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***Principals and Agents in Social Care:
Who's on the Case and for Whom?***

**Kirsteen Smith
Ken Wright**

DISCUSSION PAPER 123

PRINCIPALS AND AGENTS IN SOCIAL CARE:

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Kirsteen Smith

Ken Wright

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The Author

Kirsteen Smith is a Research Fellow and Ken Wright is the Deputy Director at the Centre for Health Economics, University of York.

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ABSTRACT

The economic theory of principal and agent is examined to assess its suitability for application to the world of social care. Principal and agent theory hinges on the basis of two individuals, the principal, who is ill-informed and the agent, who is informed. The principal hires the agent to act in such a way that the principal's utility is improved. Information is passed on to the principal from the agent to allow rational allocation of services at a reasonable fee.

The imbalance of information, however, causes problems in the relationship. The asymmetry can result in moral hazard or adverse selection when the agent "misuses" the information at his/her disposal. A considerable amount of literature exists in this area relating to the doctor-patient agency relationship. Here the doctor and patient have interdependent utility functions they try to maximise. The problem of supplier induced demand in fee for service systems has been found. This is the problem of doctors unwarrantedly increasing demand to maintain their income or other entities in their utility functions e.g. prestige, a producer's moral hazard.

It is believed that lessons from these situations can be applied to social care. In social care we have an agency relationship between the care manager and their clients. To assess this it is important to draw out the similarities and differences in this relationship. In some respects social care agency relationships are more interesting and challenging than the doctor/patient relationship because of the number of "agency" models available - care managers, advocates and service brokers.

In this quest for understanding if such a relationship exists it is important to have information about care management itself to find out what exactly it is trying to do and how it functions.

This is helped by taking examples of its operation from Britain and the USA for various client groups. The operation of the service is important to examine as this will allow us to understand how the service is coordinated and how budgets operate.

The final section of the paper examines predictions produced by this application and suggests a research agenda.

1. INTRODUCTION

This paper brings together the economic theory of principal and agent with the world of social care to assess the applicability of theory to practice. In the first section, the principal and agent relationship and its main issues will be described and discussed. In section two, the application of the theory to health care will be examined, principally the doctor-patient agency relationship. The third section will deal with the concept of care management and the application of theory to practice. In section four, some studies of practice will be discussed. Some predictions of issues of concern and how to test them will be set out in the final section.

1.1 Principal and Agent Theory

The principal and agent theory (Rees 1985a; 1985b) places the notion of delegated choice in an economic framework. This becomes applicable in any context where a person needs someone to act on his/her behalf, for example an estate agent selling someone's house or an accountant looking after personal taxes. In such situations the objectives and welfare of the principal and agent are separate. The principal then hires the agent to act in such a manner that the principal's welfare is improved.

To examine the theory's applicability the framework of principal and agent will be outlined. The rationale on which the theory is based is that of two individuals, the principal, who is ill-informed and the agent, who is informed. Information is given to an individual, the principal,

from an agent(s), to allow rational allocation of services at a reasonable fee¹. Since the outcome of this process generates an increase in the welfare of the principal s/he is required to make a payment, which in turn improves the welfare of the agent. To operate effectively a formal contract document between the two parties or, at least, an implicit contract will be required.

This represents the ideal model of behaviour. However, remembering that the principal is ill-informed and the agent is informed, two famous problems arise from informational asymmetries which are usually discussed in the context of insurance.

Problems arising from asymmetry

- Moral Hazard

Moral hazard can occur in the behaviour of both principal and agent. The usual moral hazard for principals or insured is that knowing that they are covered for loss of property or earnings they indulge in risky behaviour that they would not consider if they were not insured. Principals may then attempt to overconsume services when the cost falls on the insurers. They may also not disclose all the relevant information to an agent if they feel that this may prejudice the services they receive. For agents, moral hazard takes the form of following their own interests rather than the principal's. The estate agent may sell a client's house below the market price in order to obtain a quick sale and the commission it brings.

¹ This is generated by the Agent being faced with the choice of the action (**a**) which is from a set of actions {**a**}. The outcome (x) of this choice will depend on the state of the world in existence at the time {0}, to incorporate the concept of uncertainty.

