# Generic justification

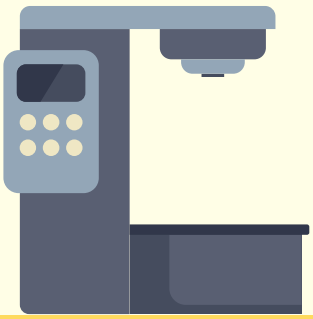
HIQA generically justifies magnetic resonance-guided radiotherapy (MRgRT) for patients with cancer who need external beam radiotherapy.

## Why did we carry out this review?

New practices involving patients' exposure to ionising radiation must be justified by the Health Information and Quality Authority.

**Magnetic resonance-guided radiotherapy (MRgRT) is a type of image-guided radiotherapy which may help to target the treatment area more precisely. This may help to ensure radiotherapy is delivered to the right place, while also avoiding healthy tissue.**

## How is it delivered?



Radiotherapy is commonly delivered using precise machines called linear accelerators. More recently, manufacturers have developed delivery systems that combine an MRI scanner (to carefully target the treatment area) with a linear accelerator (to deliver radiotherapy). Treatment delivered using these delivery systems is known as magnetic resonance-guided radiotherapy, or 'MRgRT' for short.

## Safety

Unlike other imaging practices currently being used to guide radiotherapy treatments, MRgRT does not involve the use of ionising radiation. While there are still gaps in the evidence for MRgRT, no safety concerns were found in the literature.