

# The introduction of an integrated dental care pathway for head and neck cancer patients.

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## Background

The Royal College of Surgeons (RCS) guidelines for the oral management of oncology patients requiring radiotherapy, chemotherapy and/or bone marrow transplantation (2018) highlight the importance of integrated oral care through a co-ordinated team approach and prevention and minimisation of oral complications during and after primary cancer treatment. The guidelines recommend that all patients should 1) undergo an early, pre-treatment oral assessment, 2) undergo all necessary extraction of poor prognosis teeth no less than 10 days and ideally 21+ days prior to commencing radiotherapy, 3) receive hygiene treatment prior and during radiotherapy to maintain oral health and 4) be given high concentration fluoride supplementation (toothpaste & mouthwash). The target compliance was 100%, with the exclusion of edentulous patients.

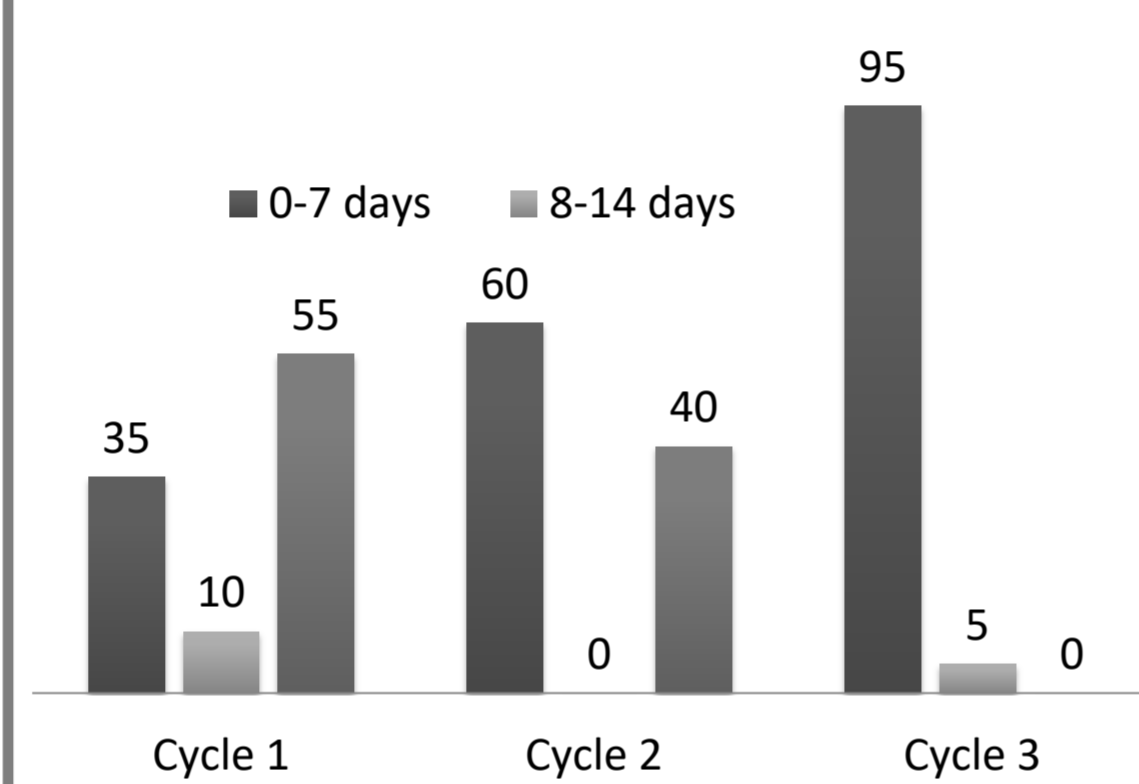
## Aims and objectives

1. Determine compliance with the RCS guidelines.
2. Improvement of the multidisciplinary cancer team approach to oral care.
3. Improvement in the interdepartmental referral procedures.