- Adverse Selection

Asymmetry of information causes problems where principals form a group of people receiving help from one agent and each member of this group pays him/her the same price to join it. Each member of the group knows his/her own probability of using services from the agent. If the price is set as an average cost for each person, those whose needs are below average subsidise those whose needs are above average. This is an incentive for those with below average needs to make other arrangements, leaving the group with higher needs to be covered by higher average costs. A motor car breakdown agency may find an increasing proportion of its members possess unreliable vehicles as those with more reliable ones make other arrangements. Insurance premiums for higher risk groups increase when the low risk group quit. With premiums becoming increasingly expensive, high risk, low income people are uninsured. This effect is known as adverse selection.

2. HEALTH CARE

In health care the doctor is the agent and the patient is the principal. Sometimes this relationship is complicated by the doctor being the provider of services.

2.1 Doctor-Patient Agency Relationship

First it may be useful to outline the reasons why an agency relationship develops in health care. Health care is an unusual commodity. Although it could be described to exist in a market, it is not a normal good or service in economic terms. In an ideal free market for normal goods a number of characteristics would be present.

Ideally, consumers would have 'well-defined preferences', generated through access to information about particular items and alternatives, which in turn would generate a demand curve, through willingness to pay statements. It is assumed that purchases can be made from a variety of suppliers, thus making consumer utility maximisation feasible. Suppliers would aim to maximise profit at a minimum cost.

A notable departure from this model exists in health care markets, where other considerations exist. Doctors (as advisor = agent; as supplier = principal) have an interest in their income and workload. Consumers in this market can be ignorant of their medical needs, given that they cannot predict outcomes of intervention through lack of easily accessible knowledge (Newhouse 1978). Indeed the role of the doctor has been described as that of a "gatekeeper to the production of medical care" (Fuchs 1974). The relationship between a doctor and

patient is additionally complex because of the uniqueness of the individuality of each person (McGuire et al 1988).

Why an Agency Relationship?

The above features indicate the underlying reasons why an agency relationship develops, ie. doctors are in an informed position. The patients, in theory, are the decision-takers but are ill-informed. From these features it can be recognised that "the doctor's specialised knowledge of the relationship between health care and health status is made available to the consumer to aid utility maximising behaviour" (McGuire et al 1988).

Consumers in the health care market are not necessarily the best judges of their own needs because of the superior information that a doctor is presumed to possess, which is also costly to attain. Therefore, (although beliefs about effectiveness may exist because patients may have anecdotal information to draw upon) it becomes necessary for patients who wish to maximise their welfare to take advice on the effects of health care interventions.

The Doctor as an Agent

Doctors are therefore required to operate as agents for patients. The doctor ideally should inform the patient of the specialist knowledge required to facilitate a fully informed decision, by comparison and assessment of likely outcomes, in terms of net utility gains. Their position requires them to provide a diagnosis, treatment regime and a prognosis.

Individuals could seek more information in the form of a second opinion. This could be provided by the buyers of health care in the form of health insurers, NHS providers or the independent sector. However, confusion rather than clarity may be created given the level of consumer ignorance. Individuals simultaneously must discern who is acting/advising on their behalf and who is pretending. Costs could potentially be high in terms of searching and anxiety. These, it has been suggested, may make a patient unwilling to participate in the choice process and thus by default the doctor will become the decision-maker (McGuire et al 1988). Hence the appropriateness of a theory of delegated choice, as the doctor is nominated to take responsibility for the choice of action. It has been suggested that over time: "By raising the question of the insufficiency of the knowledge base in medicine and by pointing out that quality in medicine must include the principle that the choice of treatment should be free from supplier induced demand², small area studies have helped set the agenda for reform of the doctor-patient relationship, for the replacement of delegated decision-making with shared decision-making, and a commitment by the profession to the ethic of evaluation" (Wennberg 1993).

Nonetheless, difficulties arise when it is recognised that the doctor is required to act as an advisory agent, giving information about present health status and alternative strategies of treatment, while simultaneously undertaking much of the treatment themselves (Jacobs 1980).

