ratio is shown compared to clinic activity. Check whether the admin time can be disaggregated.
- Check whether administration is done during clinic time, if so this increases the amount on top of scheduled administrative working.

5. SPA activity:

- Check what is undertaken during any unspecified SPA time, taking into account mandatory 1.4 SPAs for revalidation plus the potential for a further 1 SPA to be agreed annually with the line manager to support agreed activities.

6. Weekly timetable:

- Produce a weekly timetable which accurately reflects what is scheduled, so team knows when consultants are working and doing what function.

Sample Job Plan – Weekly Schedule

Day	Morning	Afternoon
Monday	Clinic (1) including 1 hour of admin	SPA time (1)
Tuesday	SPA time (0.5) MDT (0.5)	Clinic (1) including 1 hour of admin
Wednesday	Clinic (1) including 1 hour of admin	MDT (1)

Thursday	MDT (1)	Clinic (1) including 1 hour of admin
Friday	MDT (1)	To be agreed (1)

Note: (x) = number of PAs

Direct Clinical Care	Supporting Professional Activity
----------------------	----------------------------------

Observations

- **Clinics:** 16 clinics held per week - 3 clinics per day except Thursday when there are 4 with 14 “free” clinic consultant slots per week.
- **Palliative medicine:** heavily reliant on the Hospice service. [redacted] runs the service as an Associate Specialist, [redacted]. There is a Nurse Specialist [redacted] employed by Hospice who is the liaison nurse between hospital/hospice and community. Additionally, 2 PAs on a Consultant fixed term has been in place for 2019 to 2021 to end once substantive palliative care consultant in post.
- **Key performance indicators:** there are no targets or indicators for care excellence in cancer services.
- **Programmed activities (PAs):** Across the five consultants, there are 51 PAs of worked time. Of this, 39.5 PAs are DCC time. Given annual and study leave (42 week actual worked year), this means that are 127.6 hours of DCC time available each week.

Actions Log

Actions	Details
Undertake up-to-date job planning	Undertake job planning for senior medical staff, which matches capacity with demand, using the job planning prompts.
Standards and Key Performance Indicators (KPIs)	Introduce a selection of Department-wide KPIs and established NICE- level standards to which the medical team seek to deliver.

b) Nursing Review

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]	[Redacted]	[Redacted]
------------	------------	------------

<p>[Redacted]</p>	<p>[Redacted]</p>	<p>[Redacted]</p>

		<p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p>
[Redacted]	<p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p>	<p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p>
[Redacted]	<p>[Redacted]</p> <p>[Redacted]</p>	<p>[Redacted]</p> <p>[Redacted]</p>
[Redacted]	<p>[Redacted]</p> <p>[Redacted]</p>	<p>[Redacted]</p> <p>[Redacted]</p>

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

SPAs (PAs)							
Additional responsibilities (PAs)							
Total PAs							
Number of clinics							
Prospective cover							
Objectives							
Clinical impact features							
Patient activity levels							
DCC breakdown (PAs)							
Emergency attendances							
Patient related treatments							
Diagnostic sessions/assessments							

Outpatient support and services/ward rounds	■	■	■	■	■	■	■
Family meetings	■	■	■	■	■	■	■
Intervention sessions	■	■	■	■	■	■	■
MDT about direct patient care	■	■	■	■	■	■	■
MDT liaison	■	■	■	■	■	■	■
Community	■	■	■	■	■	■	■
Pre-chemotherapy chats*	■	■	■	■	■	■	■
On-call service for TYA, liaising with hospitals off island, participating in MDTs**	■	■	■	■	■	■	■
Lead on the Survivorship programme***	■	■	■	■			■
On-call****	■	■	■	■	■	■	■

Note: 1 PA = 3.75 hours

[Redacted]



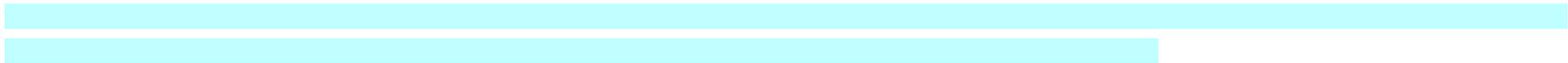
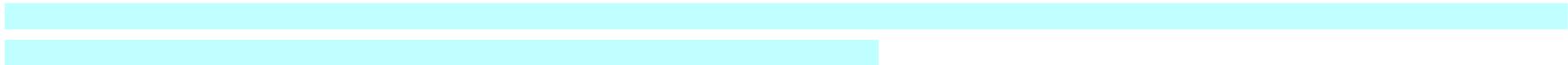
[Redacted text block]

[Redacted text block]

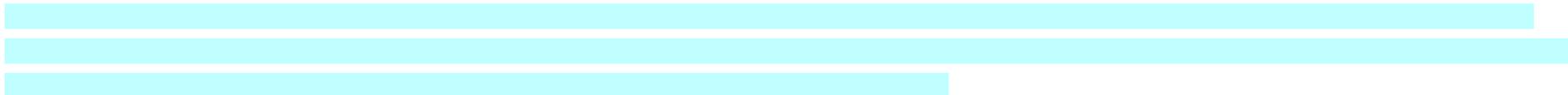
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]



Facility type	n	Daily patients per chemo RN (Median)
AMC or PPS-exempt	31	3.7
Teaching hospital	23	3.9
Non-teaching hospital	54	4



Facility type	n	Chairs and/or beds per chemo RN (Median)
AMC or PPS-exempt	31	1.7
Teaching hospital	23	2.4
Non-teaching hospital	55	2.4



[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]	[Redacted]
[Redacted]	[Redacted]
[Redacted]	[Redacted]

[Redacted]

[Redacted]	[Redacted]

[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

c) Multi-Disciplinary Team (MDT) Working

Introduction

This section addresses the current state of play with regard to how the Department approaches and delivers multi-disciplinary team (MDT) working in the interests of patients and professional development. The section takes stock of the existing arrangements, highlights best practice and identifies a number of actions.

Current Programme of MDTs

The Department currently has a timetable for the scheduling of MDTs across the organisation and with external providers. In summary, there are on average 14.75 hours per week.

Timetable

Monday	Skin, Head and neck - Dr [REDACTED]	11.45-13.30
	Cambridge URO-MDT - Dr [REDACTED] and [REDACTED]	14.00-15.00
Tuesday	Southampton Haematology via E mail am	AM
	Gynaecological - Dr [REDACTED] / [REDACTED] and body site CNS	08.00-09.00
	Colorectal - Dr [REDACTED] / [REDACTED] and body site CNS	12.30-14.00
	Southampton Head and Neck – Dr [REDACTED] / Dr [REDACTED]	13.00-14.00
	Haematology MDT - Dr [REDACTED] / Dr [REDACTED] / [REDACTED] / [REDACTED]	08.30-11.00
	Lung - Dr [REDACTED] Dr [REDACTED] / [REDACTED] Body site CNS	09.00-10.30
Wednesday	Palliative care - All oncology and haematology consultants. All members of nursing team	09.00-10.30 12.00-13.00
	Urology MDT - Dr [REDACTED] / [REDACTED]	12.45-14.00

	Breast - Dr [redacted] / [redacted]	
Thursday	Southampton NET - Dr [redacted] Southampton lung - Dr [redacted]	Preparation time will need to be scheduled going forward. 16.00-17.00
Friday	Southampton URO-MDT - Dr [redacted]	

Observations

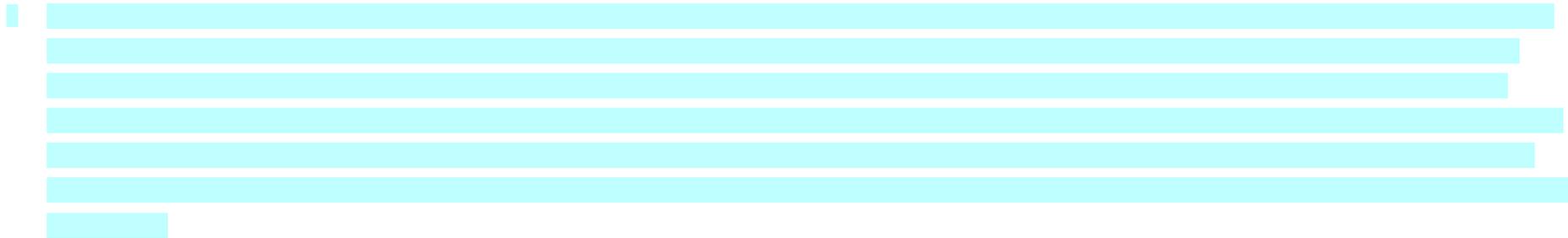
[redacted]

[redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]

[redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]



Best Practice

There is plenty of best practice which the Department can use to determine how best to design and implement its system of MDT working. The Royal College of Radiologists has produced guidance setting out specific standards, entitled: “Cancer Multi-Disciplinary Team Meetings – Standards for Clinical Radiologists” in 2018 [https://www.rcr.ac.uk/sites/default/files/bfcr1415_mdtms_revised_web_final.pdf]

Best practice MDT working is intended to:

- To give patients safe, reliable and coordinated care by:
 - clearly identifying roles and responsibilities
 - joined-up patient assessments that remove duplication and avoid repetition for the patient
 - good documentation that supports a way of working in a more productive way
- To improve the experience for staff by:
 - reducing repetition of information recording and transfer
 - maximising the time for direct patient care
 - improving the documentation by making it easier to access and to understand what is happening to the patient

There is a recommended 6 phase process for constructing and running effective MDT working:

- a) **Prepare:** decide who will be involved; talk to staff; and gather information.
- b) **Assess:** review the current MDT working processes; and assess how well you are working.
- c) **Diagnose:** identify how MDT working could be improved; and audit the processes and identify changes.
- d) **Plan:** prioritise what you want to change; plan new processes
- e) **Treat:** determine the test period; and run the new processes

f) Evaluate: analyse the information; embed the new process; communicate the success

Here is a checklist for evaluating how effective MDT working is going:

- Understand of how the MDT processes currently works.
- Ensure that all the staff have been able to give their feedback on current MDT processes.
- Make sure that all members of the MDT are represented.
- Understand how often the MDT meet as a team. Understand how the ideal MDT would work.
- Effective teamwork criteria:
 - Did all the team participate?
 - Was the discussion open?
 - Were hard questions discussed and agreed by all?
 - Did the team remain focused on the task?
 - Did the team focus on the area/process, not on individuals?

The objectives of an effective MDT meeting are to:

- Reduce the amount of meetings that you attend or call unnecessarily
- Improve the quality of the outcomes that you achieve in your meetings to support patient care
- Improve the responsiveness to actions being followed up by participants
- Improve the quality of the preparation that is undertaken for meetings
- Improve the quality of conversations in the meetings
- Improve the level of participation in meetings

Examples of ineffective MDT meeting practice include:

- Team is not clear on the purpose of the meeting.
- Objectives are not stated.
- Right team members are not present.
- Participants are not prepared.
- Meetings are not conducted with a complete agenda.
- Meetings start and end late.

- Quieter participants are not encouraged to participate.
- Actions are not assigned to individuals with agreed timescales.
- Leaders arrive late for meetings.
- Leaders seem to call/attend meetings routinely rather than out of necessity.

Source: MDT Working – NHS Institute for Innovation and Improvement (2008) - <https://www.england.nhs.uk/improvement-hub/wp-content/uploads/sites/44/2020/06/Productive-community-hospital-Multi-Team-Working.pdf>

Source: BMJ, 2019 “Improving the effectiveness of cancer multidisciplinary team meetings: analysis of a national survey of MDT members’ opinions about streamlining patient discussions” - <https://bmjopenquality.bmj.com/content/8/2/e000631>

Actions Log

Actions	Details
Introduce best practice in MDT management	<ul style="list-style-type: none"> • Review latest and relevant clinical guidance on MDT working • Consult on proposed best practice template and process. • Implement agreed approach and monitor application.
Introduce MDT proformas	<ul style="list-style-type: none"> • Introduction of proformas for all MDTs.
Increase number of MDT Coordinators	<ul style="list-style-type: none"> • Extend the role of CNS staff to undertake this role or employ additional MDT coordinator capacity.
Reintroduce MDT working with the Hospice	<ul style="list-style-type: none"> • Check how best to establish MDT working and introduce new arrangements.

d) Communications and Engagement

Observations

- No regular internal and cross-team meetings.
- The consulted GP reported that there were no communication difficulties with the Department.

Actions Log

Actions	Details
Scheduled Department meetings	Introduce a scheduled programme of internal Department meetings to address daily management and planning ahead

e) Private Practice

[Redacted content]

[Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

 - [Redacted]
 - [Redacted]

- [Redacted]
- [Redacted]

- [Redacted]
- [Redacted]

- [Redacted]

- [Redacted]
- [Redacted]
- [Redacted]

- [Redacted]
- [Redacted]
- [Redacted]

- [Redacted]

- [Redacted]
- [Redacted]
- [Redacted]

- [Redacted]

- [Redacted]
- [Redacted]

- [Redacted]

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

- █ [Redacted text block]

- █ [Redacted text block]

- █ [Redacted text block]

- █ [Redacted text block]
- █ [Redacted text block]
- █ [Redacted text block]
- █ [Redacted text block]
- █ [Redacted text block]
- █ [Redacted text block]
- █ [Redacted text block]
- █ [Redacted text block]
- █ [Redacted text block]

[Redacted text block]

[Redacted text block]	[Redacted text block]
[Redacted text block]	[Redacted text block]

	[REDACTED]
[REDACTED]	[REDACTED] [REDACTED] [REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] [REDACTED] [REDACTED]
[REDACTED]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED] [REDACTED] [REDACTED]
[REDACTED]	[REDACTED] [REDACTED] [REDACTED]

--	--

f) Radiotherapy

Radiotherapy Needs For Jersey, CI - Getting Value For Money Report

Cancer ranks as a leading cause of death and an important barrier to increasing life expectancy in every country of the world. Cancer's rising prominence as a leading cause of death partly reflects marked declines in mortality rates of stroke and coronary heart disease, relative to cancer, in many countries.¹

But, overall, the burden of cancer incidence and mortality is rapidly growing worldwide even in the high income/industrialized countries; this reflects both aging and growth of the population.²

Unexpectedly, UK cancer incidence rates are much higher than the US, Canada, and Western Europe. UK incidence is ranked higher than 90% of the world. Every two minutes someone in the UK is diagnosed with cancer. Since the early 1990s, incidence rates for all cancers combined have increased by more than a tenth (12%) in the UK. Incidence rates for all cancers combined are projected to continue to rise by 2% in the UK between 2014 and 2035.³

Unfortunately, the rate of all cancers (excluding non-melanoma skin) in Jersey is higher than in the South West and England. The age-standardised rate (ASR) is 838 per 100,000. The rate in the South West is 787 per 100,000. The rate in England is 784 per 100,000. Around 593 new cases in Jersey are diagnosed each year.⁴ This data was for 2016. The 2019 updated population estimate is 110,000 which increases expected new cancer cases for 2021 over 800. Jersey's cancer rates are also higher than that of Guernsey. There is an additional 400 non-melanoma skin cancer diagnosed per year some that may benefit from radiotherapy.

Estimating demand for radiotherapy requires knowledge of the types and numbers of cancers and the indications for services. Cancer registries provide information on the types and frequency of cancer in a population. A robust Jersey Cancer Registry supports the government and health officials to make better decisions on cancer care policy.

Planning sufficient services to meet the needs of the treatment population is vital in providing optimal care. After non-melanoma skin cancer, the most registered cancers in Jersey are prostate, breast and lung cancer. All these cancers are reliant on radiotherapy for their adjuvant treatment. At least 50% of new cases of cancer will need radiotherapy treatment as part of the initial treatment. About 25% of these may benefit from re-treatments (re-irradiation). — The capacity of a megavoltage machine is between 400 and 600 courses of treatment per year, depending on the complexity of the techniques used.⁵

TABLE 3.3. PARAMETERS FOR CALCULATING DEMAND FOR MV MACHINES

	Low and middle income countries	High income countries
Optimal utilization rate	55%	50%
Re-treatment	10%	25%
New courses per MV machine per year	600	400

In the adjuvant setting treatments are usually 30 treatments given over a 6-week period. Re-treatments usually are 10 treatments over a 2-week period and palliative care treatments vary from one, three, five and rarely 10 treatments.

The European Society for Radiotherapy and Oncology (ESTRO) in 2005 published an overview of existing guidelines for radiotherapy infrastructure and staffing and made strong recommendations. It was suggested to have one linear accelerator per 450 patients, one radiation oncologist per 200-250 patients and one physicist per 450-500 patients (or one per linac). It should be stressed, however, that these are only crude guidelines and that the actual needs heavily depend on population structure, cancer incidence and treatment strategies, which differ between the various countries.⁶ Also radiotherapy treatment has become much more aggressive in the last five years, we treat more patients with oligometastatic disease.

