Consultant paediatric outreach clinics – a practical step in integration

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Abstract

Ten years' experience of paediatric outreach clinics is reviewed and evaluated. The advantages and disadvantages of paediatric outreach and its possible place in the new era of contracting and more developed community paediatric services are discussed. It is concluded that paediatric outreach increases parental and professional choice and access to paediatric consultant services, increases hospital visits, and enables more rational and relevant clinical decision making. Outreach is particularly relevant in areas of deprivation where paediatric needs are greatest.

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Fifteen years after the Court report, integration is on everybody's lips. A series of reports have endorsed the concept,1,2 and in some districts integrated/combined child health services have been created under single management.3 The tripartite system of separate primary curative, primary preventive, and secondary curative services, which survived the 1974 NHS reorganisation, is universally accepted as anachronistic and inefficient. The importance of good primary child health care, providing curative and preventive services, is recognised and child health surveillance is increasingly carried out by general practitioners (GPs).

A shift of emphasis away from specialised hospital care towards community based care is evident.4 Despite this level of interest, there is a paucity of literature documenting practical experience of integration. The pioneering work of the Riverside project in Newcastle6 in taking a paediatric service to primary care has been followed by isolated examples of paediatric outreach.4 Community paediatric plans for cities5 and districts6 have been published and have made a significant contribution to service planning. However, these have tended to be 'broad brush' approaches. The problems and possibilities of consultant paediatric outreach initiatives have not been addressed adequately.

This paper describes 10 years' experience of consultant paediatric outreach clinics in GP surgeries and district health authority clinics. My post at the Northern General Hospital in Sheffield, created in 1979 on the retirement of Dr R R Gordon, was among the first combined community/hospital posts. The job description was deliberately 'open'; six hospital sessions were laid down and the appointee was expected to utilise the remainder to develop community links. I chose to follow the Riverside model and establish joint sessions with GPs with a view to strengthening primary child health care particularly in deprived areas.

This paper describes the selection and establishment of the clinics, the children seen, how the clinics were organised, and the results of a limited evaluation carried out in 1983. The problems and possibilities of outreach are discussed.

Aims of the clinics

The principal aims of the outreach clinics are listed below:

- To increase access to consultant paediatric services by parents and primary care professionals particularly in deprived areas of the city.
- To increase the flexibility of the services offered by the hospital paediatric unit.
- To assist and strengthen primary child health care through closer cooperation and joint consultations.
- To provide a forum for mutual education.
- To reduce unnecessary investigation and hospital admission.

The clinics

Initially, general practices in the north of the city serving areas of deprivation were approached to gauge interest in consultant sessions in their surgeries. Four practices agreed to participate and monthly sessions were established. Subsequently, other practices, some in other parts of the city, requested sessions. Health visitors working in the most deprived areas of the city requested access to an outreach service and, in consultation with health visiting management, clinics were set up in three district health authority child health centres. Referrals to these clinics came mainly from the health visitors though GPs were encouraged to, and subsequently did, refer. Health visitor referrals were made with the prior knowledge of the GP whenever possible.

A total of 18 clinics were established over the 10 year period. A few ran throughout the period; others were discontinued by mutual consent and new clinics established. At any one time a maximum of 10 monthly clinics were held. Of the 18 clinics, four were based in district health authority child health centres and 14 in surgeries or directly attached to practices. One clinic started in a GP surgery but later, at the request of local health visitors and with the agreement of the practice, moved to the nearby district health authority clinic and referrals were taken from a number of local primary care teams.

The majority of the practices had two to four partners; only one was single handed and three
were large groups with five or more partners. This is fairly typical of the distribution of practices in the north of Sheffield. Initially, a GP sat in on the clinics in all the surgeries; however, this arrangement proved impractical for some of the practices with smaller numbers of partners and the contact with the practitioners was either continued through the health visitor or in discussions after the session. Clinics in district health authority centres were attended whenever possible by one of the locally based health visitors and health visitors were encouraged to attend with children they had referred. Regular informal discussions took place after the sessions and in one clinic a programme of lunchtime update sessions for health visitors were organised to coincide with the clinic.