² Supplier induced demand hypothesises that, particularly with a fee for service system, a doctor's position of power may make it feasible to adjust the quantity of health care demanded in order to maintain their income or some other part of their utility function, eg. prestige. The empirical evidence, however, is poor leaving the issue unresolved.

Is there Conflict in the Dual Role?

To answer this question the two roles must be assessed carefully. If the doctor is to act as a perfect agent the maximand must be the patient's welfare, and the choices made should duplicate the choices' of the patient, if the patient had the same information (Pauly 1980). The critical question being, is this realistic? If not, why not?

To aid analysis the welfare of the individuals concerned must be examined in relation to the required theoretical assumptions stated in part 1, indicating potential areas of conflict. An outline of the concept of need may be useful.

- The Concept of 'Need'

A doctor agency role is required to enable services to be matched to 'need'. The concept of 'need' is a complex one. Need and supply have been linked, in that need counts so long as the treatment has a positive marginal productivity (Williams 1978), in the form of physiological or psychological gains. Need and demand are interchangeably used but technically may not refer to the same thing. Actual needs may not accurately correlate with demands, as they can be over or under stated. For example, healthy individuals may demand attention when there is a genuine need elsewhere in society which is not being demanded. In health care this dilemma is of particular concern given resource constraints and allocative methods, ie. through an agent. For agents to operate as assessors of need they must supplement their specialist knowledge with specific knowledge of their client to allocate appropriate treatment regimes and service provision. This may be decided in terms of

'capacity to benefit'. Even with this it is easy to identify areas of immediate problems, in terms of deficits and ambiguities. Information plays a vital role, particularly the exchange between doctor and patient. Imperfect information may generate imperfect agency which may produce a less desirable outcome.

- Information Issues

Asymmetry of information exists as the patient accepts his own ignorance, the doctor's superior knowledge and the likely welfare gain from the doctor's knowledge of the consequences of treatment on the patient's health status (McGuire et al 1988). In this circumstance it is the producer (the doctor) that has the advantage. Although, both parties are in possession of unique information and for a successful agency relationship to exist the exchange must be free-flowing in both directions.

First, if the doctor is aiming to be a perfect agent s/he may be functioning with poor data in two respects. It is assumed that the doctor's information about technology and its application is perfect but this does not always transpire, even though desirable (Evans 1974). Health technology assessment can aid decision-making. However, it may also add further cost and possible inaccuracy to the process. Additionally, the patient may not provide the best possible information. This is not necessarily because the patient wishes to deceive, but through fear of social stigma, ignorance, cultural differences or inability to recall vital information.

Once the information is given to the doctor it must be interpreted and this too may prove difficult, not through deliberate deceit, but through poor interpretation of the significance of

information presented or the sheer magnitude of data to be processed. Data requirements can be extensive as they relate to patients' tastes, preferences, income, production and consumption factors.

There may be other occasions when it is plausible that one or other may wish to block information flows. A doctor may have a motive for ignoring the information given or to misinterpret, because of the potential benefit which could accrue to him/herself. Similarly from the patient's viewpoint any inaccuracy most probably relates to perceived potential gains (eg. increased likelihood of receiving treatment). However, given the responsibility that patients delegate to doctors, it may on occasion be the doctor's professional judgement that it is not in the patient's best interest to obtain a full considered opinion, especially if accuracy in diagnosis or treatment is doubted. This is particularly likely to increase with the degree of individual case complexity and uncertainty. As doctors have responsibility for their patient's reactions this censorship of information may create the potential for distortion of the outcome. This eventuality has been termed process utility (McGuire et al 1988).

Process Utility

Process utility is the concept that decision-making procedures in themselves produce some welfare gain. This has been documented in the form of either decision-making or risk-bearing or equity (McGuire et al 1988). The first relates to the ability for patients to pass on to the doctors the costs of making decisions. In addition, there is an element of satisfaction derivable from participation in the consultation process in that ".. the exchange process itself [may be] an object of value" (McGuire et al 1988), since it may generate positive

psychological gains even though no physiological improvement occurs. Information dissemination to patients has been found to generate utility gains. For example, pre-natal screening has not just been used by women to abort an abnormal foetus but it has been indicated that satisfaction may be gained from "reduced uncertainty or perhaps just from knowledge" (Mooney 1991; Mooney and Ryan 1993). Equity relates to satisfaction gained from the knowledge of others gaining access to health care (McGuire et al 1988).

