The time taken to clerk 30 patients and record their history using free-text records (median 24 minutes) and 33 patients using the proforma (median 27 minutes) was not significantly different (Mann-Whitney p=0.33). Doctors at both sites had an average of 6–7 interruptions which added a median of 12 additional minutes to each clerking. Interruptions were due to the following; 43% questions or interaction with staff; 20% answering bleeps; 12% looking up information; 7% filling in forms or getting results; 6% phone calls.

Of 117 patients clerked using free-text sheets, 21% had important information unavailable during post-take ward rounds, whereas only 8% of the 114 clerked using the proforma had missing information (p = 0.0039). The most common missing data were blood test results. (At Hope Hospital 70% lacked only the result of 8-hour creatine kinase or 12-hour troponin T tests but at the hospital using free-text notes, it was common for all results to be unavailable.)

We also sought the opinions of doctors and nurses at both hospitals concerning the two types of medical records. Of 32 doctors questioned at Hope Hospital, 84% preferred the proforma. Reasons for this preference included speed of use, completeness, efficiency of post-take rounds, ease of receiving transfers from the admissions unit and ease of emergency review of ill patients. Thirty-five doctors at the hospital using free-text history sheets were shown the Hope Hospital proforma and asked if they would prefer it to plain history sheets: 39% preferred the Hope proforma, 39% preferred plain history sheets and 22% were undecided. Of 77 nurses questioned on both sites, 90% preferred the proforma method of recording clinical information.

Comment: The medical admissions proforma improves the quality and quantity of documentation of medical admissions with no increase in the time spent on this activity. It facilitates and speeds up data retrieval and is preferred by most staff who use it or could use it. The proforma is an important tool for audit and may be used as a template for computerisation in the future. The other striking finding of this study is that junior doctors who are trying to deal with ill patients spend one-third of their time dealing with interruptions. The Hope Hospital admission proforma is available on the Royal College of Physicians website at www.rcplondon.ac.uk/college/hiu/recordsstandards. Readers may use this document (or the RCP document based on the Hope proforma – available on the same website) in their own hospitals.

**Contributors:** ROD devised the medical admissions proforma guided by feedback from medical colleagues at Hope Hospital. ROD and DAN designed this study; DAN collected data and both authors interpreted the results and wrote the manuscript.

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B RONAN O'DRISCOLL Consultant in General and Respiratory Medicine DANIA AL-NUAIMI

Department of Respiratory Medicine

Hope Hospital, Salford

Medical Student

## Impact of the two-week referral guideline on time to diagnosis and treatment in oesophago-gastric cancer

Upper gastrointestinal cancers have a poor survival rate of approximately 20% at one year in the UK.1 The Department of Health in England therefore introduced national guidelines in 2000, indicating that all patients with relevant symptoms should not wait longer than two weeks before being seen by a specialist team. The clinical value of the guidelines, however, is unclear and opinions are mixed as to their value.<sup>2-5</sup> We report here the results of an audit on the times from GP referral to first hospital visit, diagnosis and treatment extracted from the records of all patients referred with oesophago-gastric cancer to the University Hospital, Nottingham, in the 12 months before guidelines and the 15 months post guidelines. We also compared the numbers going on to surgery and the six-month survival rate in the two groups.

Results: Of 235 cases identified, 55% (60/109) pre-guidelines and 41% (52/126) post guidelines were referred as outpatients by their GP. It can be seen from Table 1 (page 387) that, after the guidelines were introduced, the time from GP referral to first hospital visit was reduced significantly (median 8 days vs 26 days, p < 0.001), as was time to diagnosis (median 11 days vs 36 days, p < 0.001) and treatment (median 64 days vs 105 days, p <0.001). Both cases referred for routine and urgent outpatient appointments were seen and investigated more quickly post guidelines. In the post guideline group 21 (40%) went onto surgery compared to 26 (40%) of the pre-guideline group. At six months, no significant increase in survival was detected (54% vs 68%).

