Chapter 1 - Introduction

1.1 Background and rationale

The focus of the introduction will be to describe the reasoning behind the research undertaken in this dissertation and describe the layout of the dissertation.

Head and neck squamous cell carcinoma is the sixth commonest cancer worldwide, with an annual global incidence of 780,000 (Murdoch, 2007). Despite recent advances in its treatment the overall five year survival rate has not improved over the last 15 years. It is therefore of importance to improve the care of patients wherever possible. The author has been working as a specialist in the field of Otolaryngology, Head and Neck surgery for the National Health Service (NHS) for the last six years, and has developed a strong interest in the subspecialty of Head and Neck cancer. Hence, this will be the theme of the dissertation and the research described within.

In the UK, patients with symptoms suggestive of a malignancy in the head and neck area (such as persistent hoarseness, sensation of feeling something in the throat, prolonged cough with or without blood stained sputum, difficulty in or pain on swallowing, difficulty breathing, unilateral ear pain, unilateral nasal blockage
or persistent sore throat) usually present to their general practitioner. They are then referred to a designated, rapid access suspected head and neck cancer clinic. They will be seen by a head and neck cancer specialist where a history and physical examination will be undertaken. If there are any suspicious lesions on examination, or the history is highly suggestive of an unseen cancer, the patient will be listed for an examination of the upper airways under general anaesthetic, and a biopsy performed if any abnormality is seen. If the diagnosis of cancer is made histologically, the patient will undergo investigations into the extent of the disease using radiological imaging, either computed tomography (CT) or magnetic resonance imaging (MRI). By this stage the full diagnosis will have been made, and then treatment options decided – surgical resection, chemotherapy, radiotherapy or combinations of the three modalities. Occasionally the patient will not be suitable for curative therapy so will undergo palliative therapy.

There is evidence to suggest that adopting a multidisciplinary team (MDT) approach benefits cancer patients. This can be in the form of a MDT clinic and/or a MDT meeting (MDM). The Calman-Hine report in 1995 stated that the management of cancer patients would improve if all were discussed at local multidisciplinary meetings (Department of Health, 1995).

In 2000 the Government's white paper on the future of cancer services in the UK was published – the NHS Cancer Plan (Department of Health, 2000). The paper
provided guidelines for the planning, commissioning and organization of services for cancer patients. Since then, numerous other guidelines have been published, with the aim to identify gaps in local provision and to check the appropriateness of existing services. In 2002, the National Institute of Clinical Excellence was commissioned by the Department of Health to produce guidelines on site-specific cancers. Improving Outcomes in Head and Neck Cancer - The Manual (IOG) was the eighth manual produced in the series, and related to the management of Head and Neck Cancer in the UK (Department of Health, 2002).

Head and neck cancer is described as being a particularly difficult cancer to manage. This is in part due to the heterogeneity of the tumours involved – up to 30 different cancer sub-sites have been identified within the head and neck category. This necessitates many disciplines to be involved in the average patient's management including numerous surgical specialties either working independently or often together (otolaryngology, maxillofacial, plastics/reconstructive, endocrine). The anatomical site of the tumour may render the patient unable to speak or swallow, and often disfigured after treatment. Therefore many other healthcare professionals in disciplines such as dietetics, speech and language therapy and cancer nursing are required to input into patients' management.

One of the key points made in IOG is the relative lack of multidisciplinary team meetings within head and neck cancer units in the UK. There is often a
recognized multidisciplinary team clinic, usually consisting of surgeons and oncologists, but a formalized MDM with all the healthcare professionals present was found to be lacking. The commission had previously made recommendations that were implemented in breast cancer, which had led to over 80% of hospital Trusts in the UK holding regular MDMs. This was deemed the gold standard and it was recommended the same should occur in the UK’s head and neck cancer units. Although this applied only to units managing 80 new cases per year, it was recommended that smaller units should have access to a MDM so all their new patients could be discussed (British Association of Head and Neck Oncologists, 2001).

The composition of the MDM is considered to be of importance. It is recommended that MDMs must include ever-present “core members”. For head and neck cancer, they are identified as:

- Surgeons (at least 3 designated head and neck surgeons, with access to reconstructive and microvascular free flap capability).
- Clinical nurse specialist (CNS)
- Clinical oncologist
- Radiologist
- Speech and Language therapist (SLT)
- Dietitian
- Pathologist
• Palliative care specialists
• Administration staff (secretary, co-ordinator, data manager)

Core members are expected to attend the majority of MDMs, which are to be held weekly in order to meet waiting time targets.