- Clash of Interests

The doctor-patient relationship is vulnerable to a clash of interests between the two parties. Doctors may have interests in the selection of patients, helping colleagues and increasing their own income which are not concomitant with patient interests. In turn patients may make "unreasonable" demands on doctors in terms of timing, quantity and nature of services or commodities they demand.

The literature on doctors and agents contain a number of examples of the problems involved. Systems where doctors are paid a fee per item of service have generated a whole series of studies and commentaries (Reinhardt 1985; Cromwell and Mitchel 1986; Phelps 1986; Culyer 1987; Ryan and Mooney 1992) of how doctors attempt to maximise their income by themselves providing a whole series of treatments for the patients referred to them (Evans 1974).

3. CARE MANAGEMENT

The recent reforms of the National Health Service and community care in Britain have led to the introduction of innovative approaches to service provision care management is one such innovation. The White Paper, *Caring for People* (DoH 1989), specified the objectives of care management as enabling individuals with special needs "... to live as independently as possible in their own homes, or in homely settings in the community ... [and] ... to achieve their full potential" (DoH 1989). A needs-led service provision is advocated, with care management defined as "the process of tailoring services to individual needs" (DoH, SSI, SO & SWSG 1991a). Of course, the definition of needs is as difficult in this example as in the previous example of a doctor's interpretation of a patient's needs.

The core tasks of care management in the U.K. are considered to be (Challis and Davies 1986):

- * case finding and referral
- * assessment and selection
- * care planning and service packaging
- * monitoring and reassessment
- * case closure

The Objectives of Care Management

The care management process is designed to enhance service provision for users, tailoring services to individuals by assessing need on a personal level and finding suitable services to

fulfil that need, resulting in better provision. This change marks a major shift from the service-led provision of the past, where individuals were fitted into whatever was available. An individualised process in care planning, along with identification and assessment of outcomes is encouraged.

A main aim of the new arrangements is to improve the service commissioning and provision by separating assessment and purchasing of services from the provision. This split is to be enhanced by the development of the mixed economy of care and the generation of increased use of alternative providers in the statutory and independent (private and voluntary) sectors.

The care management process also intends to create a partnership where users, and possibly carers, are more active in determining appropriate strategies to make service receipt more effective. A care manager could be appointed by the user and/or carer as a representative or helper who organises and co-ordinates other delivery of services to meet their needs. Overall, the objective is to aid continuity of care and increase access to services and resources by users and their carers. The mechanics should increase integration of services within and between agencies. In the end the care manager is accountable for the overall welfare of the people in his/her care.

Care Management Process

The care management process is intended to be and by definition must be flexible. Guidelines for practice (DoH et al 1991a; b; c) have been developed detailing the vital components of the process which should generate services on a needs-led basis. Care management can

operate in either a team or individual form (Renshaw et al 1988), using people from a variety of professional backgrounds, including occupational therapy, nursing, social work or even general practice.

An example of a care manager may help to describe their role. From the outset, it is important that information is accessible to users and carers increasing their awareness of the agencies available. This requires giving information about who can assist, possible services available and how to contact them. The care manager would then assess a client's needs. This may involve specialists, for example a physiotherapist may be asked to assess the needs of an elderly person about to be discharged from hospital after a cerebrovascular accident. These connections have to be developed so they can be smoothly and quickly brought into operation, for example accessing other professionals to assess needs. If appropriate, carer's needs will be assessed, possibly independent of the user's assessment to elicit the specific pressures experienced through their caring role.

The care manager can then collate the information gathered and, in consultation with the user and carer, establish the objectives through a care plan which is operationalised using appropriate financial and service resources. Practitioners will have to increase familiarity with agencies in their area able to provide resources and services. Variation in practice will exist with budget responsibility.

