Velindre SST
Site Specific Teams

GIG CYMRU NHS WALES
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Velindre University
NHS Trust

Site Specific Team Annual Report 2020

Skin Cancer and Melanoma

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Overview of this Document

This document is a comprehensive report, detailing the Skin Cancer and Melanoma Site Specific Team (SST) within Velindre. Items raised in this document will be discussed in the SST meeting and approved by all members. The SST lead will then write a reflective section on the document to summarise. The Medical Business Department will take an overall SST Report Document to Senior Management Team (SMT) and Trust Board to be reported on for Velindre Cancer Centre and the VCC Integrated Medium Term Plan (IMTP) as a whole. There will then be a formal response generated and distributed from SMT and Board. Please see appendix 4 for the Terms of Reference and Framework information regarding these meetings and documents.

The Skin Cancer and Melanoma SST in VCC manage and treat some cancers affecting the skin tissue. The term "skin cancer" refers to a malignant tumour that has developed from cells in the skin. There are two classifications of skin cancer – Melanoma and non-melanoma. The earlier stages are treated in the Local Health Boards, and stage three/four, i,e. locally advanced and metastatic of each of these are generally referred to Velindre Cancer Centre.

The 2 most common types of non-melanoma skin cancer are:

- basal cell carcinoma (BCC), also known as a rodent ulcer, starts in the cells lining the bottom of the epidermis and accounts for about 75 in every 100 skin cancers

- squamous cell carcinoma (SCC) starts in the cells lining the top of the epidermis and accounts for about 20 in every 100 skin cancers

Merkel Cell Carcinoma, which is a rare type of skin cancer that usually appears as a flesh coloured or blue-red nodule, most commonly on a patient's face, hand or neck.

For more information on skin cancer, please see:

https://www.nhs.uk/conditions/non-melanoma-skin-cancer/

Executive Summary Reflecting on

2020

Non-Surgical skin cancer services have needed to keep pace with the rapid developments in treatment over the last decade. Immunotherapy and targeted braf therapy have become the backbone of therapy for melanoma in this period and these treatments have extended to the adjuvant setting. This last year too has seen the increasing numbers of patients being treated at the Velindre Cancer Centre with stage 3 and stage 4 disease. Service demands are not just to with capacity to administer these therapies but also heavily impact on provision of AOS in the regional health Boards and the Team are heavily engaged with managing patients with support of AOS nurses across all areas. Members of this SST (RF) are involved in education and training of junior trainees and nurses in delivery of acute oncological care in the Assessment unit. We have established a running programme of seminars and educational programmes that are well attended not just by oncologists but by medical specialists across all disciplines and a big priority of this SST is to lead on developing pathways and competencies in Health Boards for managing toxicities with immunotherapy.

The last year has seen the introduction of immunotherapy treatment for locally advanced SCC and Merkel cell cancers –rare skin cancer types with heavy morbidity and mortality.

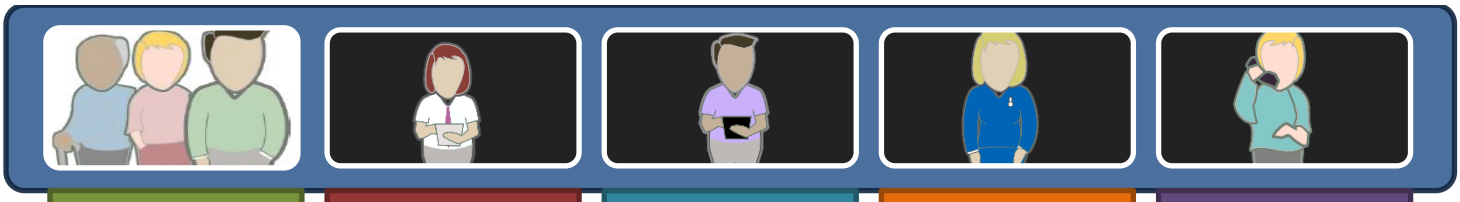
In terms of clinical trial activity we have just started an adjuvant trial of immunotherapy in earlier stages of melanoma namely in stage 2b and c patients that will further increase our work load but to the benefit of patients.

Our workforce has increased this last year with the addition of one full time CNS and the recent appointment of a Consultant with special interest in Breast and Melanoma. Our focus for the next year is to establish the Velindre Melanoma MDT that will have a positive impact on patient care.

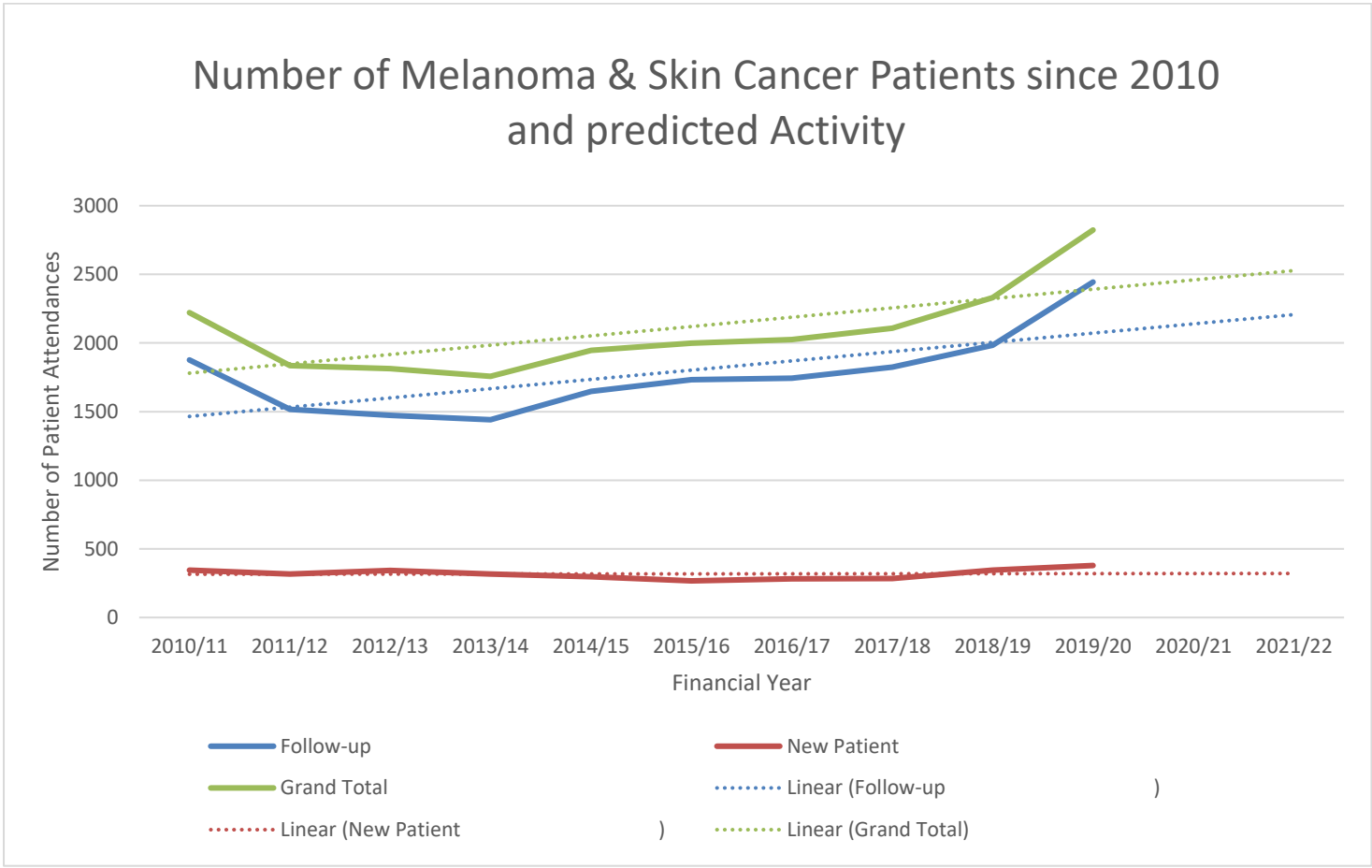
The CNS role is pivotal to patient care ensuring patients are supported from diagnosis throughout their SACT treatment and involved in prompt patient referrals ensuring continuity of care, specialist knowledge and support working alongside our Consultant colleagues to provide a seamless service and care to patients. As SACT services develop and patients live longer, survivorship is now a realistic expectation for patients who previously had a poor prognosis. The CNS is a vital link in supporting patients live well with cancer.

