

Electronic self-reporting of adverse events for patients undergoing cancer treatment: the eRAPID research programme including two RCTs

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Plain English summary

The eRAPID research programme

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Plain English summary

Cancer patients experience various symptoms and side effects during and beyond treatment. Although some can be minor, others can be life-threatening. Monitoring symptom severity when patients are not in hospital is difficult. This research developed and tested an online system, called eRAPID (electronic patient self-Reporting of Adverse-events: Patient Information and aDvice), for patients to report symptoms from home and get advice on what to do. These data were available for hospital staff to review in electronic health records.

eRAPID was originally developed for use with chemotherapy. During this research, it was adapted for patients receiving radiotherapy and surgery. For the chemotherapy work carried out in Leeds, UK, a large randomised controlled trial assessed the impact of eRAPID, compared with usual care, on patients' quality of life and hospital contacts and on the financial costs for patients and health services. To adapt eRAPID for radiotherapy and surgery, the information technology was developed and patient symptom reports and self-management advice were created, following systematic reviews and input from patients and clinicians. For radiotherapy, eRAPID, was assessed in a pilot study in Leeds and Manchester, UK. A feasibility study in Bristol, UK, took place with patients who had received cancer surgery.

We successfully developed and delivered eRAPID in three treatment areas and at three hospitals. Patient and staff feedback suggested that eRAPID was acceptable and largely well received. The chemotherapy randomised controlled trial showed that eRAPID did not lead to significant improvement in patient symptom control at the end of the study (18 weeks). However, in both the chemotherapy randomised controlled trial and the radiotherapy pilot, eRAPID appeared to be beneficial earlier in treatment. Not all doctors involved viewed the patient symptom information available to them. We conclude that the eRAPID approach to supporting monitoring and management of cancer patients has advantages. Future research should focus on how best this style of intervention can be implemented in practice to maximise clinical benefit.

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