Clinics were held at regular times on a monthly basis except for one clinic at a small surgery which was held every two months. Most of the clinics occupied a full session but a small number were arranged for the two hours after morning surgery to enable a partner to attend.

In order to fulfill the aims of increased access and mutual education, a policy of reviewing the sessions and discontinuing when necessary was instituted so that other practices could benefit from the service. Six of the 17 clinics were discontinued either because referrals were dwindling or the original purpose of the clinic had been achieved.

Nine of the clinics were in the north of the city in the area mainly served by the Northern General Hospital. However, in pursuance of the aim of supporting primary care in deprived areas, clinics were established on large estates to the east and south east of Sheffield where social deprivation is concentrated. One of the practices provided the main primary care for traveller’s families and contact was maintained with traveller’s children through this practice.

The children
More than 4600 children attended appointments at the clinics over the 10 year period; an average of more than five children/session (range 1–13). Almost 50% of attendances were for new referrals and non-attenders accounted for one in five appointments. Very few children were followed up for more than two clinics. Altogether 27% were under the age of 1 year and 50% aged between 1 and 5 years. Only 23% were school aged children.

Most referrals came through GPs. Health visitor referrals formed the majority at the district health authority clinics and a small group were referred from other paediatricians or from my own hospital outpatient clinic. Altogether 38% of new referrals were for organic diagnoses of which asthma referrals were the most numerous (35% of the organic diagnoses). Referrals for social problems, maternal anxiety, and behavioural/emotional problems constituted 38% of the total and those for a doubtful group, made up of benign murmurs, poor weight gain, and minor orthopaedic ‘abnormalities’ comprised 24%.

Five per cent of children were referred to other services within the NHS and only 1% to agencies outside the NHS such as social workers. A total of 131 children (3%) were admitted directly from the clinics to paediatric beds at the Northern General Hospital. A total of 349 investigations were requested on 294 children (6%) of which 40% were for suspected renal problems and 7-5% of the children seen were prescribed treatment, 50% for asthma.

Evaluation
In 1983, before a further expansion of the clinics, a limited evaluation was undertaken. Comparison of the outcomes of children seen in the outreach clinics with a comparable group seen in a hospital outpatient setting presented insurmountable methodological difficulties once the clinics had been established for two years. It was also impractical to approach all the families who had attended the outreach clinics to obtain their opinions on the advantages and disadvantages of the service. The evaluation was in three parts: a review of the new patients referred to my hospital general paediatric outpatient clinic during the preceding year, a questionnaire to local GPs about the potential value of outreach clinics, and a questionnaire given to parents attending hospital outpatient clinics asking if they would value an outreach service. In the review of new patients data were collected on diagnoses, admissions, referrals, investigations, and treatment. No attempt was made to match cases seen in the hospital setting with those seen in outreach clinics.

NEW PATIENT REVIEW
Altogether 177 new patients were seen in the general paediatric clinic during the period under review, an average of four new patients per clinic. The ratio of new to follow up patients was approximately 1:8 and non-attenders were noted to constitute one in four of all patients. Half the new patients were seen exclusively by me; the remainder were shared between senior registrars and registrars.

Using the broad categories of diagnosis outlined above, 44% of children had diagnoses classifiable as organic, 38% as non-organic, and 18% fell into the doubtful group. Almost 50% of the organic group had asthma; 7% of the children seen were admitted to the paediatric wards and 40% were investigated. A total of 155 tests were carried out on the 70 children who had investigations; 23% of the tests were haematological and 22% renal. Treatment was prescribed for 36 children (23%) of which 48% was for asthma and 27% for constipation. The table compares these findings with those for the outreach clinics.