The Melanoma SST has tried to introduce novel ways of working with the bulk of the weekly activity occurring on a Thursday with a joint clinic working arrangement. Both Medical and Non-medical prescribers see/deal with patients in a non-location specific manner -the idea being to work in a shared learning environment, foster team working, maintain capacity and resilience. We are working to iron out some of the challenges in running such a clinic with the aim of making it sustainable in the long term.

Workforce Planning



54 patient attendances on average per week 2019/20 to VCC	5 Consultant sessions per week	0 Registrar Supported Clinics per week	3 Clinical Nurse Specialist sessions	3 Non-Medical Prescriber session



Historical and Predicted Increase of Patient OPD Attendances

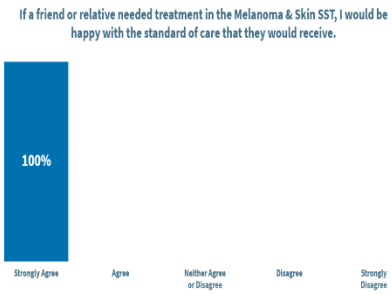
It can be predicted that in 2021, we can expect to have 2500 patients in total to the outpatient department. Based on current growth trends, this could increase further in 2022 to 2600 patients, which is a 3.84% increase annually. With this prediction, to deliver the increase, we would need an increase in the clinical workforce. In 2021 all SST's will be undertaking an evaluation of existing patient pathways to help identify where to start making improvements.

Some examples of potential improvements are below:

- Reduce the number of steps within a process
- Reduce the number of times a patient has to attend hospital – specifically for follow up
- Extend staff roles/workforce numbers to ensure the patients are being seen by the most appropriate healthcare professional.

Using the Six Steps Methodology from the Velindre University NHS Trust Workforce Planning Guidance as shown, this would ultimately lead to new patient pathway algorithms and a robust workforce to deliver the SST activity.

SST Staff Survey



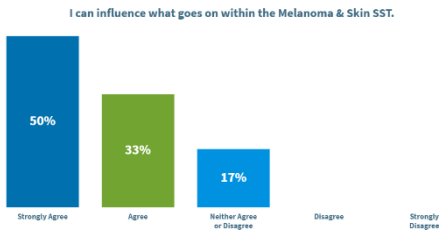
An anonymous survey was conducted on Doopoll to get an accurate reflection of how the staff members feel within the Melanoma & Skin SST. The write up below has omitted some direct results of the survey, but all results can be obtained on request from the Medical Business Team. The questions were aligned with the Velindre Staff Survey. There was a total of 6 responders from the Melanoma & Skin SST. From the survey, it is clear that members of the Melanoma & Skin SST are happy with the standard of care that they provide and that they believe patient care is their top priority. 100% of responders agree that the team come together to reflect and learn, and that the SST take time to do this in comparison to the result of the whole staff survey which indicates 59% of staff agree that teams do this. 100% of staff members agree that the Melanoma & Skin SST works well with other teams compared to 71% in the whole staff survey and 100% agree that they communicate effectively with each other in comparison to 84% in the general staff survey. When asked about staffing, 100% of responders agreed that the SST has enough staff to enable them to do their job properly which compares to 50% in the general staff survey and 100% of staff have never felt pressure to attend work when they are unwell by their SST members compared to 83% in the general staff survey. 100% of the SST believe that they are valued and that they belong within the team, but not all agree that they are able to influence what goes on within the Melanoma & Skin SST or that they are involved in discussions and decision making within the team. It can be seen that there may be some team building needed as 33% of responders do not completely agree that the SST members trust each other, however, this is a low percentage in comparison to the whole staff survey feelings on trust within the team. The team response to the COVID-19 pandemic has been reported as excellent overall.

"For clinical trial purposes its a need to be included in MDT discussions. This wasn't imperative whilst we didn't have recruiting studies however as the portfolio grows now I have access to C and v MDT and will request access to R glam and R gwent. I have scope to place more research hours into the team as required too."

A lovely team of highly specialist and knowledgeable people of to be part of."

"It is enjoyable to work within such a dynamic, caring & supportive team."

"The care we provide is excellent and we work very well together. No we have more staff on board we are working how to work more effectively in that clinic and to conduct research and audits"



WORKFORCE SUMMARY

- WITH THE CURRENT WORKFORCE OF THREE CONSULTANTS AND 3 MELANOMA SPECIALIST NURSES (2 PART TIME), WE ARE IN A POSITION TO MANAGE CLINICAL WORKLOADS WHILE CONTRIBUTING QI ACTIVITIES AND RESEARCH. WE HAVE HOWEVER LOST A CLINICAL ONCOLOGIST BUT ALERNATE ARRANGEMENTS HAVE BEEN PUT IN PLACE TO MANAGE SKIN CANCER PATIENTS REQURING RADIOTHERAPY. MANAGING COMPLEX PATIENTS REQUIRING IMMNUO RT WILL BE MORE CHALLENGING IN THE SHORT TERM.

Achievements in 2020

Achievement	Key Points	IMTP
New consultant commenced in post and has enhanced capacity in both melanoma SST and AOS aspects particularly in relation to immunotherapy, teaching and training	Stronger workforce	2, 3
Additional full time CNS has just joined the SST	Stronger workforce	2, 3
Advanced stages in setting up a metastatic melanoma MDT	Team working and sharing best practice	2, 3
Continued active participation in clinical trials	Leading the way with new pharmaceuticals	4
Patient safety and information	Better patient care	1, 2
Working hard to deliver SACT and reviewing patients throughout the COVID pandemic	Resilient workforce	2, 3
Completion of holistic needs assessment (HNA'S) for all new patients by our Macmillan navigator. Information is given to patients in the new patient clinic and the navigator will ring them a few days later to address any concerns.	Better patient care	1, 2, 3
End of treatment surveys (ETS) were developed and sent to patients and GPs following completion of their immunotherapy. This is important to ensure patients are aware of any delayed toxicity that can develop and who to contact for advice and support. The ETS also gives advice on wellbeing and psychological support.	Better patient care	1, 2, 3
The development of the immunotherapy education programme, which not only provides education to melanoma patients but also any tumour site receiving immunotherapy. Due to Covid these education sessions are now available on video though QR code access and You-tube. Not all patients have the access to technology, so iPad devices are available for patients to watch the sessions whilst attending VCC, again this service was advertised around VCC in poster format.	Better patient care	1, 2, 3

Quadruple Aims:
1) Improved Population Health and Wellbeing
2) Better Quality and More Accessible Health and Social Care Services
3) Higher Value Health and Social Care
4) A Motivated and Sustainable Health and Social Care Workforce

Challenges faced in 2020

Challenge	Key Points
While significant improvements have been made in improving pathways and partnerships with our partner organisations, there is still a need to further improve some of the immunotherapy toxicity pathways in some health Boards, e.g. the gastroenterology pathways for colitis patients. Education, training and collaboration is ongoing but this is a continuous process.	Need for network working and sharing best practice
AOS delivery and importantly training for the new curriculum in both clinical and medical oncology will need to be met in terms of consultant work force with AOS sessions planned in new posts in apposition to supervise new trainees.	Patient pathway mapping required
Delivering SACT in the face of COVID pandemic	Will improve with recovery in VCC
Planning for accommodating increased demand for IO for stage 2b patients for new clinical trail	Will improve with recovery in VCC
We have lost one clinical oncologist	Alternative arrangements have been made for patients that require RT, and are now in a pool. Needs streamlining and will need co-ordinated care in managing complex patients.
Upskilling in the management of cutaneous squamous cell carcinoma and Merkel cell which are tumour types we are starting to see more patients from	Upskilling needs to be arranged
Managing patients through the Covid pandemic has been extremely challenging. CNS priority is ensuring the safety of our patients and the safe delivery of SACT. This involved changing our practice from face to face appointments to telephone consultations for the majority of patients. Arranging bloods locally or through an appointment system in Velindre ensures patients are not waiting in a busy outpatient clinic.	Will improve with recovery in VCC and VAP programme as well as patient pathway mapping and OPD planning
Managing current workload to ensure all patients receive access to a CNS. The melanoma service is expanding and how includes SACT for squamous cell carcinoma & merkel cell carcinoma. Ensuring our services are developing in line with NICE approved SACT is challenging but need to ensure equity of care is provided to all patients.	Will improve with recovery in VCC and VAP programme as well as patient pathway mapping and OPD planning