Extended members whose presence may also be required include:
• Anaesthetist
• Physiotherapist
• Occupational therapist
• Psychologist

It was recommended that a lead clinician should be identified, and this is supposed to be either a surgeon or oncologist with clinical responsibility for a large proportion of the patients. Discussion is to be encouraged between members of the MDM in order to agree the best treatment for every new patient presented. The roles of the radiologist and pathologist are to present their findings to a wider audience thereby improving communication between team members (previously a written or verbal report would have been sent just to the requesting Consultant). The role of the CNS was extensively described. Whereby it is acknowledged that their role had been traditionally administrative, it is recognized that they should be more patient-based and are important to represent the patients' personal views at the MDM. It is recognized that SLTs
and dieticians also play a vital role in the patients' management. SLTs are encouraged to see new patients prior to discussion at the MDM in order to gauge preferences for voice rehabilitation post surgery and to bring that information to the MDMs when making a final treatment decision. Dieticians are encouraged to see patients prior to the meeting, mainly to assess pre-operative nutrition requirements, and to educate other professionals in the subject.

Whereas the roles of healthcare professionals were briefly described, there have been no reports since to describe whether this is currently happening in modern clinical practice. Additionally, there are no data available that reflects what these recommendations have meant in terms of working amongst the MDM members, the function of the MDM or the benefits or disadvantages that the MDM may have conferred.

MDMs are supposed to allow easy and open exchange of opinion and ideas between different healthcare professionals, and between colleagues from the same discipline. However in practice this may not be the case. It has been observed that some healthcare professionals, including some of those in the core group, never contribute in MDMs (personal communication, Professor Martin Birchall, Professor of Laryngology, University of Bristol, 2005). They always attend however, possibly because it is part of their job description or possibly for other reasons.
Prior to undertaking the study, several MDMs were attended to observe the workings of the meeting. It was clear that the vast majority of staff present played no role in the meeting, nor contributed to any discussions that took place. There were several participants who made the majority of contributions and these were universally Consultant medical staff (Ear, nose and throat (ENT) surgeons, maxillofacial surgeons, pathologists, oncologists and radiologists). This confirmed the previous observations from Professor Birchall that a large proportion of non-medical staff (allied health professionals, AHPs) make no contribution to the MDM, and their role in the meeting is unlikely to be as that described within IOG.

There is therefore a need to study the function of MDMs in the UK. Given the very diverse and large group of healthcare professionals that are needed to manage head and neck cancer patients, the head and neck MDM is an ideal setting for studying this subject.

1.2 Aims and objectives of the study

The aim of the study was to explore the workings of the MDMs and the roles of its members in the care and treatment of patients with head and neck cancer. In order to achieve the aim of the study, the following objectives were defined:

- To explore what the individuals from each specialty use the MDM for – do they fulfill the role as described by IOG or do their roles differ?
• To identify any benefits gained from attending the MDM, and how this compares with the time before their introduction.

• To identify and explore any disadvantages that may exist with the current running of the MDM.

• To identify any improvements that could be made.

• To explore the reasons why some healthcare professionals do not contribute to the MDM.

• To identify whether the management of patients suffer as a result of this non-contribution.

• To explore the reasons for attending the MDM if not to contribute.

• To address any changes that need to be made to the existing meetings to specifically address this issue, which might make it easier for some to contribute more.

1.3 Context of the study

This is to be a case study of an MDM at the Department of Otolaryngology, Head and Neck Surgery at a large University Hospital in the UK (anonymised for the purpose of this dissertation). The tertiary referral centre chosen is uniquely suited for studying head and neck cancer. The incidence of the disease in the region is 16 cases per 100,000 per year, compared to a national average of 12 cases per 100,000 (Murdoch, 2007). Subsequently this centre is the largest centralized head and neck cancer centre in the UK, with an average of 450-500 new cases per annum. The Department is served by six designated head and
neck surgeons (three with training in Otolaryngology, three with training in Maxillofacial surgery), two Consultant Radiologists with a special interest in head and neck anatomy, two Head and Neck Cancer Nurse Specialists, one SLT, one dietician, one physiotherapist, two Consultant Oncologists, one pathologist, several anaesthetists and junior medical staff. There is one MDM specifically designated to head and neck cancer which takes place every Wednesday morning which was introduced in 2003.

1.4 Structure of the dissertation

The following chapters will provide a description of the current evidence for and against MDMs and MDT working, in head and neck cancer and other specialties. There will be a chapter depicting the research design and strategy and the reasoning behind them. The findings will be given in full and a discussion will follow on the important points identified in the research. Finally, conclusions will be drawn along with recommendations that may help improve head and neck cancer services in the UK.