In conclusion I would like to refer to a Collaborative study for Cancer Outcomes, Research and Evaluation with The Ingham Institute for Applied Medical Research in Liverpool Hospital, UNSW in Sydney Australia and the International Atomic Energy Agency reviewed radiotherapy delivery of small countries/islands and concluded the following:⁷

- Radiotherapy for patients in small countries can be accessed by travel overseas, an independent national service or a small satellite service linked to a larger fully capable service.
- Overseas travel is costly and dislocating. Not all cases are able to travel and there are often considerable delays that may result in progression of cancer.
- It is always feared that isolated departments struggle to retain staff and to maintain equipment but with the onset of the new technology this has reduced the size and staffing in small countries by providing remote quality assurance and peer review.
- Access to radiotherapy depended on caseload, income, and geography. There were radiotherapy services in 53% of HIC (High Income Countries).
- All HIC islands with more than 80 cases per year had radiotherapy services.

The future of radiation oncology based on developments in technology and biological research is very exiting but the current unequal level of access to adequate radiotherapy services in the UK for Jersey cancer patients is frustrating. Many Jersey cancer patients undergo unnecessary chemotherapy while waiting for radiotherapy in the UK, delays in adjuvant radiotherapy impacts outcomes and the lack of easy access to hospital beds in the UK for our palliative care patients further impact quality of life of our cancer patients.

This frustration is currently much more highlighted as our patients suffer the additional delays of radiotherapy in the UK, a national issue due to the knock-on effects of Covid, this will last for many months to come.

The Government and the Executive have the responsibility to ensure that adequate services are available and to facilitate access to these services. As stated above according to the European Society for Radiotherapy and Oncology (ESTRO) it is suggested to have one linear accelerator per 450 cancer patient treatments. We expect to have more than 800 cancer patients (excluding non-melanoma) diagnosed in 2021 of which at least 50% will need radiotherapy plus some of the non-melanoma skin cancer that may also benefit from radiotherapy. There will be a small number of patients that will always need to be treated in the UK. Taken all of this into account and looking at the cost of travel and accommodation for our patients having treatment in the UK, the gain in quality of care that could be assured for our palliative care patients and the avoidance of stress and upheaval of our adjuvant patients needing to be away from family and their home for 6 weeks when undergoing treatment in the UK. We feel that there is a very strong case for radiotherapy on Jersey. This service can obviously be made available to Guernsey to make it even more cost effective.

Source: Radiotherapy Needs For Jersey, CI - Getting Value For Money June 2021.

References: Available in Annex C.

Observations

- **Linac provision:** the volume of provision is usually dependent on patients you treat. One linac for 450 patients treated as per IAEA guidelines. But the yard stick is usually for a population of 150 to 180k when cancer incidence is below 500 per 100k. UK has a much higher incidence than the rest of the world closer to 750 per 100k population and Jersey even higher. We expect more than 800 per 100k this year. If half have radiotherapy then close to 400 patients to be treated. So very close to the 450 per linac. Clearly, the case can be made for radiotherapy to be done on the island based on population need, and the financials () will need to be revisited in order to set this out.
- **Accreditation:** it would be good for the service if radiotherapy is accredited with partnering with a UK institution such as Oxford (that is interested) and Guernsey would progressively come on board. Treatment can be cheaper than in the UK. If they get on board then a better rate can be offered.
- **Referrals to UK and Radiotherapy MDT:** any referral to the UK for outpatient appointment, admission or MDT is entered onto the Overseas Treatment/Travel Application – OTTA (this applies to all specialties throughout the Hospital). This records the patient's details, who has referred them, where they are going to, and why they are going. The Travel Office then make the travel arrangements and also enter this onto the OTTA form. The OTTA team supervise the updating of this and send out monthly reports requesting outcomes from appointments/admission/MDTs, and closure of the episode if the patient is not travelling again.

- **Nursing follow-up:** the McMillan Radiotherapy Liaison Nurse is going to hold clinics to follow up the radiotherapy patients.
- **Secretarial support:** a survey was conducted, with regard to the request for a 3rd secretary in the Department, over a one month period - March, showed that Secretary 1 typed 167 letters, Secretary 2 93 letters, 45 of which were private .
- **Radiotherapy business case:** the business case needs to include the 25% of patients who have chemotherapy at the same time as radiotherapy in England, and it is believed that 80% can be treated on-island.
- **Chemotherapy chairs:** there is the opportunity for chemotherapy chairs to be part of the medical day unit (serviced by chemotherapy nurses) and not a separate unit as now with cross-training of nurses in medical care.

Actions Log

Actions	Details
Establish a radiotherapy service on Jersey	Develop the business case to set up radiotherapy service on Jersey to meet need, which could also include Guernsey patients in order to make it more viable.

g) Demand and Capacity

Analysis

- **Referral activity per week:**
 - Mean referrals Received: 7
 - Of Which Urgent: 0
 - Routine Paper/Fax: 0
 - Routine E-Referrals: 7

- Mean DNAs (routine referrals): 0.3
 - Of Which Reappointed: 0.2
 - Of Which Discharged: 0.1
 - Mean Rearranged Slots: 0
- **Waiting times:** the data is not available at the moment as undergoing validity checks.
- **Current capacity (Note:** each service needs to establish the necessary slots so that the normal variation in demand can be managed within the required maximum waiting time. Slots required will need to be between the 65th and 85th percentile in order to ensure that this variation does not create a queue i.e. an unsustainable increase in the number of patients waiting (on the PTL). Setting capacity between these levels can be thought of as saying 'we will have enough capacity to see all patients around 65%-85% of the time):
 - Mean Core Capacity: 14
 - Mean Ad-hoc Capacity: 0
 - Mean Total Capacity: 14
 - Net Weekly PTL Size Change: -7
- **Required capacity per week:**
 - Approximate Sustainable Range: 7 to 9 (which means there are 7 more slot(s) than referrals coming in plus reappointed DNAs)
 - Mean Referrals Received: 7
 - Mean DNAs Reappointed: 0
 - 65th Percentile: 7 (which means there are 7 more slot(s) than might be needed to sustain the service at a minimum level)
 - 85th Percentile: 9 (which means there are 5 more slot(s) than might be needed to sustain the service at a comfortable level).

Actions Log

Actions	Details

h) Administrative Processes

Observations

- The Department is currently undertaking a secretarial survey, commissioned by Dr [REDACTED]. This survey is examining the number of letters, which includes private ones undertaken in NHS time.
- Chemotherapy is written by hand which is inefficient and increases risks being long-winded – so work underway with pharmacy to develop clearer charts however these would still be manual.
- Appointments clerk/booking has had training but is managed within haematology/oncology not by appointments.
- Ward clerk who books chemotherapy patients has not been trained by appointments but by the unit manager (started July 2021) and does not book haematology patients.
- Medical secretary for haematology books all private patients.
- No booking policies in writing only local 'how to' guides.
- Two secretaries for 3.5 consultants but a lot of time is being spent following up patients being treated at Southampton or the Marsden. Only one person is substantive and in post. One secretary is based in the oncology unit and the other is based in OPD.
- No E-prescribing and no Electronic Patient Record (EPR) system.
- The TrakCare system is unable to book patients more than 12 months in advance so a number of follow-up patients were 'lost' and nurses keep their own paper lists themselves.
- In Haematology, the referral letter is sent by fax, post, email or e-referral. Letters are entered on the referral list on TrakCare, then sent to Consultant to triage - routine, soon, or urgent. All new patients usually seen within 4-6 weeks. Letters are returned and appointments booked. A post-

appointment outcome sheet is filled in and sent to appointments clerk for further appointment or discharge. There is one receptionist who receives samples and deals with the post, this person is often not on the front desk and they need to take the samples to the correct Laboratory and takes the post to different areas within the Pathology Lab. When this occurs, patients will often enter the Department and go direct to the secretaries, causing many interruptions. An idea for a full time appointments clerk to deal with public and, if possibly, private appointments, to share this front desk would help the situation and patients would be able to book appointments immediately. Consultants have been supported to use digital dictation (G2) as this will speed up the typing and also allow remote typing help. The consultants are willing but have yet not been able to set aside time for training. There have been some improvements in the outpatient operations that have been very positive. The Department continues with issues related to oral medication dispensing but most importantly the secretarial support is still the major concern.

