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Costs of regulating care homes for adults

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The **PERSONAL SOCIAL SERVICES RESEARCH UNIT** undertakes social and health care research, supported mainly by the United Kingdom Department of Health, and focusing particularly on policy research and analysis of equity and efficiency in community care, long-term care and related areas — including services for elderly people, people with mental health problems and children in care. The PSSRU was established at the University of Kent at Canterbury in 1974, and from 1996 it has operated from three sites:

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Summary

- 1. A key recommendation of the Burgner report on regulation and inspection of social services was that the cost of regulation should be independently reviewed with a view to relating fee levels more closely to the actual costs of regulation (Burgner, 1996; p8). Data collected on a regular basis suggest that the current fee structure is heavily subsidised by inspecting authorities and that there is considerable variation in the degree to which fee income falls short of expenditure on regulation.
- 2. In addition there are a number of important planned changes in the way that the regulatory function is to be conducted in the future (Department of Health, 1998). These include the setting up of independent regional authorities responsible for regulating care services, the extension of regulatory requirements to services not currently covered by regulatory legislation and the setting of standards at a national level. There will clearly be a need for an understanding of the costs of the current arrangements before the cost implications of any changes can be considered.
- 3. This report describes the results of a Department of Health funded study of health and local authority inspection units in England. The principle aim of the study was to establish the costs of regulating care homes for adults in a way that could be used to identify cost-based fees to homes.
- 4. The wide variety in organisational arrangements and activities undertaken by units, which were beyond the remit of the study, meant that a bottom-up approach to identifying costs was most appropriate. This involved identifying the resources used in the regulation process and estimating the unit costs of these resources.
- 5. Five principal types of regulatory activity were identified: inspection, registration, development, dealing with complaints and enforcement. For the comprehensive costs of regulation to be estimated we need to ensure that we have allowed for the costs of each of these activities.
- 6. The main data collection was a survey of all inspection units undertaken during the summer of 1998. Information was collected about unit level staffing, activity and expenditure; inspector characteristics and a sample day's time use; and a sample of recently undertaken inspections and registrations. A detailed study was also undertaken of nine enforcement actions in seven units.
- 7. In total 109 local authority units, 89 health authority units and 13 joint units were surveyed. At least some information was sent by 77 (71 per cent) local authority units, 65 (73 per cent) of health authority units and 11 (85 per cent) of joint units. Units were asked to distribute questionnaires to all inspectors (including managers and heads) that had any responsibility for adult care homes. Responses were received from 392 local authority inspectors, 182 health authority and 91 joint unit inspectors. It is not straightforward to estimate the response rates for inspectors but the indications were that these represented at least two thirds of relevant staff.
- 8. Differences in the extent of their responsibilities have resulted in local authority units and health authority units tending to have rather different organisational arrangements. Joint units are dominated by their local authority responsibilities and tend to be similar to local

authority units in structure and size. Health authority units were smaller, averaging just over two whole time equivalent members of staff, compared with local authority and joint units that had on average about 11 inspectors and managers.

- 9. The range in activities was particularly marked for local authority units, where it was illustrated by the difference between the average size of the unit overall (about 11 inspectors and managers) and the number of staff with responsibilities for adult care homes (about seven inspectors and managers). Even among those staff who had responsibilities for adult care homes, there was still a substantial proportion with other regulatory responsibilities.
- 10. For the most part units were fulfilling their statutory responsibilities and inspecting homes twice per year. Health authority units were dealing with a larger number of complaints per home than local authority units, but in terms of overall time use, were spending a similar proportion of time on them (about 10 per cent of time overall).
- 11. Information about expenditure and staffing levels in units was used to estimate the annual cost of inspectors. As far as possible, costs reflected local circumstances in terms of levels of salary levels, support staff costs and costs of travel. Only about a fifth of units were able to identify fully other overhead costs. Average estimates per inspector based on those units that could supply the information were used for all units, with adjustments made to reflect higher London costs. Costs of senior staff within units were also redistributed to reflect the costs of supervision and management of inspectors. Once all costs had been allocated, average costs per inspector were very similar in all types of unit: health authority inspectors and local authority inspectors costing about £46,000 and £50,000 per year respectively.
- 12. Hourly costs were estimated in order to allow the allocation of these costs on to specific regulatory activities. Basic hourly cost just reflects the expected number of hours worked, allowing for leave, sickness rates and length of the working week. In order to allow for activities that have not been specifically measured and so could not be allocated to homes, multipliers of this hourly cost were used. These allocate the time spent on other activities to the directly measured activities of inspection and registration.
- 13. Information regarding the use of resource inputs was collected for each of a number of types of inspection and registration. This sample information was combined with estimates of input cost to calculate the total costs of these activities. Applying weights to reflect the national picture the average total costs of an all types of inspection is £780 for local authority units and £910 for health authority units.
- 14. Four sets of factors were found to be associated with inspection and registration cost variation: the outcome of the inspection; the characteristics of the inspected or registered home (e.g. its principle client group and its size); regional variation in the costs of labour and capital and characteristics of the unit (e.g. unit size).
- 15. A number of findings are of particular interest. First, comparatively large homes are associated with higher costs. However on average only between 10 and 20 per cent of the mean costs is accounted for by variation in home size. In other words there is a large 'fixed' cost of inspection and registration unrelated to home size. Homes principally catering for people with mental health problems were consistently associated with higher

costs. Other client group effects arise for particular types of inspection or registration. Finally, unit size was inversely correlated with costs for most of the eight activities in the analysis.

- 16. The nine exemplar cases of enforcement action demonstrated that, although enforcement is a rare event in relation to the number of homes regulated, it is very costly. Costs ranged between £2,794 for an emergency closure and £122,880 for an action against two homes. These costs are experienced as serious opportunity costs to inspection unit staff time and may lead to failure to meet statutory inspections. By far the largest items of expenditure were the inspection staff time and legal advice.
- 17. There was a large range in the costs of the enforcement action cases studied. Possible reasons for the range in costs of enforcement were discussed with respondents. These included: the complexity of the case, experience of the unit and unit staff, characteristics of the action itself and unit policy.
- 18. The study results confirmed the expectation that fees do not currently cover the costs of regulating care homes for adults. Indeed, the lack of information found generally about overhead costs, would suggest that the degree to which authorities have been subsidising the regulatory function would be underestimated using national estimates of expenditure and fee income.
- 19. The most important factor affecting the difference between fee income and costs of regulating care homes is the issue of size of home. Currently annual fees are charged on a per bed basis. Although a statistically significant relationship was found between size and costs of inspections, overall the relationship was not marked. The implication of this is that while fee income increases rapidly with home size, the cost of inspections (and other regulatory functions) does not. So, if an authority has a large number of relatively small homes, the fee income will be much less than the costs of regulating those homes. If on the other hand, the authority has a large number of large homes, the fee income may cover or even exceed the costs of regulating those homes.
- 20. The next step is to consider how fees can be set in a way that reflects cost variations, is straightforward to administer and is transparent to providers. Not all factors that affect costs should, or would be practical to include in fees. Nevertheless, if fees are to cover costs, it will be important to monitor all those characteristics which affect costs, as this will assist in both explaining where fees and income diverge, and assist in updating fees at a rate that reflects real cost increases.

Chapter 1

Background and methodology

1.1 Introduction

A key component of current social care policy is the effective regulation of services provided for vulnerable people (Department of Health, 1998). If regulation is to be effective it must be properly funded. In order to achieve this we need an understanding of the costs of the regulatory process. This report describes the results of a Department of Health funded study of health and local authority inspection units in England. The principle aim of the study was to establish the costs of regulating care homes for adults in a way that could be used to identify cost-based fees to homes. This chapter describes the context of the study, its aims and objectives, costing principles used and the method used to establish the data required.

1.2 Context

A key recommendation of the Burgner report on regulation and inspection of social services was that the cost of regulation should be independently reviewed with a view to relating fee levels more closely to the actual costs of regulation (Burgner, 1996; p8). Data collected on a regular basis suggest that the current fee structure is heavily subsidised by inspecting authorities. However, there is concern about the accuracy of this data as there is a lack of information about exactly what is covered by reported income and expenditure. Variations in accounting practices may result in the inclusion of different overhead cost recharges from other departments. In the case of local authorities it is clear that at least some of the expenditure is the result of regulatory activity which would not be covered by income from fees.

There is also wide variation in the proportion of identified expenditure currently covered by fees (from less than 10 per cent to between half and three quarters of expenditure) (Burgner, 1996; p27)). This is probably largely the result of variations in fees charged and the extent of activities undertaken, although the degree to which all relevant expenditure has been identified will also be a factor. For services such as privately provided children's homes there are no national fees but local authorities have the power to set fees. Clearly, the extent to which these are charged at all and the levels set will vary. Moreover, for some activities, such as initial enquiries from prospective proprietors, local authority inspection units can not charge, some health authority units do charge and others do not. Another anomaly in terms of differences in fees charged between health authority and local authority units is variations in registration. Health authorities can charge for alterations in registration to reflect changes in ownership, numbers of beds, facilities and so forth, local authorities can not.

In addition to variations in income, there is considerable variability in total budgets of inspection units (Day et. al., 1996). This will reflect, *inter alia*, organisation of the units themselves, the tasks undertaken, and quality of the inspection process. Reports by the SSI have identified considerable differences in the organisation, management and working conditions of local authority inspection units (SSI, 1996a; SSI, 1996b). Day et al. (1996) suggested that inspection units with large budgets could have disproportionately large responsibilities in other fields. This could be both in terms of scope (numbers and types of

non-residential services inspected) and extent. The workload resulting from dealing with complaints may vary depending on local arrangements. While some inspection units may deal with all complaints, in other authorities the majority of complaints from local authority supported residents may be dealt with through contract compliance mechanisms.

The relationship between costs and the quality of the inspection process is, as in other aspects of health and social care, far from straightforward. Some aspects of quality, such as variations in the quality of individual inspections, would not be expected to impact directly on costs. Gibbs and Sinclair (1992) found that inspectors differ quite considerably in the way they assess the quality of a home, even when using the same schedule. But some variation in quality would be expected to have cost consequences. For example, some units will be providing a minimum statutory service in terms of the inspections undertaken, whereas others will include support and advice to local home owners as part of the regulatory function. Such effects may be felt through such factors as variations in grading and pay of staff; numbers of inspections and other visits per home; time spent on individual inspections; extent of advisory activities and scope of reports. Moreover, if advisory and support activities have a preventative function it would be expected that there might be a lower number of complaints and enforcement activities in areas where more support and advice is undertaken.

Previous work estimating the costs of inspection for the purposes of advising about fee levels and structures (SSI, 1985; SSI, 1988) emphasised the importance of ensuring the appropriateness of present levels of activity. This again is linked to the issue of quality of the inspection process. Current costs may in some instances be higher than necessary. Some providers made representations to the Burgner Review suggesting that there was inefficiency in the organisation of inspection and regulation. In other instances it may be lower: inadequate fee income and pressure on local government spending may result in some units not adequately fulfilling their statutory duties. When considering different options for cost based fee setting it is necessary to ensure that the costs identified are sufficient to cover statutory requirements and to consider evidence of varying levels of efficiency in delivering the regulatory function.

Since this study was commissioned, the White Paper *Modernising Social Services* (Department of Health, 1998) has been published. This contains a number of important planned changes in the way that the regulatory function is to be conducted in the future. These include the setting up of independent regional authorities responsible for regulating care services, the extension of regulatory requirements to services not currently covered by regulatory legislation and the setting of standards at a national level. While these plans did not feed in directly to the design of the study, there will clearly be a need for an understanding of the costs of the current arrangements before the cost implications of any changes can be considered.

1.3 Aims and objectives

The primary aim of the study was to identify the costs to health and local authorities in England of regulation and inspection of residential and nursing homes for adults in a way that provides a basis for setting cost related fees at a national level.

The objectives were to:

• identify relevant activities (e.g. inspections, registration, and enforcement activities);

- identify the resource implications (costs) of these activities;
- investigate causes of variation in the costs of these activities;
- identify a methodological approach to predict expected costs of regulation;
- identify useful indicators which, if supplied by inspection units would allow the Department to update expected costs;
- discuss the implications of the findings for policy and for fee setting options.

1.4 Design issues

An economic model of regulating care homes for adults would represent the output of regulation as a function of the resources used to produce this output. The overarching objective is the welfare of residents who are being cared for in the homes. The contribution of the regulatory function to this objective is ensuring that the homes and proprietors within the purview of the unit are fit for the purpose when they initially register, and continue to be so. In order to identify the costs of the achievement of this output we need to identify measurable activities, resources required to deliver these activities and (ideally) outputs of the activities.

The activities associated with the regulation of care homes for adults can be classified as:

- inspection;
- registration (new and re-registrations);
- dealing with complaints;
- enforcement; and
- policy and practice development;

The first four of these are associated with individual events or establishments. Policy and practice development feed into the regulation process through, for example, drawing up agreed procedures with other agencies such as the police; informing homes generally about drugs alerts and so on.

Section 1.2 above has identified a number of issues that needed to be taken into consideration when identifying the resources required to deliver these activities. In particular:

- the units vary considerably in their range of responsibilities beyond regulating care homes for adults;
- accounts information does not always reliably include the full costs associated with regulation;
- the quality of regulatory activity undertaken will vary in ways that in some instances will have cost consequences; and
- there will be varying levels of efficiency in the way that the regulatory function is undertaken.

The aim was to estimate the resources required in a way that could be used to estimate appropriate fee levels, it is important that we clarify both the extent and the limitations of relevant costs. Certain costs were taken to be beyond the concern of this study. These were costs that were borne by other agencies as part of their separate regulatory or other functions. These include costs of the police, fire officers and environmental health officers. They also include, in some instances, the costs of care managers where these are associated with the support of specific clients rather than providing evidence or advice to inspection officers.

1.5 Costing principles

When estimating and using cost information for any purpose four basic principles apply:

- costs should be comprehensively measured;
- they should reflect variations in resource use, and these variations should be explored;
- like should always be compared with like; and
- they should be linked with outcomes. (Knapp, 1993).

In the context of this particular study we also need to ensure that the information is collected and analysed in such a way that it can be used to consider cost-based fee options. It has been identified above that there are many potential changes in the organisation of the regulatory process under discussion. While information can be used to hypothesise the cost consequences of such changes the first task to identify costs that reflect current practice. Moreover, we need cost estimates that can:

- reflect all the relevant resources associated with the responsibilities of inspection units for care homes for adults;
- can be related to variations in the characteristics of establishments where appropriate; and
- can be used in a variety of ways when considering fee setting options.

There are two principal approaches to cost estimation. The top-down approach identifies total expenditure and divides this by level of activity. This is very useful when it is straightforward to make the link between expenditure and activity and when the interest is in monitoring costs over time. In many situations, however, a variety of activities are associated with expenditure, creating problems in establishing valid cost estimates. The bottom-up approach estimates the unit cost of resource inputs and links these to the level of resources required for any given activity. Given the complexity and variety of activities undertaken by inspection units, a bottom-up approach is more appropriate. The main concern with this approach is to ensure that all relevant resources have been identified and costed.

It is important that the costs of regulation are identified in such a way that a variety of approaches to cost-based fee setting can be considered. It may, for example, be regarded as inappropriate that all homes should bear the costs of dealing with complaints or undertaking enforcement actions. But we need to be able to identify the cost per home of these activities because in some units those activities that are undertaken as part of following-up inspections will be undertaken in others as part of an enforcement action. Moreover, savings resulting from cutting corners in the inspection process or policy and practice development may result in excessive complaints¹.

1.6 Method

In order to establish bottom-up costs we needed descriptions of activities and resources used and then to attach costs to these resources. In order to do this we needed a good understanding of both the processes involved and the type of information available.

The first task, therefore, was to establish a better understanding of the activities of inspection units and the type of information that is available both about activity and expenditure. A

¹ Thus a rise in time spent on complaints could be represented as one of the resources consequences of reducing the probability of making correct judgements about the homes' fitness for purpose (see Chapter 4, section 4.2.2).

small sample of inspection units (two local authority, two health authority and one joint) were visited to discuss regulatory activities, definitions and types of information that were available. The information gathered from this exercise was used to inform the design of the study.

The main data collection was a survey of all inspection units and undertaken during the summer of 1998. The objectives were to collect information that was relatively straightforward for units to supply and would provide consistent and reliable data that could be used to generate appropriate analyses.

A questionnaire was completed by each participating unit about overall levels of activity (numbers of inspections, registrations, enforcement actions and complaints), areas of responsibility and staffing. The information was collected in such a way as to allow the estimation of numbers of complaints and enforcements to be related to the number of establishments for which the unit is responsible.

A further questionnaire requested accounts information from units to identify expenditure including salaries, direct overheads in the form of clerical support, heating and lighting and indirect overheads such as finance and personnel functions. Units were also asked to separately identify expenditure on recruitment, training and expenses associated with lay assessors.

Individual inspectors were asked provide information about their qualifications, salary levels, range of activities and responsibilities and caseload. They were all also asked about the length of time they spent on a variety of activities on a sample day.

To identify the costs of each function, each unit was asked to supply information about the last formal inspection and unannounced visit that they had completed. The information collected included:

- 1. The process:
 - time spent by type of activity (preparation, visiting, report writing, etc.);
 - inputs by others (outside experts);
 - direct expenditure; and
 - involvement of lay assessors.
- 2. The characteristics of the establishment:
 - client group;
 - number of places;
 - sector and nature of provider; and
 - fees.
- 3. The outcome of the inspection:
 - whether the establishment was satisfactory;
 - if recommendations for improvement were made; and
 - if so, type of action (major or minor).

Similar information was collected at the unit level about the most recent new registration and a re-registration, variation of registration or voluntary de-registration.

In addition to the main survey, detailed information was collected about the resources required for rare but costly enforcement actions. Units were asked if they would be prepared to provide information about a recent action. Seven units provided information about nine enforcement actions. These are reported in chapter 5.