The care manager will be responsible for monitoring and reviewing the care plan implemented and may operate as an agent for the client. The role will vary with individual needs, either purely a facilitator, or perhaps an advocate. However, the contents of the plan should be

supported and controlled. The review process installed aims to reassess needs, with consideration of service outcomes. This may create a need for revisal of the care plan, with the frequency determined according to individual characteristics. This may result in need assessment being repeated if changes are sufficient to warrant it.

Different Models of Care Management

Care management will be developed in different fashions by the existence of variations in demography, history and geography. This is not perceived as a problem as long as the aims and objectives of community care developments are attained.

It is possible, as outlined previously, that a single practitioner could perform the functions of care management. This could be with full budget responsibility or with degrees of responsibility. Other models may take the form of an administrator coordinating a range of practitioners, allowing a more integrated multidisciplinary approach. Some users may act as their own care manager. This would obviously be dependent on their physical and psychological condition. The degree of confidence and comfort the person has with that role would determine the desirability or feasibility of this. Alternatively a group of practitioners could assume responsibility for various tasks. This would require practitioners to be on good terms with each other and willing for strong self-motivated teamwork to occur. Inter-professional rivalry or inter-agency budgetary constraints could make this difficult.

Although the example is in some respects ideal, (i.e. a one-to-one relationship), it would be unrealistic to expect all clients to be in this fortunate position. Resources are scarce and

therefore constraints will prevent this being universally applicable. Variations will not be viewed negatively, adaptability will be seen as part of the push toward innovative service provision. Moves that enhance inter-professional collaboration should create positive outcomes for clients.

Care Manager as Agent

For simplicity, it will initially be assumed that one individual will be nominated as care manager. Each care manager will be responsible for a particular caseload. For illustration, one client (user) with no carer will be taken. The care manager is then responsible to assess (by arrangement) the needs of the client (the concept of need as discussed earlier), negotiate and install a care plan, secure the demanded level of intervention, monitor and review.

For social care coordinated by care management, it is probable that an agency-type relationship will develop on a similar basis to doctors and patients. Care managers' roles will require them to operate as agents through which client's access services, ie. a 'gatekeeper'. Thus, social care will be compared to health care, as social care like health care is not a normal good. Here the care manager is required to operate as a perfect agent. They should assess objectively their client's needs in order that the client can maximise their utility. Ideally a care manager should assume the welfare of their client as if it were their own, thus taking on an agency role similar to that of doctors.

Utility Functions

For clients with care managers, utility will be derived on a similar basis to consumers of health care (Pauly 1980).

Where independent living in the community would be produced by community support resources and services, again the maximisation of utility will be subject to production function and income constraints. The care manager's task would then be one of finding the level and blend of resources and services which would satisfy the patient's demand in a fashion which emulates clients with full knowledge.

Consideration of the care manager's utility function must be given. Within the care manager's utility there is likely to be: their client's utility; their own professional development and status; time considerations (work and leisure time trade-off); financial implications for their organisation. Thus similar issues and the potential for distortions will be encountered as has been described for doctors (Pauly 1980).

Process Utility

As mentioned in section 2, the concept of process utility should be considered. The gains with respect to this by users and their carers could be considerable. The recognition that a person has needs, even if the process does not result in noticeable increases in service provision, may result in positive returns through the assessment process itself, particularly as care managers can act as counsellors.

The above outlines the basic model applicable to care managers. However, it is very simplistic and unlikely to be representative of the majority of cases. A number of issues, in addition to the utility functions, will further complicate the relationship. The issues of interest will be outlined, many of which are common to the health care scenario.

Similarities to Health Care

- Asymmetry

From the above scenario it can be observed that there are some issues which are very similar to the doctor-patient agency relationship. The existence of information asymmetry is likely. In social care, as with health care, there are the client's interests and the care manager's interests which should be interdependent. However, information has to be made explicit to ensure a good decision. It may not be in the client's interest to reveal completely all information about his/her circumstance as this may reduce the chance of obtaining services. Therefore information about disability may be exaggerated and help received in the community from relatives or friends may not be fully revealed.

