

# Implications of miscoding urological procedures in an era of financial austerity – ‘Every Penny Counts’

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## Summary

**Objectives:** The study aimed to find out any inaccuracy in coding of elective urology procedures and associated financial implications.

**Design:** Retrospective audit and re-audit.

**Settings:** Introduction of payment by results was introduced in the NHS in England in 2002. This meant that hospitals are paid on individual patient basis according to their human resource group (HRG) rather than a block contract. Current coding system uses office of population census and surveys classification. These along with other variables determine the final human resource group code defining final payment.

**Participants:** None.

**Main outcome measure:** Retrospective analysis of coding for all inpatient urological procedures was performed over a period of two months. All documented Office of Population Census and Surveys codes were recorded and reviewed by urology trainee along with the head of professional coders. As a result of first analysis the deficiencies were identified and revised Office of Population Census and Surveys codes were used to generate the final human resource group codes. After six months a re-audit was done.

**Results:** In the initial study, 121 cases were reviewed. Twenty per cent of these cases were miscoded. The revised Office of Population Census and Surveys codes led to change of final human resource group code and hence recovery of a payment of £10,716. Analysis after six months showed a considerable improvement with incorrect coding reduced to 11%.

**Conclusion:** Our findings highlight potential discrepancies in coding which can lead to significant financial loss. It is important that surgeons involve and train the coding department so that coding errors can be avoided. This will put us in better position to deal with Nicolson Challenge.

## Keywords

Office of Population Census and Surveys codes, urological surgery, coding, financial implications

## Introduction

Classification of surgical procedures in NHS dates back to 1940s.<sup>1</sup> However, it wasn't until 1987 when

the first NHS procedural classification was published by the Office of Population Census and Surveys. One should understand the impact of these codes on day-to-day NHS working, as these codes have a vital role in research and data management as well as financial implications in any given trust.

Whenever a patient is admitted to undergo a surgical procedure he/she is allocated various codes. These include diagnostic codes from International Statistical Classification of Disease (ICD-10) as well as co-morbidities codes and the actual operative procedure (derived from Office of Population Census and Surveys 4.7 released on 1 April 2014). This information is put into computer software to generate the Final Healthcare Resource Group for that particular episode. The hospital is paid according to the final Human Resource Group. Factors which may influence the final tariff include age, length of stay and elective or emergency nature of procedure. Some of the common Human Resource Group tariff examples in urological surgery are shown in Table 1.<sup>2</sup>

Traditionally, coding is done by professional coders in each NHS hospital trust who get specific training for this purpose. Urology has a high turnover of patients on a daily basis and many of its patients are elderly with significant co-morbidities. It is therefore important that each procedure done on these patients gets coded accurately for correct payment. In previous years, various studies across the specialities including orthopaedics, neurosurgery and otorhinolaryngology have identified pitfalls in these processes.<sup>1,3,4</sup>

Khwaja et al. and Ballaro et al. looked into these processes in urological surgery and also concluded that hospital coding system were inaccurate and needed further improvement.<sup>5,6</sup> A decade on from those studies we once again look into these processes in the urology department of a busy district general hospital to see if key lessons have been learnt.

## Materials and methods

A retrospective study was carried out over a two-month period (October 2012 to November 2012). All procedures which were done in the dedicated urology theatre during that period were recorded. A list of Office of Population Census and Surveys codes as awarded by professional coders using Office of Population Census and Surveys v.4.6 for these procedures was obtained from the coding department. The same cases and operation notes were reviewed by a senior urology trainee using the same version of the Office of Population Census and Surveys codes. Both lists were compared with the help of a senior coding official and any discrepancies were reviewed and their financial implications were noted. After initial study, we made recommendations and after a period of six months of implementation of these changes, we re-audited to close the loop.

## Results

In the initial study using our database we identified 121 patients undergoing urological surgery during our defined study period. We found that 24 (20%) of these procedures were not coded accurately and 2 (1.6%) of them were not coded at all.

**Table 1.** Examples of some common OPCS codes used for urological procedures and their tariff.

Procedure	OPCS code	Tariff
TURBT	M42.1	£1386
TURP	M65.3	£1642
URS and laser fragmentation of ureteric stone	M27.1	£1310
Flexi URS and laser fragmentation of renal stone	M09.3	£2374

TURBT: trans-urethral resection of bladder tumour; OPCS: Office of Population Census and Surveys; TURP: Transurethral resection of Prostate.