1.7 Conclusion

The estimation of costs in order to facilitate cost based fee setting is far from a straightforward task. A number of key factors need to be taken into consideration in appropriately estimating the resource consequences of regulating care homes for adults. These include reflecting all relevant costs, incorporating those aspects of regulation that are very variable and hard to identify, while ensuring that resource use which is not related to the inspection units' responsibilities for care homes for adults is excluded. The method has been designed to allow a bottom-up costing of key activities which will tie resource use in as closely as possible to the characteristics of the home. The following chapter describes the characteristics of the units and inspectors included in the survey, and identifies the level of regulatory activity being undertaken. Chapter 3 describes the method used to estimate the basic building block of the cost estimates: the unit cost of inspector time. Chapter 4 starts to develop the economic model of regulation and, on the basis of this, analyses variations in the costs of the key regulatory activities of inspection and registration. Chapter 5 describes the results of the detailed study of a small sample of enforcement actions. Chapter 6 briefly summarises the main findings and considers the implications of these for the concerns raised in this chapter.

Chapter 2

Units and inspectors

2.1 Introduction

This chapter describes the responsibilities and activities of units and inspectors that responded to the survey. Information was collected both at the level of the unit and individual inspectors. We start by describing the response rates to the survey before describing organisational arrangements and size of the participating units. A key issue identified in chapter 1 was the range of responsibilities of units and these are described together with information returned by inspectors about their range of responsibilities and activities. Information is presented about rates of regulatory activity and proportions of time spent on these activities. This last piece of information is of fundamental importance to the estimation of comprehensive costs of regulation.

2.2 Response rates

All units in England which had been operating for the financial year 1997/98 were sent questionnaires. There were slightly fewer units than local and health authorities as a number of units act as joint units covering both health and local authority functions. A few more combine small local or health authorities. In total 109 local authority units, 89 health authority units and 13 joint units were surveyed. At least some information was sent by 77 (71 per cent) local authority units, 65 (73 per cent) of health authority units and 11 (85 per cent) of joint units. Information at unit level was returned by 74 (68 per cent) local authority units, 60 (67 per cent) health authority units and nine joint units. Table 2.1 shows the numbers of units providing unit level information by type of authority. Response rates were highest among the counties (80 per cent response rate for local authorities). But they were lower in London: 52 per cent of London local authorities and 44 per cent of London health authorities responded.

It is less straightforward to estimate the response rates for inspectors. Units were asked to distribute questionnaires to all inspectors (including managers and heads) that had any responsibility for adult care homes. Responses were received from 392 local authority inspectors, 182 health authority and 91 joint unit inspectors. Multiplying the average number of such inspectors by the number of units we can estimate the total number of relevant personnel at the end of March 1998 (the field work took place in June and July). Using this as a basis of the total possible number of respondents, the response rate for inspectors in those local authority units in the survey was about 67 per cent and for joint units 69 per cent. The higher rate of part-time working among health authority inspectors and responses by inspectors who were self-employed (so not included in our estimates of staffing levels) meant a response rate for health authority units was the same as the overall response rate for local authority units: out the 60 heads of units 40 returned a questionnaire .

¹ In health authority units 30 per cent of respondents worked less than full-time compared with 16 per cent in joint units and just nine per cent in local authority units.

2.3 Organisational arrangements

Of the local authority units, 27 (38 per cent) reported joint working arrangements with health authority units. Of the health authority units 32 (53 per cent) reported joint working arrangements with local authorities. These arrangements varied from regular but "informal" contacts among staff to location of staff funded by a health authority in a local authority unit. The degree of joint working in one authority was such that the head of a health authority unit reported to the Director of Social Services.

The majority of local authority units (66, 89 per cent) were located in social services departments with the head of the unit reporting directly or indirectly to the Director of Social Services. The remaining units were located in a variety of other local authority departments including Housing, Chief Executives and, in one case, Public Protection. The same pattern was found in joint units, with seven of the nine units located in social services departments and the remaining two in other local government departments. The arrangements in health authorities were so varied there was no clear way to classify them.

Financially, only six health authority and 13 local authority units had ring-fenced budgets. The majority of units, 47 (78 per cent) of health units and 47 (71 per cent) of local authority units were organised as cost centres. For the most part the remaining units were part of departments or other, larger, cost centres. Six of the nine joint units were financially ring fenced. Two others were cost centres within the social services departments and another had different arrangements for different items of expenditure.

Advisory panels provide support to units but also represent an additional workload in terms of meeting preparation and organisation. All of the joint units and all bar two of the local authority units had active advisory panels with responsibility for care homes for adults. A few units (six local authority and one joint) had more than one panel which covered this area of responsibility. Just under 40 per cent of local authority units had other panels, covering other areas such as children's services. On average during 1997/98 there were 3.4 meetings of panels concerned with care homes for adults per local authority unit. These panels were most likely to meet quarterly, but over half the units had advisory group meetings three times a year or less often. All of the joint units had panels that met quarterly or more frequently.

Among health authority units, advisory group arrangements were less common and more varied. Twenty-eight per cent of units had no advisory group arrangements at all, and over a third had no group that had any responsibility for care homes for adults. Those health authority units that had advisory groups had much more frequent meetings than local authority units: half the units had meetings eight times a year or more often.

2.4 Size of units

Local authority units were considerably larger than health authority units with 11.6 members of inspection and managerial staff on average compared with 2.6 in health authority units. Joint units were similar to local authority units with an average of 11.1 members of staff. Local authority units also varied more than health authority units. Table 2.2 shows the distribution of size of unit. The smallest local authority unit consisted of one member of staff (in a unitary authority), the largest had 60 inspectors and managers. The largest health authority unit had six members of inspection staff.

This difference in size resulted in rather different managerial structures. This is demonstrated in part by the fact that 39 (66 per cent) of health authority unit heads carried a regular inspection caseload and 45 (75 per cent) regularly took the lead on registration. This compared with 10 (14 per cent) of local authority heads who regularly carry out inspections and 14 (19 per cent) who regularly take the lead on registrations. Among the nine joint units, three heads regularly inspected homes and four took the lead in registrations.

Very few health authority units had any managers within the unit other than the unit head. However, in over 40 per cent of local authority units there were managers other than the unit head. Within these units there were, on average, 2.5 managers. About half of these managers carried caseloads of inspection and registration responsibilities. There was a similar pattern in the joint units, three of which had managers other than the unit head.

This range of units' size and structure corresponded with their range in responsibilities.

2.5 Responsibilities of units and inspectors

2.5.1 Units

Table 2.3 shows that in March 1998 the local authority units responding to the survey were responsible for 200 homes for adults on average (including homes with less than four residents) ranging from just 15 homes to over 1,200. Although they were a similar size to local authority units in terms of numbers of personnel, joint units were responsible for rather more homes: the seven units for which information was complete were responsible for 261 homes on average. The much smaller health authority units were responsible for 73 homes on average, 52 of which were nursing homes (see table 2.4). This broadly reflects the national picture: in March 1998 the average number of residential and dual registered homes per authority in England was 188 and there were 58 nursing homes per health authority unit compared with administrative area was due in part to two of the local authority units that covered two authorities. Moreover, in so far as response rates can be estimated by type of local authority, the highest response rate was among counties, which generally are responsible for regulating more homes than other types of authority

The majority of homes were for elderly people: 82 per cent in health authority units and 57 per cent in local authority units². A substantial proportion of homes in local authorities (28 per cent) were homes for less than four residents. This again corresponds to the national picture. In March 1997, 27 per cent of residential and dual registered homes had fewer than four places (Department of Health, 1998c).

As was emphasised in chapter 1, it is important to bear in mind that units are responsible for regulating other types of care than care homes for adults. In terms of overall distribution of time, local authority units estimated that on average 62 per cent of their time was spent on regulating care homes for adults, with 15 per cent of time spent on residential care for children. The remaining 22 per cent was estimated to be spent on non-residential care services. Joint units estimated that 78 per cent of time was spent on care homes for adults, seven per cent on children's homes and 15 per cent on other types of establishments and services. Health authority units estimated on average that 75 per cent of their activity was

² Based on the assumption that 34 per cent of small homes nationally are for elderly people (Department of Health, 1998c).

related to regulating care homes for adults. This ranged between none (for a unit in London that only covered specialist acute provision) and 97 per cent.

The types of other regulatory responsibilities held by the units are shown in tables 2.5 and 2.6. The average number of establishments includes those cases where the unit is theoretically responsible for regulation, but in practice there is none of the particular type of establishment in the geographical area.

The vast majority of local authority units were responsible for regulating residential care for children. A substantial proportion of units had responsibility for regulating services where there was no statutory obligation on the part of the local authority, including domiciliary care providers (39 per cent) and non-maintained boarding schools (37 per cent). Other responsibilities of local authority units³ included family service and support units; family placement schemes; holiday schemes; and out of hours clubs. One unit separately identified homes that cared for both adults and children. The majority of health authority units held the responsibility for regulating hospices (87 per cent), private acute care (87 per cent), and nursing agencies (73 per cent).

For joint units the numbers were very small but seemed to indicate that they tended to cover acute sector, other health authority responsibilities and children's residential care to the same extent as other units. However, they were rather less likely to have responsibilities for day care for young children or to cover independent boarding schools.

As identified above, the levels of responsibility for regulating other forms of care and client groups goes a long way to explaining the differential levels of staffing associated with health and local authority units. Many of the staff will have no responsibility for care homes for adults so units were asked to specify how many staff were involved in such regulatory activities. In local authority units about two thirds of the inspectors, an average of seven staff, were responsible for residential care for adults, ranging between less than a whole-time equivalent and 30 inspectors and managers (including unit heads). In joint units there was less tendency to specialise in non-residential care for adults: an average of 10.4 inspectors and managers were concerned with regulating care homes. Similarly in health authority units most staff were involved in regulating nursing home care for adults: the average number of staff involved was 2.2, very close to the total number of inspection staff in the unit. Again the largest unit had about six staff involved in the regulation of adult nursing home care.

The number of staff concerned with care homes for adults can be related to the numbers of homes for which the unit is responsible. This indicator of "caseload" needs to be treated with some caution. In many units inspectors with responsibility for adult residential or nursing home care will also have other responsibilities. Given this reservation, on average (including heads of units) there were 30 homes per inspector in health authority units: ranging between 14 and 66. In local authority units there were 27 homes on average per inspector with any responsibility for residential care: ranging between five and 53. In those units where the number of homes per inspector was relatively low there tended to be a high level of responsibility for regulating other activities. For example, the local authority unit where there were only five homes for adults per inspector, estimated that just 30 per cent of the unit's activity was concerned with regulating care homes for adults. In joint units the average number of homes per inspector was 24, ranging from 11 to 39.

³ A few units also identified that they were responsible for non-regulatory activities such as contract compliance.

2.5.2 Inspectors

Caseload is more directly measured at the level of individual inspector. However, problems do arise when individuals are not allocated specific homes, so include all homes covered by the unit in their "caseload". Including all types of respondent the average caseload for health authority inspectors was 32 and for local authorities was 33. Among the 268 full-time local authority inspectors surveyed (excluding heads and managers) the average caseload was 36 homes. Among the 62 full-time health authority inspectors the average caseload was 34. Reported caseloads of full-time inspectors varied between 1 and 100.

Tables 2.7 and 2.8 show the other regulatory responsibilities of those inspectors who had at least some responsibility for regulating care homes for adults. About a third of the local authority inspectors also were involved in inspecting children's residential care, and over a quarter for regulating independent boarding schools. Nearly half of health authority inspectors had responsibility for inspecting establishments providing palliative care or private acute hospitals. Inspectors in joint units reflected the distribution of health and local authority responsibilities, with a higher proportion identifying children's residential care and day care than establishments concerned with technical nursing care.

2.6 Qualifications and experience of inspectors

Local authority and health authority inspectors had been in post very similar lengths of time: 4.2 years in local authority units, 4.6 years in health authority units and 4.7 years in joint units. On average they had been in the field of regulation for about one year more than they had been in post. They tended to have very different backgrounds, however.

Table 2.9 shows the proportions of inspectors with nursing and social work qualifications, and the proportions with experience of working in care homes. As expected, inspectors in health authority units were more likely to have nursing qualifications and those in local authority units more likely to have social work qualifications. It was interesting to note that in terms of experience inspectors in local authority units were much more likely to have managed or worked in care homes in the past.

The "other" qualifications and experience specified covered a wide range. Both types of inspector cited academic qualifications in the field of social policy, psychology and management. Health authority inspectors were more likely to cite professional qualifications and certificates. Experience in other care settings, such as domiciliary and day care was also seen as helpful in the role of inspection.

2.7 Activities

In Chapter 1 we identified the five principal regulatory activities: inspection, registration, dealing with complaints, enforcement, and policy and practice development. We can measure the workload that these represent in two ways: the rate of activity or number of specific processes (such as inspections) completed, and time spent overall on these activities. First we describe the rate of activity. Indicators or rate of activity are identifiable for inspection, registration, dealing with complaints and enforcement.

2.7.1 Inspections

The number of inspections during the year was divided by the number of large homes (with four or more residents) to give an indication of the rate at which homes were being inspected.

This is not an entirely accurate way of estimating the rate of inspections as those homes that have been opened during the year may have received one or even no inspections, because they have not been open long enough. In other cases homes that have been inspected will have closed during the year. Moreover, in some units regular inspections are undertaken of small homes. Given these reservations, table 2.10 shows that on average local authority units inspected both residential and local authority homes close to the statutory minimum number of times. That is two inspections each year: one announced and one unannounced. The method of estimation is probably responsible for the finding that local authority homes (extremely unlikely to have been opened during the year) had, on average, slightly more inspections (2.04) and independent homes slightly less (1.93). When examined at the unit level two local authority units had carried out less than one inspection per independent home and a further three less than one per local authority home. Three units had averaged close to three inspections per home over the year. About a quarter (24 per cent) of all inspections involved a lay assessor.

Health authority units conducted more inspections than local authority units, averaging well over two inspections per home. A number of units had a policy of only conducting unannounced inspections, and this is reflected in the very different balance between announced and unannounced inspections compared to local authority units. A very small proportion of health authority units have started to involve lay assessors in inspections, although under the current arrangements they are not obliged to do so. However, in practice less than two per cent of inspections involved a lay assessor, and the vast majority of these were inspections of dual registered homes where the lay assessor may well have been recruited through a local authority unit.

Full information was only available for six of the joint units so the data about low rate of inspection need to be treated with some caution. One joint unit carried out over three inspections per home in total, another less than one. Joint units used lay assessors at a similar rate overall to local authority units. Twenty three per cent of inspections involved a lay assessor.

2.7.2 Registration procedures

Table 2.11 shows that on average local authority units received 21 applications for new registrations for care homes for adults and actually registered 14. Given the wide range in geographical area covered it is not surprising that there was a wide range in numbers of registrations. Four units had no applications and seven made no registrations. At the other extreme one unit had 181 applications and registered 91 new homes.

As they are responsible for fewer homes the rate of registration of new homes and reregistrations is much lower in health authority units. Nevertheless, for their size they get involved in proportionately more variations of registrations. Those units that could, supplied information about numbers of enquiries that did not lead to a firm application to register. On average there were five applications per unit, suggesting that overall for each application there is another enquiry that does not proceed.

A couple of the larger joint units resulted in a high average level of re-registration and registration reported in table 2.11.

The analysis reported in Chapter 4 suggests that home closures can result in a considerable amount of work for the inspection units. The rate of de-registration because of home closures

was high when put in context of the number of new registrations. In the 65 local authority units where full information was available, for every ten new applications received with fee, 2.9 homes were closed. For every ten new registrations completed 4.5 homes were deregistered. In the 49 health authority units where full information was available the rate was even higher: 4.1 de-registrations for every ten applications and 8.2 for every ten completed new registrations.

When related to the number of homes regulated by the units, overall the rates of both registration and de-registration are lower in health authority units. For every 100 homes currently registered, 3.4 homes were de-registered by local authority units, and 2.7 by health authority units, for reasons other than enforcement.

2.7.3 Complaints

Table 2.12 shows the rates of complaint per 100 homes based on the number of independent homes for which the unit was responsible in March 1998 and the number of complaints received during the year. Health authority units received a much higher rate of complaints per home than local authority units. This may be attributable to the nature of care (nursing homes provide more technical care than residential homes), the greater vulnerability of residents or local authorities providing other avenues for dealing with complaints about homes.

Units were asked to distinguish substantial complaints, which resulted in more than half a days work, and to estimate the number of hours that each of these took on average. Some units had a policy of investigating all complaints in detail, and this was reflected in the high proportion of complaints defined as substantial in local authority and joint units. At just over 20 hours the estimated average number of hours per complaint was very similar for each type of unit. Multiplying the rate of complaint per home by the average number of hours spent on complaints (21 for health authority and 22 for local authority and joint units), we can estimate the workload per year per home resulting from substantial complaints alone. Table 2.12 shows that such complaints would result in four inspector hours per home per year in local authority units and 7.5 in health authority units.

The higher number of complaints received by health authority units per home means that the average estimated complaints time per home is almost double that of independent homes regulated by local authority units. It is possible that some complaints received by health authority units are screened out by other departments in local authority units.

Complaints about local authority homes are not always dealt with by inspection units so units were asked to separately identify complaints about these homes and the time spent on such complaints. Among the 25 units that dealt with complaints about local authority homes and could identify the number of complaints, the results were very similar to those for independent homes. On average there were 26 complaints per 100 homes, resulting in 4.3 hours per year of inspector time per home.

Units also have to deal with complaints about the regulatory process and inspectors themselves. The average number of complaints during 1997/98 per 10 inspectors was 1.9 per 10 inspectors for health authority units and 1.5 for local authority units. Local authority units estimated that about 18 hours was spent on average per complaint and health authorities estimated 23 hours. Assuming that 20 hours is spent per complaint on average 4.3 hours of

senior officer time is spent on complaints about health authority inspectors and three hours on local authority inspectors per inspector year.

2.7.4 Enforcement actions

The number of enforcement actions undertaken is very low when put in the context of the number of care homes being regulated. Table 2.13 shows the rate of a variety of procedures and occurrences during the process of enforcement per 100 homes per year. As would be expected the most frequent activity was serving homes with Regulation 20 or 15 notices requiring homes to take some specific action. The relatively high number served by joint units should be treated with some caution, however, as practice varies widely in serving such notices (ranging between none and 10 per 100 homes) and information was only available from six units. It does appear that health authority units are more likely to serve notices of proposals to vary, cancel or refuse registration⁴. Again joint unit rates reflect a large variation with very few units. Although notices are served more frequently per home by health authority units, it is local authority units that are more likely to carry through the enforcement and cancel registrations. Approaching three quarters of one per cent of residential homes had their registrations cancelled, compared with 0.1 per cent of nursing homes. Health authority units were more likely to prosecute homes, but the rates were very low for all units.

