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Research

Promoting innovative primary care for older people in general practice using a community-oriented approach

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The assessments of patients aged 75 years and over that were built into the 1990 contract for general practice have failed to enthuse primary care teams or to make a significant impact on the health of older people. The lack of an evidence base for these checks, and the absence of any training programme for practice staff involved in the assessment of older people, both appear to be important factors contributing to the failure of this approach. Alternative methods for improving the health of older people who are living at home are being sought. This paper describes the use of a model of community-oriented primary care (COPC) to initiate innovative care for older people in four exemplar practices in an inner-city area of London. Pump-priming funding was supplied for a 2-year period by one health authority, with the proviso that all innovation must be self-sustaining. The project was supported by an academic department of primary care, which promoted discussion about objectives and priorities, provided the evidence base for interventions considered by the practices, supported staff and created an evaluation framework, but avoided any prescriptive intervention in the process of innovation. All four practices have successfully identified different problems that need attention in their local populations of older people, and developed different projects focused on particular needs among older people. The effectiveness of the COPC method in promoting change in these practices was sufficient for the health authority to fund a second stage, extending the method to 40 practices over a 2-year period.

Key words: community-oriented primary care; general practice; innovation; older people; public health

Introduction

Research conducted in the 1950s and early 1960s indicated that there was considerable unmet need among older people in Britain (Cowan and Anderson, 1952; Williamson *et al*., 1964; Thomas, 1968). This work prompted research into ways of meeting the health care needs of older people, a task that was made more important by the ageing of the population at the end of this century. This focus resulted in the introduction of an assessment programme for older people in the 1990 GP contract, a policy evolution that has been described in detail elsewhere (Iliffe *et al*., 1999).

The terms of service for general practitioners introduced in 1990 require members of primary health care teams to offer annual assessments of health to patients aged 75 years and over (Department of Health, 1990), using a number of broad headings to guide the assessment. These headings are as follows:

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- sensory function;
- mobility;
- mental condition;
- physical condition, including continence;
- social environment;
- medication use.

It was unclear what was intended when the contract for general practice was altered to include this obligation, but it was widely interpreted as a requirement to 'screen' the 75 years and over age group. Although there has been extensive research into the possible benefits of regular screening of older populations, the introduction of the '75 and over checks' provoked extensive debate because of the lack of conclusive evidence that routine screening was worthwhile (Taylor and Buckley, 1987; Royal College of General Practitioners, 1990; Harris, 1992). Nor was there a consensus on the best methods for such screening, despite nearly 40 years of study.

Taylor and Buckley's review of assessment of older people summarized the state of the art just before the introduction of the '75 and over checks'. Early findings of massive unmet need had not been confirmed by later research, which showed that older people were no longer avoiding consultations with their doctors, that most pathology was either known to the GP or considered unimportant by the patient, and that non-consulters were mainly healthy. Social change, improvements in the population's health and changes in health services had seemed to make screening for hidden disease among older people inappropriate.

The hidden problem of later life in the UK in the last quarter of the twentieth century was not undiagnosed pathology, but loss of function that was either unrecognized or wrongly attributed to 'normal ageing'. Progress has been made in one aspect of assessment of older people in primary care, through the development of two-stage approaches whereby a brief screen is used to identify possible 'cases', who can then be further assessed in depth (Williams and Wallace, 1993). Others have attempted to define more clearly the methods of assessment to be adopted (Royal College of Physicians and British Geriatrics Society, 1992; Philp, 1994), and the implications of these developments for both policy and primary care practice have been discussed elsewhere (Iliffe *et al*., 1999).

In response to the low level of activity surrounding this important issue, and in response to pressure from general practitioners, Camden and Islington Health Authority initiated a project to develop innovative primary care for older people from 'bottom up' rather than from 'top down'. This was designed as a practice-based approach to needs assessment with older people, utilizing an extended primary care team with public health support and a range of methods of assessing needs and exploring potential service provision (Murray and Graham, 1995).

Community-oriented primary care

The model of innovation that was used in the four practices was derived from the King's Fund's review of community-oriented primary care (Freeman *et al*., 1997), and it takes the form of a cyclic process (see Figure 1). This allows a continuous process by which primary care is provided to a defined community on the basis of its assessed health needs by the planned integration of public health and primary care practice (King's Fund, 1994).

