

# Diagnostic pathway of head and neck cancer patients in Ireland: audit of patterns of first attendance 1983-2019

## Précis

Many Irish head and neck cancers (66%) are advanced at diagnosis. General medical practitioners are generally (75%) the first healthcare professional attended. The dental referral pathway remains under utilised.

## Abstract

**Objectives:** This audit explores patterns of head and neck cancer (HNC) patient presentation in primary care in Ireland over four decades and reflects on the possible impact of a 10-year national HNC awareness campaign.

**Materials and methods:** Trends in patient presentation and diagnosis are presented for 920 HNC patients across three time periods: 1983-1990; 2010; and, 2018-2019. Descriptive analysis was undertaken using SPSS-v27 on basic demographic details, tumour-related details and primary care referral patterns.

**Results:** Patients were generally male (71%), aged 54+ (71%), and 84% were diagnosed with squamous cell carcinoma (SCC). Larynx, tongue and tonsil were the most common sub-sites. General medical practitioners (GPs) were the first healthcare contact for 75% of cases, with only 13% referred by general dental practitioners (GDPs). This pattern remained consistent across four decades. The GDP's role was higher for tongue, floor of mouth and intra-oral tumours (30-47%), with some increase seen in recent years. While symptomology varied by site, symptom burden remained high across the decades with 99.9% exhibiting 1+ National Institute for Health and Care Excellence (NICE) 'red flag signs' of HNC, suggesting considerable diagnostic delay despite a 10-year national campaign to raise public and professional awareness.

**Conclusions:** This audit highlights the role of GPs in HNC diagnosis, but reveals suboptimal use of the dental pathway. The high symptom burden reported suggests considerable diagnostic delay. Increased and sustained efforts are required to raise public and professional awareness, encourage regular dental attendance, upskill healthcare professionals in opportunistic screening, and ensure appropriate responses to symptomatic patients.

**Key words:** Head and neck cancer (HNC), mouth/oral cancer, referral and diagnostic pathway, general medical practitioner (GP), general dental practitioner (GDP), awareness, diagnostic delay, symptoms, National Cancer Registry Ireland (NCRI), early detection.

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# A review of the oral cancer referral pathway system in Dublin Dental University Hospital

## Précis

The 'open door' policy adopted by the Dublin Dental University Hospital appears to be efficient in reducing delay in the clinical pathway to treatment for oral cancer.

## Abstract

**Introduction:** The incidence of oral and oropharyngeal cancer in Ireland is increasing, with approximately 503 cases diagnosed annually. A delay in diagnosis for oral cancer leads to advancement in tumour staging, which increases the risk of mortality up to two-fold. Early detection contributes to the reduction of morbidity and improvement of survival rates.

**Aim:** This review aims to assess the sources of referral and evaluate the efficiency of DDUH's oral cancer referral pathway system.

**Methods:** A retrospective search was carried out through the hospital's electronic dental records (EDRs) of patients from January 1 to December 31, 2019. Patients who received a histological diagnosis of oral cancer from biopsies carried out were identified and their EDR accessed.

**Results:** In 2019, there were 65 confirmed diagnoses of oral cancer in the Dublin Dental University Hospital (DDUH), of which the majority (89%) were assessed within two weeks. A large proportion (89%) received the diagnosis within a month of the referral date. The primary cause of delay in the clinical pathway is the delay in patients presenting to primary care. Only 50% of patients with symptoms synonymous with oral cancer presented to primary care within four weeks.

**Conclusion:** The 'open door' policy adopted by the DDUH is beneficial in terms of direct access and reducing waiting time, and allows for early detection of oral cancer, which helps to reduce morbidities and improve the overall survival rates in oral cancer cases.

**Key words:** Oral cancer, patient delay, referral pathway, Dublin Dental University Hospital

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