MAXIMISED EFFICIENCY, MINIMISED WASTE

BY STREAMLINING PROCESSES AND PATHWAYS IN RADIOTHERAPY

AIMS

We wanted to create a transformational change within the Radiotherapy Department at Ninewells Hospital by maximising the clinical value of radiotherapy technology funded by Scottish Cancer Strategy.

1. Release the potential of Aria 13.7, a new Oncology Management System (OMS), to improve patient pathways.
2. Transform traditional paper, and professional silo based processes, into streamlined electronic multi-professional processes.
3. Reduce waste by eliminating paper and multiple person to person handovers.
5. Create a single real time electronic patient record of radiotherapy interventions.
6. Access data for service planning and delivery.
7. Greatly reduce repetition and transcription of information, improving patient safety and reducing the chance of error.

METHODS

The transformation was led by a core team of Therapeutic Radiographers who received manufacturer training in the functionality of OMS Aria 13.7.

Process maps of all existing pathways were created from patient referral for radiotherapy to treatment completion, noting where paper was introduced and subsequently used.

An in depth review of each process took place to identify opportunities for improvement. During the review the following questions were asked.

- Is this process still required?
- Is there transcription /duplication of data?
- Is a paper document required?
- Can the process be electronic?

Standard automated patient carepaths were created within Aria 13.7.

Opportunities were identified to apply Aria 13.7 functionality to existing processes to reduce paper, identify ownership of tasks and improve flow.

Other Aria 13.7 functions were utilised to convert selected paper documents to an electronic format that could be attached to a patient’s radiotherapy record.

The department IT network had to be able to cope with the increased demand; time was invested in making certain that it was reliable and secure.

We had to ensure our communication with all Aria 13.7 users was first-rate and time was invested in making certain that it was reliable and secure.

Multi-user training and education was delivered by the core team.

OUTCOMES

By maximising the use of Aria 13.7 within our department we now have:

- Streamlined process pathways.
- Removed antiquated steps, allowing a more condense and concise amount of information.
- A reduction in repetition and transcription.
- Tasks and appointments scheduled utilising carepaths, with events assigned automatically to the relevant staff group, creating a fully automated process.
- A Radiotherapy Patient Record accessible from one system, contributed to by radiographers, helps, consultants, oncology nurses and physicists, allowing access to complete information of care.
- Increased amount of reportable and auditable data.
- Tripled amount of activities in OMS from February 2016 to February 2018.

Annualy, we use

18,000 Fewer sheets of paper

We have

32% fewer processes to follow

We now spend

66% less on printer and paper consumables

CONCLUSIONS

Maximising departmental use of the OMS Aria 13.7 has proved an effective method of reducing paper waste and streamlining processes.

There has been improved communication across all staff groups within the radiotherapy department and increased transparency of patient pathways.

The quality of extractable data has improved, which will benefit future service planning.

Staff spend less time tracking down paper documents and annotating information in them. Through reduction in the repetition of data and its transcription, the chance of error can be reduced therefore improving patient safety.

Having a complete patient radiotherapy record within one system, accessed by one password, has increased the efficiency in time taken to access patient treatment information.

THE FUTURE?

Greater patient involvement/engagement with OMS enabling increased person centred care.

Paper free department.

Development of Aria in other areas of oncology such as chemotherapy.

Future OMS updates will bring other opportunities for department improvement.

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