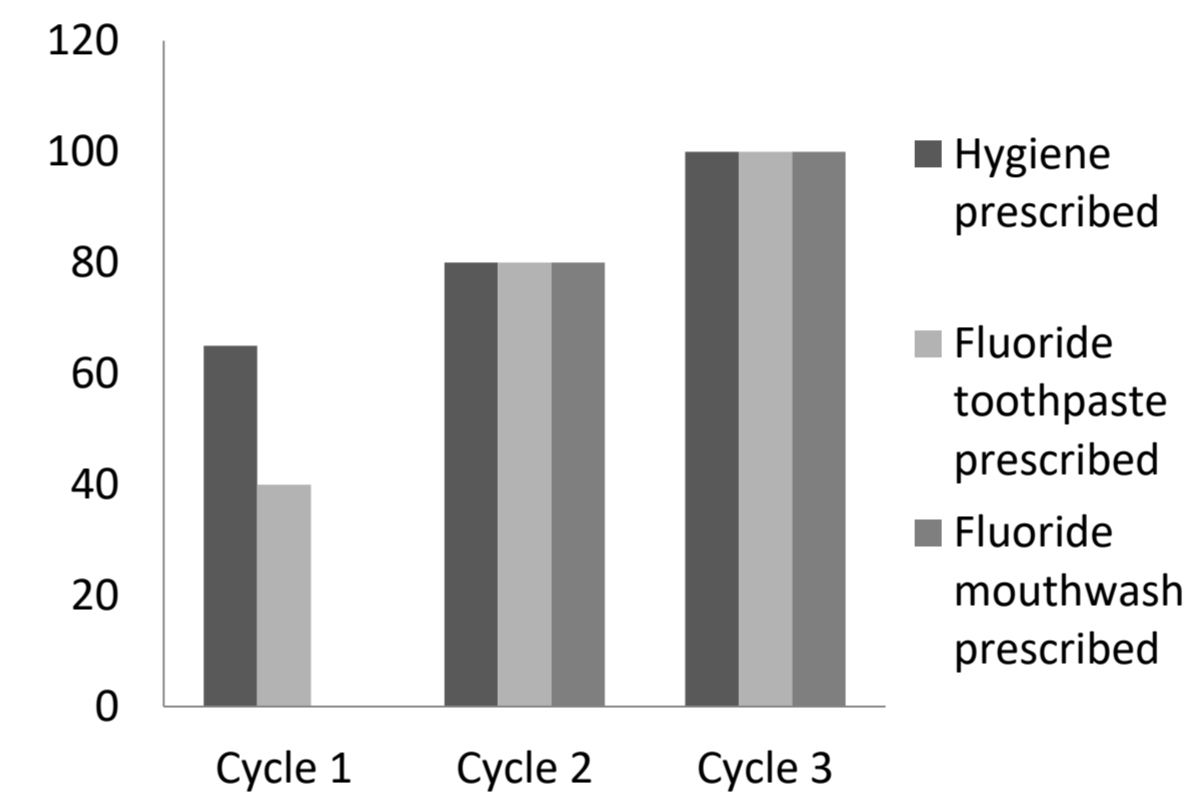
## Methods

An initial audit was undertaken to determine baseline compliance with the RCS guidelines. 50 consecutive patients listed on the Somerset Cancer Register were identified who had received radiotherapy for a head and neck cancer (HANC) prior to September 2018. A predetermined data set was extracted from the clinical records into an Excel workbook for analysis. Recommendations were implemented and re-audited prospectively in January 2019 and January 2020 with 25 consecutive cases for each cycle. Further revisions and recommendations were implemented with each cycle. The findings were reported within the departments and to the multidisciplinary team (MDT) meeting.

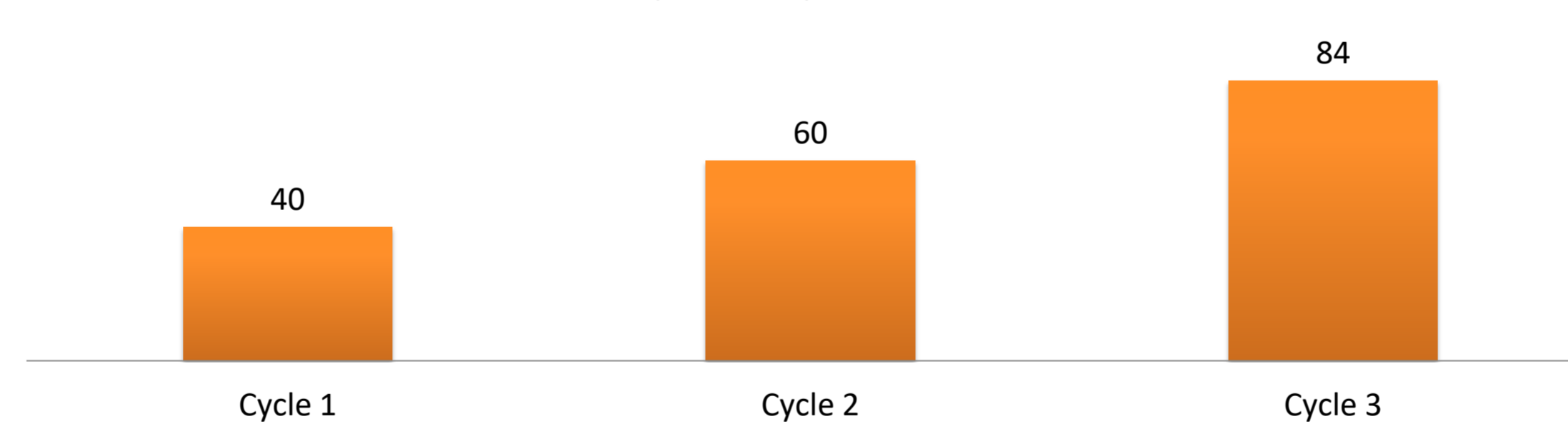
Time from referral to dental assessment (% of patients)