- Utility

As with doctors, the care manager's utility functions contain a number of elements potentially in conflict with the user's utility. With care managers there may be an incentive to favour one sector, eg. voluntary rather than public, or one mode of care, eg. residential homes to non-residential options. The biases may not necessarily be detrimental if they benefit the user

by resulting in a better care package. This will depend on the motive or incentive behind the bias, if for example it generates financial benefits to the care manager's organisation.

- Referral

Other related difficulties are the access rules. As with health care, social care can only be accessed through certain channels, which may be difficult for users, as they may not know how to approach the system, or know that they are eligible for consideration. For success, good information about care management must be made known and the rules of eligibility made clear. The care manager must know how to access various services and act therefore as a 'gate-keeper'. For some services a social worker may be involved, for others the referral may be through community nurses. Access rules to social security benefits may be quite complex and help may be required from local benefits agency staff to ensure correct type and amount of benefit is paid.

- Payment

In the UK the payment mechanisms are more complex in social care than in health care. Funding may come from one source for example the Local Authority or it may be that it is jointly financed by the Local Authority and the Health Authority. The differences in user payment rules may also cause problems. Health Authority services are free to the user at the point of access whereas the Local Authority services are not. This could result in managers trying to organise a cheaper but less effective set of services which are free to the user.

- Dual Role

Agents, care managers, may be required to act as providers especially in small rural populations and this role needs to be clarified (Beardshaw and Towel 1990). When populations are scattered, practitioners such as occupational therapists, social workers, or nurses might be required to provide services as well as function as care managers to fulfil their duties. Cost savings may accrue from this dual role, but conflicts could occur where, for example, a care manager who is also a provider presents less than the optimum amount of services because they do not get on with the user. This highlights the concept of process utility (as discussed in section 2) because here the care manager has been delegated, or has assumed, full responsibility for decision-making and thus will determine the outcome without the user benefiting from participation.

Differences from Health

- Knowledge

The care manager will be in a position of superior knowledge in terms of access to care agencies, agency policies and access routes. Over time, their experience of other clients will enhance allocation of appropriate levels of intervention. Connections with other professionals will allow them to generate feasible and well-balanced intervention, with their backgrounds giving them specialist knowledge helpful to clients. This knowledge, as with doctors, should be recognised as costly to attain. Their role resembles that of a doctor's except that the knowledge required is less technical, given that social care requires knowledge of services and

access rules, not disease processes and pharmacology. In addition, they may be more constrained by bureaucratic entanglements, through rules and regulations over practice. The decision-making process again may be delegated to them by clients who do not want to incur the costs of searching and anxiety.

- Existence of a Carer

If a carer is present the likelihood of complexities increases. Informal carers frequently enter as providers of care for the aging population, people with learning disabilities and people with mental health problems. This increases the number of people with a vested interest in the nature of provision, and the number of utility functions affected. Here the care manager(s), user and carer have separate but overlapping utility functions. The content of the first two have already been examined. The third, the carer, will contain: the user's welfare; their own welfare (health and social); the welfare of others in their household, eg. family commitments; time (in terms of work (career) and leisure opportunities).

Thus the resulting task for the care manager is even more complex. Firstly, information from the user and carer may conflict. Interpretation of information will be problematic enough without anomalies. Secondly, if the care manager is effectively operating as an agent for the user, the guidelines (DoH et al 1991b) advise that if a carer exists, consideration must be given to the burden they may be under. In this circumstance who should be given priority? The guidelines (DoH et al 1991c) indicate that a separate assessment of need may be required. If the same care manager assesses the carer 'independently' and finds areas of conflict, to whom do, or should, their loyalties lie? This creates potential for the user's interests to be

compromised. Equally, carers may be coerced into carrying on in a role they desire to give up.

- Care Management, Advocacy and Service Brokerage

The role of the care manager can vary as either service broker and/or advocate. The former being a coordinator of services and the latter relies on achieving "improved outcomes for clients through the use of individualised budget allocations" (Beardshaw & Towell 1990).

