A Study of the Slot Wastage in a Sample Endoscopy Unit in United Kingdom: Analysis of the Causes

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Abstract

Background: Patients who do not attend (DNA) or cannot attend (CNA) outpatient endoscopy procedure appointments can be a source of resource wastage. This study is an analysis of the DNA and CNA rates of an endoscopy unit in a sample district general hospital with the aim of finding reasons for any under or over-utilization. It recommends some solutions to solve the problem.

Method: Using the hospital computer records, all patients who did not attend (DNA) or could not attend (CNA) their appointment from 1st January 2014 to 30th June 2014 for endoscopy during weekdays and weekend were identified retrospectively.

Results: There were 116 points available per week on average. There was thus 25% wastage in point utilization.

Conclusions: This study has shown that common issue for wastage has been poor communication. This lack of communication may be between the doctor and the patient, the endoscopy manager and the patient, or the doctor and the endoscopy managers etc.

Keywords: Endoscopy; Slot utilisation; Wastage; DNA; CNA

Introduction

There is not much published data to compare wastage of time slots in endoscopy units at different hospitals in the United Kingdom or even about the situation in individual units. Patients who do not attend (DNA) or cannot attend (CNA) outpatient endoscopy procedure appointments can be a source of resource wastage. This study is an analysis of the DNA and CNA rates of an endoscopy unit in a sample district general hospital with the aim of finding reasons for any under or over-utilization. It recommends some solutions to solve the problem.

Method

Using the hospital computer records, all patients who were recorded to have DNA or CNA their appointment from 1st January 2014 to 30th June 2014 for endoscopy during weekdays and weekend were identified retrospectively. The lists included those done by gastroenterologists, surgeons, nurses, urologists and chest physicians. Diagnostic gastroscopy [1], cystoscopy or bronchoscopy is weighed as 1 point, diagnostic colonoscopy or therapeutic gastroscopy weighed as 2 points and therapeutic colonoscopy is allocated 3 points in the list. Average list has 10 to 12 points depending upon the endoscopist. This study measured the slot ’points availability’ and compared it with the actual ’points utilization’. The difference between the two points was calculated as the ’wastage’. Then a root cause analysis was made for reasons of any wastage.

Results

There were 116 points available per week on average. In this study it was shown that when the chest physicians, surgeons and urologists requested the endoscopy, patient attendance was more than 90%. However, when patients were booked through the gastroenterologists, the attendance dipped below 90% in three out of six months and averaged at 75%.

There was thus 25% wastage in point utilization. When root cause analysis was done multiple correctable reasons were identifiable. These included lack of availability of endoscopist to do the procedures (1-11%), theatre closure due to equipment failure (9%), changes in appointment not recorded(5-7%), dearth of necessary equipment (4%), poor patient preparation through inappropriate fasting or bowel preparation (2-3%), and clerical error by the receptionist (1%).

Conclusions

This study has shown that an endoscopy unit is under-utilized almost by 25%. Many causes are identified but a common issue has been poor communication. This lack of communication may be between the doctor and the patient, the endoscopy manager and the patient, or the doctor and the endoscopy managers etc. Poor communication seems to be the most important factor in increased DNA and CNA rates. There are no studies to show that better communication will reduce DNA or CNA rates, but there does seem a potential in it to work as a single correctable factor.

This study has shown that DNA and CNA rates were higher if patients were booked through gastroenterologists rather than the
surgeons, chest physicians or the urologists. Most bronchoscopies were
done by chest physicians for suspected lung cancer. Likewise most
colonoscopy done by surgeons was for suspected colorectal cancer.
Urologists likewise were suspecting urinary bladder growths.
Gastroenterologists on the other hand were doing endoscopy for a vide
reasons including simpler and more benign conditions like dyspepsia
(which is many times functional), gastro-esophageal reflux, acid peptic
disease, inflammatory bowel disease and also gastro-intestinal cancers.
This wider choice of reasons for endoscopy, including benign and
functional diseases, could offer an explanation for higher DNA and
CNA rates for Gastroenterologists. Furthermore, at present in the
United Kingdom, there is a shortage of trained gastroenterologists who
endoscope.

The DNA and CNA rates in clinical outpatients have been described
in few studies but hardly any specifically relates to Endoscopy. National
Health Service Highland Scotland have with appropriate actions been
able to reduce their DNA rate from 8% down to 1% and the CNA rate
from 5 % down to 2% Our study is unique in that it identifies the
causes and recommends some solutions specific to endoscopy units.

Other solutions include; improving confirmation of endoscopy
appointments through a follow up call by the receptionist, allowing
patients to directly make appointments themselves for times that suit
them, having enough trained gastroenterologists who can do
endoscopy, back filling empty lists by appropriate holiday planning of
the Endoscopists and ensuring minimal equipment or technical failure.

There are many Joint Advisory Group (JAG) accredited endoscopy
units in the United Kingdom and our data pertains to one such busy
unit in a district hospital. It would be useful to have data from other
units as well, but one thing can easily be deduced based on our data,
that the accumulative Endoscopy slot wastage in the UK would be very
high. This causes a great financial burden to the NHS and if better
communication looks to have a potential to improve the situation, then
it is well worth it.

References

Pages/EndoscopyServicesRaigmore.aspx