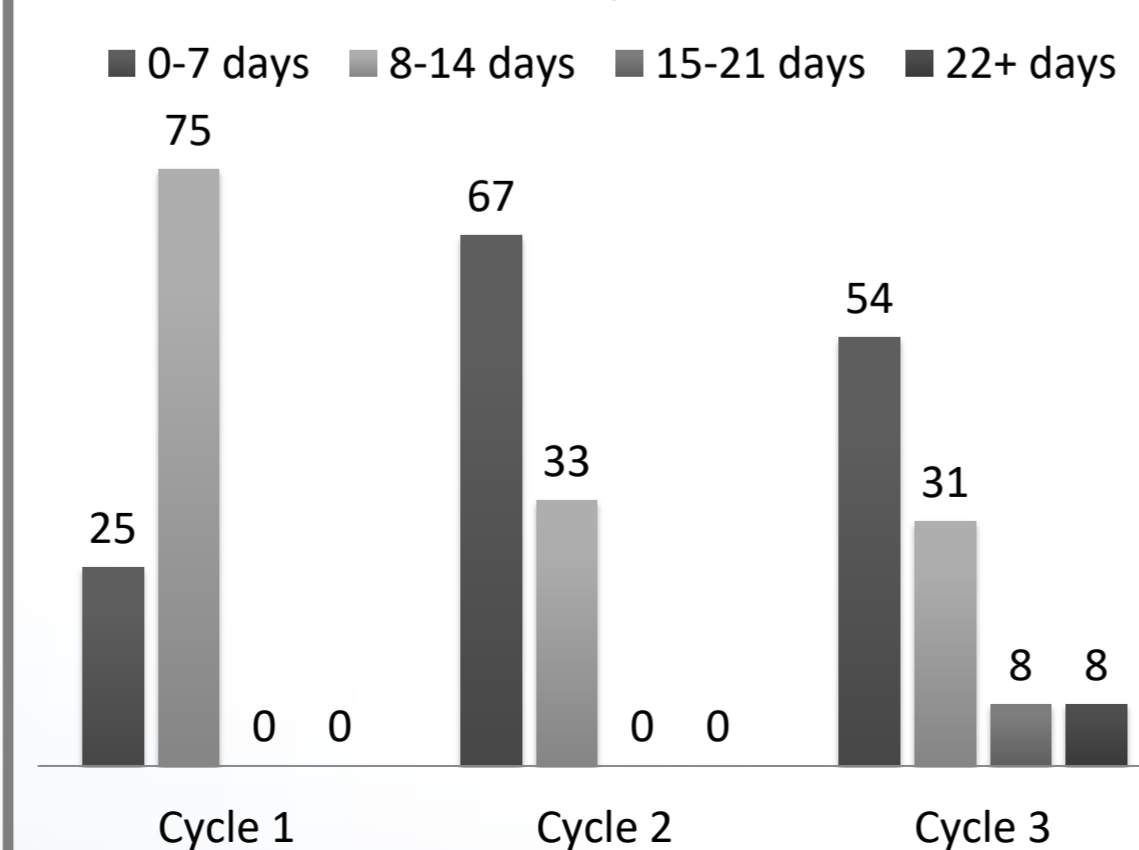
Hygiene and fluoride prescription (% of patients)