GP SURVEY
Questionnaires were sent to 70 practitioners and 36 replies were received. Practitioners with outreach clinics at their surgeries completed a section asking for their opinion on the clinics; the remainder completed a section indicating whether they would be interested in establishing an outreach clinic at their surgery. Some characteristics of the practice were also sought.
Eight of the practitioners responding were single handed, seven worked in two partner practices, 12 had three partners, and nine more than three. The majority worked from their own premises; only eight worked from health authority premises and three had surgeries in both own and district health authority premises. Nineteen (54%) held their own baby clinics and all but four had attached health visitors.

The nine practitioners with outreach clinics in their surgeries all felt that the clinics had positive benefits for the partners and the patients. The main benefits listed were related to the relationship between the paediatrician and the primary care workers. The ability to refer without difficulty, the availability of a personal second opinion and instant feedback, the ability to discuss management together, and the generally improved access to specialist services were cited. Advantages for parents and children were also mentioned but less frequently than professional advantages. The educational role of the sessions was mentioned by only one practitioner.

Twenty-seven practitioners had no sessions in their surgeries; 15 expressed an interest in establishing sessions. Ten indicated that they were unsure of the potential benefits and two did not want to consider establishing sessions. Thirteen indicated that patients and parents to specialist paediatric services and reduce unnecessary hospital visits and waiting times. The potential educational value of the sessions for practitioners and parents was mentioned by some respondents. All those who were unsure of the value of outreach sessions in their practices referred to the lack of sufficient referrals to support regular clinics and some indicated that they or the attached health visitors already had good access to the district health authority outreach clinics situated near their practices.

**Collecting and managing the evidence**

Comparison of outreach clinics with hospital outpatient clinic

<table>
<thead>
<tr>
<th></th>
<th>Outreach clinics</th>
<th>Outpatient clinics</th>
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<tbody>
<tr>
<td>New patients/session</td>
<td>2:5</td>
<td>4</td>
</tr>
<tr>
<td>Ratio new/old patients</td>
<td>1:2</td>
<td>1:8</td>
</tr>
<tr>
<td>% Non-attenders</td>
<td>20</td>
<td>25</td>
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<tr>
<td>Diagnostic categories (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic</td>
<td>38</td>
<td>44</td>
</tr>
<tr>
<td>Asthma (% organic)</td>
<td>35</td>
<td>49</td>
</tr>
<tr>
<td>Doubtful</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>Non-organic</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Referrals (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within NHS</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Outside NHS</td>
<td>0:5</td>
<td>-</td>
</tr>
<tr>
<td>Admissions (%)</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Investigations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% children investigated</td>
<td>6:5</td>
<td>47</td>
</tr>
<tr>
<td>Average No of tests/child</td>
<td>1:2</td>
<td>2:1</td>
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<tr>
<td>Treatment prescribed as % total children seen</td>
<td>7</td>
<td>23</td>
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</tbody>
</table>

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**PARENT QUESTIONNAIRE**

A total of 108 parents completed the parent questionnaire while waiting in the outpatient clinic. Fifty-five expressed a preference for outreach clinics, 41 in their GP’s surgeries and 14 in local clinics. Twenty-seven parents preferred to continue to attend the hospital and 24 indicated no preference. A total of 73 reasons were given by parents who favoured outreach clinics; 56% related to convenience, 21% to better communication between hospital specialist and GP, 21% to the advantage of familiar surroundings, and 2% gave other reasons.

A third of parents preferring the hospital also cited convenience. A further third felt that the hospital was ‘the best place’ for their child to be seen. The remaining third gave a variety of reasons. The parents who expressed no preference indicated that they did not mind as long as their child was seen by the paediatricians.

**CHANGES RESULTING FROM THE EVALUATION**

The scope of the evaluation was limited as stated above. However, it did indicate that some of the aims of the clinics were being achieved. It also served to identify new practices interested in participating in the service. The detailed comments of participating practices prompted organisational changes. The timing of some clinics was changed to ensure attendance by a practitioner and the communication system between the hospital paediatric office and the practices was improved. Further, the evaluation assisted decisions related to the discontinuation of particular clinics either because of an obvious fall in the number of referrals or as a result of comments by practitioners indicating that the clinics had achieved the aim of assisting them to manage common child health problems without the need for regular consultant paediatric expertise.