2.8 Time spent on regulatory activities

Units were asked to identify the proportion of time that the unit spent on each of these activities, classifying policy and practice development as "other" regulatory activities. Many units found this very difficult to specify. In several cases respondents noted the difficulty in estimating this distribution when enforcement activities are rare but very time consuming when they do occur. For those units that did feel able to estimate overall time distribution the results are shown in table 2.14. The pattern was very similar for health and local authority units. The majority of time, as expected, was perceived as spent on inspection. Complaints and registration occupied a similar proportion of time.

It is interesting to contrast these estimates with the information collected about time use from the survey of inspectors. The activities of 550 staff of all types over the course of one day were recorded. This information was used to calculate the average time spent on other activities such as registration, inspection, development, enforcement, complaints, supervision, and administration.

Average values of the time allocated to the activities undertaken in the 550 sample days, distinguishing health and local authority are given in table 2.15. The overall distribution of time is shown in Figures 2.1 and 2.2. On average health authority personnel worked for 8:03 hours and local authority for 8:10 hours. Respondents were able to use the pre-defined categories on the questionnaire for the very large majority of their time use. Only about 42 minutes and 63 minutes respectively for health and local authorities were not so accounted. Some of this time could be reallocated using the inspector's own description of how it was used. The remaining time that cannot be apportioned to a pre-defined activity was only 26 and 39 minutes respectively.

⁴ Information from joint units was examined to investigate whether the differential rates may be related to nursing home as opposed to residential care. There was no evidence to support this hypothesis. In joint units residential homes appeared to be just as likely to be served with a notice to cancel registration as nursing homes.

Overall the distribution of time among inspectors with a responsibility for adult care homes is very similar in health authority and local authority units. In local authority units a higher proportion of time was identified as being spent on other regulation and management. This was in part due to the fact that local authority inspectors are more likely to be responsible for regulating other services and to be involved in other non-regulatory tasks.

As would be expected, the largest single proportion of time (about 40 per cent) is spent on inspection. When we focus just on regulatory activities, so we exclude time spent on management and administrative tasks and other tasks, both health and local authority inspectors and managers spend about 56 per cent of their time on inspection. This is very similar to the proportion of time estimated to be spent on inspection by units overall (table 2.14). The distribution of time spent on complaints, registration and enforcement is also very similar, but in each case a slightly lower proportion was spent on the sample day on these activities than was estimated by the units. This has a cumulative effect on the category of general development and support activities which is considerably higher in practice than units had estimated. They estimated that about seven or eight per cent of unit time was spent on such activities when in practice 17-18 per cent of regulatory time was spent in this role.

Within these overall categories, inspectors also identified specific activities they were involved in on the sample day⁵. Again the similarity in patterns of working between health and local authority inspectors was very marked. Of the inspectors that spent any time on registration, both health (59) and local authority (147) inspectors spent 24 per cent of their time on pre-registration enquiries.

Inspectors were asked to classify time spent on complaints into "substantial" complaints about inspectors and other complaints (these would be minor complaints about homes that took less than half a day to deal with). Among 120 local authority inspectors who spent time on the sample day on complaints, 40 per cent of this time was spent on substantial complaints, five per cent on complaints about inspectors and 55 per cent on minor complaints. Among the 68 health authority inspectors who spent any time on complaints, 36 per cent of time was spent on substantial complaints, one per cent on complaints about inspectors and 63 per cent of time on minor complaints.

The methodology used in this study has focused on the relatively easily measured activities of registration and inspection. Chapter 3 describes how, in order to identify the full costs of regulation, it is necessary to allocate time spent on other regulatory activities on to these measured activities. Across all types of local authority staff, for every hour spent on inspection and registration in the average day, 4 minutes was spent on enforcement, 11 minutes was spent on complaints, 15 minutes was spent on development and 18 minutes on management, supervision and administration. The equivalent numbers of minutes for health authorities are respectively: 2, 11, 16 and 16 minutes.

⁵ Although inspectors were asked to classify information spent on enforcement activities into a number of subcategories, the number of inspectors involved in enforcement activities was too small (11 health and 37 local authority inspectors) for us to have any confidence in the generalisability of time allocation within subcategories.

2.9 Conclusion

A satisfactory response rate to the survey suggests that we can have some confidence in the national representativeness of the information provided. Differences in the extent of their responsibilities have resulted in local authority units and health authority units tending to have rather different organisational arrangements. Joint units are dominated by their local authority responsibilities and tend to be similar to local authority units in structure and size. Local authority and joint units are responsible for more care homes for adults and a wider range of other responsibilities. Nevertheless, once we start to address the activities involved in regulation, and particularly regulating care homes for adults, the results for health and local authority units start to converge. This becomes even more evident once we consider the issue addressed in the next chapter: the estimation of unit costs of inspector time.

Table 2.1 Types of authority

	Local authority units ¹	Health authority units	Joint units
London borough	17	7	0
County	23	-	5
Metropolitan district	20	-	4
Unitary	14	-	0
Non London	57	53	9
Total	74	60	9

¹ One unit which covered both a county and unitary authority has been classified here as a county.

Table 2.2 Size of units

Number of staff	Number of Local authority Health authority staff		Joint			
	n	%	n	%	n	%
One or less	1	1	6	10	0	0
>1-3	6	8	35	58	1	11
>3-5	7	9	16	27	0	0
>5-10	29	39	3	5	3	33
>10-15	16	21	0	0	3	33
>15-20	5	7	0	0	2	22
20+	9	12	0	0	0	0
Total	73	100	60	100	9	100

	Residential care	Dual registered	Local authority	Total
Elderly people	62	13	13	88
Elderly people with mental health problems	6	1	1	8
Adults with mental health problems	8	>0	1	9
People with learning disability	29	>0	4	33
People with physical disability	3	1	1	4
Other adults	2	>0	0	2
Homes with fewer than 4 residents	50	4	1	56
Total	161	19	20	200

Table 2.3 Average number of each type of care home local authority units are responsible for inspecting*

*Numbers do not add exactly to totals because of rounding averages per unit.

Table 2.4 Average number of each type of home for adults health authority units are responsible for inspecting*

	Nursing homes	Dual registered	Total
Elderly people	36	16	52
Elderly people with mental health problems	6	1	8
Adults with mental health problems	2	<0	3
People with learning disabilities	2	<0	2
Other adults	6	3	9
Total	52	21	73

* Numbers do not add exactly to totals because of rounding averages per unit.

Type of care	Number of units	% of units	Average number of establishments
Private children's homes registered under the Children's Act	59	80	2
Homes catering for children with disabilities	55	74	1
Local authority children's homes	70	95	6
Local authority day nurseries	45	61	4
Independent sector day nurseries	52	70	47
Registered child minders	41	55	652
Other children's day care services (e.g. play groups, crèches)	50	68	167
Independent boarding schools (section 87)	55	74	7
Independent boarding schools (section 63)	36	49	<0
Non-maintained boarding schools	27	37	1
Local authority boarding schools	24	32	1
Local authority domiciliary care	17	23	4
Domiciliary care providers in the independent sector	29	39	34
Day care for adults	6	8	6
Other	14	19	8

Table 2.5 Other regulatory responsibilities of local authority units

Table 2.6	Other regulatory	responsibilities of health	authority units
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Type of care	Number of units	% of units	Average number of establishments
Specialised mental health nursing care	32	53	6
Mental health nursing care for those detained under the Mental Health Act 1983	30	50	3
Learning difficulties nursing care for those detained under the Mental Health Act 1983	9	15	2
Acute psychiatric hospitals	11	18	1
Mother and baby homes	5	8	<0
Specialist nursing care e.g. brain injuries	17	28	1
Palliative nursing care including hospices	52	87	2
Private acute hospitals	52	87	2
Specially controlled techniques (lasers)	49	82	2
Termination of pregnancy clinics	15	25	1
Nursing homes for children	8	13	1
Mental health nursing homes for children/adolescents	7	12	<0
Nursing agencies	44	73	7

Table 2.7 Other regulatory responsibilities of local authority and joint unit inspectors who have a responsibility for regulating care homes for adults

Type of care	Local authority Inspectors	Joint unit Inspectors
	(<i>n</i> = 392) %	(<i>n</i> = 91) %
Private children's homes registered under the Children's Act	32	29
Local authority day purseries	38	36
Independent sector day nurseries	13	10
	20	11
Registered child minders	11	10
Other children's day care services (e.g. play groups, crèches)	14	12
Independent boarding schools (section 87)	28	35
Independent boarding schools (section 63)	18	22
Non-maintained boarding schools	15	8
Local authority boarding schools	9	11
Local authority domiciliary care	12	12
Domiciliary care providers in the independent sector	15	21
Day care for adults	6	21
Other	0	8
	11	1

Type of care	Health authority inspectors	Joint unit inspectors
	(n = 184) %	(n = 91) %
Specialised mental health nursing care	33	19
Mental health nursing care for those detained under the		
Mental Health Act 1983	27	12
Learning difficulties nursing care for those detained under		
the Mental Health Act 1983	13	9
Acute psychiatric hospitals	9	1
Mother and baby homes	3	<0
Specialist nursing care e.g brain injuries	22	18
Palliative nursing care including hospices	48	17
Acute psychiatric hospitals	9	1
Specially controlled techniques (lasers)	41	15
Termination of pregnancy clinics	9	1
Nursing agencies	41	15
Nursing homes for children	9	<0
Mental health nursing homes for children/adolescents	9	<0

Table 2.8 Other regulatory responsibilities of health authority and joint unit inspectors who have a responsibility for regulating nursing homes

Table 2.9 Qualifications of inspectors

	Local authority unit Inspectors	Health authority unit Inspectors	Joint unit inspectors
	(n = 392)	(n = 182)	$(n = 91)_{0/4}$
	/0	/0	/0
Qualification in residential or field social work	74	1	55
Nursing qualification	20	84	42
Teaching qualification	12	34	19
Pharmacy qualification	n/a	5	1
Childcare qualification	9	n/a	11
Experience of managing residential or nursing homes	62	22	52
Experience of working in residential or nursing homes	52	28	38
Other relevant qualification or experience	54	59	60

Table 2.10 Average numbers of inspections per home

	Local authority units	Health authority units	Joint units
	(n = 64)	(n = 49) %	(n = 6)
	70	/0	70
Announced inspections	0.99	0.92	0.89
Unannounced inspections	0.95	1.51	0.98
Total	1.95	2.43	1.87

Note: Rates of inspection have been estimated by dividing the total number of inspections reported by the total number of large homes regulated by units for which full information was available.

Table 2.11 Registration rates

	Average number of registrations per unit		
	Local authority Health Join units authority units		Joint units
Applications	21	5	27
New registrations	14	3	11
Variations in registration (without fee)	24	14	39
Re-registered (with fee)	7	5	16
De-registration following home closure	6	2	6

Table 2.12 Rates of complaints about homes

	Local authority units	Health authority units	Joint units
	(n = 57)	(n = 49)	(n = 6)
Total number of complaints per 100 independent homes	25	52	33
Number of substantial* complaints per 100 homes	24	36	33
Average number of hours per complaint	22	21	23
Average number of hours spent on complaints per home	3.9	7.5	7.4

* Substantial complaints are defined as those that require half a day or more to investigate.

Table 2.13 Enforcement rates

	Rate of enforcement action per 100 homes per year		
	Local authority units	Health authority units	Joint units
Regulation 20/15 enforcement notices	2.56	2,30	4 90
Notices of proposal to vary, cancel and refuse registration	0.86	6.36	3.48
Representations (appeals by registered person) regarding registration issues to SSC panel of members/registering authority	0.36	0.43	1.00
Appeals to Registered Home Tribunal initiated but not heard due to withdrawal by appellant	0.15	0.10	0.32
Appeals heard by Registered Home Tribunals	0.12	0.05	0.18
Cancelled registrations as a result of enforcement actions undertaken (Section 10/28)	0.71	0.10	0.30
Prosecution (Regulation 20/15)	0.06	0.15	0.00
Emergency closures following magistrate's order for cancellation of registration	0.04	0.05	0.06

	Local authority units	Health authority units	Joint units
	(n = 53) %	(n = 52) %	(n = 8) %
Registration	16	14	15
Inspection	56	59	56
Complaints	14	14	18
Enforcement	5	5	6
Other	7	8	5

Table 2.14 Unit level estimates of proportion of time spent on each type of regulatory activity

Table 2.15 Time spent on each type of activity by inspectors

Activity	Hours and	Hours and minutes	
	LA	HA	
	inspectors	inspectors	
	(n = 373)	(n = 177)	
Enforcement	0.14	0.07	
Complaints	0.42	0.48	
Registration	0.42	0.40	
Inspection	3.09	3.33	
Development	0.57	1.08	
Other:	(2.26)	(1.47)	
Management/admin	1.07	0.59	
Non-valid regulatory	0.26	0.06	
Not pre-specified :	(1.03)	(0.42)	
Travel	0.08	0.06	
Non-regulatory	0.04	0.11	
Remainder	0.39	0.26	
Total	8.10	8.03	

Figure 2.1 Local authority units inspector time use



Figure 2.2 Health authority units inspector time use


Chapter 3

Unit costs of inspector time

3.1 Introduction

In order to estimate the cost required to regulate homes we need to identify the resource implications of relevant activities. As chapter 1 identified, a bottom-up approach to estimating the costs of regulatory activities avoids the problems associated with linking expenditure data to activity where activities cover a wider range of tasks than those with which we are concerned. A bottom-up approach requires that we identify the unit costs of resources and the level of resource consumption for any given activity.

Potentially each of a wide range of different inputs can vary for individual inspections or registrations. Measuring each input individually for each surveyed inspection and registration would be very costly. However, the most important input into regulation is the time of those involved. So in order to estimate internal inputs from the unit, we collected for each inspection and registration only information about the use of lay assessors and time spent in four categories: inspector, unit head, manager with caseload and manager without caseload.

An important task, therefore, is to identify the unit cost of inspector time. In order to do this we need first to estimate the annual cost of an inspector and then to identify the hourly cost on the basis of expected number of hours worked. In order to fully specify the time needed to deliver regulatory activities we need to allocate the costs of this time in such a way that all necessary activities are accounted for. Otherwise, for example, time required for general administration and management is not reflected in the unit cost. The third task, therefore, is to estimate multipliers that appropriately reflect time spent on tasks other than those directly measured.

Throughout it is important to bear in mind that the costs that have been estimated reflect as far as possible the average costs of the units that responded to the survey. They have not been re-weighted in any way to reflect national average costs. The distribution of types of unit was reported in chapter 2. In chapter 4 the analysis investigates the impact of regional factors and types of unit on the costs of inspection and registration.

3.2 Annual costs of inspector time

Each unit was asked to supply information about the total number of inspectors working in the unit and numbers of support staff. The units were also asked for a detailed breakdown of expenditure in the unit. The information received was of variable quality as many of the units did not have access to the detailed level of information required. Data were checked thoroughly and some units contacted directly to ensure that interpretations of the information provided were correct.

Table 3.1 summarises the estimated annual average cost of inspectors based on the data provided. The elements of cost separately specified are salary costs, support staff costs, supervision costs, travel and other overheads. Below we describe the estimation process and overall average results for health and local authority units. Because of the similarity in structure to local authority units and their small number we have omitted any separate description of joint units.

Salary costs

The salary costs of inspectors, managers and heads of units were identified by dividing total expenditure on salary and associated oncosts (National Insurance and superannuation payments) over the previous financial year by the average whole time equivalent (wte) of inspectors, managers and heads of unit over the same year. Where the information about oncosts was not available directly, information about salaries (provided both by individual inspectors and at unit level) was inflated by 13.5 per cent as this appeared to be about the mid-point of oncosts paid by employing authorities. In health authority units inspectors and managers were combined because there were too few managers who were not heads of unit and who appeared to differ from inspectors in terms of activities or responsibilities. For local authority units it was possible to identify separately managers with and without caseloads of registration and inspection activities.

Table 3.2 shows the average salary costs of each type of staff in health and local authority units where any information was available. The slightly lower average level of health authority salaries is probably due to the lower response rate from London health authorities compared with local authority units (see chapter 2, table 2.1). In local authority units, average inspector salaries in London were 15 per cent higher than in the rest of the country. The salaries of heads of units were virtually identical, however. This suggests that overall the higher salary levels in London were offset in local authorities by the larger scale of units, and thus wider range of responsibilities of heads of units elsewhere. In health authority units average salaries in London were only eight per cent higher than elsewhere in the country. The difference, unlike local authority units, was not statistically significant. As with local authorities there was even less difference in the head of unit salaries, which were three per cent higher in London than elsewhere.

Support staff

An important part of the overhead costs were the support staff, including clerical and administrative staff. Where administrative staff became involved in the inspection process they were sometimes classified as inspectors. As the level of support is likely to affect the amount of time an inspector spends on registration and inspection activities it is important to reflect the local situation wherever possible. Where information was available about levels of expenditure on support staff this was allocated across all inspectors in the unit. Where expenditure information was not available, the number of whole time equivalent support staff was multiplied by the average support staff salary costs identified by other units. For both health and local authorities the average cost per member of support staff was about $\pounds14,000$ outside London and $\pounds17,000$ for units in London. The total cost of support staff was then divided by the number of inspectors to obtain cost per inspector in that unit.

In some instances there were very low levels of support and in others substantial levels of support for each inspector. On average, support costs were estimated as £6,600 per inspector in local authorities and £7,200 in health authorities. In local authorities, support costs ranged from £2,200 to £14,800 per inspector per year. In health authority units, the range was much wider: from a unit that had no identified support costs to one where support staff cost over £18,000 per year. In spite of the difference in salary costs there was no statistically significant difference between support costs per inspector in London and out of London. This suggests a lower level of support staff per inspector in London based units.

Supervision costs

In addition to clerical support, managers provide supervisory support to inspectors within the unit. This was not an issue for single handed units although a minority were able to identify the cost input from more senior managers. For the remaining units, however, it was important to allocate these costs to individual inspectors. Information about time use was used to derive overall average proportions of time spent on supervision by heads of unit and This information enabled costs to be re-allocated, reflecting the numbers of managers. managers in each unit. We assume that supervision is applied hierarchically down the Unit's staff structure. Unit heads' supervision inputs apply to all staff and senior managers' inputs apply to everyone except unit heads. Middle managers' supervision applies to colleagues at their level and lower, and so forth. The individual salary or labour costs of managers includes the costs of their supervision, which is re-distributed across the Unit. The input costs of generating this supervision should therefore be net of the re-distributed supervision. In other words we do not count the value of supervision of inspectors, for example, when calculating the manager's unit input cost in generating this supervision. The supervision received by an inspector is not an appropriate input counted alongside the manager's labour time that is employed to produce supervision.