Community-oriented primary care (COPC) is a model of health service development which integrates public health and primary care in order to deliver targeted prioritized services to a defined population. It was originally conceptualized by Sidney Kark in South Africa in the 1940s, and then underwent further development by Kark and his team in Israel from the 1960s onwards (Geiger, 1993). A national programme of COPC health centres was established in South Africa, but these were gradually closed down after the National Party came to power (Tollman, 1991). Kark implemented the model in Israel, and researchers and practitioners in the USA have experimented with the approach, primarily in deprived areas.

The COPC model has three major components (Nutting and Connor, 1986):

1) a practice engaged in primary care;
2) a defined community for which the practice has accepted health care responsibility;
3) a process by which the practice and the community address the major problems that impact on the community's health status.

The process itself consists of defining and

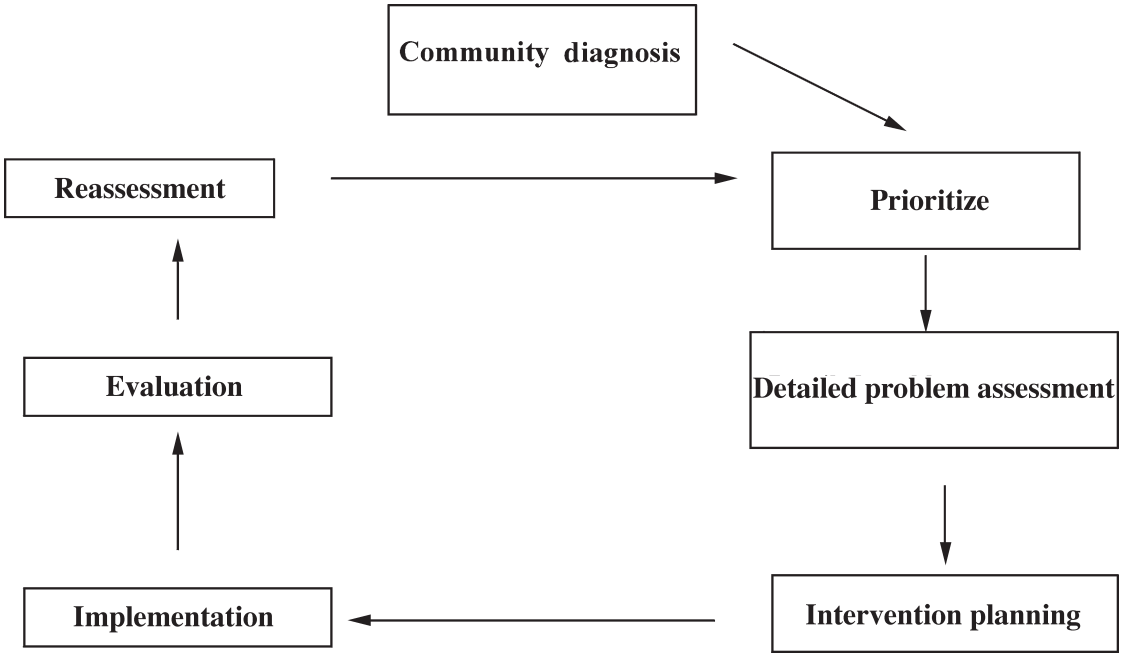

Figure 1 The COPC cycle.

characterizing the target community, identifying, listing and prioritizing the problems that are most detrimental to the health of that community (and/or of most concern to the community itself), modifying the primary care service provision to that community in order to demonstrably improve the health status of that community, and finally establishing systematic monitoring, evaluation and reassessment of the effectiveness of the COPC programme (Nevin and Gohel, 1986).

The factors which COPC emphasizes, in conjunction with clinical care, are an epidemiological basis to a COPC programme, the employment of a community database, and the relevance of social action to community health outcomes. Special features of the epidemiological methodology which are applied in COPC are that it is pragmatic and specific to the needs of the targeted community. It addresses a broad range of health issues according to what is relevant to the practice and the community, and it integrates easily into normal clinical care. It also needs to be appropriate to the scale of the proposed COPC programme and the needs of the community that is served by the practice (Abramson, 1984).

Haber (1989) describes COPC as an interdisciplinary model for planning, implementing and evaluating primary care, health promotion and disease prevention in the community which has generally appealed to practitioners working in deprived areas with limited access to health care services. He identifies the tasks specific to each stage of COPC development. These can include the following.