Discussion: The introduction of the guidelines was associated with modest but statistically significant reductions in times to first visit, endoscopy and diagnosis (90% of patients were seen by 18 days, had endoscopy by 32 days and started treatment by 94 days, compared to 59, 82 and 215 days previously). Despite this, there was no increase in the proportions having surgery, chemotherapy or radiotherapy and no increase in survival rates at six months. The main delay occurred between diagnosis and treatment and this has remained unacceptably prolonged at over six weeks.

We feel the overall value of the guidelines is unclear at present. Larger studies are needed to assess whether the reductions in delays achieved without improvement in outcomes are sufficient to justify the service costs which are likely to increase with greater uptake of the guidelines.

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Professor of Clinical Epidemiology

MWH BEHAN
Research Fellow
G CAMPION
Research Assistant
NA KEATING
IT Support Assistant
Divisions of Public Health & Epidemiology and
Gastroenterology,
University Hospital, Nottingham

RFA LOGAN

## Audit of proton pump inhibitor (PPI) prescribing: are NICE guidelines being followed?

Proton pump inhibitors (PPIs) have revolutionised the treatment of peptic ulcer disease, <sup>1</sup> and although considered effective

and safe they should be used judiciously. In 1998, PPI prescribing accounted for £291 million of the NHS drug budget. Since the establishment of the National Institute for Clinical Excellence (NICE), guidelines on PPI prescribing have been introduced.2 The introduction of these guidelines, however, appeared to have little impact on clinical practice, so an audit of PPI treatment evaluating patients admitted on the acute medical take was undertaken. The study was conducted prospectively for a period of six months. A clinical pharmacist was involved who reviewed prescribed medication particularly in cases where the indication was not apparent.

One hundred patients (49 male) were identified who were prescribed a PPI either by their GP or a hospital physician. A range of PPIs were used: lansoprazole (75%), omeprazole (14%), rabeprazole (6%) and pantoprazole (5%). Fifty-three per cent of prescriptions were initiated by hospital physicians of whom 37% were from gastroenterologists.

Table 1. Times to first hospital visit, investigation and treatment for patients with oesophago-gastric cancer presenting as outpatients to Nottingham University Hospital.

		April 1999 – 2000 (before guidelines)					April 2000 – June 2001 (after guidelines)				
		Routine (n = 19)	Urgent (n = 41)	Time for 90% of patients	Total (n = 60)	IQR	Routine (n = 11)	2 Week (n = 41) <sup>§</sup>	Time for 90% of patients	Total (n = 52)	IQR
Time (median da	• •										
date of GP refe		00	4.5	<b>50</b>	26		4.4**	7**	40	0*	C 40
- to first hospital visit		80	15	59	26	11–61	44**	7** 7*	18	8*	6–19
- to first endoscopy		86.5	22	82	28	15–83	68	•	32	8.5*	6–28
<ul><li>to diagnosis</li><li>to positive biopsy</li></ul>		90 90.5	23 24	90 104	36 42	18–89 18–90	68 71	10* 11*	47 49	11* 18*	7–32 10–3
- to positive biopsy  - to initial treatment***		90.5 147 (15)	77 (30)	215	105	63–150	96 (7)	56** (28)	94	64*	43–8
		( ,	(,				(- /	()			
Numbers having surgery		12	14		26	(43%)	5	16		21	(40%
Numbers unsuita	able for any active										
treatment with curative intent		4	23		27	(45%)	6	19		25	(48%
Numbers alive 6 months after referral		16	25		41	(68%)	9	19		28	(54%)
Site and histolog	gical type:										
Gastric:	adenocarcinoma	15	9		24		4	16		20	
	other histology	_	_		_		2	_		2	
Oesophageal:	adenocarcinoma	3	23		26		5	16		21	
	squamous	1	7		8		0	8		8	
	other histology	0	2		2		0	1		1	
		19	41		60		11	41		52	

<sup>\*</sup> p <0.001, \*\* p <0.05 Mann-Whitney test, in comparison with same type of referral in April 1999 - March 2000.

IQR = interquartile range.

<sup>\*\*\*</sup> Figures in parentheses refer to numbers having any specific treatment (surgery, chemotherapy or radiotherapy).

<sup>§</sup> Includes four patients referred as urgent cases but not using the faxed 2-week wait form.