Table 3.1 reports that on average this process resulted in an additional cost of £3,900 for health authority inspectors and £7,075 per year for local authority inspectors. For health authorities management costs raised inspector costs by nine per cent. For local authority units total supervision adds 16 per cent to inspector costs. The heads of units contribute 55 per cent of this supervision cost, with managers adding the remaining 45 per cent. Unit heads and managers contribute a larger total of their time to supervision than their health authority colleagues. Net supervision allocated to inspectors is £32,000 in local authorities and £10,000 in health authorities, although local authority units have more inspectors over which to divide this supervision. Unit heads in local authority units contribute about one third of their time to supervision, whilst heads of health authority units contribute about an eighth of their time.

Travel

Another aspect of overhead costs where it was important to reflect local circumstances is the cost of travel. It had been hoped to link this directly to inspection and registration processes but different methods of paying travel expenses meant that the information would have been too unreliable on this basis. Travel expenses were estimated, therefore, on the basis of total travel and related expenses divided by the number of inspectors in the unit. Where the information was not available travel costs were assumed to be the same as the average for the type of authority. In the case of health authorities the only distinction made was between London and non-London. In the case of local authorities all four types of authority were used to proxy travel costs (see table 3.3). The differences between average costs, where these were available, reflected the geographical area that inspectors cover. As a result London and metropolitan boroughs incurred rather lower travel costs than shires or unitary authorities.

Other overhead costs

Remaining overhead costs include direct costs such as office expenses, including accommodation, equipment, postage, stationery and so on, and indirect costs such as human resource functions and finance. This was the area where it was most difficult to establish reliable information. It proved impossible for most places to separately identify rent so accommodation costs could not be estimated on the basis of use of office space without running the risk of double counting. Although people working from home (as was the case

for six per cent of local authority and three per cent of health authority inspectors) will influence these costs, there was insufficient information for us to be able to reflect the cost impact with any accuracy.

It is essential, however, that we include the costs of both office accommodation and other direct and indirect overheads as inspectors can not do their job without these overhead costs being incurred. Those units were identified which were able to specify total overhead costs in a way that appeared to be comprehensive. The average overhead cost for these units was found to be £8,000 per whole time equivalent inspector out of London (33 units) and £11,000 in London (eight units). The values for health authority and local authority units were very similar¹ and the numbers were so small it was decided to treat both types of unit in the same way.

It is not possible to break these overhead costs down to identify the different elements of cost in a consistent way as the information was provided in a variety of ways. However, for those units able to provide separate information about the costs of training (45 local authority units and 39 health authority units), the average cost was £330 per year per local authority inspector and £430 per health authority inspector. In the six joint units able to identify these costs the average cost was £274 per inspector. For those units where information was available, the average cost of supporting advisory panels was £120 per local authority inspector per year (21 units) and £170 per year per health authority inspector (four units).

3.3 Hourly costs

In order to be able to allocate the annual cost to a unit cost per hour we need information about the number of contracted hours per year, taking into account annual leave and hours worked each week. The most common pattern of working was a 37.5 hour week with 30 days annual and a further 10 days statutory leave.

Allowance also needs to be made for sickness and maternity leave. In local authority units over the previous year, an average of 8.4 days had been lost due to sickness and 2.9 due to maternity leave. In health authority units the rates were rather lower, with 6.4 days lost due to sickness and 2.1 due to maternity leave. Rather than maintain these distinctions between types of unit when estimating unit costs they were taken as a guide to the level of days likely to be lost due to sickness and maternity leave. It was assumed, therefore, that for both health and local authority inspectors ten days would be lost on average due to sickness and maternity leave.

On this basis we estimated that on average inspectors work 42 weeks per year and 37.5 hours per week. Unit costs were very similar for health authority and local authority inspectors. On average local authority inspectors cost £32 and health authority inspectors £29 per hour. On average heads of local authority units were estimated to cost £34 per hour and heads of health authority units £32 per hour.

¹ For example, of the non-London units, the average "other" overhead costs were \pounds 7,740 per inspector in the 13 health authority units, and \pounds 8,020 in the 17 local authority units.

3.4 Costs of registration and inspection

The hourly cost of inspector time identified above allows for the costs of support provided by others, ongoing office expenditure and capital. However, we need to adjust this basic rate to ensure that all relevant activities undertaken by inspectors are attributed to the inspection and registration process. A detailed account of this process can be found in the technical appendix 1.

The internal costs of inspection and registration – that is costs which relate to the consumed resources of the registration and inspection unit directly – include the labour of the staff in two forms. First, staff input employed directly on the activity – for example, visiting homes, travelling, and report writing, – and, second, in undertaking the functions of management, administration and development, which facilitate the former work.

In order to identify how much of these associated activities are required to support our measured activities of registration and inspection, we used information about the amount of each activity that was undertaken in all of our sample units in a representative period. Taking an average across all sample units gives the proportion of time allocated to all activities in the representative period. We can express this information as a ratio: the time spent on average for each other input divided by the average time spent on inspection and registration activities. If we assume that this ratio remains unchanged for specific inspections or registrations we can calculate the total level of other inputs from the known amount of direct labour input.

As described in chapter 2, a day was chosen to be the representative period. We asked for all professional staff to provide information of their activities in a particular day. Taking an average over the 373 local authority inspector responses and the 177 health authority inspector responses we were able to calculate a representative indication of activities for different categories of staff (see box 1 below).

The first five activities listed in box 1 are defined as regulatory activities. In order to support these activities it is necessary to spend a proportion of time on general management/administrative tasks and on travel not associated with a specific regulatory activity. The other activities listed in box 1 are omitted as not relevant to the costs of regulating residential care for adults.

Some of the regulatory activities can be regarded as associated with, facilitating or required in order to undertake the regulatory function as represented by measured activities of registration and inspection. We adopt three specifications. The inclusive specification regards all other regulatory activities: development, dealing with complaints and enforcement to be allocated on to the inspection and registration processes. The exclusive specification does not include any of these activities. We also use an intermediate specification that includes development but not complaints or enforcement.

Box 1. Inspector time-use								
			Inclusive	Exclusive				
1. Enforce	ement		Yes	No				
2. Compl	aints		Yes	No				
3. Registr	ation		Yes	Yes				
4. Inspect	ion		Yes	Yes				
5. Develo	Yes	No						
Other -	7							
6.	► Management/supervision/	admin	Yes	Yes				
7.	Non-valid regulatory activ	vities (e.g. children)	No	No				
	Not pre-specified							
8.	►	Travel	Yes	Yes				
9.	▶	Non-regulatory	No	No				
10.		Remainder	No	No				

Table 3.4 describes the build-up of unit costs per hour with the three specifications. These are the estimated costs based on the average levels of activity undertaken by inspectors in the survey. The apparent discrepancy, where managers with caseloads have lower hourly costs than inspectors using the most exclusive specification, results from the process used to allocate supervision costs in a way that avoids double counting.

It should be emphasised that where multipliers are inclusive of other activities the unit costs represent a means of allocating the costs of all regulatory activity. The resulting estimates reflect the fact that, compared with inspectors, a much higher proportion of senior staff time is devoted to regulatory activities other than registration and inspection. The cost per hour exclusive of all other activities is the best estimate of a "true" cost of inspector time.

In the analysis in the following chapter, the specific costs relating to the individual unit undertaking the registrations or inspections have been used. These reflect local salaries, support staff levels, travel costs, and management structure. For the most part the most inclusive multipliers have been used to reflect the total cost of regulation i.e. allocating the more indirect regulatory activities on the time spent on registration and inspection.

3.5 Summary

Previous chapters identified the need to use a bottom-up approach, linking resources used to unit costs of these resources for inspection and registration. The most important resource is that of inspector time. To generate the total costs of inspection and registration we therefore need an hourly cost of staff inputs. Because other inputs (such as support staff and overhead costs) are measured in fixed proportion to hours of direct staff input, their cost too can be specified as an hourly cost. Each hour of inspection therefore has the cost of staff (salary, oncosts, overheads), supervision and the cost per hour of the other activities. With regard to the other regulatory activities there are three options: an inclusive, intermediate and exclusive specification. For the most part throughout the report and particularly in cost variation analysis of the next chapter we have used the inclusive cost option which allows for all other, unmeasured, regulatory activity. This provides us with a comprehensive estimate of the cost of regulatory activity.

Table 3.1 Annual cost of inspectors

	Local authority	Health authority	Joint units
	(n = 71)	(n = 44)	(n = 9)
Salary	26380	24880	26580
Support costs	6600	7200	6740
Supervision	7075	3910	5500
Travel	1395	1970	1720
Other overheads*	8735	8150	7900
Total	50185	46110	48440

* Including accommodation, office costs, finance and human resource function.

Table 3.2 Full salary costs of inspectors and managers

	Local authority	Health authority	Joint units
	£	£	£
Heads of unit	36900	32500	35300
Managers without caseloads	31500	-	32100
Managers with caseloads	29300	-	35800
Inspectors	26400	24900	26600

Table 3.3 Travel costs per inspector

	Local authority	Health authority	Joint units
London borough	860	970	-
County	1920	-	-
Metropolitan district	955	-	-
Unitary authority	1680	-	-
Non London	-	2100	1720

Table 3.4 Hourly costs of regulation

Hour	ly cost spec.		Local a	Health authority			
		Unit head	Manager without caseload	Manager with caseload	Inspector	Unit head	Inspector
Basic overh	(salary and neads)	34	30	29	27	32	27
Basic super	and vision	23	24	26	32	28	29
Basic and e	, supervision ither:						
	Exclusive of other inputs	47	46	36	39	39	36
	Intermediate other inputs	114	96	45	45	55	43
	Inclusive of other inputs	383	173	80	53	79	51

Other inputs include time spent on complaints, enforcement and development. Intermediate other inputs only includes development activities.

Chapter 4

The costs of inspection and registration

4.1. Introduction

At the time of the survey all residential and nursing homes for adults with four or more beds were legally required to register with the relevant local or health authority. Homes seeking to acquire and maintain registered status must meet a range of criteria relating to the physical fabric of the premises, the fitness for purpose, quality and intensity of staffing, health and safety regulations and increasingly the quality and social aspects of care provided to residents. Independent organisations wishing to set-up care homes need to undergo a new registration process. This is a detailed process that seeks to ensure that new premises can satisfy conditions for registration. The process is usually initiated at the planning and even pre-planning stage and can be ongoing until the home actually opens. Homes are then subject to two inspections a year by either the health or local authority. Usually, one inspection is announced in advance and the other is unannounced and can theoretically occur at any time. Inspectors undertake detailed scrutiny of the home in order to assess its fitness for continued registration.

Previous chapters have set the context of these activities in terms of the size, structure and responsibilities of units and the derivation of the unit cost of inspector time. This chapter reports on, and analyses factors associated with variation in, the costs of inspection and registration. We start by describing the theoretical approach to exploring cost variations in regulatory activities. The method is briefly discussed before a description of the characteristics of the sampled homes that were registered or inspected, the resource inputs that were used in the regulatory activities and estimates of the total costs. The final section reports on the statistical analysis of cost variation.

4.2 A theoretical model

In order to build up a statistical model to analyse cost variations, a theoretical model was developed. The theoretical model provided a framework to construct the statistical model. It also provided an indication of what data were expected to correlate with total cost and so needed to be collected in our survey. Finally, a theoretical model was needed to guide us as to the form or specification of the relationship between total cost and its explanatory factors.

From economics we would expect that the total costs of a regulatory activity would depend on four sets of factors:

- input prices;
- level of output;
- input-output production relationship (home characteristics, client group, outcome of inspection); and
- input mix efficiency (unit characteristics)

We assume that units are trying to minimise total costs for a given level of output, but input mix inefficiency indicates that costs may not be completely minimised. We then have the following relationship:

Total cost = *f*(input prices, output, production function parameters, input mix efficiency)

4.2.1 Input prices

Units have a choice over the intensity and type of inputs they choose in inspections and registrations. The process by which these decisions are made is likely to be complicated and situation specific. Nonetheless we can be confident that both the cost and outputs of this choice are important contributory factors to the decision making process. Total costs of regulatory activities depend on input prices. Input prices for labour and capital are wages and rents respectively. Input prices affect the level of inputs used – clearly if the going wage for the requisite skilled labour is comparatively high then this input may be used more sparingly. For individual regulatory activities we can treat wages and rents as given, although for a whole inspection unit the extent of demand for an input may well influence its input price. Comparing the total costs of regulatory activities across units we would expect overall that variations in the input prices paid for labour and capital employed would explain some of the differences in total costs.

4.2.2 Output

The output of regulatory activities is a determination of whether a home is either eligible for a new registration or to retain its current registration. The output involves a specification of any matters that need to be put right and an indication of remedial action. Increases in the intensity of inputs such as staff time are likely to improve the accuracy of the inspection and also increase its comprehensiveness (or completeness). The outcome of an inspection is a judgement as to whether the home is fit for purpose in accordance with the regulations. Increases in the outputs – the accuracy and comprehensiveness of the inspection – will improve the chances that the outcome is correct, that is, whether the home is actually fit for purpose. For example, a brief and concise inspection is less likely to correctly judge whether a home is fit for purpose than a lengthy, involved and comprehensive inspection. Indeed, the latter inspection is much more likely to pick up on areas and matters that require remedial attention should they exist.

The output of inspection can be conceived of in two ways. First, as the probability that the inspection produces a correct judgement of the home's fitness for purpose. Higher levels of inputs of staff time and so on would be expected to increase this regulation probability, although it is unlikely to ever reach a value of one. A probability of less than one means that some homes are mistakenly inspected as either fit or not when the converse of each is actually true. Put another way homes can be judged falsely as fit or falsely as unfit.

The second way is to think of a probability of detection of homes that are unfit. An incorrect 'judgement' takes the form of an unfit home being missed. Homes can be judged falsely as fit, but cannot be judged falsely as unfit.¹ In practice a home fails only when there is certain evidence that a home is not fit for purpose.

Although we can identify when a home has been judged fit, the regulation probability is not observable. The likelihood of a home being successfully inspected – being judged fit for purpose – depends in part on the regulation probability but also of course, on whether the home is actually of sufficient fitness to meet registration standards.

¹ Let the regulation probability be q and the fitness probability be R. In the first approach the (observed) chance that the home is judged fit for purpose, x, is the individual chances of two combinations of events that can be summarised as: [correct judgement, fit home] or [false judgement, unfit home]. Then: x = 1 + 2qR - q - R. In the second approach, the chance that the home is judged fit for purpose corresponds to three sets of events: [correct judgement, fit home] or [false judgement, unfit home], which is: x = 1 + qR - q.

In the first approach, when the chance that a home is actually fit for purpose (the fitness probability) is better than one half, which will be taken as read, the chance that a home is judged as fit for purpose is positively related to the regulation probability.² Other things being equal, we might expect greater inputs/costs and hence a greater value of the regulation probability to be associated with homes that are judged fit. But in the second approach, a negative relationship arises: improving inspection intensity means only that the chance of unfit home being correctly judged as unfit increases. So a lower number of 'fit judgements' would be associated with comparatively greater efforts/costs.³

The average work required to make a judgement is also expected to be higher for homes which have more problems – and so are less likely to be actually fit for purpose – even when the chance of a *correct* final judgement is the same (regardless of what that judgement is). This latter effect means a negative relationship between costs/effort and the chance that the home is judged fit for purpose. When we take both effects together we have an unambiguous negative relationship between a home being judged as fit for purpose and the cost of that inspection with the second approach, but not with the first.⁴

The above reasoning leads us to expect that regulatory activities with different levels of output will have different costs. For example, inspections undertaken to achieve a high level of thoroughness – i.e. a high value of the regulation probability – will be relatively more costly. We cannot observe output directly and so have no immediate way of gauging this claimed effect. However, if we adopt the second approach discussed above, which is intuitively more appealing (because it does not mean fit homes are falsely judged as unfit), then the output effect would be consistent with finding from the data a negative relationship between costs and homes judged as fit.

4.2.3 Input-output production relationships

Production function parameters tell us about the physical relationship between the level of inputs and the level of output. In the context of regulatory activities such as inspection and registration we might expect that homes of different types require somewhat different processes, forms of investigation, and have different criteria for determining fitness for purpose. In particular the main client group of the home investigated will be a prime indicator of such differences. Inspections, for example, of homes catering for younger people with learning difficulties would require distinct activities compared with inspections of homes for elderly people. The achievement of the same level of output – the thoroughness of the inspection – would require different levels and combinations of inputs for these two kinds of homes.

Registration status of the home may also affect costs in a similar fashion. Dual registered homes may need a distinct set of inputs compared with nursing homes or residential care homes. The organisational structure of the home such as its legal status and ownership may also impinge on costs. The physical nature of the home – whether it was purpose built, the number of single rooms, and its design – might also be relevant.

² In the first approach: x = 1 + 2qR - q - R. It follows that $\partial q/\partial x = 1/(2R - 1) > 0$ for $R > \frac{1}{2}$.

³ In the second approach x = 1 + qR - q and so we have $\partial q/\partial x = 1/(R - 1) < 0$ for 0 < R < 1.

⁴ Let *w* be the unit 'cost' of output *y* i.e. T = T(wq) where *T* is total cost. Therefore $\partial T/\partial x = T'[(\partial q/\partial x)w + (\partial w/\partial x)q]$. We have assumed that *w* is inversely related to *x*, the homes actual fitness, or $\partial w/\partial x < 0$ and so the second being negative. The first term is also negative with the second approach but positive with the first.

As mentioned above another relevant characteristic of a home is its actual fitness for purpose. Homes with more problems will require comparatively greater inputs to achieve the same regulatory output as homes that are of a good standard. The size of the home should be important. To be of equivalent thoroughness (to achieve an equal regulation probability) large homes presumably take more work than smaller homes. In turn we would expect the costs of inspecting or registering a large home to be comparatively higher.

The type of inspection or registration serves to differentiate input-output relationships. Announced inspections often differ systematically from unannounced inspections. Variations in registration are distinct from new registrations. Where the activity type is different we would also expect different costs, other things being equal.