**Clinic organisation**

Two elements are essential for the smooth running of outreach clinics: early and accurate liaison between the paediatric office and the clerical staff at the surgeries and district health authority clinics and a simple but efficient record system.

After some initial difficulty, we established a clear system in which the prime responsibility lay with the outreach clinic staff to inform the paediatric office of the children to be seen in the week preceding the clinic with some flexibility for late appointments. An agreement was reached with the medical records department at the hospital; the paediatric office was allocated a series of hospital numbers and record folders for children with no previous hospital contact and on completion were filed in the paediatric office with a tracer in medical records. The records of children born at the hospital or with existing notes were transferred to the paediatric office files once they became patients at the outreach clinics. This parallel system allowed records to be readily available on the clinic days and to remain within the hospital system and be pulled if the child was subsequently admitted or attended another clinic. The safe transfer of notes to and from the clinic was my responsibility. I carried a supply of continuation sheets for very late referrals and a supply of investigation request forms. By arrangement with the hospital pharmacist, I had a prescription pad for use in district health authority clinics; in GP surgeries their pads were used.

Though many of the consultations were made jointly with a practice partner, an exchange of
letters still took place as this proved essential to both hospital and GP records. A referral form was introduced for health visitors wishing to refer to the district health authority based clinics. A letter to the health visitor with a copy to the GP was sent after the consultation.

The clinics preceded the advent of parent held records (PHRs). PHRs might have simplified aspects of the record keeping but I think an exchange of letters would continue to be necessary to ensure clarity of communication. In addition, PHRs will not be universal for some years as they are issued in most districts only to those children born after the start date of the scheme.

Discussion

Ten years’ experience of paediatric outreach clinics is presented as a contribution to current discussions on integration of child health services. The model of a single consultant paediatrician, initially separate from the community child health services, providing outreach services to a range of practices may not be applicable to many districts where consultant community posts have been established with responsibility for work with GPs in neighbourhood ‘patches’. However, the aims of outreach remain valid and the practical experience presented here should inform future approaches to outreach even in those districts with fully established community consultant services.

Consultant paediatricians holding joint hospital-community appointments are ideally placed to develop outreach clinics. In districts without such posts or with consultant community paediatricians without recent general paediatric experience, outreach clinics could be carried out by hospital based consultants.

To what extent were the aims of the outreach sessions achieved? The results presented above can give only a partial answer. There can be little doubt that access was increased and that this increase favoured areas of the city with many more child health and child care problems. However, the high level of non-attenders (one in five) at the outreach clinics suggests that even taking the service closer to home does not overcome some of the problems of clinic non-attendance, which presumably has deeper roots.

The outreach clinics established a rapport between the paediatric consultant service and primary care workers which, though impossible to quantify, is alluded to in the GP survey and nurtured informal contacts to the benefit of the children. Informal contacts took place on the telephone or after the outreach clinics when problems were shared and advice sought on a range of issues.

The clinics added another dimension to existing paediatric services and, in this sense, flexibility was increased. Children admitted under my care or attending my hospital outpatient clinic could be seen for follow up at their GP’s surgery or at a district health authority clinic nearer home. Parents seemed to appreciate this increased choice, though some preferred to continue to use the hospital as indicated in the evaluation. Health visitors, particularly, expressed their appreciation of this flexibility which they saw as valuable in working with some of the families who were most resistant to professional intervention.

The extent to which primary care for children was assisted and strengthened by the clinics is difficult to measure. The primary care teams involved appreciated the service and used it actively. To some extent, they were motivated practices with a positive interest in innovation and thus there was an element of ‘preaching to the converted’. On the other hand, the responses to the GP survey and the subsequent involvement of a range of practices in the scheme, suggested that the outreach clinics came to be regarded as an asset to general practice and a desirable service to offer. On the level of access, flexibility and appreciation, this aim would appear to have been achieved; whether a real change took place in child health care in these practices and areas remains an unanswered question.