1) *Defining the community* – identify the community to be targeted and collect relevant demographic, economic, historical, political and cultural data.
2) *Identifying the health problem* – review the existing community/national databases, obtain the relevant demographic, socioeconomic, mortality and morbidity data, conduct interviews, hold focus groups and conduct community surveys where appropriate. Unusual clusters of health problems in the target community relative to the national distribution should be highlighted in the epidemiological analysis of the community, and the community consultation process should ensure that the community's priorities are included in the community diagnosis and prioritizing stages.
3) *Implementing an intervention* – community

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members are involved in the implementation of the intervention and existing community resources are used wherever possible. Training of community members in skills specific to the COPC intervention may be a feature of this stage. However, the intervention should include short-term as well as long-term measurable goals, and should have a public health focus.

4) *Evaluating the impact of the intervention* – the monitoring, evaluation and reassessment of the COPC programme are ongoing and will generally involve qualitative and quantitative methodology.

The American Institute of Medicine found that the most critical factor affecting the implementation of the COPC model in the USA was the financial structure of the practice (Nutting *et al*., 1985). At least one practitioner in a practice had to be committed to the COPC approach for the programme to be effective, but one was sufficient for the model to work. In putting the model into practice, particularly under the US reimbursement system, the funding and cost-effectiveness of the interventions have been the considerations of primary significance in the take-up of COPC by practices.

COPC practices need to develop a basic age–sex registry and a diagnostic coding system before starting the community diagnosis process. Colleagues and community members are consulted as early in the process as possible in order to promote multidisciplinary collaboration and community involvement. Local resources are identified in order to minimize costs and build on existing databases and services. Population parameters depend on the issues that are prioritized and targeted by the COPC programme, but the group has to be larger than the patient and his or her family in order to qualify as COPC (Frame, 1989), and the Institute of Medicine goes further, limiting COPC-recognized programmes to those which include population members who are not active users of the practice (Nutting and Connor, 1986). The evaluation can be made by an academic medical department, and it is common for such a department to support a COPC practice. Quantitative measures and epidemiological methodology need to be programme-specific (Frame, 1989).

Multidisciplinary co-operation and collaboration are the foundation stones of COPC. Coordination is required across social, health and voluntary sectors. This collaboration between the different sectors of the community – professional and voluntary – necessitates a range of interpersonal skills in the practice skill team. Additional practitioner skills include negotiation, advocacy, compromise, managerial capabilities, an interdisciplinary perspective on health, and the ability to interact across a range of interest groups whilst being accountable to the community. A long-term perspective is a prerequisite for developing a community-oriented primary care practice, as the impact of COPC interventions may need to be measured over a substantial period of time. Any evaluation also needs to take into account changes in socioeconomic variables which may impact on the community health status (Tollman, 1991).

Community-oriented primary care therefore appears to be an attractive model for promoting change in primary care. UK general practice, with its registered populations, widespread computerization, well-developed academic networks and relatively easy access to public health expertise would appear to be in a good position to implement this approach to innovation. However, the COPC model has not been tested in affluent communities, being until now a form of primary care organization that is used in under-served communities. This project tested the feasibility of applying COPC methodology to the developed primary care system in the UK, albeit for a relatively deprived population (older people) in a relatively deprived area (the London Borough of Camden).

Methods

A steering group representing the health authority and academic general practitioners and nurses from the local university department of primary care was established, with a four-point remit:

1) to identify and recruit to the project four exemplar practices of different sizes from different parts of the London borough of Camden. The two criteria for recruitment were a known track record of innovation in the practice and a known interest in the health of older people;
2) to establish a small academic support group that would assist practices in developing new services, without being prescriptive. This was

Table 1 Stages in the implementation of the COPC model

Stage of development	Defining and characterizing the community	Identifying community health problems	Modifying the health care programme	Monitoring the effectiveness of programme modifications
Stage I	Based on subjective impressions of the practitioners and/or consumers	Based on subjective impressions	Based on national or organization-wide initiatives	Based on subjective impressions
Stage II	Characterized by extrapolation from secondary data sources	Extrapolation from secondary data	In response to special resources that become available	Extrapolation from secondary data
Stage III	Enumerated and characterized by *ad hoc* database specific to the community	Use of data sets specific to the community	Tailored to identified needs of the community	Use of data sets specific to the community
Stage IV	Enumerated and characterized from a current and complete database of the community	Routine mechanisms identify and set priorities among a range of problems	Targeted at specific high-risk individuals and groups	Specific to programme objectives and differential impact among risk groups

recruited from the Camden & Islington Health Authority and the academic department of primary care and population sciences at the Royal Free and UCL Medical School;