Overall, home and activity characteristics may go some way to accounting for the differences in costs of regulatory activities. By incorporating these factors into our analysis we can at least identify distinct types of inspection and registration and therefore determine whether costs vary within each sub-type.

4.2.4 Input mix efficiency

Input mix efficiency refers to the relationships between outputs and production characteristics. In general for most combinations of these individual factors, a particular choice of inputs exists to generate a minimum total cost in achieving a given level of output. This choice can be described as the efficient choice.

Determining and implementing this choice of inputs is not itself without costs – often called transaction costs. Examples are the costs of staff and site management, training, optimal skill mix and so forth. These transaction costs may constrain a unit from achieving the efficient set of inputs. Transaction costs tend to have a large 'fixed cost' component incurred even if a unit produced no regulation outputs. Therefore unit size is often relevant: large units can spread out these costs and are less constrained in employing the optimal set of inputs. For example a large unit can have a specialised management team that has no inspection caseload. Large units can also secure discounts on input prices – a production cost economy of scale.

As unit size increases, diseconomies of scale can also arise. Staff co-ordination becomes more difficult for larger workforces. Also, and highly relevant, communication, monitoring and the sharing of case-specific information can break down for larger units. If these diseconomies are proportionately large then the implied 'optimal size' of units will be smaller. Whatever the exact combination, unit size, and indeed other factors such as institutional and context-specific barriers (such as being part of the local authority or working jointly with health/local authority units), are expected to partially explain costs differences in the activities which distinct units undertake.

4.3 Methodology

Units were asked to supply detailed information about specific instances of inspections and registrations. These were selected on the basis of the last announced and unannounced inspection of homes for older people and for another client group, and the last new registration completed before a specified date. We also asked for the last example of a variation of registered status, including de-registrations. Variations were defined to include changes in home ownership or management, changes in the nature of care provided (for

example, nursing or residential) alterations in the building, changes in the number of care beds and also both voluntary home closures and those resulting from business failure

Data were collected about the characteristics of the home that was the subject of the selected inspection or registration. Characteristics of the home included: the main client group served by the home, its registration or proposed registration status, and size in terms of the number of registered residential and nursing beds. Respondents also identified whether the home was part of a large chain organisation, whether the home was private or voluntary/non-for-profit, the number of staff employed by the home, whether the home was purpose built or converted from another use, and the approximate weekly fee charged by the home. Some details of the type of inspection or registration were also sought, as were the reasons that prompted it and its outcome.

A substantive part of the inspection/registration questionnaires concerned the resources consumed by the inspection and registration process. We asked about the time spent on the inspection/registration by professional staff in the following categories: unit heads, managers (with and without caseloads) and inspectors. We asked in addition about how their time was used as between on-site time, report writing and travelling. Information was also collected about external inputs, such as the time of non-unit professionals such as Health and Safety staff, public health personnel, pharmacists, social workers, legal advice and so forth.

Overall, from local authority units we received details of 117 unannounced and 125 announced inspections; 63 new registrations and 61 varying registrations. Health authority units provided information about 105 unannounced and 109 announced inspections; 64 new registrations and 62 varying registrations.

4.3.1 The costs of registration and inspection activities

The total costs of registration and inspection activities comprise internal cost elements, that is inputs under the direct purview of the unit, and external costs.

The internal costs to the unit were estimated by multiplying the number of hours spent on the activity by the unit cost reflecting the type of staff involved (head of unit, manager or inspector). As far as possible these unit costs reflected local circumstances in terms of salary, travel and support costs. For the most part, the reported results have used the most inclusive estimate of unit costs, which allows for time spent on other regulatory activities such as dealing with complaints, development and enforcement activities. Table 3.4 in chapter 3 shows average estimated unit costs of time for each type of inspector.

In addition to time spent by inspectors, internal costs to the units include the recruitment, training and expenses of lay assessors. A standard estimate of $\pounds 47$ per inspection was used based on those units that were able to supply information about these costs and number of inspections involving a lay assessor.

Registrations in particular, but also inspections can involve inputs from professionals external to the unit. Regulatory activity questionnaires invited respondents to detail such external inputs, both in terms of the intensity of the input and also its total cost. Where total costs were provided these were added directly to the running total of external costs. When intensity but not input cost was indicated a unit cost estimate from external sources was used and multiplied by the stated intensity. If only the use of a type of external input was noted then a

cost was imputed on the basis of sample use of the type of resource for the type of regulatory activity.

4.3.2. Analysis of costs

The analysis of costs has two parts. First is to determine the average costs of inspections and registrations. The statistical arithmetic mean was calculated for the sample to provide an estimate of average costs. Summary statistics for the distribution of cost per registration or inspection were also generated. This information is presented and discussed in section 4.4.

The second part of the analysis is to investigate the distribution of costs in more detail by constructing a statistical model showing the relationships between total costs and a range of determining factors. The factors included and form of the model will depend on the theoretical model described above. Using a process of inference, the statistical model will allow us to predict when regulation activity costs will differ from the average value in particular situations. For example, what will be the expected costs of inspecting particular types of homes, by certain types of inspection units in defined areas?

Regression analysis is used to generate the statistical relationships. This technique calculates the correlation between total costs and the range of factors. Correlation that is statistically different from zero is the basis for inferring that that factor and total cost are actually related. Regression analysis calculates each cost correlation for all factors simultaneously. Each correlation is therefore affected by the cost correlation of all the other variables and so it is the net contribution of each factor that is measured. Each individual relationship is identified by calculating its correlation with total costs when all other factors are treated as constant. To give an example, suppose that in simple bivariate comparisons we find that total costs in London are higher than elsewhere. The bivariate correlation does not tell us whether this effect is due to London having higher input prices or London units being smaller on average or some combination of both. Multiple regression can find the London-cost correlation when unit size is treated as constant across the sample and therefore removes any confounding effects of unit size.

4.4 Characteristics of inspections and registrations

In this section we describe the characteristics of the homes that were the subject of the regulatory activity and the resources used in the process.

4.4.1. Home characteristics

The majority of inspections and registrations in our sample are of homes with elderly people as their main client group (see tables 4.1 and 4.2). For both announced and unannounced inspections, homes primarily catering for older people constitute over half the sample.

Twice as many dual registered homes were inspected by health authority units in the sample compared with local authorities (see table 4.3 for a detailed breakdown). Dual registered homes with their more complicated regulatory structure constitute a significant minority of homes, even in the local authority unit sample.

Tables 4.4 and 4.5 summarise information about the total places (both nursing and residential) of homes inspected or registered in our sample. The variation of home size in terms of total places is very large, ranging from 4 bedded homes to those with 150 places. Average size is about 20 places for homes inspected by local authorities, and slightly larger

for those homes being newly registered. Homes that fall under the purview of the health authority were somewhat larger in the sample, averaging about 40 places for inspections of current premises and nearly 50 places for new registrations. The wide range of home sizes was expected to account for some of the variation in the resources deployed on regulatory activity.

4.4.2. Activity

For each inspection and registration we collected information on the hours of time input by four categories of staff: inspectors, managers with caseloads, managers without caseloads and unit heads. Table 4.6 gives the total hours whilst tables 4.7a-d describe the direct input hours of these staff of health authority units and tables 4.8a-d give this information with respect to local authority units' regulation activities. Listed in these tables are the average values of hours of labour input across sample inspections and across sample registrations. Also reported is information about the distribution of inputs hours across the sample registrations and inspections. Skewness and Kurtosis values indicate how the distribution varies in shape from a normal distribution⁵.

Local authority units spend slightly more time on their announced inspections than their health authority counterparts. However the converse is true for unannounced inspections. Taken together the total inspection time in local authorities was almost identical to that for health authorities (respectively the average values are 14.35 and 14.61 total hours). New registrations take the longest time, averaging over 45 hours for health authorities registering nursing homes, which are larger on average than residential homes. The average variation in registration time is about 20 hours for both health and local authority units. However, as variation can take many forms including de-registration following business failures, there is a good deal of variance in the distribution.

Tables 4.7a-d and tables 4.8a-d indicate that inspectors and unit heads have the greatest input. In total managers have low input, but the proportion of managers on average in the sample units is also low^6 . Unit heads provide the most time to registrations, both new and variations of registration status.

Hours spent by inspectors on announced inspections have non-skewed distributions, although the other measures of input hours do have skewed distributions and are significantly nonnormal. Skewed distributions are typical of this form of activity data where a few cases can take up a disproportionate level of resources. Where the data are skewed, the average value of input hours has more limited usefulness when considering the short run. This is because the most costly regulation activities only occur infrequently.

The inspection questionnaire asked if a lay assessor was employed on the inspection. Table 4.9 indicates the proportion of inspections that used a lay assessor. The majority of local authority units' announced inspections involved lay assessment, but lay assessors were rarely used for unannounced visits. Health authority units use lay assessors very infrequently; less than ten percent of inspections used this external input.

 $^{^{5}}$ The normal distribution has Skewness and Kurtosis values of zero so higher values imply greater non-normality of the distribution.

⁶ In health authorities low numbers of managers meant little labour cost information for this staff category. Their input costs were treated as equal to those of inspectors.

4.4.3. Costs

Table 4.10 lists the external resources employed by the unit on the various regulatory activities indicated. These resources are measured in terms of the number and intensity of external professional staff use. Planning and building control officers were widely used in registrations especially, but also as part of inspections. Often pharmacists were used by health authority units, reflecting the medical nature of nursing home care.

Health authorities used a greater number and intensity of external inputs. For inspections local authority units' average cost of external inputs was £14.35 (£18.35 on unannounced and £4.49 on announced inspections - see Table 4.11). The health authority units' equivalent was £51.88 (£41.30 on unannounced inspections and £61.88 on announced inspections) as reported in table 4.12.

Registrations take proportionately more external inputs than inspections. External costs for local authority registrations were 10 times higher than for inspections. Health authority registrations had external costs of about 5 times higher than their inspections. The respective average values were £154 and £303 (tables 4.13 and 4.14). Yet the difference in total hours between inspections and registrations is only double for local authority units and triple for health authority units.

Tables 4.11 to 4.14 give information about total costs of local authority inspections, health authority inspections, new registrations (with local and health authorities combined) and variations in registration (again with local and health authorities combined). Listed are average values and distribution information regarding the total internal and external costs, the total activity costs – which are the internal and external elements summed – and also, to provide context, the total hours. These estimates all use the inclusive unit costs estimate which allows for the costs of other regulatory activities (see section 3.4).

In order to illustrate the effect of omitting the cost of other regulatory activities, table 4.15 shows average total costs estimated on three bases. The first option only includes the direct input of the inspector⁷, any lay inspector involvement and external costs. The second option allows for general development and support activities provided to homes outside inspections. The third option also allows for time spent on enforcement and complaints.

Across the sample, inspection is less costly than registration activities, although there are of course many more inspections undertaken in a given period than registrations (see chapter 2). Indeed, on average, registrations are twice as expensive as inspections, including both local and health authority sampled activities. Local authorities have slightly cheaper unannounced inspections than their health authority counterparts but slightly more expensive announced inspections. In part this will be due to health authority units that did not announce any of their inspections and so the unannounced sample would include some detailed inspections. Health authority registrations appear at the average to be a good deal more costly than those undertaken by the local authority. There can be only limited interpretation of this crude comparison because no account is made of differences in the types of homes inspected such as client group, registration status, ownership or size, nor of pertinent unit characteristics such as location.

⁷ Direct input costs allow for costs of support staff, capital costs and general administrative activities.

The range of costs can be seen by the minimum and maximum values listed in tables 4.11 to 4.14. A better indication of dispersion or variance is the standard deviation. As a rule of thumb when the standard deviation exceeds the average value, sample variance is high. This occurs only once – for local authority announced inspections – and even then the standard deviation is close to the average value.

Total activity costs for inspections of all types have distributions that are skewed: there are a small number of very high cost inspections. The distribution of costs for registrations does not differ much from a normal distribution – the average and median values will be approximately equal. The smaller variance and skewness of registrations is encouraging from a funding perspective because in general registrations happen much less frequently than inspections. With a fixed funding formula for a given period, comparatively speaking the higher the variation and the lower the frequency of activity in that period, the greater is the chance that actual cost will differ from actual income.

The sample from which the cost figures are derived was based on information from four inspections and two registrations provided by participating inspection units in England. Consequently the sample is not representative of the rate of inspections and registrations per unit. The costs of registrations and inspections in large units will be under-represented with the converse true of small units. Given also that small units in terms of the annual number of registrations and inspections undertaken tend to be in urban areas – particularly in London – the sample estimates will be slightly high with respect to the England average. A reweighting of the sample to reflect these differences produced an average local authority inspection cost of $\pounds781$ compared to the $\pounds881$ for our sample⁸.

4.5 Analysis of cost variations

The theoretical model presented above has four groups of cost factors that determine the costs of inspection and registration. The model defines these determining factors conceptually. By finding a practical measure of each of these factors that can be repeated for a sufficiently large number of cases, the model can be analysed statistically. These actual measures or proxy variables are listed in Box 2 with their corresponding (theoretical) cost factor. Although the theoretical model is only indicative, we still wish to find proxies that accurately quantify the conceptual variables of the theoretical model. Indeed, any interpretation of the statistical model analysis rests on the validity of the relationship between proxy and cost factor. Box 2 shows that the four cost factor groups can be disaggregated into a number of subgroups or elements to make finding proxy variables easier.

⁸ There were too few examples of London health authority inspections to make a re-weighting based on differential average costs valid.

Box 2. Regression proxy variables

Cost factor	Elements	Proxy variable
Input prices	Regional characteristics	Local/health authority type
Output	Outcome characteristics	Satisfactory inspection
	(Judged fitness for purpose,	
	Actual fitness for purpose)	
Production function	Home characteristics	Client group
parameters		Registration status
		Ownership
		Purpose built
		Outcome of inspection
		Size of home (total places)
	Activity characteristics	Announced inspection
		Regular inspection
Input mix efficiency	Unit characteristics	Size of unit
		Type of unit

To make the analysis manageable and to keep the analysis sample size high we combined the data to generate four samples:

- local authority inspections (announced and unannounced combined),
- health authority inspections (announced and unannounced combined),
- new registrations (local and health authority data combined), and
- variations in registration (local and health authority data combined).

Technical issues concerning the treatment of missing values and regression diagnosis to check for possible bias are described in technical appendix 2.

4.6 Results

The results of the multivariate analyses are reported in tables 4.16 to 4.19. Appendix 2 describes the technical background to the estimation. Although a relatively high proportion of variation in costs remains unexplained by the factors identified as significant in affecting costs, the diagnostic statistics suggest that no important influence on the costs has been omitted.

4.6.1 Inspections

Tables 4.16 and 4.17 show the results of the multivariate analysis of the local authority and health authority inspections respectively. Below we discuss the results in terms of significant associations with outcome, home characteristics, regional factors and characteristics of the unit and the inspection itself.

Outcome

It was argued above that an inspection resulting in a satisfactory outcome (judged fit for purpose) would be expected to incur lower costs than an inspection that found problems requiring further action. The variable identifying a satisfactory outcome was found to be statistically significantly associated with lower costs for both the local authority and health authority inspections (p < 0.01 and p < 0.05 respectively). In addition to the theoretical argument that more inputs would be more likely to identify homes that were not fit for

purpose, this variable might also reflect that unsatisfactory inspections are more costly to undertake. This would result from discussions with the home about the problems that have been identified and follow-up visits, to check whether recommendations have been followed through.

Home characteristics

Home size, client group, and registration type were all found to be statistically significantly associated with total activity cost. Home size, as measured by the total number of places of homes inspected by the local authority units and by total nursing beds of the homes under the purview of health authority units, showed a significant positive relationship with cost (p < 0.05). Larger homes appear to require greater resources during inspection although the marginal effect of one extra bed is small, only £3.57 for local authority inspected homes and £5.80 for health authority inspected homes.

Figure 4.1 shows the relationship between home size and the cost of inspections. For both health authority and local authority the relationship is non-linear. For the local authority sample the gradient of the relationship between total places and cost is increasing (slightly) at the margin. Homes of an average size cost proportionately less to inspect than either small or large homes. Homes in the top third of the distribution, which average just under 39 places cost £3.96 more for an additional bed. Homes in the bottom third, which average only about 6 places cost £3.29 extra per place. The effects of size are larger in the health authority sample although the relationship between costs and places is declining at the margin. Thus very large homes are proportionately less expensive to inspect. For comparison, homes in the bottom third of the distribution (with an average of 18 places) have a marginal cost per place or cost gradient of £8.65, whilst for large homes (with an average of 57 places) the equivalent figure is £3.49.

Due to the relatively small relationship between size and cost, a large fixed value is needed so that average total costs of an inspection are covered (see tables 4.11 and 4.12). Extrapolating on the basis of the cost gradient for the average sized home in the local authority sample a fixed value of £722 would be required. The equivalent figure for health authority homes is $\pounds743$.

Overall the size of homes is significant in explaining cost variation. But even the wide variation in home sizes accounts for a small proportion of total cost variation. To provide some indication of this proportion, the fixed amount for the average home accounts for 91 per cent of the total average cost for the local authority sample and 81 per cent for the health authority sample.

Four variables were constructed to model the effects of client group: *elderly, mental health* (*including homes for elderly mentally infirm residents*), *learning disabilities* and *other persons*. These four groups refer to the home's largest client group and thus are mutually exclusive in the sample.

Homes inspected by the local authority and catering primarily for people with mental health problems were associated with higher inspection costs compared with homes serving other groups of client (p < 0.1). The analysis did not uncover a difference between any of the other client groups. Treating other factors as equal for comparison, in the local authority sample homes serving people with mental health problems had a predicted cost of an inspection of £921. Statistically we can be 90 per cent confident that the predicted cost of inspecting these

homes would lie between £830 and £1,012. This was significantly different from the average of £777 for other client groups.

Homes for people with mental health problems inspected by the health authority were also associated with higher inspection costs than homes catering for people with learning disabilities and "other persons" client groups. However, in this sample, homes catering mainly for elderly people were also significantly associated with higher costs compared with the learning disabilities and the other persons client groups. As an indication of these differences, the predicted cost for the mental health client group was £1,022, for older people it was £932 and for the other two groups (which were not different) the predicted cost was £759. The difference between inspecting homes caring for the mental health client group and the elderly client group is not statistically significant (the lower value of the 90 per cent confidence interval on the mental health client group is £875).

