

# The aging urology population and its impact on hospital stay

## Abstract

**Introduction:** The aim of this service evaluation was to assess the impact of age on the length of stay for patients admitted as an emergency with visible haematuria in our trust.

**Method:** All patients admitted with visible haematuria to Mid Essex NHS trust over a 6 month period were reviewed and the length of stay (LOS) was calculated from date of admission and discharge and correlated with the age of the patient.

**Results:** The average length of stay for the overall group was 7.9 days with a large range of 0-85 days. A dramatic rise in length of stay can be seen as age increases, specifically over the age of 75.

**Conclusion:** There is a huge potential for both improving the patient experience and reducing demands on hospital capacity by addressing the elderly urological patient population and developing new ways of collaborative working.

**Keywords:** length of stay, haematuria, ageing population

Volume 3 Issue 4 - 2016

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**Received:** July 19, 2016 | **Published:** July 20, 2016

## Introduction

Since mid-2005, the UK population aged 65 and over has increased by 21%, and the population aged 85 and over has increased by 31%. The number of males aged 85 and over has increased by 54% since mid-2005, compared to a 21% increase for females.<sup>1</sup> In England any man reaching the age of 65 has an average life expectancy of 18.8yrs,<sup>2</sup> a women of the same age can expect to live for a further 21.2 yrs. This translates into an increasingly elderly cohort of patients with multiple comorbidities and polypharmacy. In 2012 the Kings Fund reported “the average length of stay increases directly with age: it is eight days for patients aged 65–74 years; 10 days for patients aged 75–84 years; and 12 days for patients aged 85 years or older”.<sup>3</sup> It has been demonstrated that multi-disciplinary team working such as including elderly care within orthopaedic departments is effective and improves outcomes.<sup>4</sup> This is now established practice. However it is only recently that this has been considered in other areas of surgical practice, specifically within urology.<sup>5</sup> The aim of this service evaluation was to assess the impact of age on the length of stay for patients admitted as an emergency with visible haematuria in our trust.

## Methods

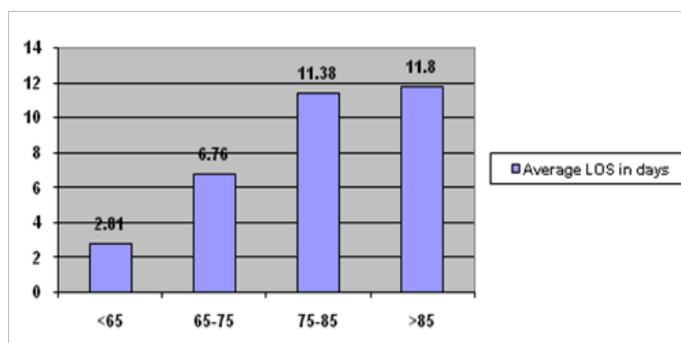
All patients admitted with visible haematuria to Mid Essex NHS trust over a 6 month period were included in this evaluation. This was a retrospective data evaluation using the hospital coding database as a source of information. All coding’s for haematuria were reviewed and the length of stay (LOS) was calculated from date of admission and discharge and correlated with the age of the patient.

## Results

In total 196 patients were admitted with visible haematuria over the 6 month period. The average age of the patients was 70.68 yrs with a range of 18-93 yrs (Table 1). The average length of stay for the overall group was 7.9 days with a large range of 0-85 days. The data was further broken down into the following age ranges: <65; 65-75; 75-8; >85. A dramatic rise in length of stay can be seen as age increases, specifically over the age of 75 (Figure 1).

**Table 1** Overall length of stay and demographics

Total Patients	196
Total LOS in days	1556
Average LOS in days (range)	7.939 (0-85)
Aver Age (range)	70.68 (18-93)



**Figure 1** Average length of stay by age range.

## Discussion

Involving care of the elderly physicians along with a multidisciplinary team has been shown to not only reduce medical complications of surgery but also reduce length of stay.<sup>6</sup> The preliminary study by Braude et al.<sup>5</sup> also demonstrated a reduction in complication rate and length of stay in urological patients >65 yrs. of age by the introduction of a geriatric liaison service. Increasing age, frailty and multiple comorbidities is now commonplace on surgical wards. There is a huge potential for both improving the patient experience and reducing demands on hospital capacity by addressing the elderly urological patient population. The results show an almost 4 times increase in length of stay from the <65 group to the >75. Further studies are required to ascertain what interventions will be useful in achieving better outcomes. Managing comorbidities within a surgical

setting will become increasingly challenging as increasing age continues. Not appreciating the wider holistic needs of elderly patients on our wards is detrimental not only to the individual patient but also to wider hospital services and thus the wider population. Stronger multi-disciplinary working with our colleagues in other specialities may help address these needs. It is essential that that we continue to develop new ways of working to treat the patient as a whole and not just a urological condition. Patient centred care provision must be strived for and having a standard pathway for urological patients that does not take into account the differing complexity of the aging population is flawed.

## Acknowledgments

None.

## Conflicts of interest

The author declares there is no conflict of interest.

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