**Background**

Radiation Treatment at Charlotte Maxeke Johannesburg Academic Hospital (CMJAH) has been in crisis for at least 5 years. Cancer incidence is on the increase nationally. Most patients in the public sector are diagnosed with late-stage disease that requires more complex treatments including chemotherapy, radiation therapy and a combination of the two. The increase in the number of diagnosed cancer patients however does not come with an increase in the budget to accommodate new equipment and more appropriate health care professionals. The ideal is to treat patients within three (3 months) after diagnosis. At CMJAH the current equipment and health care professional are not adequate to treat the number of patients requiring treatment timeously. This means that the patient demands far exceeds the supply (of treatment equipment time and oncology professionals), which as anyone with a basic understanding of economics will understand will lead to waiting lists for treatment. This has now resulted in a backlog of several years. COVID19 and the recent fire at CMJAH has further pressurised an already stressed Oncology service (Medical and Radiation Oncology) negatively impacting treatment outcomes for patients.

In November, Cancer Alliance, along with other civil society organisations such as Treatment Action Campaign, Section 27, People Health Movement, held a protest march to the office of the Gauteng Premier. A memorandum highlighting the issues at CMJAH was handed over to Gauteng Health MEC, Dr Nomathemba Mokgethi in person, however the demands and recommendations outlined were ignored. A follow up letter was written together with an online petition with more than 12 000 signatures in commemoration of World Cancer Day (4 February) to draw attention the ongoing crisis and how the Gauteng Department of Health remained unmoved.

The Gauteng Department of Health as well as the National Department of Health have disputed the radiation oncology waiting list that Cancer Alliance has brought forth – even though the information was received from the Radiation Oncology itself.

It is with this background in mind that the Cancer Alliance has partnered with the Radiation Oncology department at Charlotte Maxeke Johannesburg Academic Hospital (CMJAH) to prepare an accurate and comprehensive list of patients waiting to receive radiation.

A consultant was hired by the Cancer Alliance to work under the guidance of Dr Ramiah, the Head of Department to compile lists for four major cancers affected by the backlog: Prostate Cancer, Breast Cancer, Cervical Cancer and Colorectal Cancer. Patient files were retrieved from the various sections of the Rad Onc department as well as the archives.

A meeting will be had with the Acting DDG Dr Kgongwana and hospital management, where this information will be presented, and a way forward can be planned.

**Process**

Patient files and records were examined from 01 February 2022 – 02 March 2022.

Prostate

The prostate unit already had 5 books with patient details. One book detailed a list of patients from 2009 until 2019. The other 4 books categorised patients into their risk groups – High Risk, Low Risk, Intermediate Unfavourable and Intermediate Favourable with patient lists from 2019.

Examining the patient list from 2009 to 2019 showed that for at least 1000 patients it is unclear whether they have received radiotherapy or not. Therefore, files in archives had to be looked at. A total of 196 patient files were inspected.

Breast

Dr Mlaba had already started a spreadsheet with breast cancer patients that have been categorised. Patient files from the clinic, moulding and planning were also looked at to add to the spreadsheet.

Gynaecology

Patient files from clinic, moulding and planning sections of the radiation oncology department were used to gather information.

Colorectal

The files of these patients were examined in the planning area of radiation oncology department.

**Findings**

**Prostate Cancer:**

Total Number of Patients = **2087**

**Patients accounted for = 819**

Expedited = 192

High Risk = 343

Low Risk = 40

Intermediate Risk Favourable = 144

Intermediate Risk Unfavourable = 80

New patients = 20

\*Risk stratification in accordance to NCCN stratification

**Patients unaccounted for = 1268**

Date of initial consult at Rad Onc Department:

A sample of **196** patients unaccounted for patients was assessed from files in the filing archives. The results are as follows:

* **29** Files could not be found i.e., file was not in filing room.
* **87** patients had received radiotherapy; **79** had not received radiotherapy.
* Of the 79 patients that had not received radiotherapy, 54 have been lost to follow up, 16 are still being followed up 7 have been transferred to either another hospital or referred to another department, 1 passed away and 1 was noted “not for DXT”.
* Of the 87 patients that have received radiotherapy, 54 have been lost to follow up, 13 have been discharged, 10 still being followed up and 10 transferred to another hospital or referred to another hospital.
* Of the patients lost to follow-up:
	+ Based on their initial consult with Rad Onc 42/108 are from 2017
	+ Based on the last date they were seen in Rad Onc, most occur after 2017 – with 21 being from 2019 and 15 being from 2020 and 2021, respectively

**Recommendations:**

The Gauteng Health Department need to assign a person to go through the files to:

* Determine which patients have received radiotherapy or not
* Follow up on lost-to-follow-up (LTFU) patients
* Of those LTFU patients
	+ Drs to discharge those who have received radiotherapy and enough time has passed
	+ Drs to clinically assess those who have not receive radiotherapy +/- expedite.

