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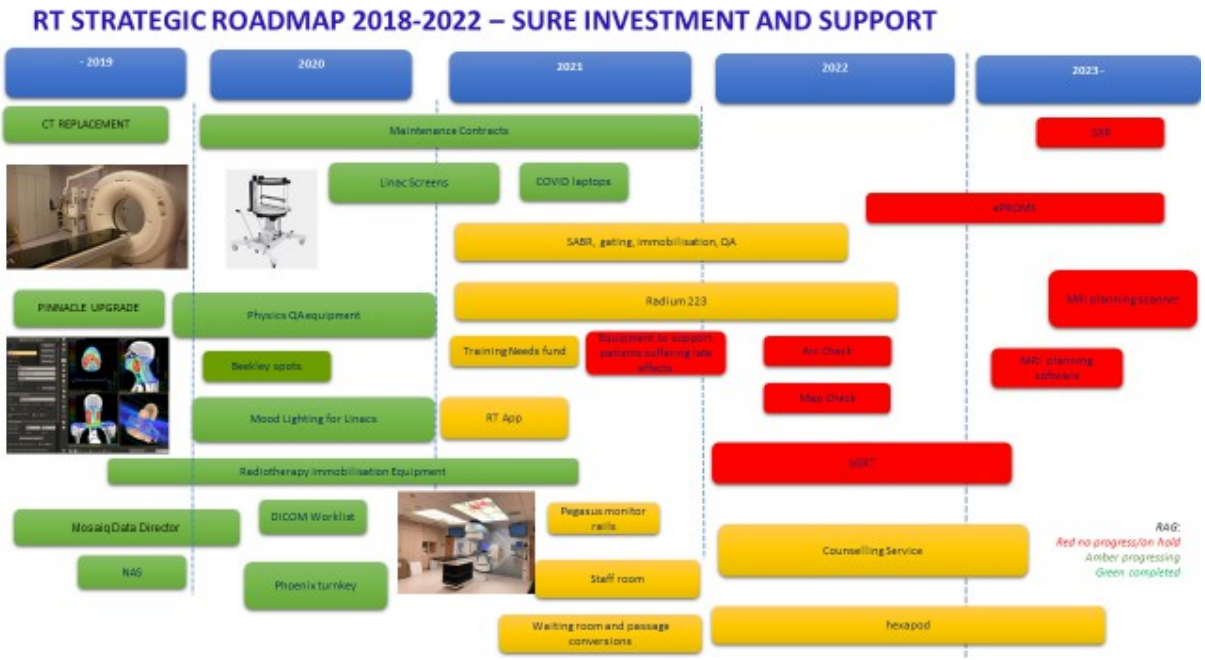
SURE

SURE Vision 2020 and beyond.

The Radiotherapy Department of the Beacon Centre in Musgrove Park Hospital is very grateful to the dedicated committee members and volunteers who strive to raise funds to support radiotherapy in Somerset. Without their dedication we would not be able to deliver the vital treatments to the people of Somerset.

The aim of this paper is to highlight the collaborative work that we have achieved in recent years and to describe how we aspire to move forward together.

The roadmap below shows a simplistic strategy for radiotherapy, how SURE have supported us already and how we would like to develop in the next few years.



Jo Penman, Head of Radiotherapy Services; Steve McCormack, Head of Radiotherapy Physics;
Paul Alway, Chairman, S.U.R.E. Somerset Unit for Radiotherapy Equipment 14 November 2020

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Projects for the Future

Radiotherapy App

This supports patients through their radiotherapy pathway

Staff Room

As a very busy cancer centre, the teams at Musgrove care for all the cancer patients who come through our doors. It is important that we, in turn, care for our staff and provide them with facilities to enable them to get the required rest and sustenance. To this end we are working with SURE to replace the tired staff room and refurbish it. Well rested and fed staff provide safer more caring services to patients.

