

Quality improvement report

Information given to patients before appointments and its effect on non-attendance rate

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Abstract

Problem Wasted outpatient appointments as a result of clinic non-attendance, exacerbating outpatient waiting times.

Design Single centre, prospective, non-randomised, controlled study.

Background and setting Diabetes clinic in a district general hospital run by a consultant, one or two diabetes nurse specialists, a dietitian, and a podiatrist. Clinic receives 10-15 new referrals a week in a health district with a population of 340 000.

Key measure for improvement Non-attendance rate in 325 new patients who attended after the intervention compared with 1336 historical controls from the same clinic in the three years before the scheme.

Strategy for change Two weeks before their outpatient appointment new patients were sent an information pack telling them when and where to come, where to park, what to bring, who they will see, and what to expect. One week before the appointment they received a supplementary phone call.

Effects of change Telling patients what to expect reduced non-attendance rate overall from 15% (201/1336) to 4.6% (15/325), $P < 0.0001$.

Non-attendance rate was 7.3% (13/178) in those sent a pack but not phoned and 1.4% (2/147) in those sent a pack and phoned, $P = 0.01$.

Lesson learnt Giving new patients detailed information reduces non-attendance to almost 1%.

Background

Outpatient non-attendance is a common source of inefficiency in healthcare provision, wasting time and resources and potentially lengthening outpatient waiting times. Non-attendance occurs in all age groups and in people from various different social, cultural, and ethnic backgrounds; it affects all specialties and does not seem to be restricted to a particular healthcare sector.¹⁻³

Our problem and its context

The diabetes clinic for new patients in our district general hospital is run by a consultant, one or two diabetes nurse specialists, a dietitian, and a podiatrist and

receives about 10-15 new referrals a week from a health district of 340 000 residents. The greatest criticism we face from general practitioners and patients is the length of time patients wait for an appointment.

Previously, on receipt of a referral letter, patients were sent an appointment by the health records department, typically three to four months before their visit. Non-attendance rates were high, frustrating staff and wasting valuable appointments that might otherwise have been used to reduce outpatient waiting times. We speculated that improvements in informing patients about their forthcoming appointment might reduce non-attendance.

Strategy for change

As previously, on receipt of a referral letter, patients were sent an appointment some three to four months before their appointment. Two weeks before this appointment patients were sent detailed information outlining their forthcoming visit, and one week before the appointment they were phoned.

The information pack was written in large type and in simple language. The first page stated the name of the clinic, the doctor's name, the precise location of the clinic, the day, date, and time of the appointment, where to park, and what to bring. The second page described exactly what would happen to the patient, from a greeting by the clinic nurse to blood tests and departure. Page three explained what would happen after the appointment during a structured diabetes education programme over five weeks, again specifying who they would see, when, and where, and then similar details for the discharge assessment clinic and the discharge process. Page four stated "our aims," a mission statement, and specified what number to phone if they are unable to attend; and page five invited positive or negative feedback about our service and was accompanied by a stamped addressed envelope directed to the general manager for medicine. The final page was a flow diagram summarising each step of the patient's visit with boxes to be ticked by hospital staff as each step in the process was completed.

The phone call one week before their appointment confirmed receipt of the pack and their intention to attend their appointment.

Process of gathering information and key measures

We compared non-attendance rates after our intervention with rates in the same clinic over the preceding two to three years to try to ensure that any change after our intervention was not a result of some underlying temporal trend in non-attendance rates in this clinic. In addition, we also examined non-attendance over the intervention period in another clinic to establish that any changes in our clinic were not the result of some more generalised change affecting all clinics within the hospital.

Non-attendance rates were expressed as percentage of total appointments (attenders plus non-attenders plus cancellations) and were compared by χ^2 tests with Yates's correction.

Effects of change

In 325 consecutive patients, all of whom were sent the patient information pack, 147 (45%) received information pack plus follow up telephone call and 178 (55%) received information pack without telephone call. Patients did not receive a follow up call if we were unable to obtain a telephone number from the general practitioner or the hospital information system, if they were known not to have a telephone, or if after repeated calls (typically three or four) the secretary was unable to contact them. The historical control group comprised 1336 patients who had been sent appointments for the same clinic in the two to three years before the study. None of these patients had received an information pack or phone call.

Overall, the information pack was associated with a significant reduction in non-attendance. In new patients who were given information before their appointment (with or without phone call) 4.6% (15/325) did not turn up compared with 15% (201/1336) of those who had received neither pack nor phone call ($P < 0.0001$). Of the new patients who received both information pack and phone call, 1.4% (2/147) did not attend compared with 7.3% (13/178) who received information but no phone call ($P < 0.01$).

Lessons learnt

Outpatient non-attendance is common, wastes time and resources, and lengthens waiting times. Reducing non-attendance offers an opportunity to make better use of healthcare resources and to reduce waiting times.

Our study shows that fully informing patients about their appointment dramatically reduced outpatient non-attendance. Non-attendance rates of 15-19% may be reduced to about 7% by sending patients information. Moreover, a further reduction in non-attendance to about 1% may be achieved by following up information with a telephone call one week before the patient's appointment.