This action should be prioritised to determine the scope of the problem

**Breast Cancer**

Total number of patients = **334** Breast (and 4 non-breast patients)

Expedited = 51

Normal Booking = 46

Awaiting results = 123

Miscellaneous = 52

Waiting to be called = 17

Planning = 49

* With 13 cases of recurrence

Patients from Helen Joseph Hospital (HJH)

 Total number of patients = 130

 Completed Treatment = 48

Patients deceased = 3

 Went to private = 4

 Patient moved away = 1

 LTFU (Patient never came for treatment) = 9

 Patient refused Treatment = 2

 Told that they don’t need radiation = 2

 Not on system 35 (-2)

 Went for surgery/chemo = 1

 MMG = 2

 Awaiting treatment = 23

Patients from Chris Hani Baragwanath Academic Hospital (CHBAH):

Total number of patients = 53

Patients deceased = 2

Dates to be seen at Rad Onc: 12/01/2022 – 16/03/2022

\*To note: CMJAH Breast Surgery Unit does not keep a list of patients awaiting radiation.

Majority of breast cancer waiting radiation are from 2021:

Clinic statistics for 2021:

* New Patients = 411
	+ Breast = 369
	+ Non-breast (Lymphoma, Multiple Myeloma) = 42

**Recommendations:**

* Higher turn-around time on results being checked – possibly every 2 weeks
* Senior registrars should be able to triage patients

**Gynaecological Cancers**

Total number of patients = **159**

* With 4 cases of recurrence and 8 patients being upstaged

Most of the patients awaiting radiation are from 2021 & 2022

Cervical cancer comprises most of the gynaecological cancers

Most of cervical cancer patients are at stage 3B

Almost 60% patients with cervical cancer are HIV positive

**Recommendations:**

None

**Colorectal Cancers**

Total number of patients = **16**

* Majority of patients are from 2022
* Rectal cancer account for most of the types of Colorectal cancer

**Recommendations:**

None

**Challenges**

Data collection

* Time: more time is needed to create
	+ complete lists with clinical information that help the doctors make decisions
	+ a system that tracks patients
* Finding files
	+ The Rad Onc is quite a dynamic department and files constantly moving between clinic, planning, moulding and patients being actively treated.

Department

* Bottlenecks
	+ Planning: number of staff and computer software licenses limit the number of patients that can be planned for radiation

**Oncology in Gauteng Public Health Care System with specific reference to Charlotte Maxeke Johannesburg Academic Hospital.**

There is a lack of coordination between the feeding hospitals (Chris Hani Baragwanath and Helen Joseph) and between the different treatment modalities in terms of patient treatment and follow-up.

**Overall Recommendations**

Department

* Allocation of budget for
	+ Urgent procurement of required equipment to manage the current and projected patient load in line with the memorandum handed to MEC Nomathemba Mokgethi on 22 November.
	+ Finalising and expediting the brachytherapy machine tender that closed Wednesday 9 March 2022. This is a tender for both Charlotte Maxeke Johannesburg Academic Hospital and Steve Biko Hospital.
	+ Appointment of additional Radiation Oncology staff as soon as possible.
	+ Solving the OSD issue urgently as per the example of other provinces (KZN and Western Cape)
	+ Software licenses so that more planning can be done

Patient Lists

* An immediate decision should be taken as to how patients on the waiting list will be managed. Waiting lists patients cannot be managed with the current patient load and equipment. If a Public Private Partnership (PPP) is to be considered it should be a transparent process. One of the options would be to consider overtime payment for health care professional in addition to short-term contracts with available health care professionals from the private sector.
* A dedicated positions for a full time data capturer and patient navigator to maintain lists between the various hospitals and divisions to ensure that patients do not fall through the crack. If there are adequate Radiation Oncology Health Care Professionals these positions will be overseen by a specialist, which will allow for the prioritization and updating of patient appointments.
* An online, living document that is accessible to a select few, that keeps record of the patients journey and is updated regularly. An application should be considered but secure Google Sheet may suffice for now.

(Particularly for Breast patients)

The use of an electronic system should be prioritised - where patients’ treatments can be monitored by a qualified health care professional.

* Data management training:

For doctors, nurses, clerks and other staff training would help ensuring all documents related to the patient are uniform – making it easier find information.

* Check list page in check file that marks whether patient has all that is required before radiotherapy (Blood results, X-rays, Scans), has received radiotherapy, subsequent follow up.

e.g.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bloods | X-ray | U/S | MMG | CT | CT Sim | DXT | Follow up6/52 | Followup3/12 | Followup 6/12 | Follow up 1yr | Follow up 2nd yr | … | D/C |
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