# Appropriate patient selection for palliative radiotherapy

**Descriptor:**

14-day mortality rates as a surrogate measure of appropriate patient selection for palliative radiotherapy.

**Background:**

Patients referred for palliative radiotherapy have advanced disease and often poor prognosis. Treatment is usually considered to relieve cancer-related symptoms. Toxicity from palliative radiotherapy can continue for several weeks after treatment. Symptomatic benefit is often not noticed until toxicity has resolved [1,2]. It is important to understand mortality rates following palliative radiotherapy to ensure patients are not dying too soon after treatment to benefit.

## The Cycle

**The standard:**

Patients treated with palliative radiotherapy should survive long enough to receive symptomatic benefit.

**Target:**

14-day mortality (from date of first fraction) ≤ 5%.

## Assess local practice

**Indicators:**

14-day mortality rate (from date of first fraction)

30-day mortality rate (from date of first fraction)

**Data items to be collected:**

• Age

• Performance Status

• Stage

• Primary disease site

• Palliative radiotherapy site

• Number of metastatic sites

• Number of fractions

• Date of first fraction

• Date last seen/date of death

**Suggested number:**

10 patients for every WTE consultant who treats patients with that particular tumour type with palliative radiotherapy (e.g. in a department with 5.0 WTE clinical oncology consultants treating NSCLC, audit requires 5x10 = 50 NSCLC patients treated with palliative radiotherapy).

**Suggestions for change if target not met:**

1) Analysis of patient demographics/characteristics to determine factors predicting early death after palliative radiotherapy

2) Presentation of findings to clinical team involved, including specialist trainees

3) Review of local guidelines for selecting patients suitable for palliaitve radiotherapy for that particular disease group

4) Re-audit to commence within 3 to 6 months, with date agreed to present re-audit findings

**Resources:**

• Radiotherapy personnel to collect data from electronic/paper records

• Audit department for data input and analysis

• Audit lead to prepare presentation to clinical team

• Time dependant on number of patients (see above)

**References:**

1. Kramer GW, Wanders SL, Noordijk EM, et al: Results of the Dutch national study of the palliative effect of irradiation using two different treatment schemes for non–small-cell lung cancer. J Clin Oncol 23:2962-2970, 2005
2. Fairchild A, Harris K, Barnes E, Wong R, Lutz S, Bezjak A, Cheung P, Chow E. Palliative thoracic radiotherapy for lung cancer: a systematic review. J Clin Oncol 26:4001-4011, 2008.

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