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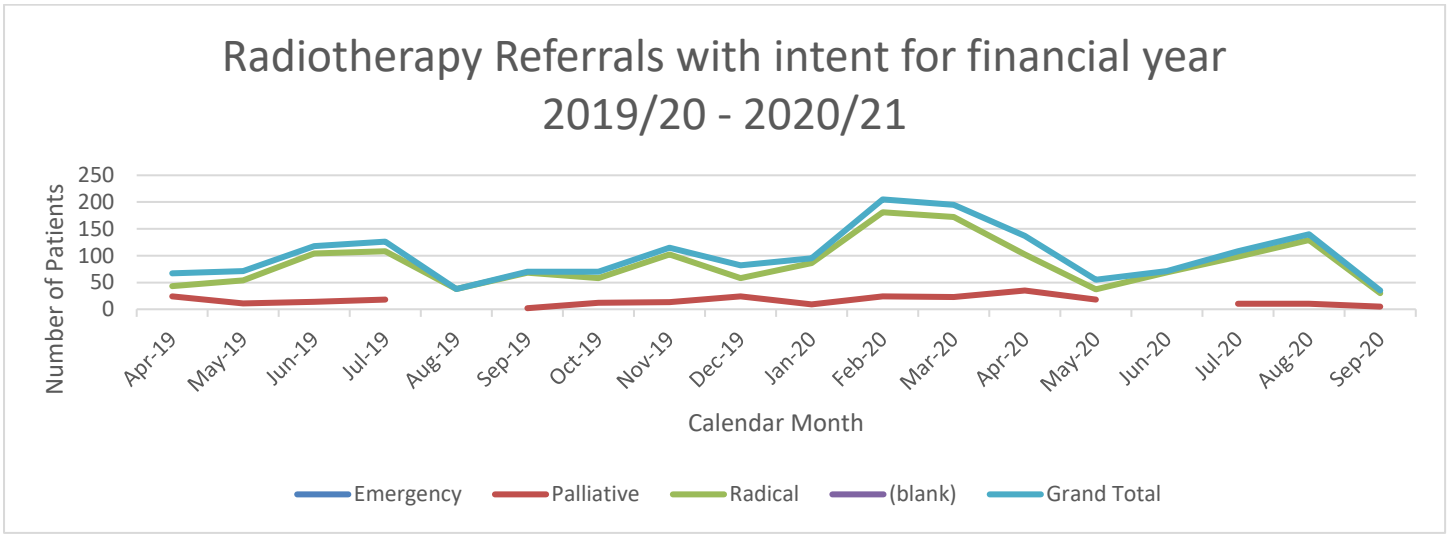
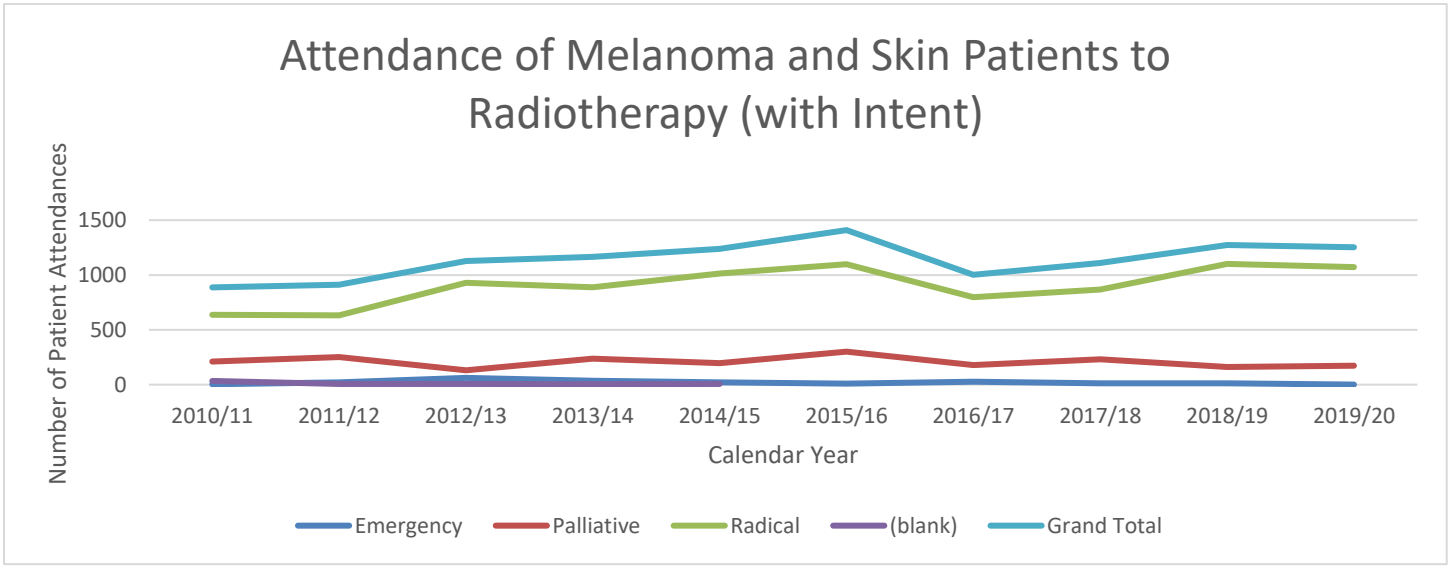
Radiotherapy Activity

This information will have been discussed in every quarterly SST meeting by RT lead.





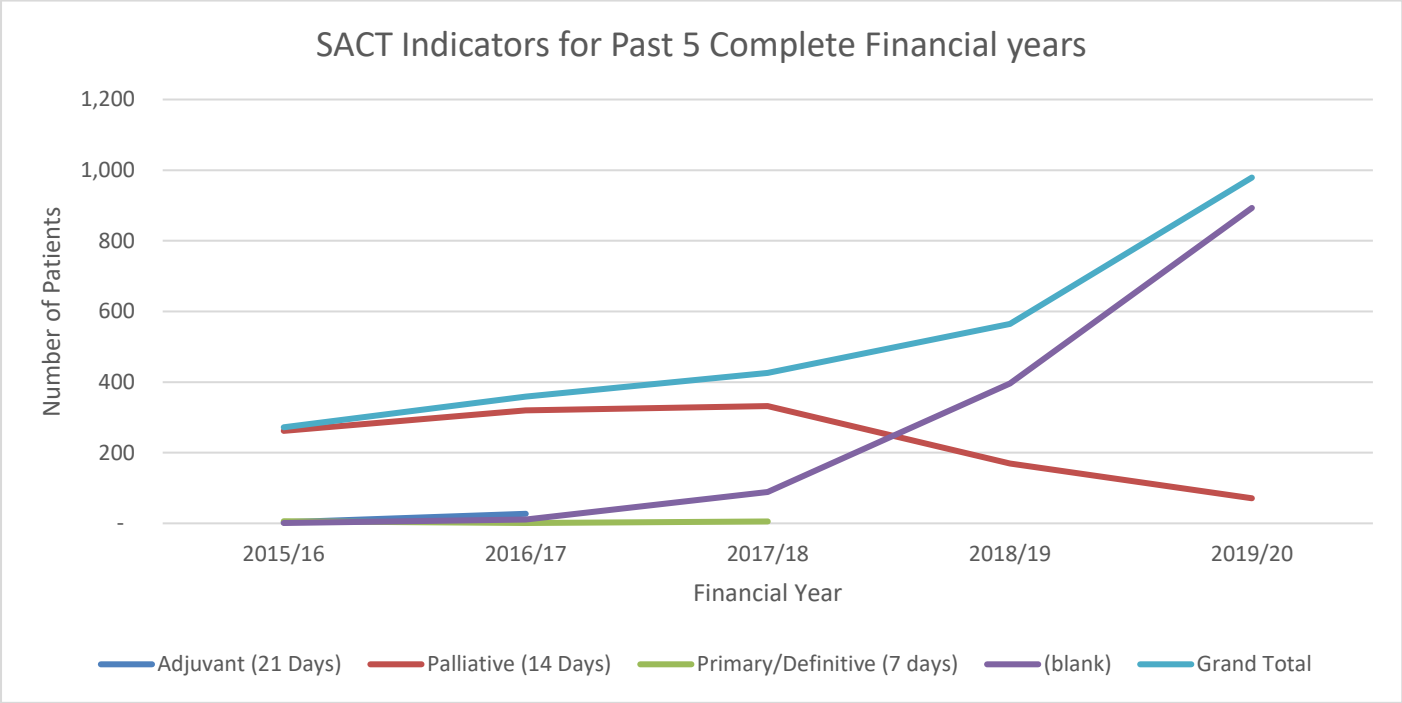
2019		2020									
Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
100%	100%	100%	97%	96%	100%	100%	100%	100%	100%	88%	89%

Table 1 Showing KPI Compliance in Radiotherapy Department November 2019 – October 2020

RADIOTHERAPY ACTIVITY SUMMARY
• THE MAJORITY OF RT ACTIVITY IS PALLIATIVE. BRAIN; SKIN AND BONES ARE THE MOST COMMONLY TREATED AREAS. • SBRT FOR BRAIN METASTASIS ARE COORDINATED VIA THE NEURO ONCOLOGY MDT TO WHICH MELANOMA SST IS A BIG REFERRAL SOURCE • WITH RECENT CHANGES, WE HAVE LOST A CLINICAL ONCOLOGIST WHO LEAD THE RT SKIN SERVICES FOR SCC AND BCC AND WE NOW HAVE APOOL OF ONCOLOGIST WHO TREAT THESE PATIENTS. • COULD WE FIND OUT THE NUMBER OF SBRT REFERRALS FRO BRAIN METS?

