

EDUCATION WEEK: An in-house, multi-disciplinary approach to improving clinical knowledge and communication within an academic institution

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Background

In the healthcare setting, continued education is essential to ensure a highly-skilled workforce that can adapt to a changing profession. Continued-professional development requirements for allied health community aims to improve staff knowledge and skill; however, there are limitations with resources providing the education, and the relevance of the educational content to the current practice requirements.

Aims & Objectives

The aim of this study was to present the outcome of a department wide education program that was developed by a multi-disciplinary team of health care professionals comprised of: medical dosimetrists, radiation therapists and medical physicists. The target audience for the program were any personnel, clinical and non-clinical, that worked within the department of radiation oncology. The education program aimed to highlight the complexity of the radiotherapy treatment workflow, with perspective provided by healthcare professionals involved in each step.

Methodology

A core planning committee comprised of three dosimetrists, two radiation therapists, one medical physicist and a non-clinical program manager developed a core syllabus that outlined learning objectives.

The syllabus were delivered as either a presentation or in a hands-on manner. Each presentation lasted 30 minutes with the program delivered over the course of a week in order to minimize any disruption to clinical operations. Attendance was voluntary, with the program generally aimed at the lunch-time period.

The syllabus was defined in such a way that followed the radiotherapy workflow, with presenters identified to lead each respective part of the process. Table 1 summarizes this format.

Post-presentation surveys were collected to evaluate effectiveness of content and demographic of those in attendance.

Results

The Education Week program was run in December 2019 with the theme “A Patient’s Journey”. The content was developed with a general overview of the radiotherapy workflow. In November 2021, the program was re-run with a special focus on stereotactic ablative body radiotherapy treatment, once again, providing a high-level overview of the special procedure (Table 1). The average survey response in the 2019 program was 19.6, increasing to 25.2 in the 2021 program. The actual number of staff in attendance was not captured in 2019, however, in 2021, with a hybrid online and meeting space format, the average attendance, as indicated by system logs, was 91.4 staff members per day. The program from each year was able to capture a diverse population of health care professionals working within the department (Figure 1).

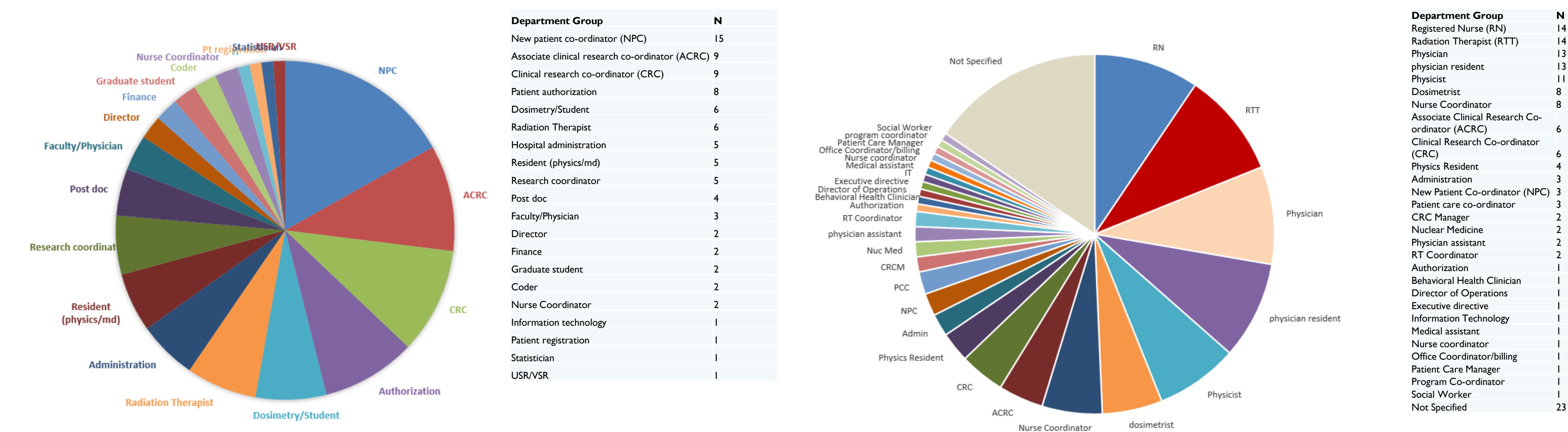


Figure 1. Summary of total number of staffing group who attended the Education Week program in 2019 (A) and again in 2021 (B).