3) to disburse up to £40 000 a year for 2 years across the four practices, to any proposal for a new service that was grounded in evidence and sustainable within existing practice resources after the end of the project;
4) to link the innovative practices with other agencies in the locality that provided services for older people.

A short list of practices that fulfilled the criteria was drawn up by the steering group, and six of these practices were approached, four of which agreed to participate. Practices were recruited to the project on the agreement that they would discuss their plans for service development with the academic support group and reach a consensus about needs, plans, costs and implementation before initiating new services.

The method of beginning the diagnosis and prioritization stage was left to practices to determine, and academic support staff encouraged frequent contact by telephone, letter and face-to-face informal meetings, as well as formal group meetings.

Potential innovations were taken by the practices to a full steering committee meeting when they reached the stage where detailed costing was appropriate. Active support was offered at the implementation stage, once the practice innovation had achieved ratification, and an evaluation framework was established using elements common to all practices as well as methods appropriate to each innovation.

Practice staff were encouraged to acknowledge that:

- a broad interpretation of health needs might result in service developments outside the traditional medical range (Frankel, 1991);
- different conceptualizations of need might have different implications for priority setting (Bradshaw, 1972) – that a comprehensive approach to the whole older population (however that might be defined) could compromise equity by obscuring the needs of minorities (Hopton and Dlugolecka, 1995);
- a range of methods of assessing needs might be necessary (Robinson and Elkan, 1996).

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Evaluation was addressed using a method triangulation approach, which consisted of the following.

1) Participant observation of practice meetings where discussion of project development took place, with detailed note-taking of all contacts with practice members outside formal meetings to allow analysis of complex, evolving group processes (Dingwall, 1997).
2) 'Before and after' interviewing of deliberately selected practice members of all disciplines about problems of primary health care for older people, and the impact of the COPC model on their practice activity, using a semi-structured questionnaire to obtain contextualized insider perspectives (Britten, 1995; Secker *et al*., 1995). These are described in detail in the project report (Lenihan and Iliffe, 1999).
3) Development of practice-specific evaluation packages (e.g., changes in self-reported health status in older patients using standardized and validated tools). These are also described in detail in the project report (Lenihan and Iliffe, 1999).

The data that were obtained using these methods were reviewed by the research team and discussed with the steering group, in order to identify themes relevant to the evaluation framework for COPC projects derived from international experience and shown in Table 1 (Nutting and Connor, 1986). To this framework we added two further categories, namely patient

Table 2 Innovations in participant practices

Practice	Number of FTE GPs	Fundholding?	Innovations	Resources used
1	6	No	1) Targeted assessment of housebound patients with polypharmacy and nursing-home residents aged 75 years and over 2) Exercise classes for patients aged 75 years and over 3) Case management of complex cases identified in (1) above, with consultant geriatrician	1) Half-time practice nurse (new post) 2) Sessional exercise therapist, once weekly (new post) 3) Consultant session (already funded), one per month
2	1	No	1) Needs assessment using tool that utilizes informant history, patient perspective and professional judgement, for patients aged 75 years and over 2) Focus groups of selected patients aged 65–70 years to discuss health needs and service requirements for an ageing population	Photocopying and postage costs only
3	3	Yes	One-stop shop for medical, nursing, chiropody, physiotherapy and benefits advice, for those aged 75 years and over and not living alone	Sessional costs of physiotherapist and chiropodist, every fortnight, plus purchase of computer decision support program for benefits advice
4	7	No	Benefits and resources outreach for patients aged 80 years and over	Benefits adviser, four sessions per week

FTE, full-time equivalent.

