

# Primary care units in A&E departments in North Thames in the 1990s: initial experience and future implications

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## SUMMARY

**Background.** In 1992, the Tomlinson Report recommended a shift from secondary to primary care, including specific primary care provision in accident and emergency (A&E) departments. Availability of short-term so-called Tomlinson monies allowed a number of experimental services. A study of the experience of A&E-based staff is reported to assist general practitioners (GPs) and purchasers and identify areas for further research.

**Aims.** To find the number and scope of primary care facilities in A&E services in North Thames; to find factors encouraging or inhibiting the setting-up of a successful service; to examine the views of a range of A&E staff including GPs, consultants, and nurses; and to suggest directions for more specific research.

**Method.** A postal questionnaire was sent to all North Thames A&E departments, and an interview study of staff in one unit was arranged, leading to a questionnaire study of all GPs employed in North Thames primary care services in A&E. This was followed by interviews of staff members in five contrasting primary care units in A&E.

**Results.** By mid-1995, at least 16 of the 33 North Thames A&E departments ran a primary care service. Seven mainly employed GPs, the others employed nurse practitioners (NPs). Problems for GPs included unclear role definition and their non-availability at times of highest patient demand. GPs' reasons for working in A&E sometimes differed from the aims of primary care in an A&E service. Staff interviews revealed differing views about their role and about use of triage protocols. Ethnicity data were being collected, but not yet being used, to improve service to patients.

**Conclusions.** A number of benefits follow the introduction of primary care practitioners into A&E. Different models have evolved, with a variety of GP and NP staffing arrangements according to local ideas and priorities. There is some confusion over whether these services aim to improve A&E-based care or to divert it to general practice. Cost information is

*inadequate so far, though the use of GPs has shown the possibility of economy. Appropriate location of services requires clearer identification of costs. This may be possible for the proposed primary care groups.*

*Keywords: primary care; accident and emergency; general practitioner; nurse practitioner; cost-effectiveness.*

## Introduction

THERE is a long history of attempts to control the inexorable rise in accident and emergency (A&E) attendances.<sup>1</sup> The problem was again addressed in the Tomlinson Report on London's health services.<sup>2</sup> One of the report's key thrusts was the shift of resources from secondary to primary care. The development of primary care units within A&E departments was specifically recommended as a way of giving more appropriate care. A promising model was in place at King's College Hospital<sup>3</sup> (Box 1), where general practitioners (GPs) worked shifts within the A&E department, co-operating with surrounding GPs and other primary care agencies.

Post-Tomlinson projects within inner London were allocated new money for up to five years. Successful projects were to receive mainstream funding at a later date.

In order to guide future developments, the new North Thames Research and Development (R&D) Directorate commissioned a worldwide systematic review of the cost of alternative models of care for primary care patients attending A&E departments, together with a local regional study of the day-to-day working of primary care units in A&E. In 1995, the North Thames region served a population of some 6.9 million and included 33 A&E departments and approximately 3800 GPs.

The systematic review has been reported elsewhere.<sup>4</sup> Only 17 studies published between 1978 and May 1996 met the inclusion criteria. The key findings were:

- Specially designed primary care projects are associated with reduced waiting times and increased patient satisfaction.<sup>5,6</sup>
- GPs working in A&E units incur fewer costs than junior A&E staff, particularly for investigations and referrals.<sup>5-7</sup>
- Attempts to divert patients away from hospital A&E units to primary care do not necessarily reduce overall costs.
- The unit cost of patients attending primary care A&E is small and likely to be comparable with that of patients attending general practice.<sup>4</sup>
- Generally relevant cost data were not available as units have not been set up to evaluate their cost-effectiveness. There is as yet no evidence regarding the cost-effectiveness of NP projects.

In this paper, we describe the findings of the regional study, which aimed to establish the scope of primary care A&E services in North Thames, seek factors that enable or inhibit establishment of services, and identify fields needing more detailed study.