SACT Activity

This information will have been discussed in every quarterly SST meeting by SACT lead.



	April 20	May 20	June 20	July 20
Emergency Breaches	0	0	0	2
% Compliance (Target: 100%)	100%	100%	100%	**77.8%**
Non-Emergency Breaches	0	1	0	18
% Compliance (Target: 98%)	100%	100%	100%	**93.8%**

Table 2 KPI Compliance in SACT Services

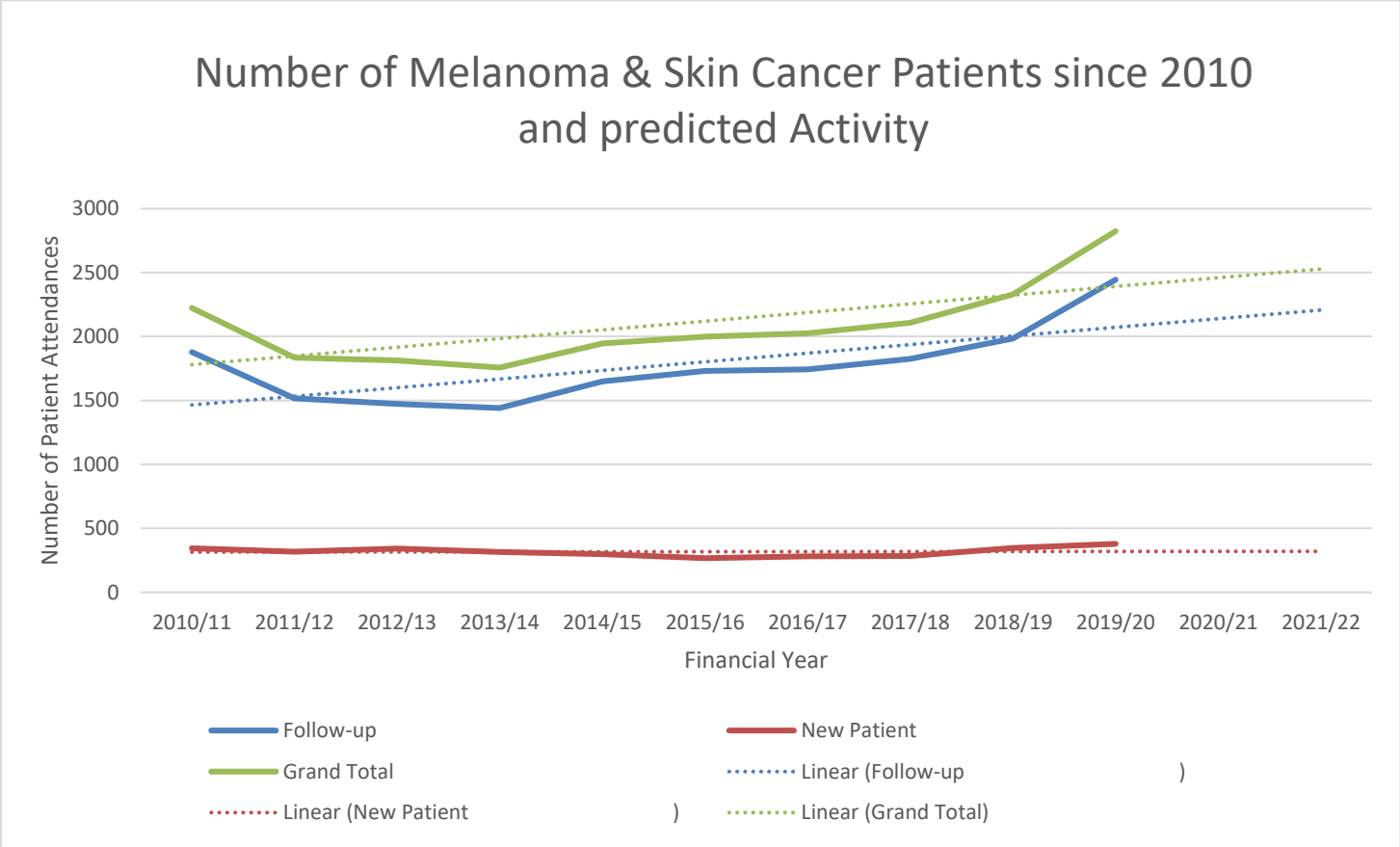
Reason for breach	Number of breaches
Capacity Issues	4
Awaiting Scan	1
Other	2

Figure 7 Showing reasons and number of Melanoma & Skin SST breaches

SACT ACTIVITY SUMMARY
• SACT ACTIVITY HAS CONTINUED TO RISE WITH THE SST RESPONSIBLE FOR PRESCRIBING SEVERAL HIGH COST DRUGS. THIS NUMBER IS EXPECTED TO RISE EVEN FURTHER WITH THE INTRODUCTION OF ADJUVANT THERAPY IN EARLIER STAGE DISEASE IN THE CINTEXT OF CLINICAL TRIALS. THE PANDEMIC SAW SOME NON EMERGENCY BREACHES. NON SURGICAL SERVICES HAVE GENERALLY CONTINUED UNINTERRUPTED THOUGH THE PANDEMIC WITH SOME ADJUSTMENTS IN CHOICE OF THERAPIES, AS PER NATIONAL ADVICE TO PROTECT SOME OF OUR MORE VULNERABLE PATIENTS.

Outpatients Activity

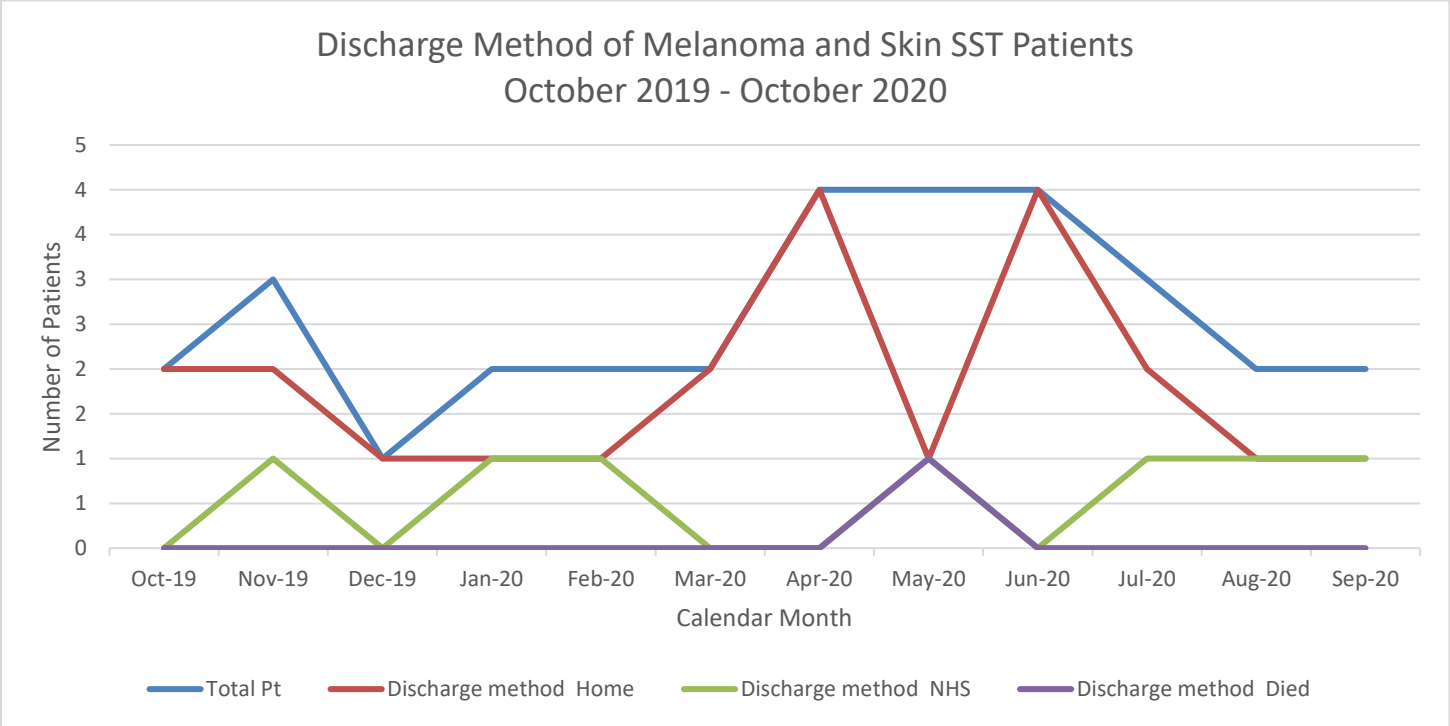
This information will have been discussed in every quarterly SST meeting by OPD lead.