The sessions aimed to be of mutual educational benefit: to raise knowledge and expertise in primary care in the management of common childhood problems and to educate the specialist in the insights afforded by working outside the hospital setting and with the whole family. No objective measure of either of these aims was available. My understanding of the process of decision making in general practice and the problems of working outside the special atmosphere and protected environment of the hospital was enhanced. Some of the GPs and health visitors indicated that they had gained knowledge and insight into the management of paediatric problems through the joint consultations and had become more confident particularly in distinguishing the significant abnormality from the normal range. This increased confidence was reflected in the decision of a number of practices that they no longer needed the sessions.

Comparison of the outreach clinics and the hospital outpatient clinic shows a remarkable similarity in the broad categories of new referrals. However, the high level of non-attenders (one in five) at the outreach clinics suggests that even taking the service closer to home does not overcome some of the problems of clinic non-attendance, which presumably has deeper roots.

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isolation of the hospital based specialist from this invaluable knowledge and the ease of investigation in the hospital setting undoubtedly contribute to the tendency to over investigation and over treatment suggested by the comparison of outreach and hospital clinics.

Despite the apparent achievement of at least some of the aims of the clinics, it could be argued that this was none the less an inefficient use of consultant time. An average of five children per session is well below the national average for paediatric clinics and it is necessary to add the travelling time and time away from the hospital. However, as many new patients per session were seen in the outreach clinics as in the hospital clinics and the average six new patients per week seen in outreach clinics would have been impossible in the hospital because of limitations of outpatient space and staffing. In addition, the far lower long term follow up rates in the outreach clinics can be seen as more efficient use of medical time.

The evaluation described here was partial and limited and a proper system of regular evaluation was not established. Outreach clinics should be subjected to audit in the same way as other medical activities. This requires reliable data collection and yearly evaluation with the practitioners involved in the functioning of each clinic. Numbers of referrals, type of referral, practitioner involvement in clinical management decisions, and the educational function of the clinic should be reviewed critically. Occasional small surveys may assist in providing information on parental perceptions of the clinics and their functioning as well as enabling practitioners to give anonymous opinions on the value of the clinics.

The viability of outreach clinics in the era of contracting and the new purchaser–provider arrangements remains to be seen. Purchasers wishing to shift the emphasis from hospital to community based secondary paediatric care could build outreach clinics into contracts with provider units and the funding would flow from the contract. In the same way, large fund holding practices may wish to ‘employ’ a paediatric consultant to see their paediatric referrals locally. A possible danger is that decisions related to the allocation and value of paediatric outreach will be decided on primarily financial grounds and based on ‘head counts’. The less tangible and measurable benefits considered above may be afforded insufficient weight in such management driven decisions.

In conclusion, I have attempted to describe and evaluate 10 years’ experience of paediatric outreach clinics established as a practical contribution to integration. The new contracting arrangements and the trend to appointment of consultant community paediatricians will alter the context in which outreach clinics are established but the advantages considered above are likely to hold good. Paediatric outreach offers greater parental and professional choice, enhanced access and flexibility of child health services, and more rational and relevant clinical management decision making and is of particular value in deprived areas where the need is greatest.

Thanks are due to all the primary health care professionals who participated in this service development and who welcomed me into their surgeries, the clerical staff at all the surgeries and child health clinics who kept the show on the road, and my consultant colleagues at the Northern General Hospital, Dr B A M Smith and Dr M Duggan, who actively supported the outreach initiative. Special thanks go to my secretary, Mrs Janice White, whose efficiency, good humour, and loyalty provided the ‘bed-rock’ on which the work could be built.

5 University of Newcastle upon Tyne. The Riverside child health project; evaluation report. Newcastle upon Tyne: Department of Family and Community Medicine, University of Newcastle upon Tyne, 1983.