**Table 2.** Details of various procedures which were not coded accurately.

Actual procedure	Coded procedure	Net loss
TURBT	Not coded	£873
Flexible URS, RGP, stent exchange	Not coded	£1310
Flexible URS and laser fragmentation of renal stone	Ureteroscopy and ureteric stone fragmentation	£1064 (seven cases)
Flexible ureteroscopy and stent removal	Endoscopic removal of prosthesis	£545

Twenty-four cases which were not coded appropriately were a mix of procedures including flexible cystoscopy, rigid cystoscopy, bladder biopsy, ureteric stent change and flexible ureteroscopy and renal stone fragmentation. Details of these procedures are shown in Table 2. The two cases which were not coded included a case of trans-urethral resection of bladder tumour and a case of flexible ureteroscopy, retrograde pyelogram and ureteric stent change. The reason behind both of these cases not being coded was case notes not delivered to the coding department. Some of the corrections did not result in financial gain for the hospital; however, eight of these corrected codes led to a net gain of £7993 and if we include two procedures which were not coded at all, the sum rises to £10,176.

## Recommendations and re-audit

Based upon our findings mentioned in the results above (which will be discussed in detail later in the article) we made two key recommendations.

1. Education of coding department with regard to specific urological procedures
2. Common procedures with Office of Population Census and Surveys codes to be printed and put up in theatre to be recorded on operative notes

A re-audit was carried out after six months to complete the audit cycle. We collected data for procedures done over one month in June 2013 and recorded any mistakes in coding of operative procedures. A total number of 27 cases were reviewed and only 3 cases were found to be miscoded; out of these three cases one case (flexible ureteroscopy and laser fragmentation of renal stone) led to net gain of £1014. One case which was not coded led to gain of £2374.

## Discussion

In the current financial climate where the NHS is facing financial cuts and has to make necessary

changes to deliver efficiently it is vital that we spend every penny carefully. Payment by results was one of the initiatives taken back in 2004 to not only create a sense of healthy competition among different trusts but also to have a national standard tariff of various procedures irrespective of their delivering authority.

One of the aspects of accurate clinical coding is to make sure that all the hard work done by the departments is paid off accurately, the so called Notes to Pounds Journey is as transparent as possible. However, we must not forget the non-financial aspect of clinical coding. Various departments do their annual audits and look at their performance over a period of time and one easy way to pull out data about a particular procedure is to use a specific code to generate the desired list, therefore any error in coding can lead to under- or overestimation of departmental performance. What one must also realise is that although coding is done by professionals who are trained, they are not medically qualified and most of the times they have to go through case notes to get appropriate information. Although in most of the hospitals we have moved into the digital era, in some places handwritten operation notes are still being used and if that information does not go accurately on 'operation title' or on discharge summary it can potentially affect the final outcome.

Looking through the literature we also found some other interesting points. Razik et al. in his recent study on day case orthopaedic surgery looked at a single orthopaedic procedure and found errors in approximately 47% of the cases leading to loss of £16,507.<sup>7</sup> Dalal et al. compared coding with their theatre database to see if procedures have been coded accurately and found around a quarter of procedures were not coded accurately.<sup>8</sup> Another study done in head and neck surgery by Mitra et al also revealed marked discrepancy in the whole coding procedure and found around 48% of procedures were miscoded.<sup>1</sup> Previous studies in accuracy of coding regarding urological procedures by Khwaja et al and Ballaro et al also showed similar outcomes.<sup>5,6</sup>

In our study, a decade on from previously published studies in urology,<sup>5,6</sup> we still find that problems exist in the process of coding. Urological procedures can be complex and sometimes a small change in the procedure can make the final code different, for example flexible ureteroscopy and laser fragmentation of ureteric stone have got far less tariff compared to flexible ureteroscopy and laser fragmentation of renal stone. If either of these procedures in operation notes heading are recorded as 'flexible ureteroscopy and laser fragmentation of stone', it is possible that it

may get coded as laser fragmentation of ureteric stone and hence change final payment. Therefore, it is important for a surgeon to make it clear in operation notes to help these allied professionals. We also noted that coding mistakes still occurred despite our efforts to make note of Office of Population Census and Surveys codes in operation notes and educate the coding department. Therefore, we encourage a continuous interaction between departments and local coding professionals or maybe devising an electronic system where while writing electronic operating notes one can select Office of Population Census and Surveys codes and patient comorbidities from a drop down menu to minimise the risk of miscoding.

#### Declarations

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**Guarantor:** SAK

**Contributorship:** ZC carried out the audit and literature search. SAK supervised the project. Both authors read and approved the final manuscript.

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