

7.9 UPPER GASTROINTESTINAL CANCER

Introduction

Upper gastrointestinal cancers include cancer of the *oesophagus* and stomach. On average each year there are 200 cases of oesophageal cancer and *oesophagogastric junction* cancers. There are around 200 cases of stomach cancer diagnosed in Northern Ireland each year. While levels of stomach cancer are falling, the levels of cancer of the oesophagus are rising.

Risk factors for both diseases include tobacco. Alcohol is an additional risk factor for cancer of the oesophagus. Survival from both of these conditions is low. 13% of people with cancer of the oesophagus are alive five years after diagnosis and 17% of people with stomach cancer. Four out of five people (80%) with cancer of the oesophagus presented with difficulty swallowing. The public should be made more aware of this as a warning symptom for this condition.

Overarching standard 43:

All patients who require radical surgery for *upper gastrointestinal cancers* should have access to surgery appropriate to their disease and have their treatment planned and delivered by an appropriately trained and experienced team.

Rationale:

Patients with upper gastrointestinal cancers have better outcomes when their care is managed by appropriately trained and experienced teams. A recent report published by Northern Ireland Cancer Registry highlighted issues around the large number of surgeons undertaking small numbers of surgery for treatment of upper gastrointestinal cancers.

Evidence:

NI Cancer Registry (2007) Monitoring of Care of Patients with Upper GI Cancers in Northern Ireland in 2005 <http://www.qub.ac.uk/research-centres/nicr/FileStore/PDF/Fileupload,82042,en.pdf>

NI Cancer Registry (2005) Cancer Services Audit 1996 and 2001 Oesophagus and Stomach <http://www.qub.ac.uk/research-centres/nicr/FileStore/Fileupload,23733,en.pdf>

NHS Executive (2001) Guidance on Commissioning Cancer Services - Improving Outcomes in Upper Gastro-intestinal Cancers. http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4080278.pdf

Scottish Intercollegiate Guidelines Network (SIGN) (2006) Management of Oesophageal and Gastric Cancer, A national clinical guideline, NHS Quality Improvement Scotland <http://www.sign.ac.uk/pdf/sign87.pdf>

Branagan G et al. (2004) Early impact of centralisation of oesophageal cancer surgery services. *Br J Surg*, 91(12): 1630-32 <http://www.bjs.co.uk/bjsCda/cda/microJournalArticleDetail.do;jsessionid=3966C2306D6FD998D7622D5B02431681?DOI=10.1002%2Fbjs.4753&issueDOI=10.1002%2Fbjs.v91%3A12&vid=2>

Lerut T et al. (2005) Quality in the surgical treatment of cancer of the oesophagus and gastro-oesophageal junction. *Eur J Surg Oncol*, 31(6):587-94 [http://www.cancer-surgery.net/article/S0748-7983\(05\)00049-1/abstract](http://www.cancer-surgery.net/article/S0748-7983(05)00049-1/abstract)

Metzger R et al. (2004) High volume centres for esophagectomy: what is the number needed to achieve low post-operative mortality? Dis Esophagus, 17(4): 310-314 <http://www3.interscience.wiley.com/journal/118802068/abstract>

Karim-Kos HE et al. (2008) High-volume versus low-volume for esophageal resections for cancer: the essential role of case-mix adjustments based on clinical data. Ann Surg Oncol, 15(1): 80-87
<http://www.springerlink.com/content/57372206676174k1/fulltext.pdf>

Balzano G, Zerbi A et al. (2008) Effect of hospital Volume on Outcome of Pancreaticoduodenectomy in Italy. Br J Surg; 95(3): 357-362
<http://www.bjs.co.uk/bjsCda/cda/microJournalArticleDetail.do;jsessionid=3966C2306D6FD998D7622D5B02431681?DOI=10.1002%2Fbjs.5982&issueDOI=10.1002%2Fbjs.v95%3A3&vid=2>

Chowdhury MM, Dagash H, Pierro A (2007) A systematic review of the impact of volume of surgery and specialization on patient outcome. Br J Surg; 94(2): 145-161
<http://www.bjs.co.uk/bjsCda/cda/microJournalArticleDetail.do;jsessionid=3966C2306D6FD998D7622D5B02431681?DOI=10.1002%2Fbjs.5714&issueDOI=10.1002%2Fbjs.v94%3A2&vid=2>

Birkmeyer JD, Stukel TA, Siewers AE, Goodney PP, Wennberg DE, Lucas FL (2003) Surgeon volume and operative mortality in the United States. N Engl J Med; 349 (22): 2117-2127 <http://content.nejm.org/cgi/reprint/349/22/2117.pdf>

