Out-Patient Management and Non-Attendance in the Current Economic Climate. How Best to Manage Our Resources?

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Abstract
Outpatient non-attendance is a considerable source of inefﬁciency in the health service, wasting time, resources and potentially-lengthening waiting lists. Given the current economic climate, methods need to be employed to reduce non-attendance. The aim was to analyse outpatient non-attendance and determine what factors inﬂuence attendance. A prospective audit over a two-month period to a tertiary referral Urological service was performed to determine the clinical and demographic proﬁle of non-attendees. Of 737 appointments, 148 (20%) patients did not attend (DNA). A benign urological condition was evident in 116 cases (78%). This group of patients also accounted for the majority of new patients not attending (43/49). Patients with benign conditions made up the majority of clinic non-attendance. Consideration may be given to discharging such patients back to their general practitioner after one unexplained non-attendance until other alternatives of follow up are available.

Introduction
In 2008, an estimated 25,000 out-patient appointments were broken in our institution, at an estimated cost of €3,800,000. This is not only a waste of resources, but also patients do not receive the medical attention that they may require. Furthermore non-attendance increases out-patient appointment waiting times from one week up to six months. Thus patients who fail to keep their clinic appointments have a signiﬁcant negative impact on productivity, their own care and resources. Subpopulations of patients have been identiﬁed that are less likely to attend. These include younger, male patients, those from a lower socioeconomic status or those on government support. Patients with a background of psychiatric illness and those with a poor comprehension of their illness are also less likely to attend. Reasons provided for non-attendance include forgetfulness on the patients part, inadequate notification of the clinic date, trouble getting leave from work, child care responsibilities, transportation difﬁculties and long travelling distances, as well as those patients feeling too ill to travel. In addition some studies have indicated that non-attendance is due to apathy towards their condition. Despite attempts to reduce non-attendance rates by raising public awareness and by speciﬁcally addressing various causal factors, non-attendance remains problematic. Given the current economic climate and the potential for ﬁnancial constraints, we aimed to identify new factors which predispose to clinic non-attendance and identify if a certain subpopulation of Urological outpatients are less likely to attend further appointments, in an eﬀort to reduce non-attendance and maximize time dedicated to outpatients. Furthermore we highlight other possible strategies for patient follow up that could be implemented in the future.

Methods
A prospective audit of patients who failed to attend their clinic appointment to a tertiary referral Urology service was performed. Patients who contacted the hospital to cancel their appointment or reschedule were omitted from the study. The analysis was carried out over a two month period. Prior to this study, patients with unexplained non-attendance were offered further appointments. Data was gathered on patients attending to three separate consultant surgeon clinics that were held on separate days. Each consultant surgeon had an interest in general adult urology and a subspecialty interest (pelvic surgery, laparoscopic surgery or female urology). Information collected on patients was obtained from the patients chart and computerised booking system. Data gathered included: patient age, sex, diagnosis or presenting complaint, referral origin, previous pattern of non attendance and if they were post operative or not to the clinic. Benign conditions are deﬁned as those conditions not involving a diagnosis of cancer (e.g. incontinence, BPH, stone disease, erectile dysfunction), whereas suspected malignant conditions are those patients in whom the diagnosis is not yet established, but their presentation generates a need to exclude malignancy (e.g. haematuria, elevated PSA). For the purpose of this study, cases of suspected malignancy are categorized with the malignant.

Figure 1: Distribution of missed appointments according to primary diagnosis

Results
Patient demographics and diagnoses
Clinic appointments were made for 737 patients in the 2 month period; of those 148 patients failed to attend their appointment, representing 20% did not attend (DNA). Mean age of patients was 54.6 ± 15.9 years. Of patients that did attend their outpatient appointment are shown above (Figure 1).

No. of patients; DNA. Did not attend

New versus returning patients
Patients with benign conditions made up the majority of non attendance 116/148. There was 47 new referrals to the clinic that failed to attend. of which 40 (85%) of these had a benign urological condition and 7 (15%) had a suspected malignancy. No patients with a conﬁrmed malignancy failed to attend. There was 101 patients that failed to make a return appointment of which, 76 (75.2%) had a benign condition, 4 (4%) a suspected malignancy and 21 (20.8%) conﬁrmed cancer. Only 19 patients failed to attend for postoperative review, of which 18 (95%) had undergone surgery for a benign urological complaint, no patient with a malignancy missed an appointment (Table 1).

