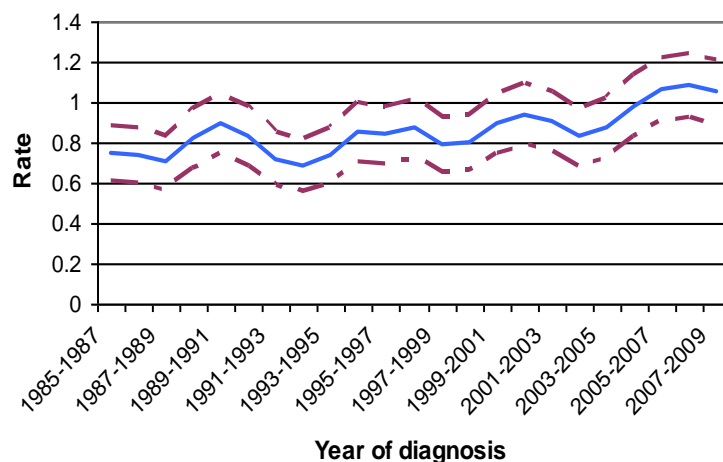


## Malignant tumours of the vertebral column, sacrum, coccyx and base of skull: estimating the annual incidence in England

Proton therapy may represent the best treatment option for patients with a tumour of the vertebral column, sacrum, coccyx or base of skull as surgical removal of these tumours can be difficult due to the importance of preserving the bony structure of the spine. With existing coding practice using ICD-10, it is impossible to measure precisely how many patients would benefit from proton therapy, as base of skull, and sacral and coccyx tumours are coded to larger sites; the skull (C41.0) and the pelvis (C41.4) respectively.

A detailed review of records held by the WMCIU identified by means of their morphologies, the percentage of tumours of the skull and pelvis which occurred in the relevant sub-sites. These percentages were extrapolated to estimate the number of tumours diagnosed in England.

**Figure 1: Three year rolling average incidence rates of tumours of the vertebral column, sacrum, coccyx and base of skull in England, 1979-2007 (rate per million population)**



### Annual incidence in England

Extrapolating from West Midlands data, 22 tumours of the vertebral column, 16 tumours of the sacrum and coccyx, and 5 tumours of the base of skull are diagnosed annually in England. Between 1985 and 2009, the overall crude incidence rates of these tumours fluctuated around 0.8 cases per million population (Figure 1).

Chondrosarcoma, Ewing sarcoma and chordoma were the most common types of sarcoma diagnosed in the sacrum and coccyx, whereas only chordomas were diagnosed in the base of skull

region. Within the vertebral column, approximately 20% of diagnoses were chordomas, 20% were Ewing's sarcoma, 25% were chondrosarcomas and 15% were osteosarcomas. Various different sarcoma morphologies made up the final 20%.

#### FIND OUT MORE:

[West Midlands Cancer Intelligence Unit](#)

The WMCIU is the National Cancer Intelligence Network lead cancer registry for sarcomas

<http://www.wmpho.org.uk/wmciu>

The National Cancer Intelligence Network is a UK-wide initiative, working to drive improvements in standards of cancer care and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research. Sitting within the National Cancer Research Institute (NCRI), the NCIN works closely with cancer services in England, Scotland, Wales and Northern Ireland. In England, the NCIN is part of the National Cancer Programme.