Both local authority and health authority units are charged with inspection of residential and nursing home beds respectively in dual registered homes. A local authority inspection of a dual registered home was not associated with any significant difference in cost compared with residential care homes. Inspection of a dual registered home by a health authority unit was predicted to have slightly higher costs on average compared with nursing homes but only in case of elderly clients (p < 0.1). For other client groups there was no statistically significant difference.

A number of additional home characteristics were used in the analysis: ownership/sector, whether the home was purpose built, and whether the home was a single home organisation rather than a chain. In the health authority analysis private ownership was associated with slightly lower costs (p < 0.05). None of the other characteristics had a significant relationship with costs of inspection in either sample.

Regional characteristics

The price of labour and capital varies across England, with London in particular having comparatively high prices. Units operating in rural compared to urban areas might also have different procedures and characteristics which result in different costs structures. For example, rural authorities would be expected to incur higher costs associated with travel. The local authority sample has 19 per cent of inspections in London. These inspections were estimated to be significantly more expensive than inspections conducted elsewhere (p < 0.1). The average London inspection cost was £141 higher than elsewhere, with a 90 per cent confidence interval of £7 to £276. The health authority sample had an insufficient number of London inspections to be included, but inspections undertaken in *Shire* authorities were also found to be slightly more expensive (p < 0.1).

Activity characteristics

Announced inspections cost in the order of £368 more than unannounced inspections when undertaken by local authority units (p < 0.001). The 90 per cent confidence interval was £278 to £457. In the health authority sample the average difference was less: £224 (with a 90 per cent confidence interval of £102 to £346) (p < 0.005). We were also able to distinguish whether the inspection was routine or initiated by a complaint or other concern. In the local authority analysis routine inspections were significantly less costly (p < 0.05). Inspections resulting from complaints or other concerns were £361 more expensive on average.

Unit characteristics

It was argued above that a unit's scale of operation could explain some of the observed variation in the cost of inspections. Scale of operation was measured as the total number of inspections carried out by the unit in 1997 for the local authority sample. Average number of staff was used for the health authority sample. In both cases a significant relationship between size of local authority or health authority unit (p < 0.001 and p < 0.1 respectively. Non-linear relationships were found (see figures 4.2 and 4.3) that were consistent with sizeable fixed costs. A feature of such a cost structure is that average costs decline with size because, as size increases, the fixed costs can be spread out over greater activity. Comparatively speaking large units have lower average inspection costs. There was no evidence of diseconomies of scale.

Other things being equal, figures 4.2 and 4.3 suggest costs saving might be had with larger units. However, some caution must be employed in interpretation: alternative explanations are possible. Any negative relationship between unit size and input prices, which is not fully captured by the regional variables used to proxy for input prices, could also produce the relationships in figures 4.2 and 4.3.

4.6.2 New registrations

Table 4.18 shows the results of the results of the analysis of the costs of new registrations conducted in both local and health authority units.

Home characteristics

As expected, the larger the home, the higher the cost of registration (p < 0.005). As with the inspections analysis the relationship is non-linear, with the additional cost per extra bed declining. The pattern is illustrated in figure 4.4. For the average sized home the extra cost per bed was £32, falling to £10 for the average home in the top third of the size distribution. Small homes, those in the bottom third of the distribution, have an equivalent figure of £65 per extra place.

Registrations of homes for people with learning disabilities and mental health problems, were both significantly more costly (p < 0.05 and p < 0.1). Homes for people with learning disabilities are predicted to cost some £3,499 in total to be registered, whilst homes for people with mental health problems cost somewhere in the order of £3,136. The valid comparison is with older people and 'other persons' client groups where predicted costs of registration average at about £2,280.

Homes that were recorded as purpose built were associated with a reduced cost to register (p < 0.1) of £727 less than homes that had been converted from other uses. Private sector homes also cost less to register (p < 0.1): in the order of £756 less than the average cost for the whole sample. The 90 per cent confidence intervals are wide however at between £92 less and £1,419 less. The registration status of the home (residential, nursing or dual) was not significant in the analysis.

Activity characteristics

An indicator of the type of new registration is given by the observation as to whether a 'fit persons' check was undertaken. In fact this check was conducted over 90 per cent of the time. A fit person check can also be construed as an output of the registration process: it provides information concerning the overall fitness of the organisation/home to be registered, but clearly requires staff time and effort and other inputs. The expected positive association with

total cost was found (p < 0.05). The average predicted effect on cost was very large, a difference of over £1,300 compared to a registration where such a check was not performed.

Unit characteristics

As with inspections, larger units were associated with lower costs of registration (p < 0.001). The average reduction in new registration cost is £100 per additional member of staff for units larger than average. The 90 per cent confidence interval is £149 less to £51 less. The relationship is also non-linear but different to those found in the inspection analyses. The result is less curvature and therefore a more persistent scale effect (see figure 4.5).

4.6.3 Variation in registrations

The initial expectation was that the 'variations' sample, which includes all manner of variations, de- and re-registrations, would have a wide variety of costs. Because the possible range of activity types is wide the statistical investigation was concentrated on distinguishing the costs of particular types of 'variation'. The results are presented in table 4.19.

Activity characteristics

Respondents to the survey were asked to identify the reason for the variation in registration. The reasons included:

- Changes in manager or person in charge;
- Changes in owner;
- Extension of the premises (i.e. new building);
- Modifications to the number of beds registered;
- Changes in the registration status;
- De-registration as a result of business failure; and
- Voluntary de-registration for unspecified reasons.

Small numbers of sample cases in some of these categories meant that cost effect could not be gauged.

Changes in manager and changes in person-in-charge provided the basis for comparison of the other valid activity categories. Relative to the costs of changes in manager or person-in-charge, a change in owner was found to be more costly to conduct (p < 0.01), as was a new building (p < 0.05). De-registration due to business failure was also associated with a higher cost (p < 0.1). None of the other valid categories differed significantly in terms of average cost. A registration resulting from a change in owner cost £2,164, a new build registration averaged £2,110 and de-registration due to business failure was associated with a cost of £1,756. The comparison 'other' activity group had an average cost of £983. The whole sample average was £1,732.

Home characteristics

Two client groups were associated with higher costs of variations in registration: elderly persons (p < 0.05) and the mental health client group (p < 0.1). The costs of variations in registration for homes for these two client groups did not differ significantly from each other.

Unit characteristics

A significant relationship between size of unit and cost was only found for local authority units (p < 0.1). The effect was small: averaging only a £15 reduction in cost per additional staff member above average (see figure 4.5). Variations in registrations undertaken by local authority units were more costly than those variations undertaken by health authority units. Taken together these two effects, i.e. size and type of unit, predict that local authority units are more costly (by £285). However, because there are two simultaneous effects, the 90 per cent confidence internal is very wide: from plus £1,116 to *minus* £545.

4.7 Summary

This chapter describes the analysis of the costs of registration and inspection. A bottom-up approach was used to estimate the total costs of a variety of inspections and registrations. The arithmetic mean was calculated for each type of inspection and registration. This descriptive information allows a comparison of the resources used in these regulatory activities. Adjusting to reflect the national picture, the average total cost of all types of inspection was $\pounds 780$ for local authority units and $\pounds 910$ for health authority units.

There was significant variation in the costs of inspection and registration. A statistical model, based on a theoretical approach to factors expected to affect the costs of regulation, was used to investigate this variation. Using a process of inference we then predicted when regulation activity costs were likely to differ from the average value.

Four sets of factors were found to be associated with inspection and registration cost variation:

- the outcome of the inspection;
- the characteristics of the inspected or registered home (including its principle client group and its size);
- locality characteristics; and
- characteristics of the unit (including unit size).

A number of findings are of particular interest. First, comparatively large homes were associated with higher costs. However on average only between 10 and 20 per cent of the average costs was accounted for by variation in home size. In other words there was a large 'fixed' cost of inspection and registration unrelated to home size. Homes principally catering for people with mental health problems were consistently associated with higher costs. Other client group effects arose for particular types of inspection or registration. Finally, larger units were associated with lower costs for most of the activities analysed.

This analysis of cost variations provides an indication of which inspection and registration costs differ from the average and by how much. The estimates allow for other regulatory activities by allocating the time spent to the unit cost of inspector time. However, this only provides part of the picture. Enforcement activities, which incur considerable costs in addition to inspector time, were too rare to include in the type of analysis described here. Nevertheless, they are a key aspect of the regulatory process, which is addressed in the next chapter.

Table 4.1 Local authority units - types of homes inspected, main client group

Activity		Client group						
	Elderly	Elderly – mental health	Adults – mental health	Learning difficulties	Physical disabilities	Other	Total	
Announced inspection	55	9	7	30	3	6	111	
Unannounced inspection	55	7	12	32	2	9	117	
New registration	21	7	2	18	4	6	58	
Variation registration	24	17	16	10	11	2	80	

Table 4.2 Health authority units – types of homes inspected, main client group

Activity		Client group						
	Gen. nursing – older people	Gen. nursing – other adults	Mental health – older people	Mental health – other adults	Learning disabilities	Other	Total	
Announced inspection Unannounced inspection New registration Variation registration	65 58 34 5	12 8 4 19	9 15 5 23	7 8 4 12	9 7 2 16	6 8 8 5	108 104 57 80	

Table 4.3 Registration status

	Local authority t	unit	Health authority unit			
	Residential care	Dual registered		Nursing home		
Announced inspection Unannounced inspection New registration	102 112 42	9 5 16	23 28 17	85 76 40		
Variation registration	56	6	5	61		

Table 4.4 Size of home (total places) – Local authority units

	Average	Std dev	Min	Max	Cases
Announced inspection	23.12	19.18	4	98	108
Unannounced inspection	17.34	11.89	4	50	91
New registration	29.38	30.78	4	150	48

Table 4.5 Size of home (total places) – Health authority units

	Average	Std dev	Min	Max	Cases
Announced inspection	42.76	24.78	7	150	106
Unannounced inspection	38.17	20.19	5	106	101
New registration	47.35	24.63	5	124	52

Table 4.6 Direct staff input – total hours

	Average	Ν	Std. Dev.	Min	Max	Skewness	Kurtosis
LA announced inspection	18.46	116	8.93	2.00	56.00	1.19	2.57
HA announced inspection	15.63	108	9.69	4.50	73.50	2.57	11.25
LA unannounced inspection	10.05	111	6.85	2.50	38.50	2.03	4.43
HA unannounced inspection	13.53	102	12.99	2.25	100.00	4.23	23.10
LA new registration	29.16	54	23.69	3.50	144.00	3.17	12.34
HA new registration	45.09	53	30.57	6.00	134.00	1.12	0.79
LA variation registration	21.76	54	21.88	0.50	130.00	2.59	10.23
HA variation registration	19.96	57	20.54	1.00	111.00	2.78	9.17

Table 4.7a Health authority announced inspection – hours of labour input by staff type

	Average	Median	Std. Dev.	Skewness	Kurtosis	Min	Max
Inspectors	10.99	10	9.68	1.08	1.46	0.00	48
Managers with caseload	1.54	0	3.96	2.77	7.44	0.00	20.5
Managers without caseload	0.39	0	2.67	7.34	55.13	0.00	22.5
Unit heads	2.71	0	5.07	2.71	8.38	0.00	26
Total hours	15.63	14.00	9.69	2.57	11.25	4.50	73.50
n	108		•	•		•	

Table 4.7b Health authority unannounced inspection – hours of labour input by staff type

	Average	Median	Std. Dev.	Skewness	Kurtosis	Min	Max
Inspectors	9.44	7.5	10.96	3.39	17.71	0.00	80
Managers with caseload	1.67	0	4.03	2.56	6.12	0.00	20
Managers without caseload	0.46	0	2.92	7.31	56.07	0.00	25
Unit heads	1.96	0	4.61	4.51	26.93	0.00	35
Total hours	13.53	10.25	12.99	4.23	23.10	2.25	100.00
n	102		1	<u> </u>			<u> </u>

	Average	Median	Std. Dev.	Skewness	Kurtosis	Min	Max
Inspectors	23.50	15	26.30	1.86	5.01	0.00	133
Managers with caseload	5.92	0	14.31	3.21	11.19	0.00	72
Managers without caseload	2.26	0	6.91	3.32	11.12	0.00	35
Unit heads	13.41	7.5	18.77	1.95	3.23	0.00	75
Total hours	45.09	34.00	30.57	1.12	0.79	6.00	134.00
n	53						1

Table 4.7c Health authority new registration – hours of labour input by staff type

Table 4.7d Health authority variation registration – hours of labour input by staff type

	Average	Median	Std. Dev.	Skewness	Kurtosis	Min	Max
Inspectors	10.36	5.5	17.88	4.62	27.02	0.00	120
Managers with caseload	3.49	0	7.10	2.09	3.64	0.00	30
Managers without caseload	1.09	0	5.04	5.08	25.86	0.00	30
Unit heads	6.82	2	12.01	2.98	9.65	0.00	60
Total hours	21.76	14.00	21.88	2.59	10.23	0.50	130.00
n	54	1	1	1			1

Table 4.8a Local authority announced inspection – hours of labour input by staff type

	Average	Median	Std. Dev.	Skewness	Kurtosis	Min	Max
Inspectors	16.18	16	9.62	0.84	2.09	0.00	56
Managers with caseload	1.23	0	4.57	3.92	14.25	0.00	22.85
Managers without caseload	0.25	0	1.44	9.65	99.01	0.00	15
Unit heads	0.79	0	2.33	5.63	37.15	0.00	19
Total hours	18.46	17.00	8.93	1.19	2.57	2.00	56.00
n	116	1	1	1	1	1	1

	Average	Median	Std. Dev.	Skewness	Kurtosis	Min	Max
Inspectors	8.87	7	7.08	1.82	3.92	0.00	38
Managers with caseload	0.47	0	1.70	4.41	19.80	0.00	10.66
Managers without caseload	0.20	0	1.26	9.76	99.44	0.00	13
Unit heads	0.52	0	1.79	5.74	38.10	0.00	14.5
Total hours	10.05	8.00	6.85	2.03	4.43	2.50	38.50
n	111	1	1	1	<u> </u>	<u> </u>	

Table 4.8b Local authority unannounced inspection – hours of labour input by staff type

Table 4.8c Local authority new registration – hours of labour input by staff type

	Average	Median	Std. Dev.	Skewness	Kurtosis	Min	Max
Inspectors	24.99	20	24.48	2.97	11.48	0.00	144
Managers with caseload	1.81	0	5.06	4.45	24.16	0.00	32
Managers without caseload	0.67	0	1.56	2.56	5.58	0.00	6
Unit heads	1.69	0.25	3.94	4.37	21.48	0.00	24
Total hours	29.16	23.50	23.69	3.17	12.34	3.50	144.00
n	54	1	1	I			1

Table 4.8d Local authority variation registration – hours of labour input by staff type

	Average	Median	Std. Dev.	Skewness	Kurtosis	Min	Max
Inspectors	16.41	10	19.26	2.65	8.36	0.00	101
Managers with caseload	1.37	0	3.85	3.12	9.18	0.00	18
Managers without caseload	0.32	0	1.15	5.67	36.73	0.00	8
Unit heads	1.86	1	3.05	2.75	8.16	0.00	14
Total hours	19.96	14.00	20.54	2.78	9.17	1.00	111.00
n	57	1	1	1	<u> </u>	1	1

Table 4.9 Use of lay assessor – number and percentage of inspections

	Frequency	Percent
LA announced inspection	69	59.5
HA announced inspection	9	8.3
LA unannounced inspection	13	11.7
HA unannounced inspection	3	3.0

Table 4.10 Authorities using advice

Input	Registi	ration	Variation in registration		Announced inspection		Unannounced inspection	
	HA	LA	HA	LA	HA	LA	HA	LA
Engineering Estates Fire H&S	1 38 29 1	19 22 2	2 17 12	10 11	2 15 9 2	1 7 1	2 3 8 4	3 6
EHO Nurses Public health Pharmacy	16 5 27	19 1	6 2 8	9 1	5 5 2 34	6 2	5 6 18	2 3 5
LA inspector HA inspector Council staff Social worker	1 1	1 2	2	15 5 3	2 2 1	5 1	2 2	1 3
Legal GP LA Execs Dietician	5 2 2 1	4 2	2 2 1	7 1	1	1 1	3 2	5 1
Ambulance Children's team Police Team manager	1	1 2 4		4		1		3
Utilities Other LAs Age concern Consultant Photographer		1 1		2		1 1		

Table 4.11 Local authority inspections

	Average	Ν	Std. Dev.	Min	Max	Skewness	Kurtosis
Unannounced IA inspection							
Total activity aget	615 12	07	770 41	107.16	6202 17	5.04	22.76
Total activity cost	043.45	0/	//0.41	107.10	0292.17	5.04	55.70
Total hours	10.05	111	6.85	2.50	38.50	2.03	4.43
Total external cost	18.35	111	59.71	0.00	336.00	3.82	15.07
Total internal cost	622.02	87	757.99	107.16	6182.17	5.08	33.92
Announced LA inspection							
Total activity cost	1105.96	91	854.64	185.74	5639.33	2.64	9.51
Total hours	18.46	116	8.93	2.00	56.00	1.19	2.57
Total external cost	4.49	116	27.46	0.00	250.00	7.34	59.37
Total internal cost	1101.44	91	850.45	185.74	5639.33	2.68	9.79
LA inspection - all types							
Total activity cost	880.87	178	844.44	107.16	6292.17	3.29	15.26
Total hours	14.35	227	9.01	2.00	56.00	1.30	2.20
Total external cost	11.27	227	46.55	0.00	336.00	4.93	26.05
Total internal cost	867.11	178	839.45	107.16	6182.17	3.28	15.09

Table 4.12 Health authority inspections

	Average	N	Std. Dev.	Min	Max	Skewness	Kurtosis
Unannounced HA inspection							
Total activity cost	815.76	68	745.31	116.91	4287.58	3.26	11.84
Total hours	13.53	102	12.99	2.25	100.00	4.23	23.10
Total external cost	41.30	102	132.85	0.00	1100.00	5.96	42.49
Total internal cost	778.54	68	723.33	116.91	4270.58	3.37	12.76
Announced HA inspection							
Total activity cost	1000.63	73	714.13	208.43	4852.72	2.56	10.66
Total hours	15.63	108	9.69	4.50	73.50	2.57	11.25
Total external cost	61.88	108	107.01	0.00	650.02	2.88	10.79
Total internal cost	923.89	73	673.39	178.07	4368.22	2.27	8.35
HA inspection - all types							
Total activity cost	911.48	141	732.61	116.91	4852.72	2.80	10.24
Total hours	14.61	210	11.43	2.25	100.00	3.68	20.28
Total external cost	51.88	210	120.41	0.00	1100.00	4.80	31.95
Total internal cost	853.79	141	699.22	116.91	4368.22	2.76	9.84

