

Needs Based Planning: Use of Information from Individual Assessments to Develop Population Estimates of Need and Use of Resources

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Abstract

By separating purchasing from the traditional provider role, the new community care policy has brought about a fundamental change in the planning role of health and local authorities. The policy implies changed assumptions about what constitutes need and requires an improved understanding of local needs. The policy has not only placed a duty on local authorities to assess the needs of the population in support of their Community Care Plans, but has also brought about several changes which have by their nature encouraged many local authorities to undertake a more detailed needs assessment.

The PSSRU, in conjunction with Surrey Social Service Department, has been developing a needs based planning model which will assist in the equitable and efficient deployment of community care resources for elderly and physically disabled people. The model is customised to reflect local priorities and assumptions. The model synthesises local client needs assessment data with national data to provide a method of predicting numbers of the population in these target groups which can then be translated into potential resource requirements.

This paper provides a background to the development of the project by discussing the place of needs based planning in population needs assessment and local authority strategic planning. The final section discusses the progress and development of the methodology in Surrey.

1.0 INTRODUCTION

I have been asked to talk to you today about the work of the PSSRU in needs based planning and how our ideas are being developed in local authorities. Firstly, I would like to briefly place needs based planning and population needs assessment in the context of the community care arena. Secondly, I would like to discuss population needs assessment in relation to a strategic planning model. Finally I will discuss our work in the development of a needs based planning model in Surrey.

2.0 NEEDS BASED PLANNING AND POPULATION NEEDS ASSESSMENT

There has always been a requirement on local authorities to allocate resources in relation to an assessment of the needs of the community. However, local government resource allocation had generally been carried out whereby spending is adjusted on an incremental basis year by year, with occasional shifts resulting from local political concerns or in response to some short-term problem, or as a result of spending constraints. On the whole, local authorities have only occasionally attempted to examine spending in relation to patterns of need at local authority level. Needs analysis has usually had little impact on policy or strategic planning.

This has now changed since the NHS and CC Act of 1991 whose needs led principles aims to change this culture. The act has brought about many changes such as requiring local authorities to assess the needs of their populations in support of their community care plans. The act has also brought about other changes which have encouraged local authorities to undertake more detailed needs assessments. These changes may be briefly summarised as follows:

- an emphasis on promoting consumer choice and independence, and the increasing obligation of individuals to bear responsibility for care decisions made about them and to contribute to their own care costs. This is reflected in increasingly "needs-led" assessments and the development of charging policies.
- increasing recognition of the role of informal carers and the support which they provide; and the support which they will require to enable them continue in their caring role
- increasing emphasis on a holistic approach to needs assessment which is reflected in the increasing emphasis on joint planning, joint assessments of need and a joint approach to responding to a clients need
- the separation of purchasing and providing roles, and the emphasis on the enabling role of local authorities. This assumes that a mixed economy will be more responsive to supply in local areas of capital and labour and hence more efficient. But this also means that the supply of services will become more varied.
- finally, the greater use of community care for people who might previously have used institutional care. This continues to engage providers in developing a variety of types of help exploiting what is available locally, which will enable people to remain at home, or in partly sheltered settings.

All of these factors are at present combining to bring about a situation in which there is greater

variety of demand as well as greater variety in supply, and so increasing complexity of service allocations.

Local authorities have been grappling with these issues and attempting to create models of need assessment which not only reflect these issues, but reflect their own local considerations and concerns.

The Department of Health has provided some practical guidance in its publication "Population Needs Assessment Good Practice Guidance" (Department of Health & Price Waterhouse, 1993), see Figure 1: Population needs assessment cycle.

This diagram from the guidance sees needs based planning as a cyclic and evolutionary process in which population needs assessment is at the core of the development of strategic plans and about resource use which in turn affect individual care plans. Population needs assessment is a dynamic process which is to be continually being reappraised in the light of what is happening at care management level.

The DH model of population needs assessment assumes that information from individual need assessments will continually feed into the development of strategic plans. However, in reality it appears that the synthesis of information gathered from the top-down and from the bottom-up through individual need assessment, is a major stumbling block to local authority population needs assessment.

3.0 POPULATION NEEDS ASSESSMENT AND A STRATEGIC PLANNING MODEL

Now I would like to briefly describe the contribution of population needs assessment to the strategic planning process. The strategic plan is a statement about the appropriate distribution of resources between groups of clients which represents the balance between the demand for and supply of social care. The needs based planning approach which we are currently developing is based very much on a Balance of Care type model (Bowen & Forte, 1987).