- In Oncology, there is a digital form of dictation (G2) which is used throughout the Hospital which two consultants use regularly. This enables work to be done much quicker as urgent letters are highlighted and remote typing help can be allocated when necessary. 2 x Consultants have 5 clinics/week; 1 x Consultant has 3 clinics/week plus there are nurse-led clinics. A full time appointments clerk is required – as this would reduce the pressure on the secretaries during the afternoons. The receptionist only ‘meets and greets’ the patients, she does not check them in. She does however fill in a charge sheet for the private patients which is then sent to Finance to invoice the patient. There is already an administration assistant in OPD who does this for any private appointments in outpatients – this work could this be passed onto this administration assistant or the receptionist could be trained as an appointments clerk. The Department does not want to lose this person but it seems a waste of resources. It could be more sensible to have 1 x part-time appointments clerk who could cover morning and afternoons and also cover for each other when on leave/sick.
- GP or more usually Consultant letter sent to Oncology, entered on referral list – patient usually seen within 1 -3 weeks. Appointments clerk books initially consultation, bloods, oral chemo and ad hoc nurse led clinics. Appointments clerk will also cover for ward clerk and book IV chemo appointments when necessary. Chemotherapy appointments are entered onto TrakCare as an inpatient admission, then discharged when appointment finished. All patients leave with a follow up appointment based on the daily care sheet which is handed to the Appointments Clerk – there is no pending list apart from recalls for 3 months, 6 months, 1 year, 2 – 5 years, which the Appointments Clerk keeps track of. As Appointments clerk is part-time, any follow ups are left until the next day, unless urgent, then the secretaries will book these. A weekly MDT is held on a Wednesday between the Oncology Department and the Hospice [DN: has this also stopped give the suspension] to discuss any patients admitted/ discharged/deceased, a care plan is discussed and put in place.
- No episode is recorded on TrakCare if a patient is admitted to the Hospice, however a letter is typed from Oncology and so is recorded on TrakCare via the letters.

- Chair patients are recorded as Regular Day Admissions (i.e. admitted and discharged the same day), and they should be recorded as Regular Day Attender. Follow up patients are recorded as attending remission clinics and should be cancer follow-ups.
- Consultants not using the starleaf telelink.
- There are no targets for diagnosis by X or treatment by Y (but try to work to 2 weeks).
- Only able to track stage 1 (i.e. first appointment). Cannot book pts more than 12 months in advance on TrakCare. TrakCare is not able to book a series of appointments so a separate system is used.
- Ward clerk books chemotherapy appointments (new post in post since March 2021) and booking clerk books clinic appointments.
- [REDACTED]
- Booking duties are as follows:
 - Follow-ups:
 - Consultant requests bloods in system
 - [REDACTED] books next phlebotomy and clinic appointment.
 - Only oral treatments:
 - Consultant requests bloods in system.
 - [REDACTED] books next treatment in TrakCare, phlebotomy and clinic appointment.
 - IV/SC/IM or mixed treatments (PO plus IV/SC/IM):
 - Nurse on the SCAT floor requests bloods in system.
 - [REDACTED] books next treatment in TrakCare, phlebotomy and clinic appointment

Best Practice

The King's Fund has recently produced a report entitled "Admin Matters: The Impact of NHS Administration on Patient Care" which has a number of key messages which could be useful for the Department to take into account when planning how best to provide administrative services to support its clinical activities. These messages include:

- Care relies on administration (admin) processes, which ensure that patients, staff, equipment and information are in the right place at the right time.
- Patients, carers and staff all experience admin processes – including phone calls, letters, booking systems and other communications – that do not consistently meet the needs of all users. These experiences can place a heavy practical burden on patients and carers, restrict their access to care, negatively affect their wellbeing, and have knock-on consequences for staff.
- For people who live with long-term conditions, use multiple health and care services or who have additional needs, for example, people with a disability, their experience of admin can play a critical role in their overall experience of care.
- High-quality admin has the potential to improve patient experience, reduce inequalities, promote better care – and contribute to a better working environment for staff. Despite this, it has seldom been a major focus for policy-makers and leaders.
- Embracing a user perspective, seeking and harnessing patient feedback, and working with patients and staff to co-design processes will be essential to developing truly high-quality admin.
- Integrated care systems, and place-based partnerships within them, are tasked with promoting more seamless care that better meets people's needs. To do this they will need to understand the role admin plays in care – from both patient and staff perspectives.

The report recommends a five-part framework for improving patient-facing administration that:

- a) Is co-designed by patients and staff
- b) Promotes two-way interactions between the service and patients
- c) Promotes understanding and confidence
- d) Promotes equal access
- e) Seeks user feedback and uses it to develop.

Source: King's Fund Report – Admin Matters: The Impact of NHS Administration on Patient Care, June 2021 - <https://www.kingsfund.org.uk/publications/admin-matters-nhs-patient-care>

Actions Log

Actions	Details
Improved administrative systems – temporary and permanent solutions	Introduce improved manual systems pending the introduction of electronic systems for booking, recording, referring and ordering.
Digital dictation	Provide training so that consultants can use the digital dictation system (G2).
Business case for administration support	Produce a business case for expanding the limited administrative support for making appointments and associated activity. Draw on best practice such as outlined on the King's Fund report to construct a programme for designing a "fit for purpose" administration system.

i) Pharmacy and Prescribing

Observations

- There is no e-prescribing. There is the WellSky Electronic Prescribing System, which has been rolling out since last year. This was piloted as a chemotherapy system but was not successful. The company involved is working on a new version, with a view to pilot from January to March 2022.
- Patients not always given chemotherapy tablets with an explanation from either pharmacist or chemotherapy nurses.
- Chemotherapy drug chart written out by hand.
- Variation in treatments as some undertaken above NICE guidelines as can be either self or state funded.
- Cancer drug fund has been set up initially with an indicative £800k. It was believed that there would be an additional cancer drug fund had been set up, in reality Haematology and Oncology is being approved outside of the Independent Panel with no additional resource. This spend is showing on the

drugs budget statement, the cost of which is currently being offset by private practice income. Criteria for the future management of the fund is awaited, and there has been no specific governance for this.

- An IV chemotherapy process review was undertaken by [redacted] in 2014 (no copy has been located).
- The lead pharmacist for Haematology/Oncology is [redacted]
- The Department has its own aseptic unit which produces IV chemotherapy for the haematology/oncology unit - both are bespoke and pre-made.
- Chemotherapy tablets are issued, usually the CNS gives an explanation on ward but if the patient collects from the pharmacy then pharmacist give the explanation. There is a variation in medical practice and the explanation given regarding the issuing of tablets or not. Nurses are not viewing oral chemotherapy with the same gravitas as IV chemo and patients essentially have to get on with it themselves.
- If IV chemotherapy is bespoke then no patient leaflet is available and therefore provided.
- Regarding private patients, if NICE approved then will be in the Jersey formulary. If not NICE approved then this goes before an Individual Patient Funding Request Panel chaired by [redacted], Deputy Medical Director.

Actions Log

Actions	Details
Introduce e-prescribing	Pilot the latest version of the WellSky Electronic Prescribing System in early 2022, following the provision of a demonstration in July 2021.
Prescribing chemotherapy tablets	Introduce standard practice with regard to the issuing of chemotherapy tablets and guidance to make sure that accompanying explanation is adequate and appropriate. Check what best practice regarding the provision of chemotherapy tablets.

Nursing advice - chemotherapy	Introduce a system (guidance, training, literature) to make sure that nursing advice is of a high quality when issuing chemotherapy tablets and IV chemotherapy in order to meet the needs of patients and governance requirements.
Cancer fund operation	Establish and implement the latest criteria for allocating the funding programme.

j) Patient Pathways and Guidelines

Progress Report: Specialist Practice Innovation

Survivorship follow up clinic post Systemic Anticancer Therapy (SACT) led by Oncology CNS

The implementation and development of this clinic tries to meet the NHS outcomes expectations framework, and aims to identify and address the patients' needs and optimise the long term cancer effects, deliver a set of interventions to greatly improve the experience and outcomes of people living with and beyond cancer, informing and streamlining referrals of patients for specialized help when necessary.

The plan is to run this clinic as face to face 30-minute consultation twice per month in regard to cancer survivors' numbers, six to eight weeks after the completion of the treatment. The follow-up will be done within 3 to 6 months depending on the risk stratification for the patient, taking in consideration factors as co-morbidities, type of cancer, short and long term effects of the treatments, patient self-management and preferences. A clinical room was kindly offered by the Macmillan CEO [REDACTED] on Macmillan premises.

