

# The cost and advantages of establishing an age-sex register

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**SUMMARY.** The advantages and disadvantages of different methods of creating an age-sex register are described. The cost of setting up such a register in a NHS practice with 10,000 patients is shown, and it is suggested that financial advantages may cover the costs involved.

### Introduction

**P**INSENT (1968) described how to prepare index cards from NHS envelopes and the index cards held by the family practitioner committee, and how to deal with records without dates of birth. However, he gave no indication, at that time, of the cost of setting up a register and how many man-hours were involved.

Goodman (1975) pointed out that to start an age-sex register is a formidable task in an established practice and costs at least £50. He did not mention what size of practice could be dealt with for this sum. He was mainly concerned with how established age-sex registers were being used at that time.

We found no publication giving detailed costs of creating an age-sex register, or advice on the best way to start. We realized, however, that the Birmingham Research Unit of the Royal College of General Practitioners is pleased to see people to show them its age-sex register and to give advice on forming new ones.

### The creation of an age-sex register in a practice of 10,000 patients

Initially, two medical students were employed for about five weeks, for 30 hours per week each, to make the index cards from our NHS records. Their work was

complicated because 1,500 record cards are kept at a branch surgery and over the years duplication of records has occurred, resulting in files for the same patient being at both branch and central surgeries. Duplicate files were found for married women who had previously registered in their maiden names.

The students worked extremely hard and produced over 600 queries, many of which we felt were due to fatigue, lack of local knowledge and lack of knowledge of our local family practitioner procedures. We thought at first that we had made a mistake in employing external help but probably in a practice with 10,000 patients only one or two ancillary staff would be experienced enough to create an age-sex register with fewer queries being found. To use one's own staff in a practice of this size would mean a senior ancillary working 30 hours per week for ten weeks. We concluded that outside help is probably the best way of doing the initial groundwork.

The FPC supplied most of the dates of birth which were not recorded. We still have no date of birth for 16 patients. In the instances where the family practitioner committee could not help us we are making direct contact with the patients rather than waiting for them to come to the surgery. After rechecking the medical notes—particularly the enclosed letters which often revealed the date of birth—we wrote to the patients or telephoned them. At first we put a green sticker on the front of the NHS envelope indicating the absence of the date of birth, so that a partner could ask the patient when he came to the practice. However, we found that this was soon forgotten and that direct contact was the best way of obtaining every patient's date of birth.

Dates of registration revealed interesting problems. After working through the 600 queries, we discovered, with the help of the FPC, 95 patients who were unaccounted for by the FPC. Their envelopes were stamped with various dates since 1947, which showed that they were in fact registered. We had 20 patients who were coming regularly to the practice at this time who for some reason had never been registered. These

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**Table 1.** Time and cost of establishing an age-sex register.

Medical students (300 hours)	£200
Two practice staff (60 hours each)	£200
Senior receptionist (80 hours)	£100
Cabinets	£ 58.70
Index cards	£ 8.30
<b>Total</b>	<b>£567</b>

patients were registered as they came in or were written to. It is unlikely that we will be paid in arrears for the 95 patients thought to be registered but of whom the FPC has no record. If they are still alive, then there has been an administrative mistake and it is possible that we will eventually have 95 new registrations which will represent significant additional income. The FPC is trying to trace these patients.

Seventy per cent of staff costs were reimbursed on money paid both to the medical students and our own staff, so that the actual net cost to the practice was £217. This residual sum also formed a practice expense for income tax.

If a family practitioner committee were not prepared to reimburse these costs, the gross cost would be £567, which would be prohibitive to many general practitioners (Table 1).

The financial advantages were about £50 a year from the 20 new registrations, and a possible further £300 a year should we register all of the 95 patients we are querying. Even with the 20 new registrations that have definitely been made, it can be seen that this pays for the establishment of the age-sex register over six years, and it seems likely that at least a further 20 patients will be found among the 95, reducing the time to pay for an age-sex register by new registrations to three years.

It is essential that, during the period of the search, records are kept of all notifications of change of name, address and removal of patients from partners' lists. Many of the patients not found after the initial search were once-only patients, that is, temporary residents, where a single A5 card was used instead of a temporary resident form. The assumption was made that the patient was registered but that his main files were missing. Having discovered this, by tightening up our control of unfamiliar patients, we should be able to increase our income significantly. This would be of even greater relevance in holiday areas.

The practice staff and the FPC are both to blame for lax control of the records of some patients and we suggest that a regular check of files against an age-sex register would be useful although time-consuming. Outside clerical help could be employed for this.

We feel that the creation of an age-sex register has enough advantages to recommend it even if the register is used relatively little. Our records have been stream-

lined and at least 400 single useless A5 sheets thrown away. The time taken to complete the register was seven months, from July 1976 to February 1977. The cost was £217, but although expensive, the register may actually pay for itself.

#### References

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## Urinary infection in boys— a three-year prospective study

Seventy-three boys who presented to their general practitioners over the course of one year with symptoms of urinary tract infection and were found to have bacteriuria were referred to a three-year prospective study. This included clinical and radiological investigations and monitoring of the preputial flora and mid-stream urine culture at monthly intervals. Twenty-two (30 per cent) of the boys had radiological abnormalities of the urinary tract; six had pyelonephritic changes. Only two required urinary tract surgery. Several findings of the study suggest that the natural history of the disease in boys is different from that in girls.

The *Proteus* species predominated as the infecting organisms. Culture of swabs from the preputial sac, and comparison with matched controls, suggested that the source of infection in boys is the prepuce or urethra rather than the bowel as in girls. Recurrence of infection in the absence of radiological abnormality was rare; 51 boys (70 per cent) had no recurrence throughout the follow-up period. There was evidence that recurrence in boys is related to the persistence of gram-negative organisms in the urethra, revealed by low bacterial counts on midstream culture, and it is suggested that in boys urethral infection may be as important as bladder bacteriuria.

#### Reference

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