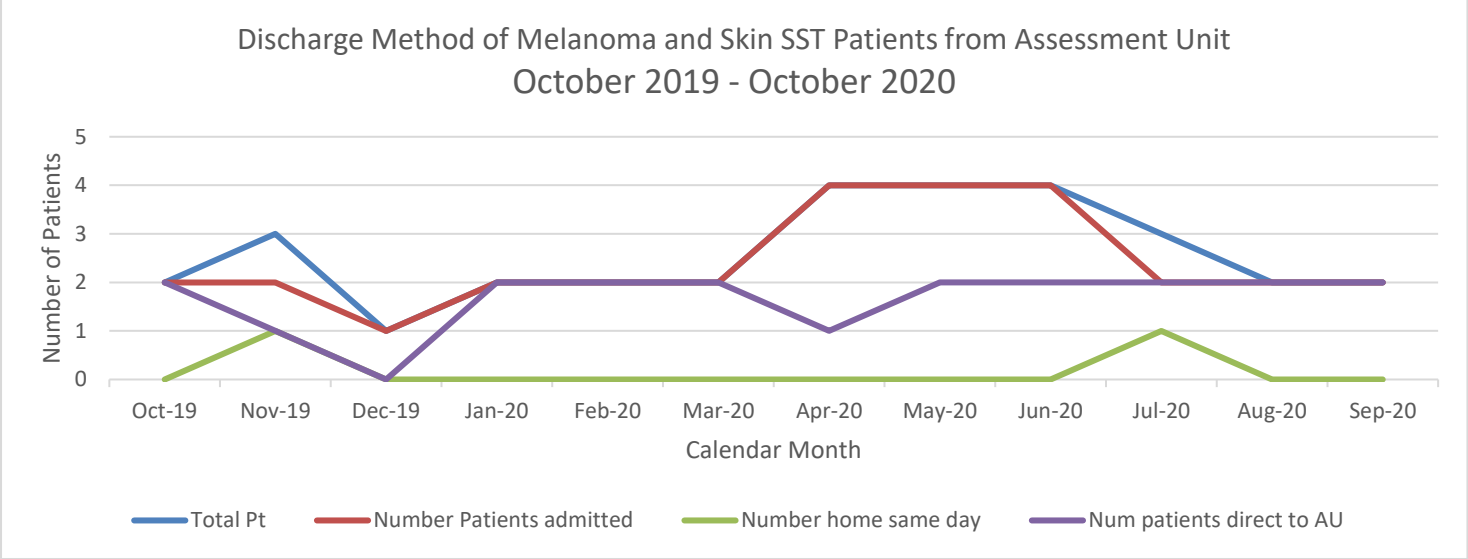


OUTPATIENTS ACTIVITY SUMMARY
• MELANOMA OUT PATINET ACTIVITY CONTINUES TO RISE IN KEEPING WITH RISING NUMBERS OF PATIENTS WHO ARE SUITABLE FOR LICENSED THERAPIES IN ADJUVANT AND METASTATIC SETTING. OUR CLINICS ARE ALSO SOMETIMES USED TO SEE PATIENTS WITH ONGOING PROBLEMS ASSOCIATED WITH ONCOLOGICAL THERAPY. THERE IS ROOM FOR IMPROVEMENT IN STREAMLINING OUT PATINETS ACTIVITY EVEN FURTHER.

Inpatients Activity

This information will have been discussed in every quarterly SST meeting by inpatient/AOS lead.





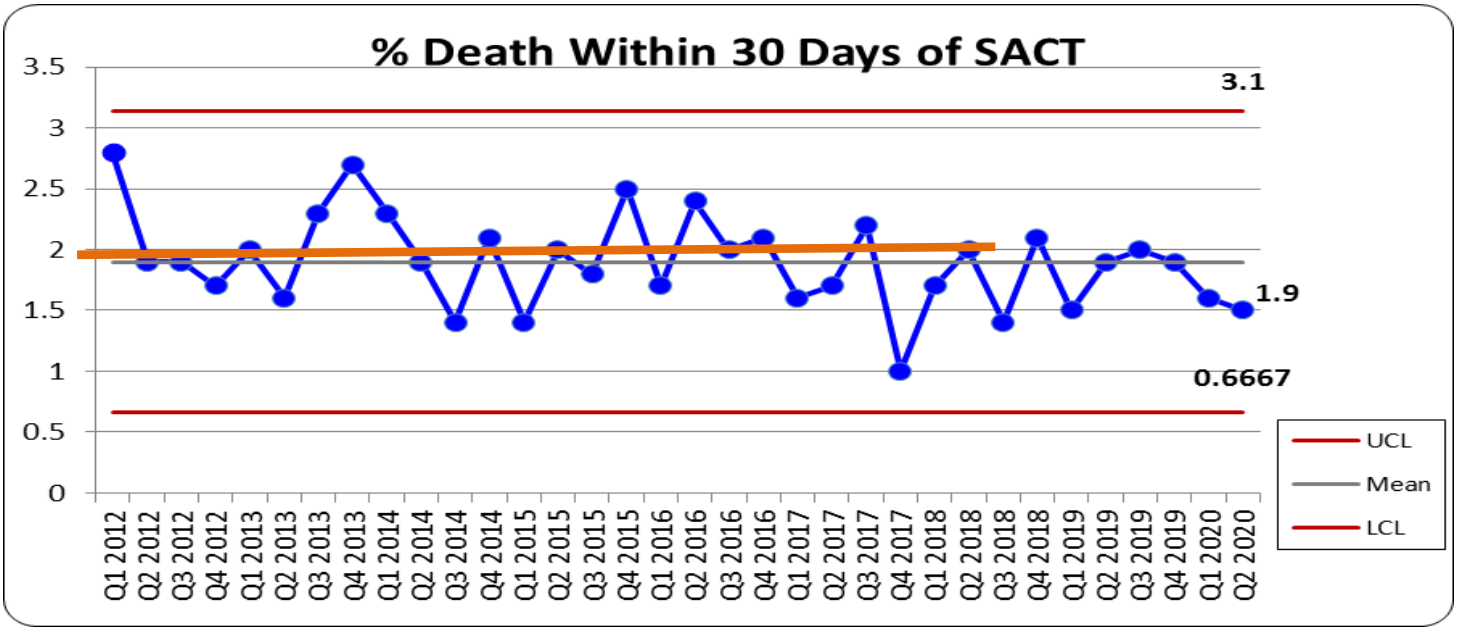
INPATIENTS ACTIVITY SUMMARY
• IN VIEW OF THE RELATIVELY HIGH PROPORTIONATE OF IMMUNOTHERAPY TREATMENTS GIVEN BY THE SKIN SST WE HAVE WORKED HARD TO ESTABLISH CLOSE WORKING WITH THE ASSESSMENT UNIT TO ENSURE BEST MANAGEMENT OF THESE TOXICITIES. ONE OF THE SKIN MDT CONSULTANTS RICKY FRAZER IS ALSO CLINICAL LEAD OF THE ASSESSMENT UNIT AT VCC. DESPITE THE PANDEMIC THE SST HAS WORKED HARD TO ESTABLISH OPTIMAL TOXICITY MANAGEMENT PATHWAYS. THESE INCLUDE DEVELOPING A GUIDE LINE TO ALLOW INFLIXIMAB TO BE DELIVERED AT VCC IF TRANSFER OF THE PATIENT IS NOT POSSIBLE. WE HAVE DELIVERED A NUMBER OF TOXICITY MANAGEMENT MASTERCLASSES TO MULTIDISCIPLINARY PROFESSIONALS' AD ON A DAY TO DAY BASIS PROVIDE MUCH OF THE INFORMAL EDUCATION AND MANAGEMENT TO COLLEAGUES REGARDING CHECKPOINT INHIBITOR IMMUNOTHERAPY TOXICITY.