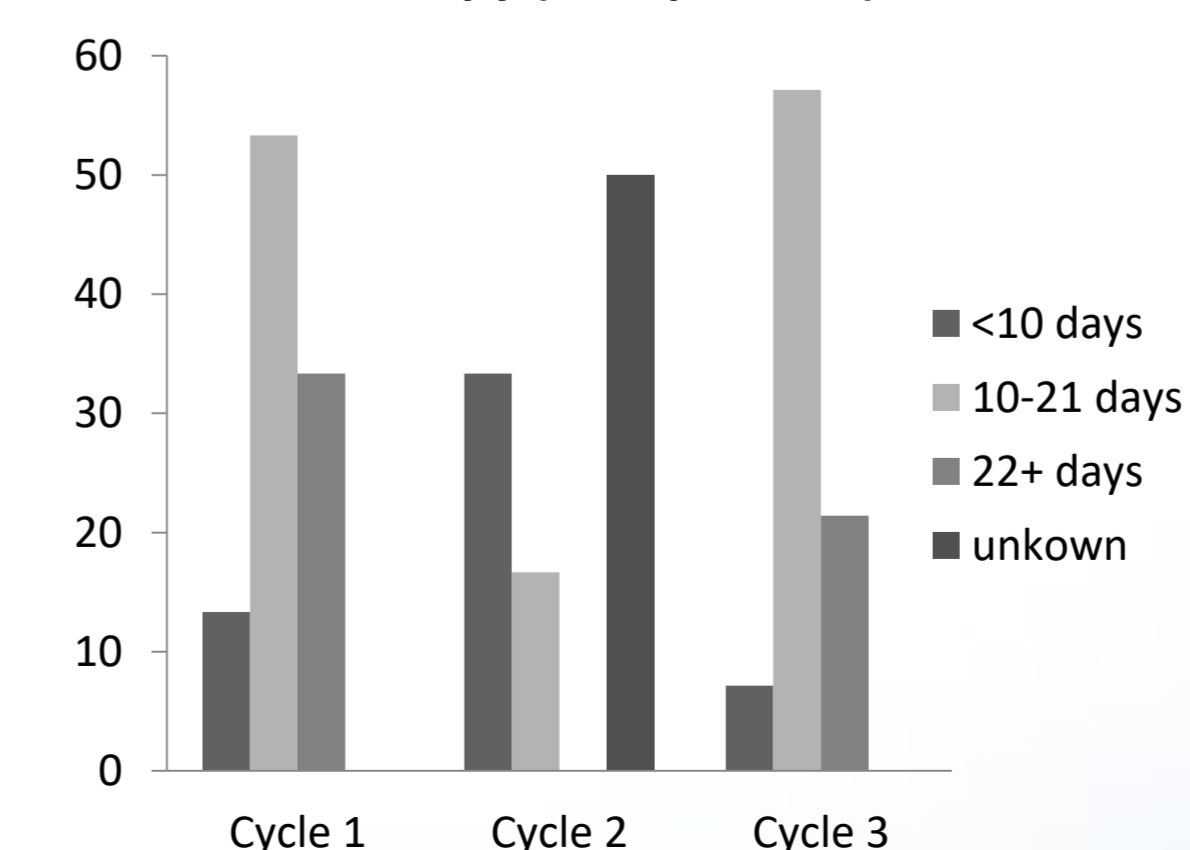
Patients referred for dental assessment (% of patients planned for RT)



Time from dental assessment to extraction (% of patients)



Time from extraction to commencing radiotherapy (% of patients)



## Implemented Changes

Cycle 1	Cycle 2	Cycle 3
Dental assessment referral criteria agreed.	Reinforce MDT referral of all pre-RT HANC patients	Introduction of HANC dental referral and assessment proforma.
Hygiene programme, including fluoride prescription, agreed.	Development and refinement of dental referral / assessment proforma.	Pathway introduced locally and regionally.
Core data set for documentation with dental assessment proforma agreed.	Reinforce need for hygiene and fluoride prescription.	

## Results

The introduction of an interdisciplinary oral care pathway resulted in a significant increase in the number of patients referred for pre radiotherapy dental assessment (40% up to 84%). Patients who underwent dental assessment within one week of referral improved from 35% to 95%, with 67% of referrals now seen the same day. Assessment to extraction time improved from 25% within one week to 54%, while 78% of patients now undergo any necessary extractions  $\geq 10$  days pre radiotherapy. Hygienist prescription and fluoride supplementation both improved respectively from 65 % and 40% to 100%.

## Discussion

Improvements in all parameters highlighted the sustained change of practice with the interdisciplinary approach to oral care. The introduction of a combined referral and assessment proforma ensured that necessary diagnostic and prognostic information was included at referral. The proforma also included dental assessment and treatment plan details (surgical, restorative, hygiene and follow-up). The integrated approach thus facilitated an effective pathway from MDT to dental assessment and subsequent treatment.

## Conclusion

The development of an integrated care pathway has resulted in sustained improvements to the oral management of HANC patients. The integrated referral and assessment proforma has been trialled and introduced regionally.