Sterotactic Ablative Body Radiotherapy (SABR)

NHS England has confirmed that we are now rolling out SABR across the country and Somerset FT (SFT) has risen to the challenge. Whilst a few years ago, we were delivering lung SABR, we are now privileged to work this up for lung, lung oligometastases, bone (not spine) oligometastases and lymph and adrenal oligomtastases. This is wonderful for our patients, who previously would have had to travel to Bristol or beyond for this treatment.

We have a comprehensive project plan being worked on currently but will need support for equipment to deliver this:

- Gating
- Abdominal compression immobilisation
- QA equipment replacements such as Arc and Map checkers

Workspace/Patient Space

In these difficult times of social distancing, we have had to become very creative to ensure that our patients get the care they need whilst providing a safe environment to those who

must come for treatment. To this end we are looking to create the right “online” clinic spaces to support the privacy and dignity of our patients whilst maintaining excellent care even though they may not be in the department.

We are hoping to create some clinic pods and a review room.

Radium 223 (Ra223)

Radium-223 Dichloride injections are currently recommended by NICE for the treatment of hormone resistant metastatic prostate cancer mostly for disease in their bones, where other treatment options have been exhausted or are contraindicated in the individual. Currently, Somerset patients have to travel to Bristol for this treatment but many are unable to endure the journey so this treatment becomes unavailable to them. We hope to change that for our patients. We also anticipate that this treatment will also become available to metastatic breast patients

We are hoping to build a radium suite and will need support to purchase some of the essential equipment such as a ventilated fume cabinet, a radiation monitoring device and computers and a metal radiation safe for example.

Training Needs

This will support the staff to become the best they can be, researching treatments, changing the way we deliver treatment and delivering the very best, evidence based treatments in our centre. Education is power!

In 2021, our professional bodies advocate academic underpinning in the form of Masters Degrees in radiotherapy topics to ensure that the correct research ideologies and methods are employed in our drive for the best care for patients.

ePROMs

This is a cancer programme which enables us to collate Patient Reported Outcome Measures will help us understand real time patient experience and define the future of services and cancer treatments.

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Equipment

We know that radiotherapy equipment is very expensive and we aim to have the best to make sure we serve our patients well.

Alongside the replacement of some existing, quality assurance equipment such as our MAP check and ARC check (to ensure the calibration of our larger equipment for patient safety, we are also aspiring to move forward with the technology with some more innovative technology.

- SGRT - Surface guided radiotherapy system for patient treatment delivery – this enables patient position tracking and gated beam control and also enable tattoo free treatments
- Hexapod linear accelerator couch tops – allows 6 degrees of freedom precision movement to ensure daily adaptation in all planes of motion
- MRI planning software that enable us to convert MRI data for planning (reducing dose to patients and enhancing soft tissue structure)
- MRI planning scanner to replace the CT planning scanner
- A replacement superficial unit (SXR)
- BiGART – Biology Guided Radiotherapy - real time biological, image-guided adaptive radiotherapy system, uses PET/MRI planning and adapts radiotherapy to biological changes in tumours and surrounding tissues – still in development phases
- AI – artificial intelligence contouring system for planning (which will help reduce planning time and improve the time to treatment for patients)
- A 4th linear accelerator (LINAC)

We hope that this will give you a better understanding of the developments, small, medium and large that we are working on currently and how we could benefit from all the work that the SURE team put in to help us achieve our aims. The future of our radiotherapy service is shared.

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Appendix 1

Projects delivering in 2021

- **Radiotherapy App – February 2021**
- **Staff Room – January 2021**
- **SABR – March 2021**
- **Space Conversions – January 2021**
- **Radium223 Suite – June 2021**
- **Supporting Training Needs (an Annual project)**

Projects delivering in 2022

- **ePROMS – March 2022**

Projects delivering in 2023

- **SGRT – January 2023**
- **Hexapods – March 2023**

Projects delivering in 2024

- **MRI Planning Software - March 2024**
- **MRI Planning Scanner**
- **SXR**

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