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Table 3 Putting the COPC model into practice

Practice	Defining and characterizing the community	Identifying community health problems	Modifying the health care programme	Monitoring the effectiveness of programme modifications	Patient involvement in design and implementation process	Sustainability
1	Stage 4 – practice data set on prescribing used to identify polypharmacy groups, nursing-home residents and housebound	Stage 2 – problems of target populations extrapolated from existing knowledge	Stage 4 – targeted on specific high-risk individuals and groups	Stage 1 – based on subjective impressions	None	Exercise classes continue, targeted home visiting discontinued, case management discontinued
2	Stage 1 – based on subjective impressions of the practitioners and/or consumers	Stage 3 – based on subjective impressions	Stage 3 – tailored to identified needs of the community	Stage 3 – use of data sets specific to the community	Patient involvement central to horizon-scanning project	Assessment tool not adopted. Focus groups continue as guide to next phase of project
3	Stage 1 – based on subjective impressions of the practitioners and/or consumers	Stage 2 – extrapolation from secondary data	Stage 3 – tailored to identified needs of the community	Stage 4 – specific to programme objectives and differential impact among risk groups	None	One-stop shops discontinued in practice following end of fundholding
4	Stage 2 – characterized by extrapolation from secondary data sources	Stage 2 – extrapolation from secondary data	Stage 3 – tailored to identified needs of the community	Stage 4 – specific to programme objectives and differential impact among risk groups	Voluntary sector organization involved	Extended to one of four primary care groups, feasibility being investigated by another

involvement in the design and implementation process, and the sustainability of the innovation following withdrawal of the project's pump-priming funding.

Outcome measures for the project were defined as follows:

1) the extent to which practices could implement the COPC model and generate innovative primary care services for older people;
2) the sustainability of these new services;
3) the response of the funding body (the health authority) to COPC as a method for promoting change in urban general practice.

Outcomes

Innovation

The changes introduced by the four practices, and the characteristics of the practices, are presented in Table 2.

The detailed outcomes for each practice have been reported elsewhere (Lenihan and Iliffe, 1999; Duddle *et al*., 2000; Gargaro *et al*., 2000; McCabe *et al*., 2000).

Implementing COPC

The overall evaluation of the project is shown in Table 3. The staging shown in Table 1 is applied

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to the innovations used in each practice, and demonstrates the extent to which the practices were able to implement the COPC model.

Funding body responses

The funding health authority decided to extend the project to 40 more practices, over a 2-year period, with extra funding for exercise promotion in general practice. One of the newly formed primary care groups in the health authority has decided to fund extra nurses for assessment of the 75 years and over age group, and is supported by a Social Services department which is supplying benefits advisers to work alongside these nurses.

Discussion

General practices can develop and implement innovative, locally appropriate primary care services for older people, using limited short-term funding. Nondirective support from an academic department that is familiar with the nature and problems of general practice, and steering by a multiprofessional management group including public health professionals from the health authority, both appear to be important in this process. Concerns that minority groups in the population will be neglected if unskilled primary care teams undertake public health functions (Pollock and Majeed, 1995) do not appear to be substantiated in the exemplar practices, which have focused not only on the needs of older people, but on particularly disadvantaged groups within this population, namely those with chronic diseases, those less supported by services, those with unmet needs and those with low incomes and limited resources.

The COPC model does appear to work as a mechanism for innovation in primary care in an affluent society, albeit with a relatively deprived older social group. The amount of time that is devoted to design, and the extent to which the process of change becomes embedded in practice activity, both vary, and not all efforts to innovate are successful. Some 'failures' (e.g., the needs assessment tool evaluated by practice 2) are positive experiences in that they show that some new approaches have limited practical advantages despite strong theoretical advantages. Others (e.g., the lack of sustainability of much of the work in practice 1) may reflect the over-ambitiousness of the interventions developed and the difficulties in maintaining leadership at practice level. Nevertheless, the targeted approach to vulnerable older people that was tested in practice 1 has been taken up at a different level, namely that of the primary care group, where benefits advice has also been adopted for PCG-wide implementation.

The American experience that security of funding determines the sustainability of COPC methods appears to apply in the UK context, even though in the UK there is no competition between public and private primary care comparable to that in the USA. The one-stop shop developed by practice 3 was only sustainable if a fundholding practice was able to invest resources in it, but this ability ended with the shift of investment decisons to the level of primary care groups.

Community-oriented primary care may be useful for primary care groups and trusts that are seeking a mechanism for testing out new approaches to service development prior to widespread implementation. The current large-scale study based on this pilot will test this potential.

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