Edge SB, Schmiegel RE Jr, Rosenlof LK, Wilhelm MC (1993) Pancreas cancer resection outcome in American University centers in 1989-1990. Cancer; 71(11): 3502-3508
<http://www3.interscience.wiley.com/journal/112677757/abstract>

Glasgow RE, Mulvihill SJ (1996) Hospital volume influences outcome in patients undergoing pancreatic resection for cancer. West J Med; 165(5): 294-300
<http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1303846&blobtype=pdf>

Lieberman MD, Kilburn H, Lindsey M, Brennan MF (1995) Relation of perioperative deaths to hospital volume among patients undergoing pancreatic resection for malignancy. Ann Surg; 222(5): 638-645
<http://journals.lww.com/annalsofsurgery/toc/1995/11000>

Gordon TA, Bowman HM, Tielsch JM, Bass EB, Burleyson GP, Cameron JL (1998) Statewide regionalization of pancreaticoduodenectomy and its effect on in-hospital mortality. *Ann Surg*; 228(1): 71-78

http://journals.lww.com/annalsofsurgery/Abstract/1998/07000/Statewide_Regionalization_of_.11.aspx

Responsibility for delivery / implementation

HSC Board
Public Health Agency
HSC Trusts
Multidisciplinary teams

Quality Dimension

Safe & Effective

Management of patients with upper gastrointestinal cancer by appropriately trained and experienced teams leads to better outcomes including lower mortality and better survival.

Increasing specialisation offers valuable opportunities for enhanced clinical training, research, facilitates and recruitment into clinical trials.

Performance Indicator	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of oesophago-gastric cancer resections to be undertaken by a single specialist surgical team ¹³	MDM database	100%	March 2011
Percentage of pancreatic cancer resections to be undertaken by a single specialist surgical team	MDM database	100%	March 2011

¹³ A team should comprise no more than four surgeons.

Percentage of patients with a primary liver tumour discussed with a <i>hepatologist</i> prior to development of a management plan	MDM database	100%	March 2011
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NOTE: Performance indicators and targets will be reviewed and adjusted as necessary, in the light of the current Budget settlement for 2011/12 to 2013/14.

Overarching standard 44:

All patients with *operable upper gastrointestinal cancers* (i.e. cancer that can be treated by surgery) should have access to evidence based *chemotherapy* treatments together with their surgery.

Rationale:

Evidence based treatment options for *upper gastrointestinal cancers* include surgery, appropriate *neo-adjuvant* or *adjuvant therapy*, *palliative treatments* (including *chemotherapy*, *radiotherapy*, *laser therapy*, *biliary stenting* and *oesophageal stenting*)

There is evidence that the use of *neo-adjuvant* or *peri-operative*, *post-operative* chemotherapy is associated with improved survival in patients with upper gastro-intestinal tract cancers that can be treated by surgery.

Evidence:

NHS Executive (2001) Guidance on Commissioning Cancer Services- Improving Outcomes in Upper Gastro-intestinal Cancers

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4080278.pdf

Scottish Intercollegiate Guidelines Network (SIGN) (2006) Management of Oesophageal and Gastric Cancer, a national clinical guideline, NHS Quality Improvement Scotland <http://www.sign.ac.uk/pdf/sign87.pdf>

Malthaner RA, Collin S, Fenlon D (2006) Preoperative chemotherapy for resectable thoracic esophageal cancer.

<http://www.cochrane.org/reviews/en/ab001556.html>

Wong R, Malthaner R (2005) Combined chemotherapy and radiotherapy (without surgery) compared with radiotherapy alone in localized carcinoma of the esophagus. <http://www.cochrane.org/reviews/en/ab002092.html>

Department of Health (2004) Manual for Cancer Services

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4090081

Responsibility for delivery / implementation

HSC Board

Public Health Agency

HSC Trusts

Multidisciplinary teams

Quality Dimension			
Effective/Efficient			
<p>The appropriate use of neo-adjuvant or peri-operative chemotherapy reduces the risk of the cancer returning after surgery in patients with oesophageal or gastric cancers.</p> <p>The appropriate use of adjuvant chemotherapy following <i>resection</i> of pancreatic cancer lowers the risk of the cancer coming back.</p>			
Performance Indicator	Data source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with operable oesophago-gastric cancer receiving <i>neo-adjuvant / peri-operative chemotherapy</i>	MDM database	70%	March 2011
Percentage of patients with operable gastric cancer receiving <i>neo-adjuvant chemotherapy</i>	MDM database	50%	March 2011
Percentage of patients receiving adjuvant chemotherapy after <i>resection</i> of pancreatic <i>adenocarcinoma</i>	MDM database	50%	March 2011

NOTE: Performance indicators and targets will be reviewed and adjusted as necessary, in the light of the current Budget settlement for 2011/12 to 2013/14.