## Method

The project was carried out jointly by members of two academic

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departments of general practice at the Royal Free Hospital and at Imperial College (previously Charing Cross & Westminster Medical School until August 1997). We worked together in three phases: the initial questionnaire survey was shared (phase A), and the Royal Free group then looked for factors acting as barriers and enablers to the introduction of primary care services in A&E, concentrating on the experience of GPs working in A&E (phase B). They interviewed GPs and other key staff in one A&E unit and, based on these interviews, developed a postal questionnaire to the GPs in the remaining six sites.<sup>8</sup>

Meanwhile, the Imperial group purposively sampled five primary care projects contrasting in their funding and staffing (phase C): two involved GPs, and three involved nurse practitioners (NPs). During 22 semi-structured interviews, they studied organization and management, triage, and service provision for ethnic minorities. They then analysed the data for recurrent themes. Findings about ethnic minority issues are reported more fully elsewhere.<sup>9</sup>

## Results

### Phase A: postal questionnaire (conducted mid-1995)

Thirty-one out of 33 A&E departments in North Thames replied (94%); 16 of these reported a primary care project of some kind (Figure 1). Five of these were close to the King's model; all were funded with 'Tomlinson' money. Three other 'Tomlinson' projects were somewhat different. One was a separate GP unit on an A&E site, and a common triage point was the only link with the main department. The second involved NPs in addition to GPs. (These were available at times when no GPs were present.) The third employed NPs only. Table 1 shows the reported primary

- A philosophy that accepts that patients have a right to choose when to attend A&E, and that care provided should be appropriate for the patient's immediate needs.
- Triage process to prospectively identify patients with primary care needs.
- Staffed and led by GPs.
- A philosophy of educating other A&E staff about the role of primary care.
- Strong links with associated hospital and community services, including local GPs.
- Rigorous selection/recruitment of GPs.
- Continuing programme of audit and professional development for GPs involved in the service.

Box 1. The criteria given by the King's College Hospital Project for their model of a primary care service in A&E.<sup>14</sup>

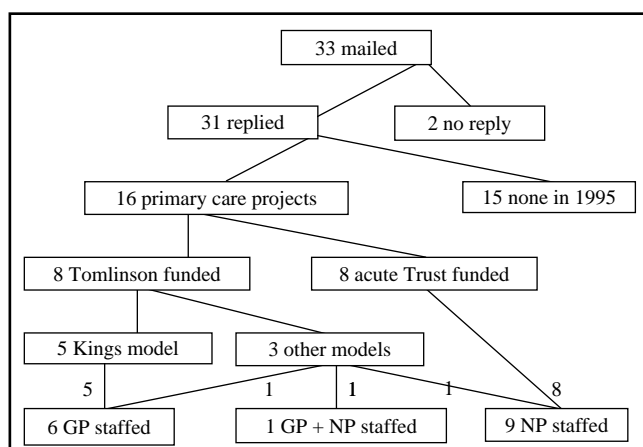


Figure 1. Phase A: questionnaire survey of 33 North Thames A&E departments.

care workload, based on A&E attendance, and the wide range of the proportion triaged as primary care. Since none of these projects provided a 24-hour service, these data reflect a combination of workload and availability. The remaining eight projects, all employing NPs, were almost entirely funded by the relevant acute Trusts.

### Phase B: barriers and enablers to a primary care in A&E project

The first part of this phase concentrated on a service where the GP input had been reduced from the original level. Key staff were interviewed, including six of the seven GPs; five of these had by now left A&E employment. This department offered relatively low rates of pay (clinical assistant) and staff recruitment and retention was a problem. Subsequently, it was decided not to re-launch the service because of the difficulties in recruiting at times of highest 'primary care' demand.

In this part of the study, we identified a number of 'barriers' and suggested 'enablers' for the successful implementation of primary care services in A&E (Box 2). To seek the generalizability of these views we sent a postal questionnaire to the 63 GPs in the other six North Thames projects. Most views found support from the 36 responders (57%); no new barriers or enablers were identified.

Prominent among the barriers was unclear role definition. Roles were variously perceived between A&E staff and GPs, and among GPs themselves. Triage criteria were not clearly recognized. Even with clear triage criteria, the need to use all available staff for direct patient care in a busy department, together with the tendency of GPs to choose cases interesting to them, compounded this apparent role confusion. Some GPs worked in A&E in order to see non-primary care patients. Some remarked that if they were (only) providing primary care then this was best done in the patient's own practice with better longitudinal continuity.

