# Efficiency of Concurrent Chemoradiotherapy Delivery for Anal Carcinomas

**Descriptor:**

Overall treatment time of radiotherapy delivery is essential to optimising tumour control. Adherence to treatment protocols and compensation of missed fractions are an integral part of treatment efficacy.

**Background:**

Chemoradiotherapy (CRT) is the first line, definitive treatment for Anal Squamous Cell Carcinomas. It is widely accepted that uncompensated interruptions to radiotherapy, therefore prolonging overall treatment time (OTT), increases local recurrence risk. Optimal outcomes depend on adherence to local protocols specifying sequencing, planning, dosage and overall treatment time. Treatment delays should therefore be minimised and treatment interruptions, both planned and unplanned, compensated for as per RCR guidance [1].

## The Cycle

**The standard:**

1. Local radiotherapy protocols for Anal CRT should be adhered to for delivery of treatment

2. All patients should start CRT within 28 days of consent [2]

3. Treatment completion should be 38 days after commencing, with no extension greater than 7 days as per RCR guidelines for category 2 patients. Compensation for interruptions should ideally minimise OTT [1]

**Target:**

1.100% (unless clinically justified deviation)

2.100%

3. 100%

## Assess local practice

**Indicators:**

1. Percentage compliance with departmental protocol

2. Median Overall treatment time of patients undergoing CRT for anal cancer

3. Percentage of patients experiencing treatment interruptions

4. Percentage of patients exceeding  target overall treatment time

5. Perecntage of patients who received 'missed treatment' compensations

**Data items to be collected:**

1. Radiotherapy dose/fractionation intent

2. Concurrent chemotherapy intent

3. Radiotherapy dose/ fractions and chemotherapy received

4. Date of consent

5. Start and end date of treatment

6. Number and cause of interruptions to treatment

7. Compensation method employed

**Suggested number:**

All patients receiving radical CRT for anal cancer over a 2 year period.

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

- Identify causes of treatment protocol deviations if not clinically justified

- Streamline clinic appointments/ consent with radiotherapy planning department and chemotherapy bookings to ensure no departmental delay in treatment delivery

-  Departmental forward planning to ensure robust tactics in place for full compensation of foreseeable treatment interruptions

- 'Back up' strategies in place to compensate for unplanned treatment interruptions to minimise extension of overall treatment time

- Re-audit to assess efficacy of changes outlined above as appropriate

**Resources:**

• Personnel: Clinical Oncologist, Radiotherapy departmental representative to provide radiotherapy data

• Time: Up to 4 days to collect and interpret data

**References:**

1. Board of Faculty of Clinical Oncology. [The Timely Delivery of Radical Radiotherapy: Standards and Guidelines for the Management of Unscheduled Treatment Interruptions.The Royal College of Radiologists;Third Edition, 2008.](http://www.rcr.ac.uk/publication/timely-delivery-radical-radiotherapy-standards-and-guidelines-management-unscheduled)
2. Joint Council for Clinical Oncology. Reducing delays in cancer treatment: some targets. London: Royal College of Physicians, 1993

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