There are several differences between our needs assessment model and other models such as the Balance of Care Model and the Price Waterhouse model (Communicare, 1994, Price Waterhouse, 1993) which can be described briefly as follows. Our model:

- is not generic and has the methodology has been developed to reflect the local authority with which we are working
- attempts to explicitly address many of the issues highlighted in the community care arena, such as the impact of the availability of informal care support on potential service and resource requirements
- incorporates data collected from the "bottom-up" (that is using data collected directly from individual client need assessments in the local authority) with "top-down data"
- incorporates a wide range of needs relevant circumstances
- emphasises carer and client needs

- has been developed to reflect local priorities and constraints and local factors which are taken into consideration in a care managers judgement of need
- incorporates both community health and social needs in the typology

The model incorporates methods of predicting the numbers in target groups of people according to their need circumstances, as these would be relevant to a need assessment. The target groups describes the needs related circumstances of a group of people. Studies show that there are many relevant factors which could be included in a description of a target group are (refer to figure 2):

Mental health condition, functional ability and the extent to which they can safely manage the activities of daily living, their informal care support circumstances, and the needs of any informal carer involved, whether the person is socially isolated or in regular social contact with friends or family, whether they live alone, the suitability and security of their housing and environment, and their physical health condition. The ability and willingness to pay for services is now also a highly relevant factor.

Ideally, these relevant factors should actually correspond to those already used by the local authority for client assessment.

Population needs assessment describes the means of predicting the numbers of people in the need groups. There are two methods of predicting numbers in need. The first is to carry out a survey of needs, however these are often time consuming and expensive. The second method is to use existing national or regional surveys after adjusting them to reflect the composition of local populations from the Census and similar sources.

The DH guidance provides an illustration of how this can be done, using the UK national disability survey of 1986 and this method has been used by many local authorities. The problem with this method is that the need groups are generally very simplified and they do not easily translate into potential service or resource requirements.

The model incorporates average service or care plans for members of each target group. The target groups should not be too broadly defined if there is debate about the priorities for care between clients with different needs. However, to ensure that the numbers of target groups are manageable in number, the groups also should not be too specifically defined. Needs assessment models like the Balance of Care model have tended to use between 15 or so target groups for elderly and disabled people. The care plan makes a normative judgement about people's needs, even if it is partly determined by actual experience. The care plan should take into consideration the percentage uptake the contribution of other service purchasers. Ideally care plans are developed jointly.

FIGURE 2: RELEVANT NEED FACTORS

- Mental health condition

- Functional ability: ability to manage activities of daily living

- Availability of informal social support

- Needs of any informal carer involved

- Social Networks: Socially isolated or in regular social contact

- Physical Environment: Suitability and security of housing and environment

- Physical health condition

- Ability and willingness to pay

4.0 THE SURREY MODEL

The PSSRU has been collaborating with Surrey Social Services Department over the last year in the development of a needs based planning model which will focus on the equitable distribution of resources for the elderly (people aged 65 years and over) and adults with a physical disability (adults aged between 18-64 years) care groups between localities in Surrey. This model takes into account a full range of socio demographic indicators and aims to make the relationship between assessed need in the community and the resource implications for social services and also community health services more explicit. For Surrey Social Services Department, the main outcome of the project is

- To provide a better measure of the total resources required (including health and social services) to meet the community care needs of the two care groups in different localities.
- To provide an improved basis for the relative distribution of social services resources between localities.

The main focus of this work so far has been the development of a need typology for Surrey. Following the framework of the balance of care needs assessment model, the need typology is a set of target groups which describe the needs related circumstances of the population in question.

The development of this typology in Surrey was carried out in several stages:

1. Identification of the main domains of need
2. Collection of local data; this was of 2 sorts:
 - local client data to illustrate the relationship between individual need circumstances and actual social and community health care services allocated through the care plan
 - local supply information: including actual costs of services (in-house, private or voluntary), location and volume of supply
3. Formulation of a computer database and analysis of the data collected at stage 2 to look at the relationships between
 - the various domains of need
 - need and the average cost of care packages
 - need and actual service receipt
4. Development of separate target groups for the elderly and adults with a physical disability

5. Estimation of numbers in these need groups

We are currently working on stages 4 and 5 and we are refining our target groups in consultation with representatives from both health and social services (which includes planners and care managers) from localities in Surrey.

The first stage in the development of a needs typology for Surrey was to identify the main factors which are relevant to need judgement. This was done by combining the results of a literature review with a field study among middle managers and senior field staff designed to test assumptions about needs and priorities.

Local data available from client need assessment forms was collected to illustrate the relationship between individual need circumstances and actual social and community health care services allocated through the care plan. Data was collected from a sample of forms filled out in 5 pilot localities in Surrey, which also included one hospital based team. A substantial number of factors about the clients need related circumstance were collected from the need assessment forms including: age, sex, ethnicity, recent hospital episode, living circumstances, the clients ability to undertake a variety of activities of daily living tasks (including instrumental activities of daily living) such as washing, dressing, cooking, laundry etc. Information was collected on the clients physical and mental health condition, as well as a variety of socio-demographic characteristics including: the social networks of the client including the clients level of social contact or isolation, availability and level of informal care provision, whether the carer(s) required support, accommodation situation and financial circumstance. Data on the actual services (both social and community health) allocated through care plans was collected for each client. Details on the type, frequency and volume of service provision was collected.

Standard scales were developed to measure the level of each of the main domains of need in the database. As far as possible, existing and validated scales were used, but with some adjustments made to reflect the availability, quality and accuracy of the data collected and also Surreys existing criteria for measuring need.

