

SURE – Equipment Provided to the Beacon Centre during 2015.

During 2015 SURE was able to commit **£110,144.50** to providing additional items of equipment to the Radiotherapy Department at the Beacon Centre to further improve patient treatment and outcomes.

This whilst continuing the fundraising campaign to raise **£500,000** by March 2017 to purchase a new Big Bore CT Scanner/Simulator for the Beacon Centre as the existing Scanner provided by SURE when the Beacon Centre opened in May 2009, with replacement planned to be completed by April 2018. As further costing information became available during 2015 the target was increased to **£550,000** to cover the costs of removing the existing scanner and refurbishment of the room prior to the new scanner being installed. By the beginning of 2016 SURE had ringfenced **£450,000** towards this project.

- 1. Application Server for the Pinnacle Planning System** – Following the introduction of VMAT treatment (which significantly reduces patient treatment times whilst maximizing therapy dose to target and minimising exposure to healthy tissue) calculations times for treatment plans rose which slowed the whole treatment planning system, restricting the ability to offer the improvements of VMAT treatment to more patients. SURE funded an additional application server to be added to speed up calculation of VMAT treatment plans on the Pinnacle planning system, At Cost of **£59,021**
- 2. Patient Positioning Equipment** Sure funded the replacement of all patient positioning support cushions, wedges and head-supports for the radiotherapy treatment couches.

At a cost of **£8,088**

- 3. Small Dosimetry Unit.** SURE funded a Sun Nuclear Corp 1D Scanner Acurate Point Dose and PDD Dosimetry unit and PC Electrometer. This is used to carry out monthly Quality Assurance testing of the Linac to ensure accuracy and safety of radiotherapy treatments.

At a cost of **£10,908** (including 4-year extended maintenance warranty).

- 4. Replacement server for MOSAIQ Disaster Recovery (DR)system).** The warranty on the MOSAIQ DR system expired in 2015, every day patient data is backed up to this DR so that in the event of a catastrophic MOSAIQ failure all services can be back up and running within around 30 minutes and kept running until the failed equipment is replaced. It is also used for testing new software before implementation. SURE funded the purchase of the replacement Poweredge R730 Server. At a cost of **£5,980**
- 5. Water Equivalent Rod (with Ion chamber cavity for IMRT Phantom)** SURE funded this and it is now being used in support of testing for the introduction of SABR treatment.

At a cost of **£307.25**

- 6. Annual Maintenance charges.** SURE also funded **£25,840.25** towards the annual maintenance costs of Radiotherapy equipment for the period to 30.9.2015

A look ahead at 2016

SURE is committed to ensuring the Beacon Centre continues to offer high quality cancer care to internationally recognised standards and whilst the major fundraising effort is towards the purchase of a replacement CT Scanner/Simulator SURE aims to continue to provide equipment and support not otherwise available within the NHS budget that is assessed to be of real patient benefit.

- 7. Medicare 3-section Scanning Couch.** Used to safely position patients during superficial X-Ray treatments. SURE agreed to fund this replacement couch., it is now in use. At a cost of **£1,339**
- 8. Paperless Radiotherapy.** The Beacon Centre radiotherapy department is considered paper-light. This project aims to remove the use of any paper documents in the delivery of radiotherapy treatment, leading to further improvements in patient safety and experience. SURE has agreed to fund this project by provision of In-Bunker screens, process automation using IQ Scripts to augment the Mosaiq system patient workflows, making

existing Mosaiq functionality mobile avoiding patient notes and information having to be collated and printed by using securely networked tablet-based Mosaiq functionality. At an estimated cost of **£26,195.01**

- 9. CC04 Ion Chamber.** The small volume Ion chamber is regularly used for VMAT quality checks and will also be key to SABR quality checks. Currently the radiotherapy department only have one such chamber and whilst it is currently fine, if it fails it would cause a significant problem. These devices are quite delicate and do fail, repairs can be expensive, so much so that it's often considered just as cheap to buy a new one. SURE has agreed to purchase a second Ion chamber. At an estimated cost of **£1,334**
- 10. Ashland Film QA Pro Software.** This software has been provided and already used to complete testing of SABR treatment, allowing SABR to be signed off as ready for the first patient. At a cost of **£13,058**
- 11. 4 x Gafchromic Film packs.** SURE has agreed to fund the purchase of additional Gafchromic film required to complete testing for the introduction of SABR treatment. At a cost of **£1,580**
- 12. Annual Maintenance Charges.** SURE has committed to fund **£26,357.06** towards the annual maintenance costs of Radiotherapy equipment for the period to 30.9.2016
- 13. Radiotherapy Network Area Storage (NAS).** This is to provide a NAS system for the radiotherapy service. It is used for backing up all images acquired and used in RT, including CBCT Synergy images and provides a "live" archive for the Pinnacle treatment planning system. The system is also mirrored for additional redundancy. At an estimated cost of **£6,250.52**
- 14. Cancer Patient Treatment Advice Line.** SURE is backing a proposal to introduce a safer solution to providing patients with consistent advice in response to any concerns they have in relation to their ongoing treatment, radiotherapy and chemotherapy. SURE has committed to fund the provision of new Netcall equipment (telephone systems and recording facilities) to enable this, subject to approval of final quotes. At an estimated cost of between **£12,000 -£15,000**
- 15. Cancer Patient Counselling Centre.** It is proposed to develop a counselling centre for cancer patients and their carers separate from the cancer treatment centre. A building has been identified near to the Beacon Centre but there will be some work required to make it suitable for the proposed use, and the provision of appropriate furnishings. SURE is working with the Beacon Centre on this proposal. It is expected to cost in region of **£25,000** to provide an appropriate environment for the centre.
- 16. Investigation into the potential benefit of the Elekta MOSAIQ Data Director system** for the storage and management of all Synergy scans and all Beacon Centre patient information relating to radiotherapy and chemotherapy records continues in relation to the replacement of the 3 Linear Accelerators in 2018-20. No commitment has been made. At an estimated cost of £100-£150,000.
- 17. Future Major Fundraising Projects.** SURE is discussing with the Trust the potential for SURE, along with other Musgrove Park Hospital charities, to fundraise towards the purchase of other significant (£1M+) items of equipment which will have a benefit for cancer patients treatment, from 2017 onwards. SURE will only commit to any future major fundraising project provided it does not impact on the ability to also meet the day-to-day additional funding needs of the Beacon Centre and patients.