Death Within 30 Days

Quarter	Months	VCC Deaths	SACT	%
Q1 2016	January-March 2016	33	1936	1.7
Q2 2016	April-June 2016	46	1906	2.4
Q3 2016	July-September 2016	40	1947	2.0
Q4 2016	October-December 2016	40	1902	2.1
Q1 2017	January-March 2017	30	1898	1.6
Q2 2017	April-June2017	32	1928	1.7
Q3 2017	July-September 2017	42	1924	2.2
Q4 2017	October-December 2017	21	2019	1.0
Q1 2018	January-March 2018	36	2147	1.7
Q2 2018	April-June 2018	42	2051	2.0
Q3 2018	July-September 2018	30	2172	1.4
Q4 2018	October-December 2018	46	2151	2.1
Q1 2019	January-March 2019	33	2197	1.5
Q2 2019	April-June 2019	42	2258	1.9
Q3 2019	July-September 2019	47	2346	2.0
Q4 2019	October-December 2019	45	2324	1.9
Q1 2020	January-March 2020	40	*2453	1.6
Q2 2020	April-June 2020	25	*1689	1.5

All VCC data

*Different data analysis tool used to capture SACT



NCEPOD Benchmark

Percentage Deaths by Melanoma & Skin SST

Quarter	Months	VCC Deaths	SACT	%
Q1 2019	January-March 2019	2	102	2
Q2 2019	April-June 2019	2	121	1.7
Q3 2019	July-September 2019	3	127	2.4
Q4 2019	October-December 2019	2	141	1.4
Q1 2020	January-March 2020	0	130	0
Q2 2020	April-June 2020	2	114	1.8

DEATH WITHIN 30 DAYS SUMMARY
• WITH THE INTRODUCTION OF BETTER TREATMENTS, THIS RATE HAS BEEN DECREASING. BRAF TARGETED THERAPY AND IMMUNOTHERAPIES ARE UNIQUE BECAUSE THESE ARE TREATMENST CAN BE CONTINUED BEYOND PROGRESISON IN SPECIFIC CONDITIONS.

Aspirations for 2021

Aspiration	Key Points	IMTP
Hopeful that the Velindre Melanoma MDT will be up and running	Better patient care	1, 3
Assess feasibility of setting up an intra-tumoural service for South East Wales	New treatment, better patient care. NICE approved – VCC capacity a barrier.	3, 4
Enhance services for cutaneous SCC and non-melanoma skin cancers with different working in MDT and explore possibly of joint clinics	Better patient care and stronger workforce	1, 3
We also hope for additional consultant sessions so that each of the 3 major health boards have a named consultant. Plans are afoot for such a post in the near future.	Stronger workforce	1
To conduct original audit/research projects	Leading in research and audit	1, 3
Involvement in more immunotherapy toxicity management trials	Leading in research and audit	1, 3
An audit of our current telephone assessment SACT clinic may change our future practice and this is planned for 2021.	Leading in research and audit	1, 3
Completion of an adjuvant immunotherapy audit and database to record toxicity.	Leading in research and audit	1, 3
Develop an IO toxicity assessment sheet pre SACT to record patients' co-comorbidities in order to identify potential toxicity early.	Leading in research and audit	1, 3
Ensuring each patient is aware of their key worker and a HNA is completed on all patients in line with the cancer delivery plan for Wales.	Better patient care	1, 3
Arrange a monthly drop in skin support group in Maggies cancer support centre, supported by the CNS team.	Better patient care	1, 3

Quadruple Aims:
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SST Pocket Plan Alignment with IMTP

VCC Strategic Objective	Objective	Output	Outcome/Benefit	Quadruple Aim	Sustainable Development Principle
1. Equitable and consistent care, no matter where	We also hope for additional consultant sessions so that each of the 3 major health boards have a named consultant. Plans are afoot for such a post in the near future.	Three consultants employed for each HB	More consistent involvement of consultants in MDTs. Streamlined pathways for patients with increased capacity.	1	A, E
	Hopeful that the metastatic MDT will be up and running	Negotiations were at an advanced stage until COVID-19. Waiting on SMT sign off.	Joint working with Pfizer – a consultant radiographer.	1, 3	B, C
3. Improving care and support for patients to live well through and beyond cancer	Enhance services for cutaneous SCC and non-melanoma skin cancers with different working in MDT and explore possibly of joint clinics	Better patient care and better care for complex patients.	Sharing best practice and networking.	1, 3	A, E
4. To be an international leader in research, development, innovation and education	Assess feasibility of setting up an intra-tumoural service	Better patient care and more advanced treatments in Velindre.	Patients travel less for specialised treatment.	3, 4	A, D, E

Research and Articles

All Research and Articles from the past year. Summarised. Appendix 1

Research Plan:

	Portfolio	Commercial
No. of open and recruiting studies:	1	1
Total patients screened 2019/20:	7	0
Total patients recruited 2019/20:	4	0
No of studies expected to remain open in 2020/2021:	1	1
No of studies expected to remain open in 2021/2022:	1	1
No. of known studies under consideration for opening at VUNHST during 2020/2021:	0	2

Appendices, References & Glossary

Patient contact: Term for a healthcare interaction between a healthcare professional and a patient. This includes new appointments, follow up appointments and telephone appointments.

KPI: Key Performance Indicator

POW: Princess of Wales Hospital in Bridgend

SST: Site Specific Team

IMTP: Intermediate Term Plan

WCN: Welsh Cancer Network – a collaboration between Health Boards and Trusts, health professionals, the third sector and other stakeholders to develop and improve cancer services with the aim of improving cancer survival, and quality of life and experience of those living with the impact of cancer.

Domain	Measure
Preventing Cancer	• HPV and Hep B Vaccination rates • Smoking cessation rates • Public Health Outcomes Framework
Detecting cancer quickly	• Stage at diagnosis • Emergency presentations • Screening uptake
Delivering fast, effective treatment and care	• Referral to treatment time • Compliance with national quality standards • 30-day mortality post treatment
Meeting People's Needs	• Allocation of key worker • Completion of electronic holistic needs assessment • Offer of a written care plan
Caring at the End of Life	• Preferred place of death • % advanced care plan in place
Improving Information	• CPES [longer term PREMs and PROMs] • Audit and Peer Review Participation
Targeting research	• Number of cancer clinical trials and research studies • Patient recruitment to cancer clinical trials and research studies • Consent to tissue donation (TBD)

Appendix 1

Publications: Melanoma & Skin SST June 19 – July 20

Satish Kumar

Ocen, J. and S. Kumar (2020). "Targeted agents in cancer." Medicine (United Kingdom) **48**(2): 108-112.

Atkinson, V. G., D. Bafaloukos, S. Tulyte, E. Baltruskeviciene, S. Kumar, K. Putnik, I. Boukovinas, A. Cesas, P. Corrie, M. Berciano-Guerrero, G. Hospers, E. Razis, X. Feng, E. De Jong, M. Del Vecchio and B. Neyns (2019). "Describe III: A retrospective analysis of dabrafenib (D) and/or dabrafenib plus trametinib (D+T) in patients with metastatic melanoma (MM) participating in the individual patient program (IPP)." Pigment Cell and Melanoma Research **32**(1): 96.

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Appendix 2

Death within 30 days of Systemic Anti-Cancer Therapy

Introduction

The Wales: Clinical Audit and Outcome Reviews (Confidential Enquiries) and the NHS Wales Annual Quality Framework 2011/2012 set out how participation, and findings from national audit and outcome reviews together with a small number of Wales specific audits and other reviews will be used to measure and drive improvement in the quality of Welsh healthcare services over the next 5 years.

Background

Benefits to patients from systemic anti-cancer therapies (SACT) occur at a cost of significant toxicities that can be life threatening. In 2008 the National Confidential enquiry for patient Outcome and Death (NCEPOD) published their report of a study which examined the process of care of all patients who died within 30 days of SACT, looking for areas where their care might have been improved. It did not concentrate solely on those patients whose death may have been treatment-related.

The work was supported by the Joint Collegiate Council for Oncology (JCCO), a joint group between the Royal College of Radiologists and Royal College of Physicians; and the Joint Specialty Committee (JSC) for Medical Oncology at the Royal College of Physicians.