Here is an example of a scale used to measure level of functional ability:

The interval need scale (Isaacs & Neville, 1976) and a Guttman Scale (Kyle et al, 1987) were adapted to measure functional ability and the level of care required. The interval need scale closely matched Surrey's existing definition of need.

Figure 3: Interval Need Scale

A guttman scale which lists ADL's according to an assumed level of difficulty was used to score individuals level of functional ability and the potential level of care required. Inability to carry out a certain task in the list assume an ability the carry out preceding tasks. This method of scoring clients was found to be extremely useful, particularly where a lesser amount of data was available.

Figure 4: Adapted Guttman scale

FIGURE 3: MEASURING LEVEL OF NEED

1. LEVEL OF CARE AND FUNCTIONAL DISABILITY

INDEPENDENT: PEOPLE WHO REQUIRE NO HELP WITH ADL TASKS

LONG INTERVAL NEED: PEOPLE WHO REQUIRE HELP WITH ONE OR MORE ADL TASKS, BUT LESS THAN ONCE A DAY

SHORT INTERVAL NEED: PEOPLE WHO REQUIRE HELP WITH ADL TASKS, AT LEAST ONCE A DAY

CRITICAL INTERVAL NEED: PEOPLE WHO REQUIRE HELP WITH ADL TASKS, FREQUENTLY AND AT SHORT NOTICE

FIGURE 4:

THE GUTTMAN SCALE OF ACTIVITIES OF DAILY LIVING

1. LAUNDRY
2. SHOPPING
3. MOBILITY OUT OF DOORS
4. BATHING
5. COOKING
6. HOUSEWORK
7. DRESSING
8. MOBILITY INDOORS
9. WASHING HANDS AND FACE
10. TRANSFER TOILET
11. FEEDING
12. INCONTINENCE

(Adapted from the Guttman Scale from Hereford Survey, Kyle et al, 1987)

The information collected was entered into a database and analysed to develop the need typology. The data on need factors and actual care plans collected were used to develop the descriptions of the target groups and their potential service requirements. Using average unit costs of services we were also able to describe the resource consequences of each target group.

We are still in the process of refining the need typology in Surrey with representatives from the pilot localities, and planners from both health and social services.

The elderly need typology consists of 16 target groups, each mutually exclusive and everyone in the database fits into a group. Each target group is described by various combinations of the various parameters and levels of need.

A typical elderly target group looks like this:

Figure 5: Example Target Group

The next step in the development of the model is the estimation of numbers of people in localities who live in circumstances equivalent to the target groups. We are currently at this stage and are testing various methods and data sources. For elderly groups, these estimates will be produced by synthetic estimation based on local Census statistics and recent national surveys such as the 1986 Disability Survey, the 1991 General Household Survey, or the 1991 British Health Survey. It may be possible, however, to directly estimate the numbers of young adults with a physical disability from locality registers or assessments made by health or social services.

We envisage that the prediction model will take the form of a series of spreadsheets, see figure 6. For each of the need groups, there will be a prediction of the numbers in each group, an expected take up rate and numbers for each group, potential social and community health service requirements, the balance of cost of care for social services and health, and then the combined cost of care.

FIGURE 5: TYPICAL TARGET GROUP DEFINITION

Elderly Target Group 10

Need Description	Potential Service Requirements
<ul style="list-style-type: none"> <li data-bbox="209 562 592 600">☐ No mental health condition <li data-bbox="209 640 603 712">☐ Moderate or high functional disability <li data-bbox="209 752 564 824">☐ Not well supported by an informal carer <li data-bbox="209 864 627 902">☐ Any physical health condition 	<p data-bbox="681 533 1369 571">Some will require a range of community care services:</p> <p data-bbox="681 607 1106 645">79% will require domiciliary care</p> <p data-bbox="681 645 1090 683">39% will require district nursing</p> <p data-bbox="681 683 1126 721">23% will require aids or equipment</p> <p data-bbox="1018 757 1046 795" style="text-align: center;">or</p> <p data-bbox="681 864 1106 902">14% will go to residential homes</p>

Extended Definition:

Members of this groups have no mental health problems and a moderate to high level of functional disability. Their accommodation is either ok or physically unsuitable and they may or may not have a physical health problem. They are however not well supported and therefore a large proportion of this group will require a range of community services and aids or equipment in order to remain at home. A small proportion of this group will not be able to cope at home, even with the provision of community services, and will need to move into a residential home.

Figure 6: A TYPICAL SPREADSHEET SUMMARY IN THE PSSRU POPULATION NEEDS ASSESSMENT MODEL

Target Group	Number of Persons in Group	Expected Take Up Rate	Expected Numbers in Group	Potential Care Requirements		Balance of Cost of Care (£ per week)		Combined Cost of Care (£ per week)
				Social Services	Health	Social Services	Health	
eg. Description of Target Group	eg. 200	eg. 5%	eg. 10	eg. 50% of group require day care 20% of group require domiciliary care	eg. 10% of group require district nursing	eg. £50	eg. £20	eg. £70

References

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