The follow-up clinic would be composed by one oncology CNS in order to plan, execute, deliver and schedule all the cancer survivors' clinics. A plan care must be done developed and this should include a clear and succinct treatment summary document and a comprehensive and descriptive follow-up plan care stipulating the likely pathway to follow. Due to the high levels of satisfaction and efficacy demonstrated through the pilot programmes, executed in several places of the UK, using the "Recovery Package" (Macmillan Cancer Support, 2013), it was considered as an asset to adapt this program to this project. Thus, this follow-up clinic will involve four major interventions, beginning with an Holistic Needs Assessment (HNA) that should be initiated at the time of diagnosis and reevaluated at the key points of the pathway care, including domains such as clinical, psychological and practical needs using the HNA

tool (on the next slide); a care plan updated at the end of every acute treatment revealing disease details, expected side effects of the treatment and predictable long term issues; a cancer care review which will discuss thoroughly and assess in detail the patients' unmet needs, if necessary signposting patients to specialized help, and finally the promotion and education of healthy habits with the aim of empowering people to self-manage their own care. The survivorship follow-up clinic post SACT can bring some opportunities to the patients and oncology department as improvement of patients' health status and prevention of long-term complications after SACT, support patients' psychological, social and financial issues, enhance patients' experience post cancer survival (Patients' satisfaction) and develop department's visibility.

The guideline was produced and ratified in May 2021. At the moment this is under the specialist services group awaiting approval.

Patient Pathway Review

Introduction

This section summarises the key changes and suggestions discussed by the project team at the Design Event on 11th Nov 2014. The VSM for Chemotherapy created on 9th September 2014 was reviewed in detail – of the total of 83 steps, the split was as follows:

- 28 value adding
- 46 non-value adding
- 6 wastes

Patent pathway - seven distinct stages

The following distinct stages were identified:

- 1) Pre-appointment
- 2) First consultation
- 3) First pre-chemo appointment (with nurse)
- 4) First cycle
- 5) Pre-chemo appointment (with doctor)
- 6) 2nd/subsequent cycles
- 7) End of treatment

Identified Key problems

The attendees agreed that the key problems included the following:

- Drug chart processes and storage/placement
- Scheduling of outpatient appointments and treatments
- Prescribing of drug charts (including batched prescribing and pre-chemo appointments)
- Cancellations/deferrals of treatment
- Delays between referral and start of treatment
- Availability of central lines (relevant for approx. 5% of patients)
- Process for urgent/emergency patients (approx. 10%)
- Availability of staff.

Progress Report: Non-Medical Prescribing

It is anticipated that two further members of the CNS team will be pursuing this within 24 months.

Proposed changes

Following the identification of key problems and their root causes, the following changes have been discussed in more detail:

- **Prescribing of new treatments:** To speed up prescribing and in preparation for the Chemotherapy e-Prescribing system, the current Drug Charts could be re-designed for each protocol (there are currently 108 protocols). When prescribing, doctors would not need to write down drug names, but only dose and other details. However, the re-designed drug charts should not lose the ease of writing down medical notes and the “patient history”. Allergies and specific clinical information (diabetes etc.) could be noted on the cover.
- **Pre-chemo clinics Schedule/Prescribing of subsequent treatments:** In order to reduce the number of Drug Charts currently prescribed 7-11 days ahead of treatment, the current Monday pre-chemo clinics could be evenly spread across all week, possibly Monday, Wednesday and Friday. This would improve the availability of blood results for accurate prescribing, and make clinical screening easier. Subsequent treatments could be prescribed as

soon as test results are made available. This would also mean that each treatment day would be dedicated to a specific site, depending on the schedule/staffing of pre-chemo clinics. The new design of Drug Charts could make it possible to prescribe in the clinic.

- **Drug Charts to be kept at the Oncology Unit at all times:** To prevent problems with handovers between the Oncology Unit and Pharmacy and drug chart related defects, Drug Charts would ideally never leave the Oncology Unit, and would be kept with nursing notes for completeness of information.
- **Nursing Notes/Drug Chart filing system:** This can be reviewed with a view to making it easier and quicker to locate specific patient notes/drug charts.
- **Clinical Screening:** If the Drug Charts are to be kept at the Oncology Unit at all times, the clinical screening would have to take place at the Oncology Unit. Initially, it was estimated that 4 hours of pharmacist time per week (preferably in the afternoon) could be sufficient to cover the clinical screening of drug charts at the Oncology Unit. At the same time, the screening would be facilitated by the availability of nursing notes.
- **Production Orders:** As the Drug Charts would remain at the Oncology Unit, a new 'Production Order' would have to be designed and implemented.
- **Pharmacy Production Planning:** Pharmacy would rely on TrakCare data for planned treatments, ideally for at least 2-3 days in advance. TrakCare data for planned treatments would need to be regularly synced with the diary.
- **Data recording/reporting:** Recording of existing and new data needs to be reviewed to include relevant service-related events, for example: cancellations, patient outcomes.
- **Central lines:** A standard process could be developed/agreed to reduce the waiting for patients who require them.

Outcomes from changes

The following improvements are expected to come from implementing the changes:

- Reduced drug-chart related defects
- Improved staff satisfaction
- Reduced cancellations, delays and waiting for patients
- Shorter time between blood test results and prescribing

- Shorter time between prescribing and production
- Reduced drug waste
- Released capacity to produce more treatments/treat more patients.

Observations

- Many patients attend acute medicine without records of chemotherapy or oncology treatment received as no EPR. No care pathways for some oncology patients such as those with ascites. Patients are referred to acute medicine and whoever is on when acute medical symptoms develop.
- It is reported that there is a good working relationship between the Department and the laboratory service. This has improved with the appointment of the second consultant.
- The laboratory has invited MHRA (which does not have a remit in Jersey) every 3 years to undertake a review and inspection of the laboratory and this will enable the Minister to issue them another 3 year licence (next one due in July 2021). The laboratory is working to apply for UKAS accreditation.

Actions log

Actions	Details
Evaluate patient pathway recommendations	Identify which recommendations are outstanding and implement updated programme
Appoint a named physician for chemotherapy patients	Suggest a named physician (Doctor of Reference) for chemotherapy patients to deal with acute symptoms eg diarrhoea, breathlessness, ascites etc.

k) Risk and Governance

Observations

- Staff cannot describe the governance arrangements and what governance means – no mention of risk management, learning from mistakes, standardisation.
- After clinics outcome sheets are written for each patient who attended. The sheets are then emailed or taken to OPD appointments and given to a 'pool' member of OPD. Some patients get lost and are not booked for some reason. The Oncology/Haematology team only find out if the patients phones to find out where their appointment is. There is anecdotal evidence that the patient outcome sheets are being discarded and not put in the patient records.
- Paper based activity. Longstanding problem getting lab results to GPs from the hospital as they are sent by paper or given to the patients. The GP staff have to then input onto their own systems.
- Patients who are admitted to hospital under palliative care if patient is discharged they will not be readmitted unless a new referral is made.
- The following risks are included in the Risk Register:
 - Lack of clinic space and nursing staff within the Haematology-Oncology Unit (rating = 6: low)
 - Lack of senior nurses to support acute-oncology on-call (rating = 12: moderate).



Proposed Governance Structure

Actions Log

Actions	Details
Pathway review	Undertake a complete patient pathway review as part of clinical audit in order to establish what is and what is not working.
Governance system	Implement the organisation's proscribed system of governance.
Storage of outcome sheets	The outcome sheet need to be placed in the patient's medical records.

I) Mental Health and Wellbeing Support

Observations

Patients

- There are two sessions a week provided by Dr [redacted] for psychological support and relaxation therapy.

- McMillan Cancer Support (MCS) offer counselling and relaxation services. All patients receive an information leaflet from MacMillan Cancer Support (which in Jersey is independent of the UK service). MCS is funding their CEO, [REDACTED] to work two days a week as the radiotherapy liaison between MCS and the radiotherapy units and also to support patients when they return to Jersey from treatment in England.
- There is a Listening Lounge available to anyone (no recording of speciality) which is run by MCS, where people can drop in then be forwarded to mental health services.
- CAMHS recorded individually as patients under paediatric service.
- All interactions are done by letter which is not able to automatically include information from previous correspondence, so everything that is written has to summarise everything to date. The GPs do not have access to EPR so rely solely on the written correspondence.
- Shared care arrangement is in place between psychiatrists and physical Haematology/Oncology consultants.