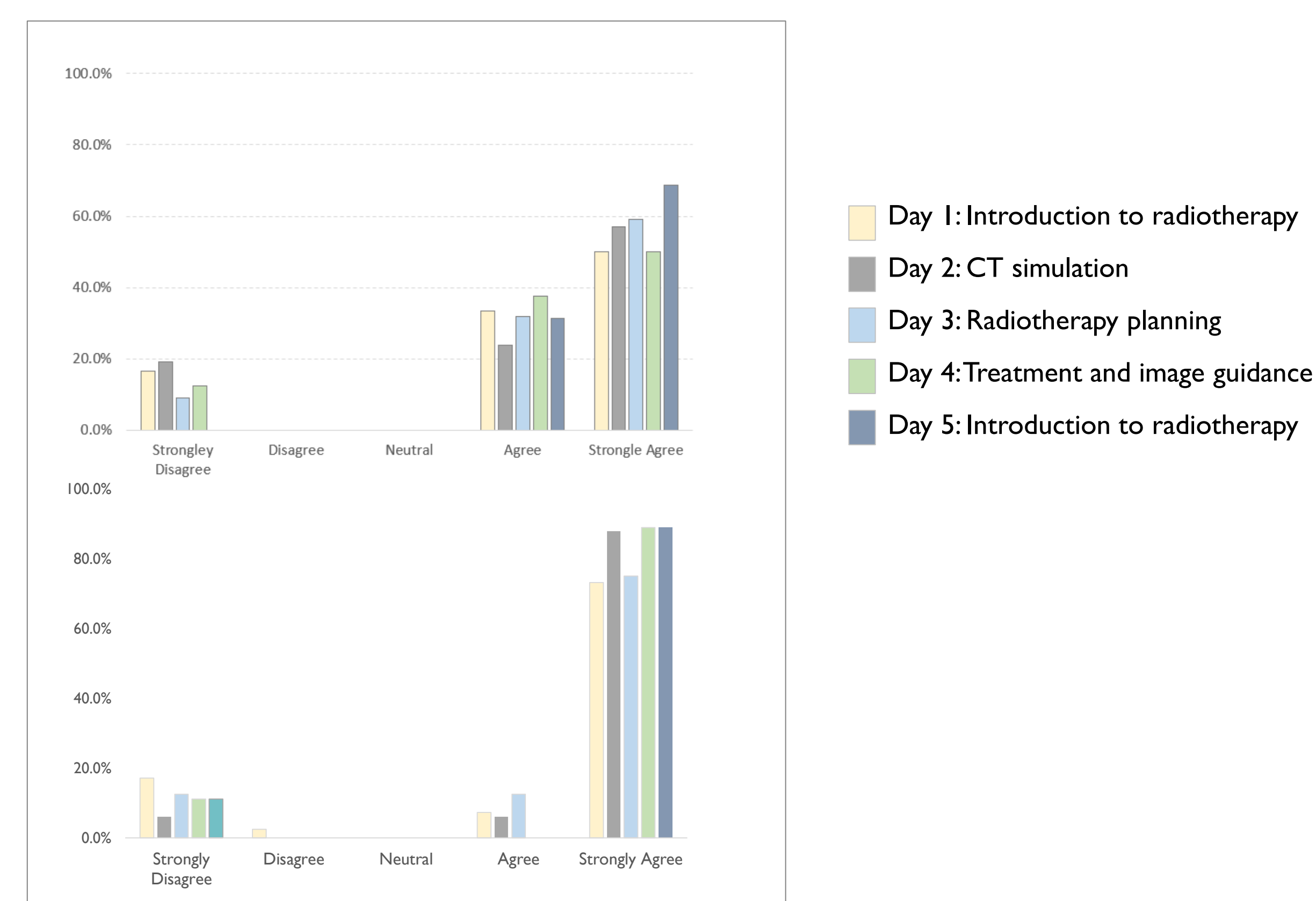


Figure 2. Survey response to the question “Program was effective in helping the audience gain a better understanding of the roles and challenges of different work groups in the department”. Survey response showed a majority positive agreement to this content both in the 2019 (A) and 2021 (B) program.