A few GPs found that they lacked their accustomed autonomy and control, seeing this as a barrier to the effective running of a primary care facility in an A&E service. This view was not supported in the questionnaire survey.

An important barrier identified by consultant staff was the non-availability of GPs at times when the primary care workload was highest because of either unsociable hours or practice commitments. Some GPs also found their practice commitments a barrier, even employing locums for their practice to enable them to work in A&E. However, few postal responders reported conflict between A&E and practice commitments.

Many of the enablers clearly address the barriers. However, some needs, such as appropriate accommodation, a primary care project team with dedicated nursing staff, and regular properly resourced team meetings, reflect the desire to bring some successful features of modern general practice into the A&E setting. We hope that addressing these will contribute to the successful setting-up and implementation of future services.

### Phase C: 22 staff interviews in five contrasting primary care in A&E projects

**Organization and management.** Role ambiguity was confirmed, with reports of GPs looking for a change from their normal practice experience when working A&E shifts. There was a contrast in training between GPs and NPs. The GPs were employed part-time on a sessional basis and generally reported less training than the NPs, who were full-time and more formally trained. Trusts only paid GPs for clinical sessions and not for educational time out of their practices. NPs themselves fell into two contrasting groups: those with primary care training and orientation were

**Table 1.** Reported annual workload in the eight Tomlinson funded primary care units within A&E departments in 1995: North Thames Region.

Hospital	Total number of patients	Percentage designated as primary care	Number of new primary care patients seen in primary care units
P (GP)	61 000	3	1920
Q (NP)	40 000	NA	2800
R (GP)	60 000	16	960
S (GP)	52 000	31	3800
T (GP)	40 000	45	1200
U (GP)	84 000	23	2160
V (GP)	80 000	23	3600
W (GP + NP)	62 000	NA	NA

NA = data not available.

#### Barriers

Recruitment problems (lack of suitable GPs)  
 Short-term funding  
 Unclear role definition  
 Conflict between GP autonomy and A&E employee status  
 Rostering problems (GPs unavailable when most needed)  
 Inadequate remuneration  
 Conflict with practice commitments

#### Suggested enablers

Across-the-board staff support for aims of primary care project  
 Clearly defined aims and objectives for the project  
 Planning input from both A&E staff and GPs  
 Clearly defined and agreed professional status and title for GPs  
 Appropriate accommodation  
 Agreed triage process  
 Primary care project team with dedicated nursing support  
 Regular, properly resourced project team meetings  
 Relevant and meaningful audit, with clear aims  
 Defined leadership and accountability  
 Appropriate orientation, training, and feedback

Box 2. Barriers and suggested enablers to the successful implementation of primary care services in A&E.

more interested in health promotion, while A&E-trained NPs preferred to offer a minor injury service.

Information systems generally did not enable identification of primary care records and costs separately from the A&E department as a whole. All five units studied had undertaken local evaluations, but significant subsequent change seemed primarily owing to other pressures, such as funding and workload, rather than to the evaluation findings.

*Triage.* Protocols were available in each unit but seemed to have limited practical relevance. Triage was not confined to the triage desk; primary care practitioners, both GPs and NPs, often overrode nurse triage decisions and chose patients according to their own interests and perceived skills. This complemented other findings of role confusion and seeking work beyond the scope of primary care. However, change was anticipated at all units with the imminent finalization of new national triage guidelines<sup>10</sup> (announced just after our study).

In addition, triage to select primary care patients generally only happened while the primary care units were open. Hence it was not possible to assess potential demand at other times.

*Ethnic minority issues.* We tried to establish:

- the level and type of ethnic monitoring being carried out,
- how the data were used,
- staff recruitment and training policies in place, and
- written material available and the availability of interpreting services.

All units were collecting data on ethnicity. Interpreter services and written materials in different languages were generally available. This, with the use of patient advocates, was evidence that the needs of patients from ethnic minorities were acknowledged. However, this preliminary investigation suggested that recording of ethnicity was seen as difficult and, arguably, not a high priority. None of the units arranged formal training for staff to gain an appreciation of issues facing patients from ethnic minorities, and only one reported actively recruiting staff from ethnic minority groups.