Staff

- CNS staff describe themselves as having 'compassion fatigue' and felt they needed 'grief resolution'. They say there is no debrief/support when one of their patients die.

Best Practice

The Bereavement Task Model

Hildebrandt used the Saunders and Valente model because it is the only one that isolates the unique characteristics of the oncology role in grief and bereavement. In their model, Saunders and Valente postulated that oncology nurses take the following four actions when grieving the loss of a patient:

- Finding meaning** in a patient's death or questioning whether different actions would have resulted in a different outcome
- Maintaining and restoring integrity**, if the nurse felt conflicted or helpless about a patient's death
- Managing affect** by expressing emotions and feelings related to the death
- Redefining relationships** that may have been impacted by a patient's death

Grief Resolution Strategies

Hildebrandt found a variety of strategies in her literature search that would help oncology nurses to complete Saunders and Valente's Bereavement Task Model. The strategies fell within four common themes that, when used together, enable nurses to address all the steps of the Bereavement Task Model.

Create a positive work environment: Mutually supportive work environments that integrate grief resolution strategies directly in the workplace can optimise patient care, improve oncology nurses' job satisfaction, and reduce the risk and incidence of compassion fatigue. The most supportive workplaces in the literature provided accessible, variable grief resolution strategies to their nurses on a regular basis. Oncology nurses also stressed the importance of workplaces supporting outward displays of grief and mourning by nurses.

Encourage nurses to debrief with colleagues: Sharing their experiences with colleagues, who may have had similar experiences, helps nurses cope with their grief. In contrast, bringing those experiences home to loved ones is not as helpful, because nurses' family members may not be able to relate in the same way. The studies in Hildebrandt's review reported that activities such as peer-supported storytelling, workplace psychosocial wellness retreats, and listening to others' stories of grief experiences all had a cathartic effect on oncology nurses.

Offer end-of-life education and grief training: End-of-life training that incorporates components of managing grief, in addition to the usual foci of patient and family care, pain management, and other symptom management, helps prepare nurses to attend to their own needs during patient death. Hildebrandt found that for this kind of training to be effective, it must be provided prior to a nurse's first exposure to patient death and grief.

Alter patient care assignments: Because repeated exposure to death can compound a nurse's grief experience, altering patient care assignments may give nurses an emotional break so they can complete the steps of bereavement. Efforts should be made to ensure that nurses do not provide end-of-life care to multiple patients simultaneously, and nurses should be allowed time off the unit following a patient's death so they can grieve appropriately.

Source: To Retain Oncology Nurses, Offer Grief Resolution, Elisa Becze October 2012

Actions Log

Actions	Details
Team and individual needs assessment	Introduce a regular health and wellbeing check-in as part of appraisal and daily line management to see how staff are doing and provide support accordingly. Make promoting health and wellbeing

	a regular agenda item at Team meetings.
Patient support	Check with Macmillan Cancer Support whether there are any other services which patients can access.

m) Financials and Staffing Capacity

Financial Summary

- Pay budget position:
 - Pay spend YTD = £301,258
 - Pay budget YTD = £204,740
 - Variance YTD = (£96,516)
- Budget and expenditure position at Month 2:

Area	YTD Budget	YTD Spend	Variance
Haematology	£1.16m	£1.3m	(£170k)
Oncology	£1.26m	£1.1m	(£136k)
Nursing	£348k	£424k	(£76k)
Tertiary care	£3.89m	£3.4m	£471k

Staffing

The Department employs the following members of staff:

Haematology staffing:

- Current staffing level – 2 FTE medical secretaries – based in Haematology office
- 1 x FTE Appointments Clerk for public haematology patients - based in Appointments office.

Oncology staffing:

- 2 x FTE secretaries – supervised by Medical Secretaries Supervisors
- 1 x 0.5 FTE Appointments Clerk – budget supplied by Oncology, under the supervisory umbrella of Appointments Supervisor
- 1 x 0.5 FTE Reception Clerk – budget and managed by Oncology Manager.
- 1 x FTE Ward Clerk – budget and managed by Oncology Manager* (Ward Clerks throughout the Hospital are managed by the Ward Managers – this may change as an Admin Review is due to take place)
- 1 x FTE McMillan Radiotherapy Liaison Nurse.

Staffing Budget

Staff Group	YTD Spend	YTD Budget	(Over)/Under-spend
Civil Servants Grade 5/6	£48,891	£25,226	(£23,665)
Medical Consultants 13-16	£186,292	£142,668	(£43,624)
Nursing Grade 6a	£60,306	£31,354	(£28,952)
Nursing Grade 6b	£121,927	£145,284	£23,357
Nursing Grade 4	£121,258	£39,094	(£82,164)
HCA Grade 1	£27,158	£24,636	(£2,522)
Agency Nursing	£37,644	£26,320	(£11,324)
Total	£603,476	£434,582	(£168,894)

Notes:

- YTD = Month 6 (Jun 2021)
- Total includes some other minor pay items

Source: Payroll summary

Staffing Capacity

Band	WTE	Headcount
Nursing		
Grade 6a		
Grade 6b		
Grade 5		
Grade 4		
Grade 2		
Administration		
Ward clerk Grade 5		
Receptionist		
Medical secretary		

Note: Budget supplement (%) to cover leave] = 20%

Staffing Ratios

- 1 chemo nurse to 2 chairs (9am to 6pm).
- Availability of employed nursing (Grade 5 and above) cover per week (based on 41 working week year – 7 weeks annual leave, 2 weeks study leave but 2 weeks of sick leave) = 319 hours per week. The budget supplement of 20% adds back a further 81 hours per week = a grand total of 400 hours per week.
- Nurse-led clinic: 9 sessions at 4 hours, therefore 36 hours - 1 nurse per hour per clinic with 20% cover for absence/leave.
- New nurse-led pre chemotherapy assessment clinic: running daily one session at 4 hours equates to 20 hours per week. One nurse per hour per clinic - currently on hold due to staff shortages.
- New nurse-led survivorship clinic: one session every two weeks therefore 4 hours every two weeks - currently on hold due to staff shortages.
- Consultant clinics: 1 CNS available at all times for breaking bad news, new patients, consultant queries and administration of oral chemotherapy - 28 sessions running per week therefore 112 hours.
- One HCA available to cover all clinics - 112 hours
- One nurse and HCA per hour of clinic.

Observations

- Acute oncology services has no budget set and therefore is an overspend year on year. Activity levels have increased by 17-20% over the last 3 years in spite of Covid, with no downward movement as a result of Covid. This is driven by immune therapy and 3rd 4th line treatments becoming available. There has been no increase in the non-pay budget over this period.
- There are budget and forecast lines for on-call in the nursing financial statement:
 - FYE forecast spend = £9k
 - Full year budget = £35k
- Significant overspend by Month 4.
- Forecasted FYE overspend (assuming no action taken and trend the same) = £289,000.

- Always overspends in haematology/oncology but budgets based on budget and not expenditure - Budgets are historical (roll-over budget plus inflation growth) usually but in 2020 and 2021 no growth allocated to specialities although growth was given to HCS from Treasury.
- Efficiency (CIP) target taken out in Month 1 (Jan) so overspent with the hope of catching up and breaking even by year end.
- Not known how cancer fund will be funded going forward.
- Report on zero-based undertaken by EY in 2020 but never implemented.
- With regard to charity funding, the committee (Governors) decide how the monies are spent and financial requests are taken from other charities, patients and family members, Oncology/Haematology and other departments within the hospital. Requests under £1000 that are urgent (i.e. funding for flights to UK for family members, or food vouchers) it has been agreed that named managers can sanction this to ensure patients receive timely financial support. Anything above this amount must go to the committee for consideration and authorisation. Details: <https://charitycommissioner.je/>

Future Staffing Recommendations

Staff Group	Calculation	Recommendation
Clinical leadership	Volume of clinical daily management demand	There is a requirement for 2 extra clinical sessions/clinics with a named physician who would see oncology and haematology patients with medical problems.
Medical	Volume of demand and time per week to meet demand	Given waiting times under control and some of their MDT work can be taken on by MDT coordinators, there is no need for additional medical staff.
Nursing	Volume of time per week needed to meet demand	There is no need for additional CNS staff as long as the new nurse-led activities can be covered by a reorganised team.

Administration	Administration support needed once the processes have become electronic	Whilst the administrative process is paper-based there is a need for additional administrative staffing, and probably ongoing so that CNS staff can do less administration thereby releasing them to take on more.
MDT coordination	Hours of MDT preparation and attendance per week which currently does not have MDT coordinator support	MDT coordinator(s): unless picked up by CNS (with admin support) there needs to be additional MDT coordinator staffing to cover those MDTs without such a service.