Originally it was proposed that the study would focus on those patients in which it was thought that the toxic effects of the patient's therapy contributed to their death. Whilst this is an extremely important group of patients to study, it would only be possible to identify this cohort of patients following close examination of individual sets of case notes. As stated above, the study included all patients who died within 30 days of systemic anti-cancer therapy and therefore included many patients who died from progressive disease as well as those who suffered iatrogenic disease. Patient management should adhere to guidelines and standards, which aim to reduce risk. This expanded study enabled NCEPOD to obtain a large dataset on patient care from which to identify remedial factors and make meaningful recommendations.

To identify remediable factors in the care of patients who received SACT which may have contributed to their death, the NCEPOD Expert Group identified five main thematic areas that would address the overall aim of the study. These were:

- The appropriateness of the decision to treat with SACT;
- The process of prescribing the anti-cancer therapy and administration of the treatment;
- The safety of the care with regard to monitoring of toxicity and management of complications;
- Communication - patient information, care pathways, protocols, guidelines, and MDT meetings; and
- Regular clinical audit with regard to process of care and clinical outcomes.

As part of the Trusts commitment to reporting on the key indicators of practice in the NHS Wales Annual Quality Framework Velindre Cancer Centre (VCC) is attempting to develop a robust mechanism to report on its deaths within 30 days of chemotherapy. Routine reports have been produced for site specific team (SST) appraisals, for consultant appraisal and revalidation, peer review and for Cancer Services as a whole, however, the introduction of the new electronic prescribing system (Chemocare) and Crystal reporting tools disabled the functionality of LHB and individual consultant reporting of % death rate for the last year and has only recently been restored.

Method

A data analysis tool was developed by the Canisc team to enable us to review all deaths within 30 days of SACT and the Crystal reporting tool within Chemocare now enables us to report on % death rate within 30 days of administration of SACT.

Inclusion criteria:

- Patients aged 16 or over
- All solid tumours and haematological malignancies
- Received intravenous, oral, subcutaneous, intravesical, Intrathecal or intraperitoneal chemotherapy, monoclonal antibodies or immunotherapy
- Died within 30 days of receiving a SACT cycle, either in hospital or in the community

The 30 day period is defined as 30 days from Day 1 of the SACT cycle immediately prior to death. If SACT is given continuously, then 30 days from the date of the last prescription.

Exclusion criteria:

- Patients under 16
- Patients receiving hormone therapy

For the purposes of the study, the definition of chemotherapy treatment includes cytotoxic drugs and biological agents, such as interferon and monoclonal antibody therapies.

% deaths within 30 days is calculated using the formula:-

$$\frac{\text{Total N}^{o}\text{ deaths within 30 days of SACT cycle per quarter}}{\text{Total N}^{o}\text{ patients starting SACT cycle per quarter}} \times 100$$

For reporting purposes, the time period is 3 monthly (quarterly) as this is in line with the NCEPOD time span (2 months data) and enables us to benchmark against other cancer centres (Marsden, Christie). Data can then be recorded on run charts or statistical process control (SPC) charts so we can observe changes over time.

Results

It must be acknowledged that anomalies exist due to the different methods of calculation that can be used to determine % death rate within 30 days of SACT. The NCEPOD study reviewed patients who had chemotherapy over a two month period. As data at VCC is reviewed on a quarterly basis, the rate of death within 30 days has been calculated as a percentage of individual patients who had chemotherapy prescribed during that quarter.

It should be noted that this process currently requires manual intervention as the current data platforms are unable to provide all the information required. There is ongoing work with the informatics team to develop automated tools to streamline the process.

Appendix 3

Site Specific Team Annual Report Framework

Name of Group/Committee/Board:	Tumour Site Specific Team Annual Report
Purpose:	• To understand where the delivery of cancer care is of a high quality and where service improvements are required. • To combine self assessment with independent expert review. • To share best practice. • To agree actions to remove potential barriers to service improvement. • To provide recommendations to Velindre Cancer Centre (VCC) on required service changes and approaches to realising these. • To monitor quality and timeliness of services according to national standards. • To identify areas where education is needed. • To approve service changes in principle. • To prioritise the various clinical services offered by VCC and recommend methods of ensuring that the most effective and beneficial treatments are delivered within the resources available. • Horizon scan future developmental needs and provide reviews of these to advise VCC and inform business case development. • To gain and record feedback from SMT/Board on the activity and actions arising.
Process:	• The Site Specific Annual Report meeting will happen annually. • The process will commence with a meeting between the SST lead and

	Medical Business Officer to discuss data requirements 8 weeks prior the scheduled appraisal meeting date. • The document will be updated with data. • Engagement with the entire team prior to completing document 8 weeks before. • The document will be reviewed in the first quarterly SST meeting of the calendar year. • Document to review 12 months prior to month of first request for data. • Once approved in the SST meeting, executive summary to be written by SST lead. • Document will be circulated to all those attending SST Annual Report Meeting to prepare feedback for the meeting. • The completed document is presented at the Annual SST Report Meeting for feedback from SMT/Board. • Action plans that arise from the process are fed into SST meetings and monitored accordingly.
Reporting to: **Communicates with:**	VCC Senior Management Team (SMT) and Board Clinical Director; Chief Operating Officer; Director of Cancer Services; Other SST's;
Sub Groups:	SST meetings
Chaired by:	Clinical Director

<table>
<tr><td>Membership:</td><td colspan="2">Clinical Director

Director of Cancer Services

Medical Director

SST Lead (other SST members as they feel appropriate)

Another SST Lead

Chief Executive Officer

Independent Member

Patient Rep – Cannot be part of SST being fed back on, cannot be part of SST that Peer Lead is from

Medical Business Officer

SST Admin Support Officer</td></tr>
<tr><td>Meeting Frequency:</td><td colspan="2">Annually</td></tr>
<tr><td rowspan="2">Documentation Required/Submitted From:</td><td>Documentation</td><td>Submitted From</td></tr>
<tr><td>SST Annual Report</td><td>All members of SST Meetings</td></tr>
<tr><td>Outputs (i.e. minutes of meeting submitted to other committee meetings)</td><td colspan="2">Recommendations for service change.

Minutes.

Action plans.</td></tr>
</table>

Name of Group/Committee/Board:	Site Specific Team
Summary of Role:	Aims of Forum are to monitor and discuss: • How the SST are performing? • What are the SST doing well? • What can the SST improve on and how? • What are the SSTs clinical ambitions and plans?
Objectives:	• To monitor quality, effectiveness and timeliness of services according to national standards. • To recommend and monitor appropriate and site specific key performance indicators and outcome indicators. • To develop SST Annual plans which feed in to the IMTP process. • To provide a forum where information can be shared regarding the 'bigger picture' e.g. horizon scanning, organisation wide information sharing and tumour site specific developments, peer review information and education. • To audit the service to ensure clinical effectiveness. • To ensure recommendations for service improvement, education and development following national guidance and local audit and service review are considered and effectively implemented. • To present the Annual SST Report to to the Strategic Management Team and Board Members, at Velindre Cancer Centre (VCC *) on annual activity within the SST, required service changes and approaches to realising these, requesting resource where appropriate. • To highlight and adopt best practice.

Reporting to:	Strategic Management Team and Board through the Annual SST Meetings.
Communicates with:	Clinical Director; Chief Operating Officer; Director of Cancer Services; Other SST's;
Monitoring of:	Service delivery, in particular with reference to National Standards, NICE guidelines, Clinical effectiveness, Welsh Government Publications on Health,
Sub Committees:	None
Chaired by:	SST Lead
Membership:	SST Lead SST Members Representative Research & Trials Representative Radiotherapy Representative Physics Representative SACT Representative OPD Representative Inpatients Representative Therapies Representative Nursing Representative Secretaries Representative Education Representative Concerns Team Planning and Performance Manager

<table>
<tr><td></td><td colspan="2">Audit

Specialist Registrars of SST

Facilitated by:

SST Administrator</td></tr>
<tr><td>Meeting Frequency:</td><td colspan="2">To be determined by SST Lead

1 Annual Meeting to be the Annual SST Presentation Meeting</td></tr>
<tr><td rowspan="2">Documentation Required/Submitted From</td><td>Documentation</td><td>Submitted From</td></tr>
<tr><td>Key performance outcomes

Relevant documentation/guidelines for discussion

Annual SST Report</td><td>SST members</td></tr>
<tr><td>Documentation Principles</td><td colspan="2">Request for agenda/discussion items/papers should go to all team members 2 weeks before meeting.

Requests for progress against actions should go to all team members 2 weeks before meeting.

Agendas, documents and latest progress against actions distributed at least 1 week before meeting to be reviewed by SST members prior to the meeting.

Feedback on documents send out 1 week prior to be prepared ahead of meeting as necessary.

