

Commercial Opportunities

IRPS Interactive Radiotherapy Planning System (ref: 103)

Overview

IRPS (Interactive Radiotherapy Planning System) is a software system for teaching the craft of external beam radiotherapy planning without users requiring access to expensive clinical planning systems, or any peripherals.

The development of IRPS has been led by a team from Medical Physics at Weston Park Hospital, Sheffield. It is a low cost, independent, interactive, on-line training system for radiotherapy staff, students and trainee doctors in the uses of radiotherapy. It shows how isodose distributions are produced and tests the users grasp of what has been learned with interactive exercises.

The Problem

With current training in Radiotherapy Planning there is a gap between the tracing paper, hand-planning approach, and the current clinical systems which may prevent trainees from getting a good feel for physical dose distribution.

The Solution

IRPS teaches the fundamental principles which underlie planning techniques, and includes interactive examples to test the students' understanding. It also presents patient outlines and guides users towards producing a clinically acceptable dose distribution.

IRPS provides a computer-based training programme. Part 1 teaches the fundamental principles that underlie planning techniques and includes interactive tests. Part 2 presents patient outlines and guides the users towards producing a clinically acceptable dose distribution.

The Medical Physics team has been developing IRPS since 1994, and its simple algorithms have been in use clinically at Weston Park Hospital for over 20 years. IRPS was awarded the HBO/InfoRAD prize at Radiology 97 for original IT development.

Benefits to Patients & NHS

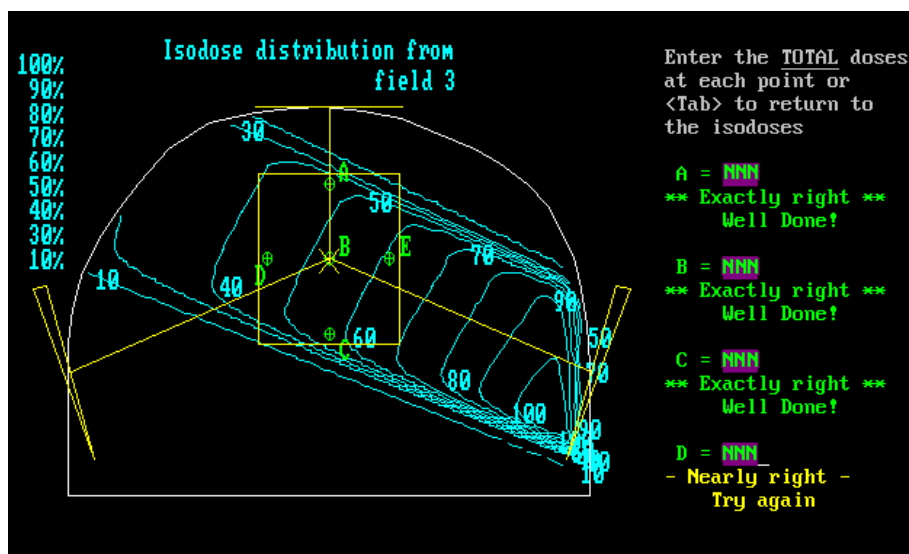
NHS staff are better trained with the result that patients receive a high quality service.

IRPS was first made commercially available in January 1998 and it has been bought by individuals, medical physics departments and schools of radiography, both in the UK and internationally. A brand new version, Version 4 will shortly be available downloadable from the internet.

IRPS is suitable for all staff groups who require an in-depth understanding of computer-based radiotherapy planning including:

- Radiation Oncologists
- MTOs/Dosimetrists
- Radiographers
- Medical Physicists

Use of IRPS may be tailored to suit newcomers to radiotherapy planning, or experienced staff who wish to hone existing skills. IRPS may be installed on single pc's but is ideally suited to running across a network, allowing students to work and their progress to be monitored remotely.



A menu-driven 2D planning algorithm is used to produce an external beam plan.