	Average	Ν	Std. Dev.	Min	Max	Skewness	Kurtosis
LA new registration							
Total activity cost	1958.34	41	1427.32	247.40	6761.49	1.56	2.56
Total hours	29.16	54	23.69	3.50	144.00	3.17	12.34
Total external cost	153.96	54	415.79	0.00	2744.70	5.21	30.24
Total internal cost	1790.35	41	1313.89	247.40	6761.49	1.99	5.00
HA new registration							
Total activity cost	2821.87	40	1956.33	428.47	8073.67	1.29	1.09
Total hours	45.09	53	30.57	6.00	134.00	1.12	0.79
Total external cost	302.51	53	369.98	0.00	2009.20	2.24	7.57
Total internal cost	2505.44	40	1764.35	386.47	7546.15	1.21	0.78
<i>New registration - all unit types</i>							
Total activity cost	2384.77	81	1753.03	247.40	8073.67	1.48	1.94
Total hours	37.05	107	28.34	3.50	144.00	1.78	3.20
Total external cost	227.54	107	398.95	0.00	2744.70	3.69	17.89
Total internal cost	2143.48	81	1584.34	247.40	7546.15	1.54	2.05

Table 4.13 New registration – health authority and local authority

Table 4.14 Variation/re-/de- registration -health authority and local authority

	Average	Ν	Std. Dev.	Min	Max	Skewness	Kurtosis
LA Variation/re-/de- registration							
Total activity cost	1482.26	38	1433.42	25.17	6144.12	1.50	2.22
Total hours	21.76	54	21.88	0.50	130.00	2.59	10.23
Total external cost	102.95	54	153.30	0.00	735.00	1.96	4.67
Total internal cost	1383.59	38	1330.37	25.17	5409.12	1.49	1.91
HA Variation/re-/de- registration							
Total activity cost	1598.52	47	1532.28	45.74	6691.06	1.70	3.02
Total hours	19.96	57	20.54	1.00	111.00	2.78	9.17
Total external cost	84.75	57	177.83	0.00	946.20	3.11	11.02
Total internal cost	1515.34	47	1432.77	45.74	6376.06	1.60	2.58
Variation/re-/de- registration - all unit types Total activity cost	1545.92	84	1480.64	25.17	6691.06	1.60	2.55
Total hours	20.84	111	21.13	0.50	130.00	2.64	9.29
Total external cost	93.60	111	165.85	0.00	946.20	2.62	8.34
Total internal cost	1455.74	84	1380.69	25.17	6376.06	1.54	2.19

Table 4.15 Total costs – inclusive and exclusive multipliers

	Total activity cost				
	No allowance made for other regulatory activity (exclusive)	Allowing for development activities (intermediate)	Allowing for development complaints and enforcement (inclusive)		
LA announced inspection	708.22	839.35	1105.96		
HA announced inspection	694.51	847.92	1000.63		
LA unannounced inspection	400.55	479.69	645.43		
HA unannounced inspection	578.56	706.40	815.76		
LA new registration	1217.16	1443.36	1958.34		
HA new registration	1911.60	2345.15	2821.87		
LA variation registration	824.64	1011.75	1482.26		
HA variation registration	1084.43	1311.20	1598.52		

Variable	Coeff	t-stat	average
Constant	7.651	24.030	1.000
Outcome			
satisfactory inspection	-0.512	-4.417	0.815
Home characteristics			
Total places	0.006	2.247	20.848
Mental health client group	0.230	1.703	0.139
Res. home, elderly clients	0.072	NS	0.391
Regional characteristics			
London	0.225	1.729	0.192
Unit & activity characteristics			
Announced inspection	0.585	6.753	0.543
Regular inspection (not initiated by complaint etc.)	-0.331	-2.253	0.901
Total number of inspections 1997 (logged)	-0.201	-3.926	5.134
Conne	151		I
Cases E stat	17 255**		
R squared	0 492		
Diagnostics	0.192		
Specification – Reset test (F [1])	0.638 NS		
Heteroskedasticity – Breuch-Pagan (chi-sord [8])	10.941 NS		
Normality – Bowman-Shenton (chi-sqrd [2])	1.505 NS		

Table 4.16 Multiple regression – effects on costs of local authority inspections (announced and unannounced)

Variable	Coeff	t-stat	average			
Constant	6.262	16.855	1.000			
Outcome						
Satisfactory inspection	-0.308	-2.428	0.795			
Home characteristics						
Total nursing beds (logged)	0.228	2.379	3.380			
Mental health client group	0.350	2.634	0.189			
Dual reg. home, elderly clients	1.028	1.877	0.197			
Dual reg. home, elderly clients by no. of res. beds (log)	-0.376	-1.891	0.532			
Private sector home	-0.337	-2.071	0.886			
Regional characteristics						
Shire authority	0.183	1.702	0.636			
Unit & activity characteristics						
Announced inspection	0.299	3.031	0.523			
Average number of staff in unit (logged)	-0.223	-1.850	0.945			
Cases	132					
F stat	4.226**					
R squared	0.238					
Diagnostics:						
Specification – Reset test (F [1])	1.206 NS					
Heteroskedasticity – Breuch-Pagan (chi-sqrd [8])	10.094 NS					
Normality – Bowman-Shenton (chi-sqrd [2])	5.373 NS					

$Table \ 4.17 \ Multiple \ regression \ - \ Effects \ on \ costs \ of \ health \ authority \ inspections \ (announced \ and \ unannounced)$

Table 4.10 Multiple regression – effects on costs of new registrations
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Variable	Coeff	t-stat	average	
Constant	6.020	10.057	1.000	
Home characteristics				
Total beds (logged)	0.430	3.174	3.276	
Learning disabilities client group	0.605	2.101	0.187	
Mental health client group	0.425	1.984	0.173	
Purpose built home	-0.846	-2.189	0.533	
Single home organisation (not a chain)	0.466	1.807	0.187	
Private home	-0.375	-1.873	0.760	
Home purpose built & single home organisation	0.597	1.456	0.467	
Residential care home	0.336	1.058	0.373	
Unit & activity characteristics				
Average no. of staff in unit	-0.049	-3.354	7.377	
Fit person check undertaken	0.657	2.231	0.920	
Cases	75			
F stat	3.81**			
R squared	0.373			
Diagnostics:				
Specification – Reset test (F [1])	1.485 NS			
Heteroskedasticity – Breuch-Pagan (chi-sqrd [10])	15.930 NS			
Normality – Bowman-Shenton (chi-sqrd [2])	0.531 NS			

Table 4.19 Multiple regression	-effect on costs of	variations in registr	ations

Variable	Coeff	t-stat	average	
Constant	5.449	11.190	1	
Home characteristics				
Elderly persons client group	1.035	2.239	0.788	
Mental health client group	0.922	1.711	0.141	
Activity characteristics				
Change of owner	0.789	2.982	0.306	
New build	0.764	2.233	0.141	
Change in registration status (e.g. res. to dual)	-0.408	-1.114	0.118	
De-registration – business failure	0.581	1.689	0.153	
Unit & activity characteristics				
Average no. of staff in unit, LA unit	-0.026	-1.740	6.812	
Local authority unit	0.594	1.939	-0.565	
Cases	84			
F stat	2.81**			
R squared	0.228			
Diagnostics:				
Specification – Reset test (F [1]) 1.249 NS				
Heteroskedasticity – Breuch-Pagan (chi-sqrd [8])	8.422 NS			
Normality – Bowman-Shenton (chi-sqrd [2])	0.142 NS			
Fig 4.1. Cost - home size relationship



Home size

Fig 4.2 Local authority unit size - cost relationship



Fig 4.3 Staff - cost relationship



Fig 4.4 New registration: cost - home size relationship



Fig 4.5 Registration: cost - Unit size relationship



Chapter 5

The costs of enforcement action

5.1 Introduction

An important element of the regulation process is enforcement. Chapter 2 identified that the rate of enforcement action is low in terms of numbers of actions per year. This prevents the type of analysis being undertaken that was described in the previous chapter. However, we do need to have some understanding of the costs associated with an activity that is at the heart of the regulatory function.

This chapter illustrates the costs of enforcement action using information about a small group of examples collected through interviews with inspection unit staff. We start by briefly describing the context within which enforcement action takes place. The method used to select suitable cases is then described. The component costs of the enforcement actions are identified and the rationale given for the decision whether or not to include them. A breakdown of the costs of these cases is presented in tables 5.1 - 5.8 at the end of the chapter. Some potential influences on these costs are discussed. This discussion reflects issues and opinions raised in the course of interviews with inspection staff.

5.2 Background

In the majority of cases in which residential and nursing homes breach the conditions of their registration or fail to meet required standards, registration and inspection staff use their skills in persuasion and negotiation to correct problems through a supportive relationship with the provider. In a few cases, however, these informal methods are unsuccessful and the problems persist or increase, causing concern to the staff about the residents whose welfare it is their responsibility to protect. When this occurs, it becomes necessary to resort to formal sanctions through enforcement action.

Regulators have a choice of enforcement options. When a provider of residential care contravenes the regulations, usually on a minor and specific issue, under Regulation 20 of the Registered Homes Act 1984, a local authority has the power to serve a notice detailing the contravention and stating a time scale of up to three months, by which action to correct the problem must be completed. Failure to comply with a Regulation 20 notice is grounds for prosecution and/or possible fine in a Magistrate's court. Equivalent measures are open to health authority inspection and registration units when a provider of nursing care breaches the regulations under Regulation 15 of the 1984 Act.

Alternatively, and often when Regulation 20 or 15 notices have failed to correct the problem, regulators can serve Notice of intention to cancel the registration of the home. The provider has the right to appeal against this to a sub-committee of the Social Services Committee or health authority and then a Registered Homes Tribunal. The cancellation does not become effective until both these panels have dismissed the appeal.

If inspection officers are concerned about a serious risk to residents, the local authority or health authority can apply to Magistrates to cancel the registration of the home. This

emergency cancellation is effective under Section 11 of the Registered Homes Act and the home must cease to operate although the provider can appeal to the Registered Homes Tribunal.

Information provided by units about the rate of enforcement actions last year shows how infrequently inspection units are forced to embark on enforcement action against homes. When viewed in relation to the number of homes for which units have responsibility, the rate of issuing statutory notices was over two cases per 100 homes last year, (see chapter 2). It is also interesting to note that in local authority units the closure rate of homes is approximately half the rate of newly registered homes, whilst in health authority units it is approximately 80 per cent of the rate of new registrations illustrating that homes close for a variety of reasons other than as a result of enforcement actions.

Although only a small minority of providers requires such stringent actions, enforcement is a significant area of regulatory work because of the very high costs of pursuing these formal sanctions. Secondly, the questionnaire assessing the proportion of inspector time spent on specific activities during a specified day, (see Chapter 3) shows that three percent of local authority inspector and manager time and one percent of health authority inspection staff time is spent on enforcement related activities.

Given the low rate of enforcement actions, this high proportion of time suggests that cases of enforcement are very demanding on inspection staff time. This contributes significantly to the overall cost. This proportion of time spent on this work also includes time spent preparing and issuing Regulation 15 and 20 notices and may provide some indication of the number of cases in which providers comply with the statutory notice, carrying out the required actions. In these cases, prompt action by the unit has avoided more rigorous enforcement action.

This emphasises that although enforcement actions which reach appeal to Registered Homes Tribunal or prosecution are rare, there is a substantial cost to units in terms of staff time, legal advice and other professional expertise on avoiding and correcting problems to avoid the need for costly and time consuming enforcement actions which often cause disruption to the residents of the home concerned. Both complex cases of enforcement action or actions against homes with which there are serious concerns often are of prolonged duration and have considerable opportunity costs for the other regulatory duties of inspection staff as well as other agencies involved in the case. In some cases, a unit may fail to carry out all of its statutory inspections in a given year as a result.

5.3 Methodology

As part of the questionnaire sent to both health authority and local authority inspection units, units were asked if they could provide any information about a specific example of a costly enforcement action and would be willing to discuss the example in an informal interview. There was a good response to this request although few units had been involved in costly enforcement actions, and a small sample of cases were chosen for discussion. These were selected to reflect the range of possible enforcement actions, client groups and types of residential facility. There were a larger number of examples with information available from local authority units than from health authority units and this is reflected in the sample cases.

Units were sent details of the information which would be helpful to the research and were then visited to discuss the case. The discussion focused on identifying the inputs to the case at each stage of the enforcement action and estimates of inspection staff time spent at each stage of the action, by staff type. Information was also collected about other costs, both direct and indirect, associated with the case. Issues raised by staff in relation to the case were discussed and noted.

This case-study approach was used because the low rate of enforcement made any unit level cost estimation across all units impossible. Moreover, the complexity and unique nature of each enforcement action makes it difficult to generalise across cases. However, through discussions with inspection staff, some common themes emerged which provided an insight into potential influences on the costs of enforcement.

In each case, the individual activities and stages of the action were identified as well as estimates of time input by inspection unit staff and other agencies. Costs were attached to resource use using proxies where costs were not available. The costs of local authority and health authority committees and Registered Home Tribunals were not included as they do not constitute a cost to the unit budget. The number of hours of legal advice, preparation and attendance at tribunal by solicitors and barristers was included, whether the advice was from the social services legal department or an external legal practice. External expertise was included where the advice contributed to the report produced by the inspection unit (for example, nurse advisors and pharmacists), but not included where the visit or involvement could be regarded as part of the external agency's own duties, for example police and local authority placement purchasers. The cost of equipment bought specifically for the case was included.

Chapter 3 described the estimation of hourly costs of inspector time. The full hourly cost of an inspector including overheads using the exclusive multiplier was used. That is, only general administrative and other activities were assumed to be needed in addition to time spent directly on enforcement. Caution should be used, when comparing these costs with those used for other analyses presented in this report as the multipliers applied to the basic hourly costs vary.

5.4 Results

The case studies chosen to illustrate and estimate the costs of enforcement action are cases A - H, outlined in tables 5.1 - 5.8. These provide details of the home, the history of the problem and the enforcement action as well as a breakdown of the associated costs.

5.4.1 Types of case

Seven units provided information about nine enforcement actions. Two of the units were health authority units and the rest local authority units as there were fewer suitable cases among health authority units. No joint units were visited as there were no suitable cases among units willing to supply information.

Six cases dealt with problems in residential homes, two describe actions against the registered persons at nursing homes and one case involved a dually registered home. Of the residential homes, three provided care for elderly people and three were facilities for people with mental

health problems¹. The size of the homes ranged from a small boarding house for three people with mental health problems to a 30-bedded residential home. All homes were in the private sector, some proprietors having two homes, and in other cases, this being the only facility owned. None of the homes were in large chains and at most proprietors owned only one other care home.

A range of reasons for enforcement were given, from generally poor care reflecting the unfitness of the proprietor to two cases of physical abuse and one failure of the building to meet London standards². In two of the cases where the enforcement actions were against the one proprietor operating two residential homes, the problems focused on a decision to deregister the home unilaterally by the proprietor, and in the other case, failure to appoint a registered person in charge of the home for a sixteen month period leading up to the dismissal of the appeal at the Registered Homes Tribunal. The duration of cases also varied widely, from less than 13 hours in the case of an emergency cancellation under a Section 11 Order from Magistrates to over two years in two cases. In eight of the nine cases, the action took in excess of six months to resolve, again indicating the demands on inspection staff time over a considerable period.

Two of the cases resulted in emergency cancellations of registration whilst the other seven and one of the emergency cancellations involved a Notice of proposal to cancel the registration. The decision of the unit to cancel the registration was upheld by the registering authority committee, tribunal or magistrate in every case presented.

5.4.2 Activities and costs

With the exception of one case, the tables detail the activities of the unit staff and other agencies once a decision to proceed with formal sanctions has been taken³. However, the respondents interviewed were careful to point out that enforcement does not arise spontaneously and in many cases there has been a period of several years in which there have been a series of complaints against the home or problems detected at inspection both causing significant concerns among inspection staff and requiring additional follow-up investigation by staff. It is also worthwhile to re-emphasise that only a minority of providers causes sufficient problems to warrant enforcement action. Although we have identified comprehensive costs of the action itself, there were often earlier costs. These are associated with staff and other agency time investigating complaints, additional inspections and generally providing support in order to try to avoid enforcement action.

The least expensive action was case A costing £2,794. In contrast, the most expensive was case B, comprising two actions against homes, and costing £122,880. Case H should be regarded with extreme caution as the cost information was provided directly by the unit and it has not been possible to re-estimate the costs on the same basis as the other cases. It is included here for illustrative purposes only. Disregarding this case, the average cost of the

¹ Case B comprises two enforcement actions carried out by the same unit against two homes owned by the same proprietor.

 $^{^{2}}$ London standards were agreed by a group of London Local Authorities during the 1980's and revised in the early 1990's, demanding higher standards of facility and care.

³ Case B involved actions dealing with problems of such severity that the time at which enforcement is assumed to commence is taken to be the point at which the breach of regulations first occurred. The was no alternative option open to the unit at any time since the person registered refused to provide a suitable manager for a home and decided to unilaterally de-register a home without unit permission.

other cases was £44,194 when the two sanctions involved in case B were included as one enforcement action and £32,954 when they were considered as two cases. Although these two actions dealt with different types of problems in the two homes, the unit held meetings discussing the two cases. Legal costs were supplied in total and one of the adjournments to the Tribunal was made in order that appeals against both homes could be heard together. Whichever mean figure is considered appropriate, caution must be exercised in using average cost figures given the small number of cases and degree of variation among them.

The total staff time involved in these cases ranged from 60 hours to 1631 hours when all inspection staff hours were considered together. This was the largest cost componenent accounting for between 66% and 92% total costs.

Legal advice was also costly, ranging from 8% to 32% of total costs. In some cases the total cost of legal expertise was provided. In other cases, and in particular where in house social services legal departments were used, the exact cost of legal input was not known but unit staff were able to estimate the number of hours the legal department spent on the case. In these cases, the total cost of advice was estimated using an average hourly cost of legal advice calculated from cost information provided by all those units nationally utilising legal advice as part of the registration and inspection activities detailed in other parts of the questionnaire.

