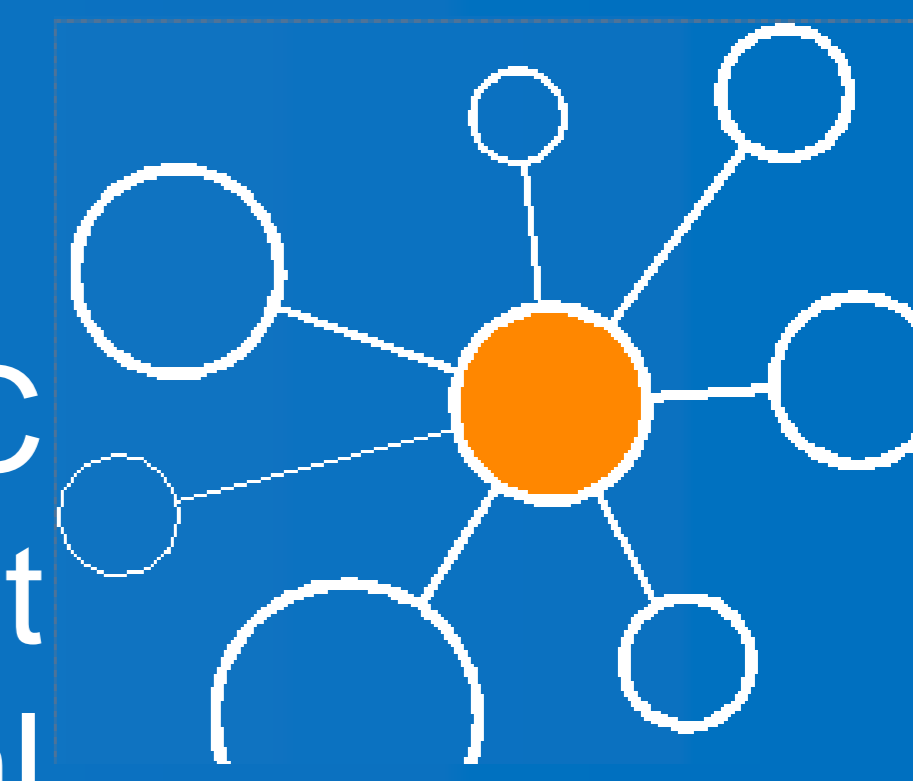


Emergency Radiotherapy: Streamlining the Pathway from Planning to Treatment

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BACKGROUND

Radiotherapy is an effective treatment of emergency presentations in advanced cancer; used in metastatic spinal cord compression (MSCC), superior vena cava obstruction, haemorrhage and airway obstruction. NICE guidance stipulates MSCC treatment should be initiated within 24 hours of diagnosis. A delay in receiving radiotherapy may result in increased morbidity and mortality. Patient experience can be adversely affected by longer pre-treatment waiting times, which is especially important at a time when quality of life is so important.

AIM

Improve the emergency radiotherapy pathway from patient arrival to treatment such that all patients receive radiotherapy within 4 hours of arriving in the department.

RESULTS

Initial data collection included 10 patients. Data on a further 10 patients was collected following the intervention. Initially 50% of patients were treated more than 4h after arriving. Following our two-step intervention this improved to 90% (overall median time 2h 55min). Median time improved for stage 1 (33 to 23min), stage 2 (40 to 23min) and stage 3 (1h 38min to 40min). The median time for stage 4 increased from 35 to 53min.