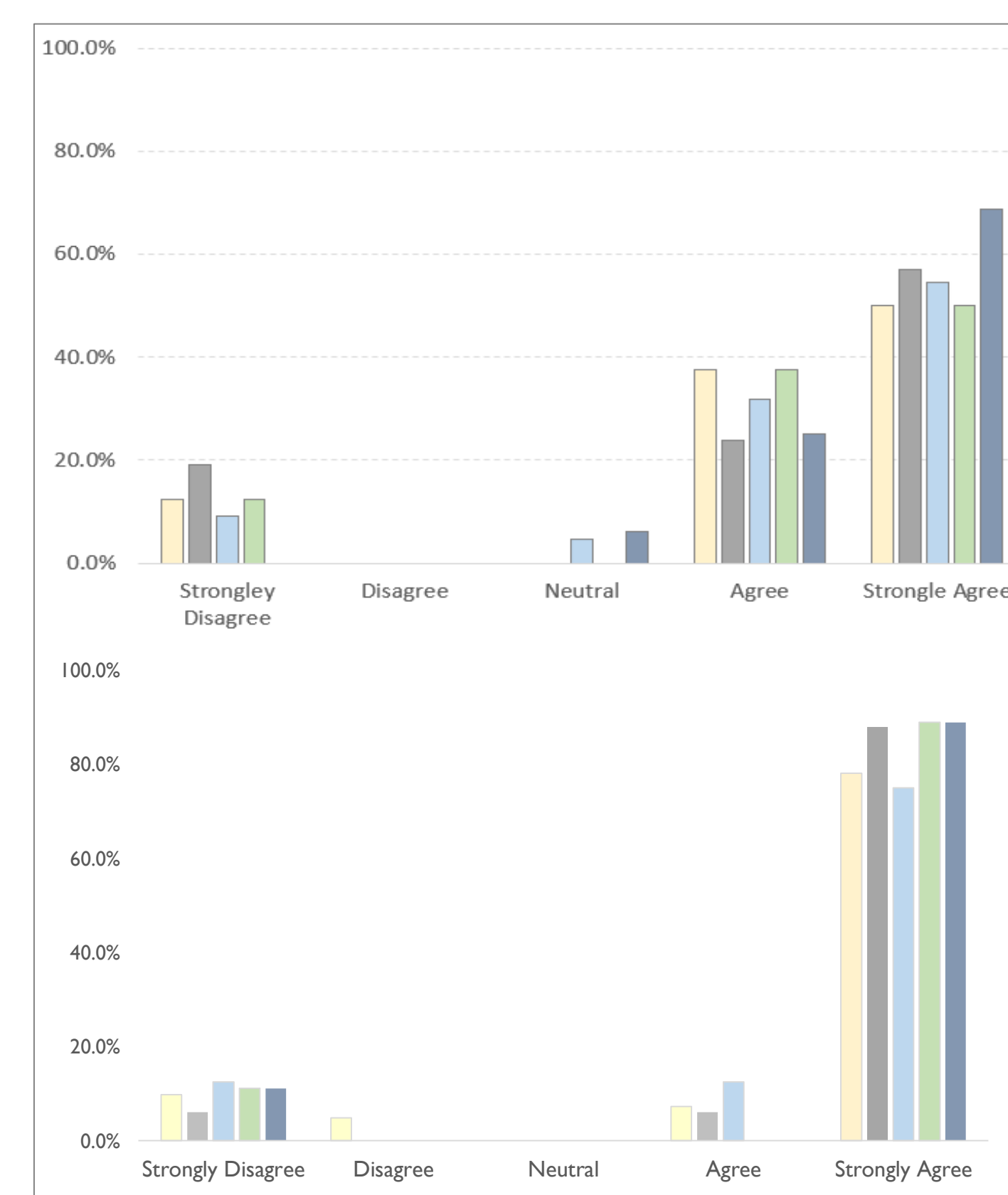


Figure 3. Survey response to the question “Program contained useful information that can be applied to current work”. Survey response showed a majority positive agreement to this content both in the 2019 (A) and 2021 (B) program.

	2019 Program	2021 Program	Presenter
Day 1	Introduction to Cancer Format: Lecture	Introduction to SABR Format: Lecture	Physician
Day 2	CT simulation Format: Lecture	SABR specific CT simulation Format: CT sim live-stream and audience participation	Radiation therapist/Medical physicist
Day 3	Radiotherapy Planning Format: Lecture	SABR planning Format: Lecture + demo	Dosimetrist
Day 4	Treatment and Image Guidance Format: Lecture	SABR treatment and IGRT Format: Machine live-stream and audience participation	Radiation Therapist
Day 5	1. Post Treatment Side effects Format: Lecture 2. Clinical trials in radiotherapy Format: Lecture	1. Post treatment side effects Format: Lecture 2. Billing and insurance authorization related to SABR Format: Lecture	Nursing/Billing team/Clinical research co-ordinator

Table 1. Program overview for the Education Week “A Patients journey in 2019 and the “De-mystifying SABR” in 2021. The content followed the radiotherapy workflow, building on the content from the previous session. Lectures, hands-on practice and live-streaming of clinical practice was delivered live and online for attendees.

Discussion/Conclusions

An educational program for clinical and non-clinical staff showed positive benefits to the department. Some challenges to implementing the program were i) finding an ideal time of the day for clinical staff to attend ii) finding sufficient machine resource time for practical/hands on education iii) providing protected time/resources for clinical staff to develop content for presentation.

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