Actions to be recorded in SMART format – staff held accountable to deliver their action.</td></tr>
</table>

	Minutes and actions to be distributed to the team within 10 working days of meeting.	
Outputs (i.e. minutes of meeting submitted to other committee meetings)	Recommendations and actions for service change. Minutes and action plan. Audits and audit action plan. Annual SST Report. Discussion papers. Business Cases. Managed Introduction of Technologies/Drugs.	
Contact:	**Date ToR Last Revised:**	**Next Review Date:**
Steffanie Pothecary	January 2020	January 2022

Appendix 4

Research Plan Detail:

Checkmate 76K (CA209-76K) Nivolumab vs Placebo in early-stage Melanoma
A Phase 3, Randomized, Double-Blind Study of Adjuvant Immunotherapy with Nivolumab versus Placebo after Complete Resection of Stage IIB/C Melanoma (CA209-76K)
Open to recruitment November 2020
Principal Investigator: Satish Kumar
Participants Screened 2019/20: 0
Participants Recruited 2019/20: 0
Annual Recruitment Target: 2
Commercially Sponsored: Yes

DANTE (Duration of Anti-PD1 therapy for melanoma)
A randomised phase III trial to evaluate the Duration of ANti-PD1 monoclonal antibody Treatment in patients with metastatic mElanoma
Principal Investigator: Satish Kumar
Participants Screened 2019/20: 6
Participants Recruited 2019/20: 3
Annual Recruitment Target: 1
Commercially Sponsored: No

Initium
A Randomized Phase II, Open-label, Active-controlled, Multicenter Study Investigating the Efficacy and Safety of UV1 Vaccination in Combination with Nivolumab and Ipilimumab as First-line Treatment of Patients with Unresectable or Metastatic Melanoma (UV1-202)
Principal Investigator: Satish Kumar
Open to recruitment Dec 2021
Participants Screened 2019/20: 0
Participants Recruited 2019/20: 0
Annual Recruitment Target: 5 in total
Commercially Sponsored: Yes

Scancell – Site initiation December 2020
A Phase 2, Multicenter, Open-Label Study of SCIB1 in Patients with Advanced Unresectable Melanoma Receiving Pembrolizumab
Principal Investigator: Satish Kumar
Open to recruitment Jan 2021
Participants Screened 2019/20: 0
Participants Recruited 2019/20: 0
Annual Recruitment Target: 5 in total
Commercially Sponsored: Yes

Appendix 5

Melanoma & Skin SST to SMT/Board Feedback Meeting Minutes

24th November 2020

Attendees:
Jeff O'Sullivan – Planning & Performance (Chair)
Satish Kumar – Consultant
Ricky Frazer – Consultant
Jo Ocen – Consultant
Valarie Harris – Clinical Nurse Specialist
Hayley Mian – Clinical Nurse Specialist
Eve Gallop-Evans – Clinical Director
Clare Boobier – Clinical Trials
Wayne Jenkins – Planning & Performance
Viv Cooper – Head of Nursing
Naomi Horne – CNS Manager
Sarah Morley – Director of Workforce & OD
Steffanie Pothecary – Medical Business Officer
Nicola Sully – Admin

Melanoma & Skin SST Annual Report – Satish Kumar
A smaller SST in terms of number of patients but has expanded rapidly due to treatments. A very SACT heavy service closely intertwined with plastics, dermatology, gastroentology and neuroentology.
The team gives some of the most expensive treatments. As a result of combination chemotherapy 54% of stage 4 patients will have long term survival.
The expansion of the CNS staff and consultants has allowed the team to carry out joint clinics, which have been necessary due to the speed of expansion of the treatments.
The CNS' are a very important part of the team.
One clinical oncologist has recently stepped out of the SST. Eve has made huge efforts to cover skin radiotherapy. An additional person is required for DCC and merkels, which are difficult to manage.

Comments
Jeff explained how the SST meetings had been revamped and well facilitated by Steff. Jeff has found them very useful in highlighting aspirations and how they will be taken forward collectively. The time and energy that has gone into the process is appreciated and has been really enlightening.

Having three CNS' in post in the SST is amazing. They try and see every new patient in clinic with each of the consultants.
Lara Salmon, the Macmillan navigator, has been a huge help to the team carrying out HNA's.
Hayley has been very involved with immunotherapy education. It was being held at the Maggie's Centre where attendance doubled. Since COVID it has been delivered virtually for all patients on immunotherapy across all sites. Well done Hayley.
As the treatments are very new the CNS' carry out end of treatment summaries.

Working out how patients have felt about the telephone clinics that were implemented this year will shape the future service.
The team have good links with Maggie's and would like to establish a melanoma support group.

Hayley has been working from home as a remote part of the team. Support from the team in house has allowed this provision of the service.
Sarah thanked the team for all their work they have done that is illustrated in the report and went on to say she was interested to hear how those working remotely have been supported whilst doing a difficult job in the home environment.
Hayley considers herself to be very fortunate. Childcare was her biggest struggle during the pandemic which led to feelings of guilt for not being on the frontline. The team is fantastic team and have stayed in touch. Hayley is very grateful of the support from colleagues.
Things have felt more normal for Val although it was challenging at the beginning. The CNS' have a good working relationship with really good policies in place.

Eve commented that it was more than team working but a real example of partnership working.
Immunotherapy and AOS is given and used more widely and are we capturing enough from the other SST's?
Hayley explained that stats have been put together and feedback rolled out, which was positive. Since moving online the team haven't yet worked out how to audit people watching the virtual sessions. Other SST's need awareness and to be able to sign post patients accordingly.
Teaching has also been rolled out to wider dermatology and skin colleagues, but there is always room to do more.

<u>Metastatic MDT</u>
A joint project working with Pfizer was very close to getting sign off pre-COVID.
Jeff has revisited the agreement and Pfizer are still content to take it forward. The agreement is currently with our legal department. Once worked through governance we can look at how we implement operationally. Likely to be early next year.

<u>Clinical oncologist and radiotherapy support</u>
This area has been quite difficult to manage. The SST is grateful to the Head & Neck team for picking it up. Eve needs a feel for the skin service before designing a post. Cwm Taf don't have a post so will need to be included.
Three MDT's is difficult and one person couldn't do it all. It is a complex area which requires a good service.

Squamous and Merkel now have good indications for using radical treatment for radiotherapy. There is more of a pressing need that was previously envisaged.

Wayne asked how this was being taken forward in terms of working with the Health Board's. They will be non-compliant, which would be picked up in their peer reviews. This would be a lever. Our IMTP process is another method.

Feedback
Jeff asked where the team were in terms of their aspirations.
The metastatic MDT seems to have the go ahead.
There is now input in all three Health Boards. Satish covering Aneurin Bevan, Ricky Cardiff and Jo Cwm Taf.

Although not in Jo's job plan she has started participating in the Bridgend MDT on a monthly basis and hopes to do the same for Cwm Taf with the help of Satish and Ricky.

Ricky has worries about the clin onc side of things stating it was a real priority.
T-Vec is an approved treatment and neither Velindre nor Swansea offer that therapy. The treatment has a potential long term durable response for patients with superficial legions. Satish added that it would be a long term treatment so we would need to make sure the service was robust. There is a very good service in Cheltenham which is nurse led and covered by consultants. This could be looked at when Rachel has completed the NMP course.

There is data coming though looking at adoptive car T cell therapy. Melanoma could be the first solid tumour site to have this.

Further Comments
Viv said that we need to demonstrate Naomi's work and investment into the team in terms of recruiting Rachel. It has been a positive experience reading the report and listening. The SST stands out in terms of team working therefore what can be taken to others which have some problems.

Eve commented that it feels like the service has been designed around the patient.
Viv and Naomi are always being challenged on HNA's and end of treatment summaries and this team are doing them.

Ricky said that Satish' role shouldn't be underplayed. He is a great leader and always there to support the team. For the newer consultants and on a personal level that kind of support had been invaluable.

Naomi reinforced that it was a fantastic team. Val's abundance of ideas need to be tapped into to let them grow. Adding an additional person has given her the room to put some of them into practice.

Jo said it has been a pleasure to be a senior registrar on the team. Credit to Hayley for adapting to the recent situation. Satish is very knowledgeable and gives great support.

Close
Jeff thanked the group and said the meeting had been very interesting.

Ricky asked what we can do to support Eve with the clinical oncologist post.
Eve needs the role clear in her head and a feel for how the practice is evolving.
Satish thought Head & Neck will be part of the solution but not entirely. They have been fantastic support.

Satish thanked Jeff for chairing.