Problems of information asymmetries as defined in the previous section have led to recommendations that care management and advocacy roles should not be carried out by the same person or even people from the same organisations. The advocate is much closer to the ideal agent as described earlier. In effect, a person who can "get under the skin" of the person in need to ensure that the relevant needs are clearly and fully articulated and yet who is independent of the organisational constraints which restrict the care manager's room for manoeuvre. In general health care it is not a common practice for someone to act in the advocate role.

The importance of the different roles here relates to the number of individuals involved. However it is possible to have agents from a variety of organisations dealing with the one principal. All of whom will be very informed individuals within their own rights but dealing from different perspectives with the client's case. This may result in conflicting assessments of need and subsequently delay the implementation of a care plan.

As can be seen from the above, numerous aspects interact with and have an influence on the care management process. For care management some of the problems faced are the same as those for doctors and others are unique to the situation. This new complexity makes the issue of care management very interesting to follow but difficult to predict.

4. STUDIES OF CARE MANAGEMENT

Evidence from Kent

A study of care management arrangements occurred in Kent for older people (Challis and Davies 1986). Divisional managers allocated the budget to team managers for the elderly and the disabled and care managers were appointed to deal with caseloads of mixed complexity.

Expenditure on individuals was set by two-thirds of the cost of a place in a new residential home. If more resources were required they had to be sanctioned by a manager, but did not make a case ineligible. This budget constraint and specifically targeted caseload were set to clarify autonomy and accountability (Challis & Davies 1986). Some knowledge of unit costs was helpful. In practice, potential costs were calculated and actual costs were recorded.

It was believed that staff were able to enhance the quality of services to the elderly through command over the budget as well as responsibility over costs and welfare. There was evidence of resources being closely matched to needs and a relationship between dependency and costs. Social workers were thought to benefit from the extra autonomous control over resources and flexibility which seemed to make their job more interesting by adding a new dimension. Specifying a client group seemed the most agreeable manner of allocation as it was anticipated that it would be problematic if different client groups were competing for resources, eg. the elderly and children.

A lower rate of admissions to institutions but a greater use of acute hospital facilities

occurred. The benefits of the scheme seemed to be shared by the elderly and their carers with practical difficulties and mental stress having decreased. The care packages varied with the problems, individual care plans and a greater input mix efficiency. Better communication occurred with care being drawn from a wide range of sources and alongside closer support for carers.

The Andover Case Management Project

The Andover Scheme was established for people with learning disabilities. In the planning of this project each member of the team was identified alongside their role. The plan indicated that a case manager would assess, cost, purchase, monitor, record, and allocate resources from a project manager. It was suggested that a service broker would search, develop, sustain community resources, and be involved with providers to establish contracts. An advocate to represent the clients was indicated in the plans.

At the planning stage it was proposed that the case manager and broker would become one role. However, initially it remained as two roles "because of time constraints and the need to adapt or develop provision" (NDT 1991). The advocate role was not developed at this point despite being seen as essential.

To operate the pilot project one full-time (from the health authority) and one part-time (from the social services department) case manager were employed. Two part-time brokers were seconded. A project leader was employed to supervise, among other things, the case managers.

It became clear that the first stages were very time consuming, ie. the assessments etc. Existing day services were not as adaptable because of budget constraints, not lack of willingness, so another budget was created. Further resources were required for service development.

In terms of implementation a number of conclusions were reached about clarity of budgets and access, to encourage the smooth running of the services. Direct access to devolved budgets was believed necessary. In addition, a cost and charging policy was required to clarify cost, client contribution and financial accountability. An important finding from the pilot project was recognised early on: "case management on its own would not lead to major system change, as had been originally intended. Indeed unless case management and planning processes take on the broader implications for service change, the life of a case manager could become particularly frustrating." (NDT 1991). It seems essential that links between the case manager and the rest of the system are good for the smooth operation of the service.

Channelling experience in USA

Channelling (case management) was observed in the USA (Carcagno and Kemper 1988). This was an attempt to substitute community care for nursing home care, with the idea of reducing costs in the longrun and increasing quality of life. Two types of case management were tried. Both were comprehensive models involving full needs assessment, care planning including formal and informal resources, service arrangements along the broker model, monitoring and reassessment. However, one model was a basic care management model and the other, a financial control model.