## Discussion

Specific primary care services had been set up in over half of all North Thames A&E departments by 1995. Of these, more than half involved NPs (usually employed full-time), and generally offered more restricted, protocol-based services over longer hours than the GPs in the other services. However, questionnaire, and especially interview, data highlighted a tension between two underlying service aims — whether to give a better service and thus risk attracting more demand with little prospect of extra funding, or whether to provide a service aiming at diverting patients elsewhere, particularly to general practice. A rational solution must involve GPs and NPs, and A&E departments. The recent government White Paper's proposals for locality commissioning offer a promising framework for this.<sup>11</sup>

Evidence of some confusion of roles points to a need for clearer definitions and appropriate training, as shown in our list of 'enablers' (Box 2). Perhaps we should not be surprised that roles envisaged by those planning a new service might not be perceived as desirable by those filling them. Our findings suggest that recruitment of GPs to A&E from primary care partly depends on the perceived glamour of working in a hospital department, including some contact with more seriously ill patients.

Triage protocols seemed to have little practical relevance so far. While categories may have seemed too rigid and insensitive to the realities of a busy unit with a mixed case load, we would like to have heard evidence of triage decisions being audited and revised rather than ignored. Also, triage systems only operated while the extra service was available, making it difficult to assess demand at other times. The extent of this problem is suggested by Table 1. Some units, for example P, appeared to confine definition of primary care patients to those actually seen in the primary care unit; while others, such as T, counted over 10 times this number. However, GPs are unlikely to be available to staff such units at periods of peak demand unless they are paid substantially more than they can earn in general practice. This would be a perverse incentive in the wider NHS context.

The barriers and enablers to successful working, if addressed,

represent a microcosm of good management, ranging from clear objectives and adequate resources to teamwork, education, and feedback.

North Thames has one of the most diverse ethnic populations in England, and A&E departments are the 'shop window' of the Trusts. These units seemed well placed to provide culturally sensitive services. However, while some data collection is taking place, we found little evidence that it was being used locally or that staff were aware of its potential.<sup>9</sup> To provide more appropriate services we believe providers need to undertake comprehensive studies on the utilization and health needs of ethnic minorities attending both primary care and A&E services.

Perhaps owing to perceived pressure for quick results, these initiatives were introduced without sufficiently clear mechanisms for financial control or evaluation. As a result, the total costs associated with the projects could not be identified from information available to the staff that we interviewed. We did not attempt direct access to finance departments of Trusts.

Thus, there is as yet little economic evidence to inform decision-making that is likely to remain pragmatically based on the availability of suitably trained staff. The case for more widespread use of NPs seems reasonable but this still needs evaluation. While it may appear cheaper to provide a more restricted NP-led primary care service, there is as yet no evidence that this reduces the expense of the A&E unit as a whole.<sup>4</sup>

While this research was being done there have been many other changes in the health service. Most relevant is the change in provision of out-of-hours GP services. There has been a massive movement towards co-operatives, often associated with primary care treatment centres, many working in or near A&E departments. A number of natural experiments are in progress. Leaders of out-of-hours cooperatives and of A&E departments should cooperate in setting up the necessary systems to evaluate costs and outcomes.

There is still the question of emergency primary care during working hours, when GP and other primary care facilities are open. Some evidence should soon be available from total purchasing schemes. These should enable diversion of patients and costs from A&E to general practice to be identified. If the proposed primary care groups have to bear the cost of their patients attending A&E departments, it could prove more cost-effective to provide suitable practice-based services. If GPs wish to keep the leadership role in primary care, it may be worthwhile for GP-led groups or cooperatives to run daytime primary care units in A&E. These could care for unregistered patients and those such as visitors and commuters registered with a distant practice. A better balance could then be achieved between the 'one stop' anonymity of the A&E-based primary care facility and the familiarity and personal continuity of the practice.<sup>12</sup>

It is likely that demand for emergency primary care will continue to rise. Providing primary care in A&E is unlikely in itself to mean 'the end of the inappropriate attender'.<sup>13</sup> There is, however, a place for imaginative experiments that offer rewards to practitioners and patients for not treating minor problems as either accidents or emergencies. Experience in North Thames suggests that carefully managed implementation is needed for such experiments to become part of normal service.

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