Non-attendance in our historical control group was high (15-19%) and remarkably similar to the rate in our hospital as a whole and to that of a neighbouring university hospital (both about 15%). This suggests that non-attendance in our clinic before the information pack was representative of non-attendance in other

Key learning points

Before an appointment if patients are told by post what to expect, who they will see, what to bring, and where to park non-attendance rates can be reduced to around 7%

In addition, phoning patients one week before their appointment can further reduce the rate of non-attendance to around 1%

clinics and in other institutions. The non-attendance rate over the preceding three years in this clinic was 9%, 13%, and 19% for the years 1996-8, which suggests that the dramatic fall after introduction of our information pack and phone call was unlikely to be a result of a background trend in non-attendance rates. Moreover, although our diabetes review clinic catered for a different group of patients (follow up patients), non-attendance rates were similar to those in the new patient clinic, the hospital as a whole, and the neighbouring university hospital before the study and showed no sign of decreasing over the study period. This suggests that the fall in non-attendance in the new patient clinic was likely to have been as a result of the information pack and phone call and not the result of some coincidental process favourably affecting non-attendance in all the hospital's outpatient clinics.

It is possible that the smaller reduction in non-attendance seen in patients who received the information pack but were not phoned was not a consequence of not being phoned but of some other factor associated with not having a telephone, such as poverty. This is unlikely as only a minority of patients who were not phoned did not have a telephone.

Potamitis et al found that over a quarter of non-attendance could be attributed to clerical error and nearly a fifth to patients forgetting appointments and suggested that a simple postal reminder could prevent 40% of non-attendance.⁴ In practice, however, Majeed and colleagues found that reminder letters were of only limited benefit.⁵ Livianos-Aldana et al found that the shorter the time interval between the appointment letter and the appointment, the lower the non-attendance rate.⁶ Like us, Seow et al found that personal contact together with an information pack reduced non-attendance, but in their study an information pack alone was not effective.⁷ It would seem therefore that timing and content of material sent to patients is important and that personal contact increases the benefit obtained from an information pack alone.

In addition to several hours of secretarial time, there were some minor additional costs for materials and phone calls associated with our project. Anecdotally, however, these seem to have been more than offset by reductions in the number of letters concerning non-attendance, cancellations, rescheduled appointments, patient and general practitioner follow up calls about missed appointments, and, most importantly, more effective use of existing appointment slots.

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NICE: faster access to modern treatments? Analysis of guidance on health technologies

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Introduction

The National Institute for Clinical Excellence (NICE) was set up as a special health authority for England and Wales in 1999. Its role is to provide patients, health professionals, and the public with authoritative, robust, and reliable guidance on current "best practice." It has three main functions: to appraise new technologies, to produce or approve guidelines, and to encourage improvement in quality. NICE was first announced in the new Labour government's white paper *The New NHS*.¹ As a special health authority it is part of the Department of Health. NICE marks an innovation internationally in that while some other countries have bodies to provide advice on which new health technologies to use, NICE is the first national body with power to issue guidance covering the full range of health technologies.² Guidance from NICE applies to the NHS in the same way as guidance from other parts of the Department of Health; while health authorities are required by statute to take account of but not necessarily follow guidance, general practitioners have greater discretion.³

NICE is a relatively small organisation with just under 30 members of staff and a budget of around £10m which covers various "inherited projects" (mainly to do with audit). NICE relies heavily on unpaid input in the form of seven non-executive directors and 46 members of its appraisal committee, which is made up of doctors, NHS and commercial managers, academics, nurses, and patient representatives (full details on www.nice.org.uk). NICE is largely a "virtual" organisation relying on a small office and a large network, centred on electronic communication, and contracting out specific tasks.

Transparency

NICE aims to be transparent, not least by publishing all guidance and background appraisals on its web page (www.nice.org), the source of all the guidance discussed here. Minutes of board and appraisal committee meetings, along with membership, supporting documents, and appeal proceedings are published on the website. The only exceptions are submissions that industry deems "commercial-in-confidence." Because of

Summary points

Of the 22 health technologies on which NICE had issued guidance by March 2001, it recommended against use in three (with a change of judgment on zanamivir)

The guidance recommending use of the 19 other health technologies cited clinical benefit in all instances but could cite cost per QALY in only around half

Restrictions on the recommended use of most health technologies (for instance, in most severely ill patients) helped keep the cost per QALY below around £30 000, with only one exception—riluzole for motor neurone disease, which had a cost per QALY of £34 000 to £44 000

NICE's provisional recommendation against the use of beta interferons or glatiramer acetate for multiple sclerosis cited its high cost per QALY in relation to technologies previously appraised

The net cost of implementing NICE's guidance was around £200m, or less than 0.5% of annual spending on the NHS

advance leaks of three appraisals (all unfavourable to the technology), in early 2001 NICE decided to publish its provisional technology appraisals⁴ as well as final appraisal documents.

The Department of Health selects health technologies for assessment by using four criteria: possible health benefit, links to health related policies, impact on NHS resources, and the added value of NICE guidance.⁵ New health technologies are identified for the Department of Health by the National Horizon Scanning Centre in the University of Birmingham. The task of NICE is to make recommendations on use in the NHS of particular health technologies based on