Single versus multiple missed appointments
Approximately two thirds of patients in this study had only missed one previous appointment, of which 78 (76.8%) had a benign condition. 7 (7.1%) a suspected malignancy and 24 (24.4%) a malignant. Of these 49 patients who had missed multiple clinic appointments, of which 9 patients had a malignancy, whereas 43 had a benign condition (Table 1).

DNA: did not attend. PSA: Prostate speciﬁc antigen

Patients with malignancy or suspected malignancy
Ou only 11 patients under investigation for a suspected Urological malignancy that DNA. This included 7 patients with elevated asymptomatic PSA levels, 3 patients with renal masses and 1 patient with haematuria (Table 2). There were 24 patients with confirmed malignancy DNA. This group accounted for 14.2% of non attendance and included: 14 patients with prostate cancer (diagnosis >3 years); 3 patients who had radical orthotopic neobladder surgery for transitional cell carcinoma (diagnosis >3 years), 2 patients who had undergone radical retropubic prostatectomy for periurethral carcinoma and 2 patients each that had a partial penectomy for perineal cancer and a transurethral resection of a bladder tumour (TURBT) all of these patients were well and on routine follow up (Table 3).

DNA: did not attend. Post-op: post operative

Discussion
Patient non-attendance at clinics varies but appears to be constant internationally, paediatric clinics report the lowest DNA rates (5-10%), while general practice and psychiatry the highest (42%). In hospital practice adult DNA rates are relatively constant at 20%. In our Urological department approximately 900 patients a year will miss an appointment, which cost the Urology department an estimated €128,000 in 2008. Furthermore this represents the equivalent loss of 20 outpatient sessions a year, increasing waiting times for future and returning patients up to six months.

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Multiple strategies have been tried to increase out-patient attendance popular and effective to date have been reminder calls or reminder and mailed letters 4. Frankel S, Farrow A, West R. Non-admission or non-invitation? A case-control study of failed admissions. BMJ 1994;308:379-82. 5. Casey RG, Quinnan GR, Flynn R, Granger R, McDermott TE, Thornhill JA. Urology out-patient non-attenders: are we wasting our time? Ir J Med Sci 2007;176:305-8. 6. Overbooking is another method for reducing the affects of non-attendance. If practiced with an understanding of the pattern of non-attendance, the loss of productivity is minimal. However overbooking can lead to increased in clinic waiting times and decreased patient satisfaction, ultimately increasing non-attendance rates in the future. 7. Kruse LV, Hansen LG, Olesen C. [Non-attendance at a pediatric outpatient clinic. SMS text messaging improves attendance]. Ugeskr Laeger 2009;171:1372-5. 8. Overbooking is another method for reducing the affects of non-attendance. If practiced with an understanding of the pattern of non-attendance, the loss of productivity is minimal. However overbooking can lead to increased in clinic waiting times and decreased patient satisfaction, ultimately increasing non-attendance rates in the future. 9. Potamitis T, Chell PB, Jones HS, Murray PI. Non-attendance at ophthalmology no-shows. Ann Fam Med 2004;2:541-5. 10. Roberts N, Meade K, Partridge M. The effect of telephone reminders on attendance in outpatient clinics. J R Soc Med 1994;87:591-3. 11. Macharia WM, Leon G, Rowe BH, Stephenson BJ, Haynes RB. An overview of interventions to improve compliance with appointment keeping for medical services. JAMA 1992;267:1813-7. 12. Irwin JH. Telephone reminders and their use looks promising. It is clear that the telephone clinic could be expanded to encompass a wide range of benign complaints such as incontinence, BPH, stone disease. While the implementation of the telephone clinic is feasible, clinical practice would have to adapt to meet potential limitations of the communication medium to ensure workload does not increase. Furthermore this method of follow up would require a greater level of patient participation and education. While non-attendance is clearly multi-factorial, we found that patients with benign urological conditions make up the majority of non-attendees compared to patients with a malignancy. Our results suggest that patients with benign conditions could be more apathetic towards their condition and are therefore less likely to attend. Given the current economic climate and the potential for limitation of resources and finances we suggest that the above patients be discharged from clinic if they fail to attend one appointment in an unexplained manner. This may have the substantial benefit of increasing clinic attendance rates and improving the care of patients who do in fact attend. Then perhaps when economic conditions improve, resources could be diverted to improve clinic attendance rates and the implementation of alternative methods of follow up.

References

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