Virtual Environment for Radiotherapy Training (VERT) is a virtual reality software originally developed for radiographer education. We felt that it could tackle several patient issues identified by our department. We initiated a pilot project implementing the use of VERT to visually explain the RT process to patients over 12 months.

The control group (n=55) received standard pre-RT education and the VERT group (n=56) received an additional VERT education session. Data was collected prospectively from feedback questionnaires. In the control group, 49% of patients required repeat CT planning scans, compared to 34% in the VERT group (p=0.105). Patients requiring re-education of bowel and bladder preparation due to poor compliance was significantly higher for the control group, 29%, compared to 13% for the VERT group (p=0.03). 63% of patients stated that the VERT session reduced their anxiety levels. Cost analysis revealed that the calculated average savings per patient was £17.

VERT patient education reduces anxiety, improves compliance with RT preparation and reduces requirements for repeated CT scanning. Use of a virtual-reality patient education program should be considered in all RT departments nationally.

**Leading innovation and improvement**

The Junior Doctors Service Improvement Board (JDSIB) was started in 2014 at Darent Valley hospital.

**Aims**
1. Provide a forum for discussion of ideas for quality improvement (QI)
2. Develop ideas into achievable, timely plans
3. Connect frontline staff with the necessary resources and personnel to turn plans into actions
4. Aid in delivering sustainable improvements in patient care led by frontline staff

**Methods** Led by junior doctor chairs and a consultant lead, the board invites staff to propose and discuss improvement projects. Project leads are expected to find an enthusiastic mentor, include MDT members, and complete a short initiation template to register projects. The JDSIB connects teams with the appropriate staff and resources they require, and advise on methodology. The JDSIB is well supported by the leadership faculty group and the Trust Board. To ensure sustainability and handover we maintain a database of ongoing projects.

**Results** Since 2014, we have 31 completed quality improvement projects. In 2018, we launched a new project initiation template, introduced a quality improvement project toolkit, and a half day QI training workshop for all staff.

**Sample completed projects** include trust electrolyte guidelines, launched trust wide through shared working of the renal, endocrine, and pharmacy departments.

The pharmacist buddy scheme for new FY1’s to reduce medication errors and improve prescribing skills and confidence.

Trust-wide introduction and facilitation of the adoption of the WHO surgical brief.

**Discussion/conclusion** The JDSIB has facilitated frontline staff in developing their leadership skills and successfully designing, leading, and completing sustainable improvement projects which have brought huge benefit to patient care across the trust.

**Developing effective leaders**

The Chief Registrar (CR) scheme is a new leadership role for junior doctors in training. An independent evaluation of the first cohort underlined barriers faced by CRs, which suggested that their clinical training might have been affected.

**Objectives** This was the first study investigating the second cohort of CRs, and the first study exploring the impact the role has on CRs clinical training, and the differences in clinical training experienced between CRs In-programme and those Out-of-programme.