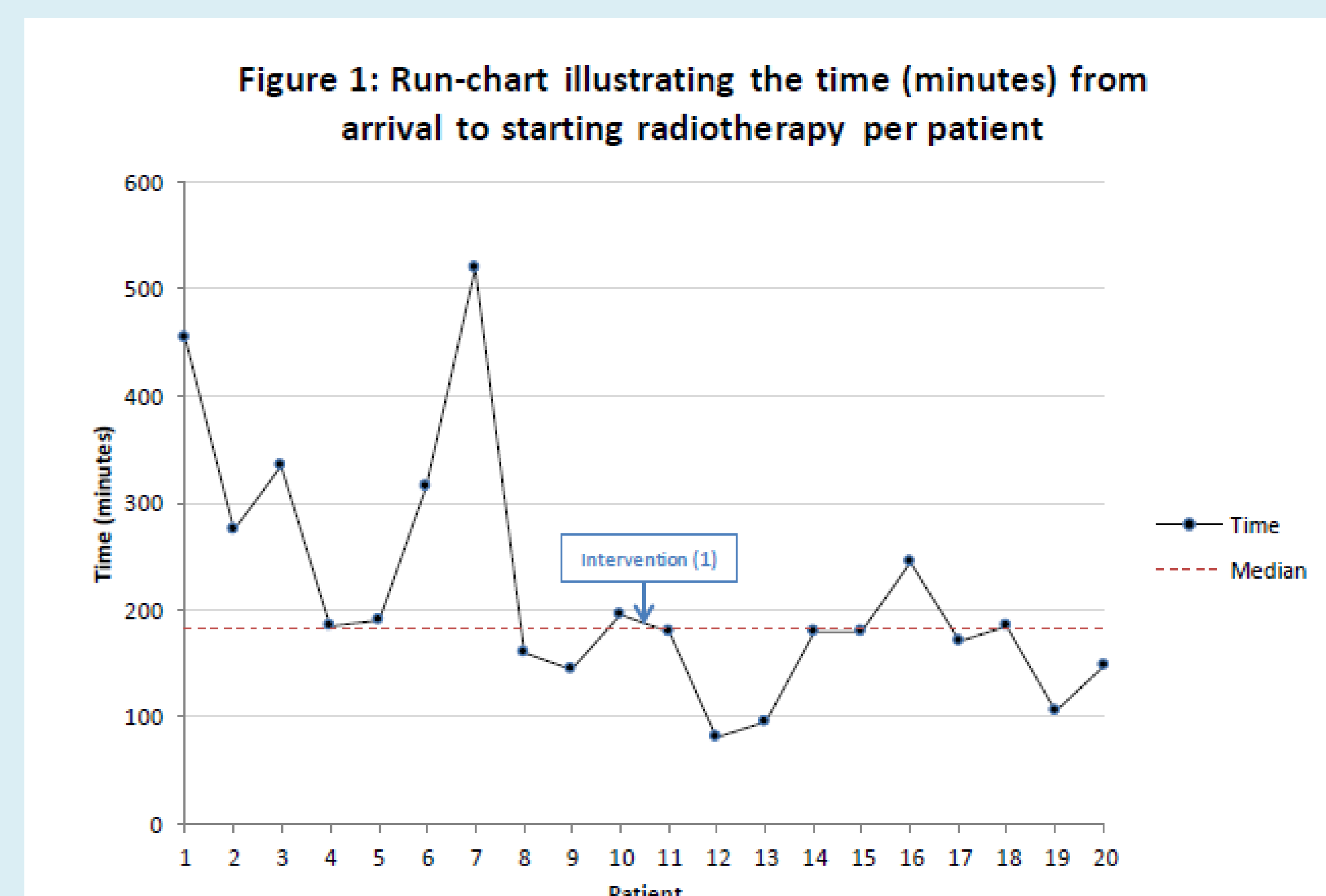
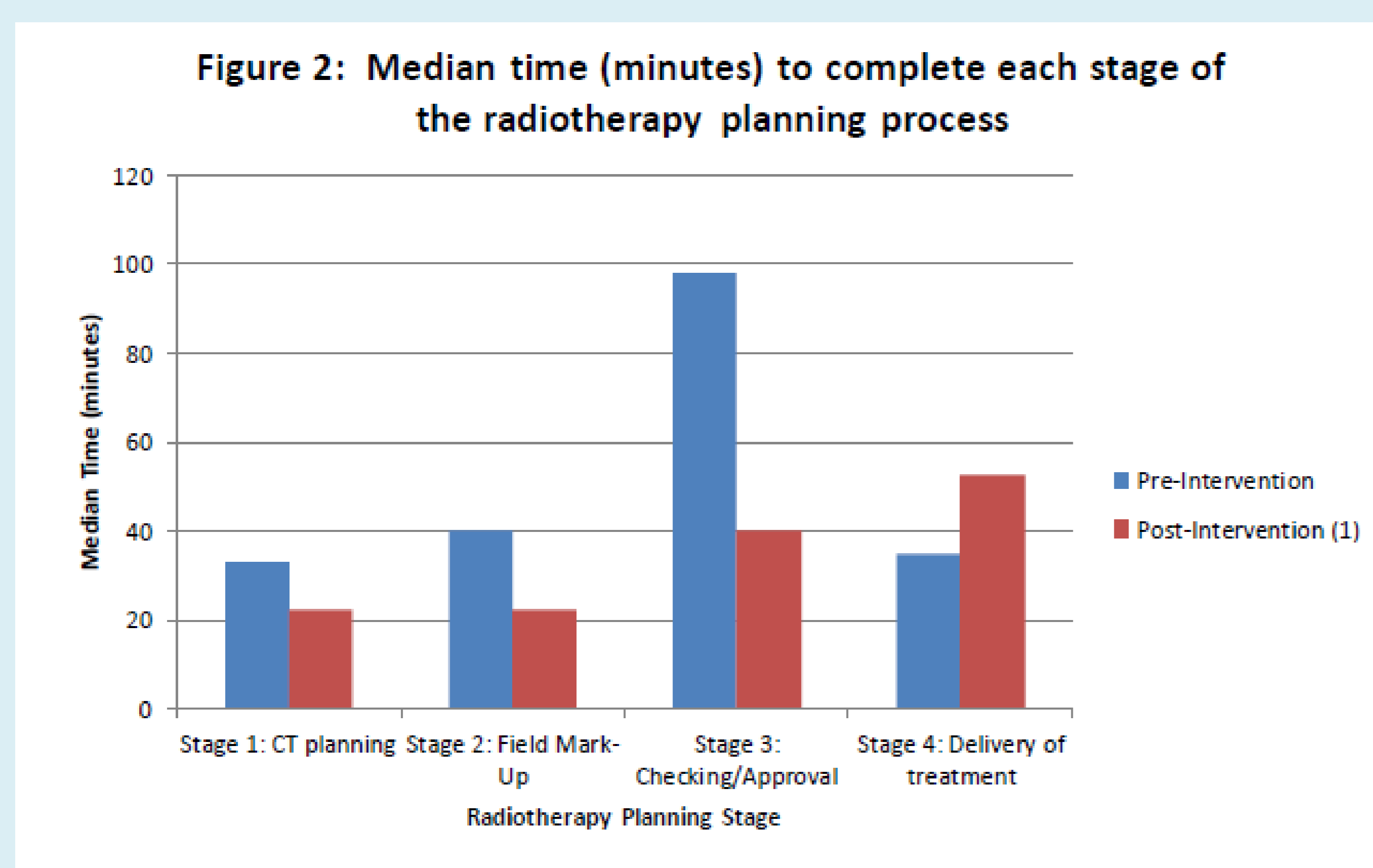
METHODS

We examined the emergency pathway from patient arrival to radiotherapy, and grouped each step into 4 stages: 1) CT planning 2) Field Mark-Up 3) Checking/Approval 4) Delivery of Treatment. An initial data collection recorded the time to complete each step and reasons for delays. Using a driver diagram to identify influencing factors, we determined our intervention. A repeat data collection then followed.

INTERVENTION

Initial data showed a median time from arrival to treatment of 3 hours (h) 55 minutes (min). Our intervention targeted stage 3 (Checking/Approval) as this demonstrated the most significant delays (median time 1h 38min). We implemented two changes:

- 1) A nominated emergency radiographer of the day so that plans can be uploaded without delay
- 2) Request the consultant remains within the department to immediately give final approval once radiographer tasks are complete.



CONCLUSION

The process of planning emergency radiotherapy involves multiple steps; in this quality improvement initiative we are aiming to streamline this pathway. Our intervention has led to a reduced pathway time with notable improvement at the checking/approval stage.

We have learnt that communication is paramount when implementing changes that influence the work patterns of our colleagues. By presenting our initiative locally we have been able to fully engage stakeholders in the process; a key factor in facilitating changes in practice. Our future goals include maintaining the current change in practice and addressing potential delays in the final stage of the emergency radiotherapy pathway.