Actions Log

Actions	Details
Zero-based budget exercise	Check whether the EY report on zero-based budgeting undertaken in 2020 can be reviewed and establish an appropriate “fit-for-purpose” budget which adequately reflects current costs
Produce business cases for additional staffing	Business case (budget bids) for additional staffing to meet demand

11. FUTURE SERVICE PROVISION

Future Service Provision Options

The Department has two main issues with regard to future service provision.

First, it needs to produce a comprehensive cancer service strategy, which it started and paused. This will need to take into account best practice elsewhere, progress to date, and where it wants cancer service standards, performance and practice to be over the next decade.

Second, the Department needs to consider reforming its tertiary referral system so that a greater number of patients are treated within the service, especially once the new hospital is opened.

12. NEXT STEPS

Themes	Actions	Lead	Timescale for completion
Medical Staffing Review	Undertake up-to-date job planning		
	Standards and Key Performance Indicators (KPIs)		
Nursing Review	Undertake up-to-date job planning		
	Governance system		
	Gap management and cover		
	On-call		
	MDT working		
	CNS skill mix		
	CNS SPA allocation		
Multi-Disciplinary Team (MDT) Working	Introduce best practice in MDT management		
	Introduce MDT proformas		
	Increase number of MDT Coordinators		
	Reintroduce MDT working with the Hospice		

Communication and Engagement	Scheduled Department meetings		
Private Practice	Allocation of private practice income to where costs incurred		
	Standardise private practice pricing		
	Private practice policy		
	Private practice committee		
	Service level agreement for facility and services usage		
	Business approach with insurers		
	Job planning		
	Charging list		
	Overseas Travel and Treatment Applications		
	Income generation for the Department		
	Delivery of dedicated private practice		
Radiotherapy	Establish a radiotherapy service on Jersey		
Demand and Capacity			
Administrative Processes	Improved administrative systems – temporary and permanent solutions		

	Digital dictation		
	Business case for administration support		
	Storage of outcome sheets		
Pharmacy and Prescribing	Introduce e-prescribing		
	Prescribing chemotherapy tablets		
	Nursing advice - chemotherapy		
	Cancer fund operation		
Patient Pathways and Guidelines	Evaluate patient pathway recommendations		
	Appoint a named physician for chemotherapy patients		
Risk and Governance	Pathway review		
	Governance system		
Mental Health and Wellbeing Support	Team and individual needs assessment		
	Patient support		
Financials and Staff Capacity	Zero-based budget exercise		
	Produce business cases for additional staffing		

Kim Hodgson
23rd July 2021

ANNEXES

ANNEX A: CONDITIONS TREATED

Condition Area	Specific conditions	
Lung cancer	<p>Small Cell Lung Cancer (SCLC)</p> <ul style="list-style-type: none"> • Limited Stage small cell • Extensive stage small cell <p>Non-Small Cell Lung Cancer</p> <ul style="list-style-type: none"> • Squamous cell carcinomas • Adenocarcinomas <p>Mesothelioma</p>	<p>Treatment options</p> <p>Chemotherapy (neoadjuvant and adjuvant and palliative)</p> <p>Radiotherapy pre and post (off island treatment but follow up in Jersey)</p> <p>Targeted Therapies</p> <p>Immunotherapies</p>
Melanoma	<p>Metastatic Melanoma (palliative treatment immunotherapy/chemotherapy)</p> <p>BRAF Positive Melanoma Palliative (palliative treatment targeted/ immunotherapy/chemotherapy)</p>	<p>Stage 2B Melanoma T4 Disease or ulceration offered (Adjuvant 1 year treatment immunotherapy or targeted)</p> <p>Stage 3 that is N+ disease offered (Adjuvant 1 year treatment immunotherapy or targeted)</p>
<ul style="list-style-type: none"> • Gastro-intestinal 	<p>Upper GI</p> <p>Link with Soton OG Oesophago-Gastric MDT</p> <ul style="list-style-type: none"> • Oesophageal and Stomach cancer • Duodenal and Small bowel cancer <p>Hepato-Pancreatic-Biliary HPB</p> <ul style="list-style-type: none"> • Pancreatic cancer Link with Soton HPB MDT • Primary Liver cancer HCC Link with Soton HCC MDT • Biliary system cancer Link with Soton HPB MDT <p>Lower GI</p> <ul style="list-style-type: none"> • Colon and appendicular cancers Link with Soton 	<p>Appendicular cancers if Pseudomyxoma Peritonei and peritoneal cancers</p> <ul style="list-style-type: none"> • Link to Basingstoke MDT <p>Gastro Intestinal Stromal Tumours GISTs</p> <ul style="list-style-type: none"> • Link with Royal Marsden GIST MDT <p>Neuro Endocrine Tumours NETS</p> <ul style="list-style-type: none"> • Link with Soton/Basingstoke NET MDT <p>All of them can be treated as Neo-Adjuvant, adjuvant and palliative.</p> <p>Discussed at our GI MDT in Jersey and then referred to the</p>

	<p>Lower GI MDT and Liver resection MDT if liver metastases</p> <ul style="list-style-type: none"> • Rectal cancer Link with Soton Lower GI MDT and sometimes Liver resection MDT if liver metastases • Anal cancer Link with Soton Anal cancer MDT plus Basingstoke Anal MDT for groin node resection • Oligo-metastatic disease for lung and liver metastases for surgery/thermal ablation or SABR Stereotactic Ablative Body Radiotherapy via Soton and Royal Marsden MDTs 	UK to one of these 10/11 specific MDTs
Gynaecological	<p>CA Ovary- chemotherapy, Targeted agents</p> <p>Metastatic endometrium. Chemotherapy</p>	Other gynaecological cancers- Vulva, Sarcomas
Breast	<p>Ductal cancer in situ</p> <p>Invasive ductal cancer</p> <p>Invasive Lobular cancer</p> <p>Inflammatory breast cancer</p> <p>Triple negative breast cancer</p> <p>Triple positive breast cancer</p> <p>ER/PR positive breast cancer</p> <p>Her2 positive breast cancer</p> <p>Mucinous/colloid breast cancer</p>	<p>Tubular breast cancer</p> <p>Medullary breast cancer</p> <p>Metaplastic breast cancer</p> <p>Papillary breast cancer</p> <p>Phyllodes or Cytosarcoma Phyllodes breast cancer</p> <p>Adenoid cystic carcinoma of the breast</p> <p>Lymphoma of the breast</p> <p>Angiosarcoma of breast</p>
Bladder	<p>Urothelial or transitional cell carcinoma</p> <p>Squamous cell carcinoma</p>	<p>Adenocarcinoma</p> <p>*muscle invasive treated in Addenbrookes*</p>

Prostate	Ductal adenocarcinoma. Transitional cell (or urothelial) cancer	Squamous cell
Kidney	Clear Cell Papillary Chromophobe Clear cell papillary Collecting Duct	Medullary Unclassified Urothelial Carcinoma
Primary tumours of the brain	Glioma Lowest grade tumors Pilocytic astrocytoma Subependymal giant cell astrocytoma Protoplasmic astrocytoma Ganglioglioma Xanthomatous astrocytoma Subependymoma	Pituitary tumors Pituitary adenoma Pituitary carcinoma Craniopharyngioma Rathke's cleft cyst Pineal Tumors Pineal cyst Pineocytoma

	<p>Lower grade malignancies</p> <p>Fibrillary (gemistocytic, protoplasmic) astrocytoma</p> <p>Ependymoma</p> <p>Oligodendroglioma</p> <p>Mixed oligo-astrocytoma</p> <p>Optic nerve glioma</p> <p>Higher-grade malignancies</p> <p>Anaplastic astrocytoma</p> <p>Anaplastic oligodendroglioma</p> <p>Anaplastic mixed glioma</p> <p>Highest-grade malignancies</p> <p>Glioblastoma multiforme</p> <p>Gliosarcoma</p> <p>Gliomatosis cerebri</p> <p>Meningioma</p>	<p>Pineoblastoma</p> <p>Germinoma</p> <p>Mixed germ cell tumor</p> <p>Pineal gliomas</p> <p>Pineal teratoma</p> <p>Choroid plexus tumors</p> <p>Choroid plexus papilloma</p> <p>Choroid plexus carcinoma</p> <p>Other, more benign primary tumors</p> <p>Neurocytoma</p> <p>Dysembroplastic neuroepithelial tumor (DNT)</p> <p>Lipoma</p> <p>Hemangioblastoma</p> <p>Hamartoma</p> <p>Teratoma</p>
--	--	---