The intention of the demonstration was to increase the use of community services, decrease the use of nursing homes, decrease use of hospital and decrease costs of long term care. Simultaneously it was hoped that the level of informal care would be maintained alongside the maintenance of quality of life for clients and caregivers.

The financial control model required case managers to complete cost calculation worksheets. It tended to identify more problems with physical and mental function, whereas the basic model identified a broader range of problems. The basic model encouraged informal carers participation. It appeared therefore that the basic case management model played a broader role by providing more direct support for clients and informal carers through reassessment and personal contact. The financial control model tended to provide more formal services.

The analysis established that both models increased the receipt of comprehensive case management. Some of the control group were in receipt of good channelling as a direct consequence. The basic case management model created more incremental increase of case management than the financial model. With the basic case management model there appeared to be more client contact and a broader approach to problem solving.

The results indicated that overall total cost increased because admission to homes was not reduced. However, informal care did not decrease alongside the increases in formal services. Clients, family and friends appeared to benefit in terms of satisfaction with services and quality of life, although no cost savings occurred.

In Summary

These three studies indicate that where care management has been installed it worked with some success. However, the roles taken on by the managers have been slightly different. In some, the manager has been expected to be a service broker in addition to their role as manager. None of the three models have an advocate present, although the Andover model expressed a need for one.

Budget responsibility varied depending on which model was used. The US experiment had two different states, the outcomes varied with the method used, ie. the assessment approach. All concluded that a degree of autonomy over the budget would be helpful in enabling better matching of services to need.

The presence of informal carers was noted in all studies. It seemed that the benefits to them were considered but this was not always assessed explicitly. In Kent, mental stress and subjective burden seemed to be reduced by provision of services not normally received. With channelling, satisfaction with the arrangements of care occurred alongside satisfaction with life. Other quality of life factors, however, were unaffected.

5. THEORETICAL PREDICTIONS AND EMPIRICAL TESTING

This review of the theory and practice of principals and agents has revealed a need for a number of approaches to evaluating the development of care management. The research on the agency relationship has shown how problems arise when agents have considerations other than the welfare of principals in their actions. These problems have lessons for a future research agenda.

One part of this agenda may well be a number of descriptive studies which broaden our understanding of care management and the way it works according to different user groups, geographical location, individual or group management and styles of care management. Given that developments are based on a small foundation of principles and practice, lessons of good and poor practice are likely to emerge from closely focused case studies.

Evaluative research will also figure on the agenda. There is considerable scope for experimentation in the development and practice of care management. Systems which rely on managers drawn from different professional backgrounds, use individual or group approaches, have varying caseloads according to the different characteristics of users and carers, can be manipulated to set up interesting cost-effectiveness studies. The different methods of determining budget size and devolution to care managers and the need to develop systems which cross organisational and fiscal boundaries are also promising research areas with important policy implications.

Research in these areas, descriptive, comparative and evaluative, can examine the theory and

practice of principals and agents in social care. For example in contrast to the work on health care systems, it would be interesting to examine whether the absence of income-generating possibilities for care managers avoids the problem of supplier-induced demand in health care. By contrast, care managers may be so caught up in budgetary control and financial stringency that supplier reduced demand is a more likely outcome in social care.

It would also be interesting to know whether care managers so closely reflect the ideal agency role that they are able to make the system mimic classical consumer sovereignty by getting completely "into the skin" of users. If not, can advocacy or service brokerage systems protect users from practices which are not totally in the users' interests? The resolution of the clash of interests which sometimes occurs between users and carers by care managers or advocates should also yield studies which will inform good practice.

Research on care management (Pilling 1992) in the United Kingdom is still in its early stages as, indeed, is practice. The next five years of work on this topic promises a fascinating research and development programme which will benefit from a multi-disciplinary approach. We would expect economists to play an important role in cost-effectiveness aspects of this programme, but the study of the theories of principal and agent show that a much wider casting of the net may catch issues about purchasers and providers, about users, carers and service delivery and about the ends and means of care management which will inform the effective implementation of the recent reform of community care.

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