	<p>Benign</p> <p>Atypical</p> <p>Malignant</p> <p>Primitive neuroectodermal tumors (PNET)</p> <p>Medulloblastoma</p> <p>Ependymoblastoma</p> <p>Pineoblastoma</p>	<p>Other primary tumors, including skull base</p> <p>Chondroma</p> <p>Chordoma</p> <p>Sarcomas</p> <p>Gliosarcoma</p> <p>Chondrosarcoma</p> <p>Rhabdomyosarcoma</p> <p>Primary Central Nervous System Lymphoma (PCNSL)</p> <p>Metastatic brain tumors and carcinomatous meningitis</p>
Low grade lymphoma	<p>Mantle Cell Lymphoma</p> <p>Marginal Zone Lymphoma</p> <p>Small Lymphocytic Lymphoma</p>	<p>Lymphoplasmacytic Lymphoma</p> <p>MALT – Mucosa Associated Lymphoid Tissue</p> <p>Follicular Lymphoma Grade 1/2</p>
Hodgkin lymphoma	All Subsets	
Bone marrow transplant	<p>Autograft and Allogeneic bone marrow transplant.</p> <p>Pre-bone marrow work-up</p>	<p>Post bone marrow transplant follow-up.</p> <p>Management/prevention of graft versus host disease</p>
Leukaemia	<p>Acute Myeloid Leukaemia AML</p> <p>Chronic Myeloid Leukaemia CML</p> <p>Acute Lymphoblastic Leukaemia ALL</p>	<p>Acute Promyelocytic Leukaemia APML</p> <p>Myelodysplastic Syndrome MDS</p> <p>Idiopathic Thrombocytopenic Purpura IT</p>

	Chronic Lymphocytic Leukaemia CLL Chronic Myelomonocytic Leukaemia CMML	Cold Agglutin Disease
High grade lymphoma	Large B Cell Lymphoma Burkitt Lymphoma Peripheral T cell Lymphoma	Follicular Lymphoma Grade 3 Angioimmunoblastic Lymphoma
Myeloma	All Subsets	
Supportive therapies	Blood transfusions Platelet transfusions Bisphosphonate therapy	Hormone therapies PICC line care Porta Cath care

ANNEX B: DETAILED ACTIVITY REPORTS

OUTPATIENTS ACTIVITY - 2020

Clinician	Attended	Cancelled	DNA	Booked	Transferred	Overbooked
Dr [REDACTED]						
Follow-up	1430	153	<5	19	136	79
Routine	12	<5	<5	0	<5	<5
Soon	114	8	<5	0	7	18
Urgent	20	<5	0	0	<5	9
Total	1576	166		19	148	110
Dr [REDACTED]						
SOS medical	30	0	0	<5	<5	<5
Telephone consultation	11	<5	0	<5	<5	5
Follow-up	498	92	<5	7	81	60
Pre chemotherapy assessment	600	58	<5	<5	31	46
Routine	35	7	0	<5	5	12
Soon	25	6	0	0	8	10
Urgent	6	<5	0	0	<5	<5
Total	1205	168		17	130	136
Acute Oncology Nurse						
SOS telephone consultation	237	<5	0	11	0	12
Total	237	<5	0	11	0	12
Dr [REDACTED]						

Follow-up: 20 mins	146	33	<5	0	32	62
Follow-up: 30 mins	149	41	<5	0	27	133
Follow-up: 40 mins	5	5	0	0	<5	<5
Pre chemotherapy assessment	286	35	5	0	52	57
Routine	27	5	<5	0	7	8
Soon	32	<5	0	0	16	30
SOS medical	31	<5	0	<5	<5	10
SOS telephone consultation	10	<5	0	0	<5	13
Telephone conversation	6	<5	0	0	<5	7
Total	692	127		<5	141	321
Dr [redacted]						
Follow-up lymphoma assessment	130	11	<5	11	108	<5
New lymphoma assessment	6	<5	0	<5	0	<5
Total	136		<5		108	<5
Dr [redacted]						
Pre chemotherapy assessment	0	<5	0	0	0	<5
Total	0	<5	0	0	0	<5
[redacted]						

Follow-up medical assessment: 30 mins	8	0	0	0	0	<5
PICC line	<5	0	0	0	0	0
Total	9	0	0	0	0	<5
Locum Consultant						
Follow-up: 20 mins	304	28	<5	11	20	14
Follow-up: 40 mins	5	<5	0	0	0	0
Pre chemotherapy assessment	151	18	0	<5	20	31
Routine	27	<5	0	0	<5	<5
SOS	7	0	0	0	<5	<5
Total	494		<5			
Phlebotomy nurse						
Mid cycle bloods	123	16	0	34	5	0
Pre chemotherapy bloods	1605	336	<5	308	42	<5
Total	1728	352	<5	342	47	<5

PRIVATE PATIENTS ACTIVITY - 2020

Clinician	Follow-up Patient Appointments () = unique patients	New Patient Appointments () = unique patients
Dr [REDACTED]	319 (53)	25 (25)
Acute Oncology Nurse	2 ()	0
Dr [REDACTED]	137 (17)	5 ()
Dr [REDACTED]	14 ()	0
Dr [REDACTED]	21 (5)	1 ()
Locum Consultant	9 (5)	0
Phlebotomy Nurse	125 (24)	0
Total	627 (109)	31 (30)

MEDICAL AND CLINICAL ONCOLOGY APPOINTMENTS OUTCOMES - 2020

Appointment outcome	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	%
Not recorded	[REDACTED]												77	7%
Discharge	[REDACTED]												1	0%
Follow-up appointment given	[REDACTED]												220	20%
Follow-up appointment pending	[REDACTED]												6	1%

Total	29	21	20	20	17	13	27	16	35	46	24	36	304	27%
--------------	----	----	----	----	----	----	----	----	----	----	----	----	------------	-----

Source: BKG1A TC Report

SOURCES OF REFERRALS – 2020

Medical Oncology										
Clinician	Referral by same consultant after outpatient episode	Referral by same consultant after inpatient episode	Consultant team hospital	General practitioner	Community	Other community	Other referrer	Specialist nurse	Other consultant private	Total
Dr [redacted]	<5									[redacted]
Dr [redacted]	25		133	6	<5					[redacted]
[redacted]	<5									[redacted]
Clinical Oncology										
Acute oncology nurse	120	<5								[redacted]
Dr [redacted]	15		69	9		<5	<5		<5	[redacted]
[redacted]			<5							[redacted]
Dr [redacted]	53		67	5			<5	<5		[redacted]

[redacted]										
[redacted]			<5							<5
[redacted]	<5		5						<5	[redacted]
Dr [redacted]	<5									<5
[redacted]	<5		6							[redacted]
Locum consultant	<5		24	<5		5				[redacted]
Oncology nurse			<5							<5
Phlebotomy nurse	540		14	<5			<5	<5		[redacted]
[redacted]			<5							<5

ANNEX C

REFERENCES: RADIOTHERAPY NEEDS FOR JERSEY, CI – GETTING VALUE FOR MONEY REPORT

1. Bray F, Laversanne M, Weiderpass E, Soerjomataram I. The ever-increasing importance of cancer as a leading cause of premature death worldwide. *Cancer. In press*
2. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. Hyuna Sung PhD, et al. First published: 04 February 2021. <https://doi.org/10.3322/caac.21660>
3. <https://www.cancerresearchuk.org/health-professional/cancer-statistics/incidence> (accessed June 8, 2021)
4. Channel Islands Cancer Report 2020 Incorporating data up to 2016. Produced by the Public Health England National Cancer Registration and Analysis Service for the Guernsey and Jersey Medical Officers of Health. PUBLIC REPORT
5. Radiotherapy In Cancer Care: Facing The Global Challenge Edited By: E. Rosenblatt E. Zubizarreta International Atomic Energy Agency Vienna, 2017
6. Slotman BJ, et al. Overview of national guidelines for infrastructure and staffing of radiotherapy. ESTRO-QUARTS: work package. *Radiother Oncol.* 2005 Jun;75(3):349-54. Epub 2004 Dec 23. PMID: 15893832.
7. Barton MB, Zubizarreta EH, Polo Rubio JA. Radiotherapy in small countries. *Cancer Epidemiol.* 2017 Oct;50(Pt B):257-259. doi: 10.1016/j.canep.2017.06.007. PMID: 29120833.