The tables show a range of external expertise utilised by the units. This was both for direct advice and to provide statements to be used as evidence in support of the case. Costs have not been included in cases in which the external agency was carrying out their own duties e.g. police or social workers. It should be noted that the time contribution by these agencies was in some cases considerable. For example, when inspection staff fear that if the situation in the home deteriorates to such an extent that an emergency cancellation may become necessary at very short notice, commissioning officers from the local authority and social workers are often required to maintain active contingency plans for re-locating residents to alternative accommodation. Such liaison is very time consuming and will have opportunity costs for the agencies concerned.

It is interesting to observe some commonality among units interviewed with regard to the equipment purchased specifically for the enforcement action. Three of the seven units obtained a mobile photocopier and at least one of the remaining four units already possessed this equipment. Two units bought cameras to obtain photographs to present as evidence in support of their case.⁴ A number of units mentioned the use of mobile phones with most inspection staff already having use of these.

5.4.3 Costs of serving notices

From the breakdown of inspection staff time at each stage of the enforcement action, it was possible to estimate the costs of serving a Regulation 20 or Regulation 15 notice. This is important given the large numbers of cases in which this preliminary procedure is effective in bringing about a change in practice and thus, preventing very costly enforcement actions.

Based on discussions with respondents, the activities involved in issuing a statutory notice were identified and resources allocated in order to estimate average costs. Activities included

⁴ Strictly these costs ought to be annuitised to reflect their use over time. However, given the rarity of these enforcement actions it was not clear how often these would be used again before they would need to be replaced. For our purposes here the total cost was assumed to be borne by the enforcement action.

two visits by two inspectors to firstly identify problems and secondly to check whether the registered person had carried out the required actions. Time was included for the report writing after these visits and preparation of written details of the problem for use when preparing the notice. In some cases the notice was written by the unit head and in other cases, it was prepared by inspectors and checked and signed by the unit head. Other agencies were informed, including the contracts department of the authority, the Director of Social Services and in some cases, advisory panel members. In all cases the legal department, usually via fax or telephone communication, checked the document. Where one unit held a regular meeting with the legal advisors, the notice was discussed along with other current problems. On the basis of these assumptions of component activities, the average cost per notice was estimated at $\pounds740$.

In most of the cases studied, when a statutory notice was required, more than one was sent. There may have been several regulations breached at one time requiring a set of notices sent together or several notices repeating the similar requirements when the first was ineffective. The cost per notice is greater when a series of notices are required. Costs were also higher when the unit staff deliver the notice by hand to the registered person, rather than sending it by recorded delivery. The costs given here are for the issue of one notice sent by recorded delivery, and assuming a satisfactory outcome. An unsatisfactory follow-up visit would increase the cost as further communication, notices or enforcement action would be required.

5.5 Issues affecting the costs of enforcement action

It is dangerous to draw any firm conclusions when considering the differences among such a small group of cases and when a range of other factors and differences also had some influence on the case. It is interesting, however, to consider whether some factors may potentially be a cause of variation in overall costs of these cases.

5.5.1 Experience of the unit and inspection staff.

One factor that could affect costs is the experience of an inspection unit could influence the costs. For example, enforcement may be less costly when the unit concerned has carried out previous enforcement actions, compared to those actions that constitute the unit's first experience of formal sanctions.

This is illustrated by comparing two similar cases. The first, case C, cost £82,000. This was the first enforcement action taken by that unit. Case D, costing just £34,000 was handled by a unit which has carried out many enforcement actions. It is a large unit with a senior inspector whose job is substantially concerned with enforcement activity. The unit also has very clear policies, procedures and protocols for dealing with enforcement actions. In addition, members of the sub committee which is used for appeal hearings have an appreciation of their role in the enforcement process.

The experience of the individual officers employed by the unit may also affect the costs of the enforcement actions. Discussions with officers indicated the need for both careful planning at the start of a problematic case, especially when the current situation may be the latest in a long series of unproven incidents of poor care. However, in addition, the often unpredictable nature of the course of enforcement requires that officers are able to plan and act quickly and confidently. This may be a factor involved in the benefit of experience in handling enforcement cases.

Several of the officers providing details of their experiences suggested that the unfitness of the proprietor or manager was not detected on registration but that the problems with the home commenced immediately after registration. It is feasible that greater experience of officers handling registration or of the unit itself, could reduce the likelihood of such unfitness passing undetected until the home is registered.

Throughout the course of an enforcement action, experienced officers may not require as much legal advice or advice as early in the case as less experienced staff. They may also be more able to choose the most appropriate type of advice to the stage of the case. This may in turn reduce the duration of the case by removing some hesitation and advice seeking by officers. It could also be argued that proprietors are less likely to be obstructive in their dealings with the unit if it is clear that the staff handling the case are fully aware of the enforcement process and the options open to both parties at each stage of the action. The experience of individual staff in the unit is also illustrated, for example, case E was handled by a very experienced inspection officer who was very familiar with enforcement. The officer felt in control of the situation throughout the case and was not intimidated by the responses of the proprietor. This example was one of the least costly at £20,700.

Apart from their past experience of working in the area of regulation, an inspection officer may feel more in control in an enforcement action if the unit has written and readily accessible policies on how to handle such difficult cases. This is shown in the two relatively less costly cases A and D carried out by the large unit described above.

5.5.2 Characteristics of the enforcement process

There are a number of ways in which the enforcement process can be delayed and costs increased. The volume of correspondence received and sent by the unit can delay proceedings, by placing additional demands on unit resources in terms of both inspection and support staff time. Such correspondence can also require additional time consuming and costly legal advice. A lack of response by providers to communication from the unit often causes delays. Perhaps the most common cause for delay in resolution of enforcement actions is the cancellation and adjournment of tribunals in some cases occurring several times within a case. In four of the cases presented, a tribunal had already been arranged when the appeal was withdrawn. In most cases, this was very near to the commencement and sometimes on the day of the tribunal itself. In two of the cases, tribunals were adjourned two or three times before finally taking place.

Cancellations of tribunals result in delays and unnecessary expense in arrangements and opportunity costs of tribunal members' time. Both cancelled tribunals and poor lines of communication with providers can arise for a number of reasons. When discussing the responses of proprietors to enforcement communication it is important to emphasise that there is only a very small minority of providers who cause delays whether wilfully or otherwise. Respondents suggested that knowledge of the system of enforcement on the part of the proprietor makes time wasting and delays more likely.

The attitude of the proprietor can impair communication with the unit especially if he or she is regarded as being deliberately obstructive to the work of the unit. Poor communication can result in wasted time visiting the home or preparing letters that are ignored. Officers claimed that a proprietor may, in some cases, make a formal complaint against unit staff, as a tactic by

which to waste time and resources. This can also unnerve inspection staff, particularly if they are relatively inexperienced.

In some cases, (for example see case B), the tribunal was adjourned because the proprietor was not legally represented. The tribunal has to be careful to be seen to be fair to both parties. There are few experienced lawyers in this specialist area of enforcement and those with an interest in the work can command high fees. Providers with fewer resources can sometimes be forced to use inexperienced legal advisors which delays the process further.

By contrast, when the proprietor has a wealth of resources available to them, they can often afford legal advice from lawyers with a high reputation for work in the area. This may result in inspection staff seeking more costly increased costly legal advice and result in more complex and lengthy appeals.

5.5.3 Characteristics of the case

The nature of the problem and its history can affect the costs of an ensuing enforcement action. For example, in a number of the studies, there had been problems for several years including unsupported complaints by staff and relatives, or unsatisfactory inspections. If the problems at a home are wide ranging it will be more costly since there are a large number of issues to attend to during a visit to investigate the problems. There will subsequently be more issues to consider when preparing evidence in support of an enforcement case. Cases with problems constituting a breach of several regulations or covering a wide range of issues may require advice and opinions of several external experts, including pharmacists and nurse advisors, and may necessitate regular monitoring visits to the home. This is illustrated by the 47 visits required by case F in which the problems encompassed a wide range of issues and commenced almost immediately after registration. By contrast, just 10 visits were carried out to the home in case G where the problem focused solely on financial deceit.

Different enforcement actions may be chosen in cases where the wellbeing of the residents is being put at risk. This is demonstrated by the decision to obtain a magistrate's order for emergency cancellation of the registration in cases A and B where a resident had already died or come close to death as a result of the problems identified in the home. Where the inspection staff feel the residents to be potentially at risk, they may operate contingency plans with liaison with social workers and social service personnel to re-locate residents in the event of emergency cancellation at short notice. This increases the cost of the case although this cost of social care staff time has not been included here.

The client group served by the home in question may influence the choice of enforcement action or cost of the case. Increased vulnerability of clients may indicate the need for rapid action. Among the studies, both emergency cancellations of registration were against homes for people with mental health problems, (see cases A & B). As the cost estimations of these cases illustrate, the speed of an emergency cancellation makes the action less costly than a Section 12 cancellation, although it could be considered good regulatory practice to run a Section 12 proposal to cancel in parallel to ensure the Magistrate's Order is not repealed on a technicality. Case B also illustrates the high demands on inspection staff time brought about by a proposal to cancel the registration of a home for people with mental health problems. During the period of awaiting an appeal hearing at a tribunal, very frequent monitoring visits to the home were required in view of the vulnerability of the client group, as well as the nature of the problem.

The complexity of the case increases the likelihood of involvement by other agencies and subsequently both the cost and duration of the case. In addition, complexity may result in the use of more costly external legal advice early on in preference to in house social services legal department advice, or when the case is outside of the inspection staff's area of experience. When such cases result in tribunal, the tribunal tends to be of longer duration and therefore, more costly. There is more preparation required by inspection staff, for example in case G between 20 and 30 witness statements were used as evidence.

Clearly the complexity of the case will be compounded when the registered person owns more than one home. In such cases, it is often necessary to issue a notice of intention to cancel the registration of the other home or even apply for a second emergency cancellation which would require re-location of residents. In some of the cases within this group of studies, there may be further costs related to closure of associated homes which have not been identified. A number of the cases illustrated involved the closure of a second home owned by the same proprietor. In two cases the cancellation was performed by the same unit, and in one of the health authority cases, the social services inspection unit decided to proceed with notice of intention to cancel the registration of a residential home based on the outcome of the nursing home cancellation.

5.5.4 Unit policy

As has been pointed out by the Better Regulation Task Force (1998), "The effective enforcement of regulation is an important factor in maintaining public confidence in the care system.", (p.15). Respondents were anxious to highlight the resultant dilemma often accompanying the regulatory role. One deputy head of a unit said that in cases in which there have been problems with the home for some considerable time surrounding poor (rather than bad practice), (see cases D, E & F), there are often difficulties for units in pursuing enforcement actions. He also highlighted that authorities are expected to act reasonably and accordingly if they are not to be seen to be heavy handed they have to be careful in judging at what stage action might be appropriate. They need to demonstrate fairness in dealings with providers and offer the support required for a quality service without being too quick to employ formal sanctions. The actions taken must be appropriate for protection of the interests of residents.

Discussions with staff suggested that the policies adopted by the unit in relation to all regulatory activities can have some influence on the choice, duration and cost of enforcement actions. As well as the issue of clear procedures being associated with unit experience as discussed above, policies can effect the costs directly. For example, there is a delicate balance between supporting homes in improving care and enforcement. At one extreme, it may be unit policy to attempt to resolve all problems and save homes at all cost. Another unit may commence enforcement action more promptly as it becomes evident that the problems are too widespread or such that cannot be resolved through statutory notices alone.

Where attempts are made to save a home and negotiate to maintain the owner or manager, costs may be increased although the problems may subsequently re-occur to a level of severity to warrant ultimate enforcement and cancellation of registration. For example, case F where two sets of six Regulation 15 notices were served and a plan was implemented to pass the running of the home to a management company. The plan would have enabled the owner to remain in possession of the home although not active in its daily operation. This plan was

unsuccessful and the registration of the home was eventually cancelled and the home sold. It is not possible to deduce by how much the £48,000 cost of this case would have been reduced without these attempts to preserve the current registration. However, with other homes, the policy may have prevented further enforcement action being needed.

The largest unit visited employed a full time senior inspector whose job is substantially concerned with enforcement activity and two complaints officers. They had clear guidelines regarding procedures to be taken regarding enforcement and the cases supplied in the sample were relatively low at $\pounds 2,800$ for an emergency cancellation and just under $\pounds 34,000$ for a cancellation of registration with appeal to a Registered Homes Tribunal. Clearly with so few cases, it is not possible to draw any conclusions from these costs alone.

Another choice facing units is whether to prosecute providers for failure to comply with statutory notices. This may be a decision made on evidence of each individual case or may be an issue governed by unit policy. If prosecution is undertaken, it may extend the duration of the case and increase the costs but could be argued that is necessary to protect the vulnerable in the provider's care.

Enforcement action can ensue in response to problems identified through unsatisfactory inspections or, as in several of the cases illustrated, through complaints received from staff or relatives. An effective complaints procedure could serve to reduce the costs of enforcement action and detect problems before they reach such a degree of seriousness. As cases C & D demonstrate, a visit to the home to investigate a complaint can bring to light a range of other problems increasing as investigations increase. This 'tip of the iceberg' situation regarding problems was repeatedly highlighted through interviews with unit staff and emphasises the need for thorough investigation of all complaints, possibly to reduce the duration of problems and even prevent formal enforcement action.

5.5.5 Outcome of the enforcement

The outcome of the action influences the costs of the enforcement because if the registration is cancelled under magistrate's order, the residents will need to be re-located immediately which is time consuming to the social care services although the enforcement itself is shorter and less costly. If the home is closed, residents will also need to be moved whereas if it is sold as a going concern the new owners apply for a new registration. In case F, the new owner of the home was introduced to the unit by the proprietor against whom the enforcement was taken. This unusual situation introduced additional complications since the unit was required to carry out more in depth checks of the proposed purchaser as a result of the introduction.

The welfare of residents must, however, be the overall concern when considering the cost variations as a result of differences in enforcement outcome. For example, a Section 11 Order for emergency cancellation is less costly of resources but creates infinitely more disruption to residents who are required to be moved. A less rapid Section 12 cancellation is more costly but preferable from the perspective of the residents. However, rapid action would only be undertaken if there were serious concerns about the safety of residents.

5.6 Conclusion

As these examples have demonstrated, enforcement, although a rare event in relation to the number of homes regulated, is very costly and can have serious opportunity costs to inspection unit staff time and may lead to failure to meet statutory inspections. By far the largest items of expenditure are the inspection staff time and legal advice. The complexity of these cases means that it is difficult to estimate the full cost of such actions when there are contributions from a range of other agencies often made as part of their own duties. Additional homes with the same owner also increase the complexity and time required to deal with the case, especially if the cancellation on these is subsequently cancelled.

The ultimate objective of the system of regulation through enforcement is protection of vulnerable residents. Cost minimisation should not, therefore, be the focus of any measures to restructure the system. The system of enforcement has been criticised for being inconsistent and ambiguous, with a lack of published enforcement strategies and a lack of consistency in interpretation and application of standards on the part of inspection staff, (Better Regulation Task Force Review of Long Term Care, 1998). The system may be protracted, as a result costly, but the welfare of residents has to remain the priority.

Table 5.1 Outline of the costs incurred in enforcement action for case A

Other costs			
Item	Amount	Purpose	Total cost
Travel	120 miles @	Visit to fire service and home	These are not included
	34p per mile		separately as an allowance has
Support staff	Small	Documentation	been made as an overhead on
Stationery	Small	Documentation	inspection staff time
Telephone	1.5 hours	Peak rate	
Subtotal			No additional costs included
Total cost of case			£2,794
Outcome of case			
Section 11 emergency ca	ncellation of reg	istration of both homes due to unfit	tness of proprietor, although the
incident involved only or	he home. All res	idents were re-housed and both hou	mes closed.

Type of Unit: Local			
Details of home			
Client group: Mental he	alth		
Type of home: Hostel	aiui		
Size of home: 3			
Size of fiornet. 5	Driveta The	armore had one other small montal has	alth hama
Organisational subclure.	Private. The C	Whers had one other small mental nea	
Details of problem			
Relevant past mistory	was with 2 floor	Desistration was granted only on a	andition residents were not
housed on upper floors a	dse with 5 moor	s. Registration was granted only on the	Ondition residents were not
Current incident/nroble	s lifete were por	of file procedures for mese moors.	
The home had exceeded	numbers and he	pused a resident on the 3 rd floor. He h	ad set fire to his room and jumped
from the window killing	himself	Jused a resident on the 5 moor. The ha	ad set me to ms room and jumped
Summary of enforceme	nt action taker	n	
Following a visit to the h	nome concerned	the unit applied for and obtained from	m Magistrates a Section 11 Order
for the emergency cancel	llation of regist	ration in respect of both homes. The r	residents were all moved within 13
hours of visiting the hom	nation of regime		
Duration of enforcemen	nt action: 13 hc	ours plus completion of documentation	n following case.
Inputs		are president and a second	
Staff	Hours	Purnose	Total cost
Singj			
Deputy Unit head	21	Visit, cancellation and closure.	£960
Team Leader	13	Documentation. Liaison with	£594
Inspector	26	other agencies.	£1020
Subtotal			£2.574
Dustown			······
Legal	Hours	Purpose	Total cost
Solicitors	2	Advice on emergency	£220
		cancellation documentation	
Subtotal			£220
Other Experts	Hours	Purpose	Total cost
Fire service	4	Consultation	No additional costs have been
Mental health social	12	Relocation of residents.	included as there was no costs
workers.			met through the unit budget and
			it is assumed that the
			involvement constituted part of
			own duties.
Subtototal			No additional costs included
Equipment	1	No specifi	c equipment purchased for case.
		-	Mobile telephones used.
Magistrates court			
Staff	Hours	Purpose	Total cost
		-	
Magistrate	2	Emergency cancellation	No cost included as cost not
			met from unit budget.
Notes	The emergence	cy cancellation order was obtained ex	parte and the proprietor was not,
	therefore, awa	are of this action.	
Subtotal			No additional cost included

Table 5.1 Outline of the costs incurred in enforcement action for case A

Table 5.1 Outline of the costs incurred in enforcement action for case A

Other costs			
Item	Amount	Purpose	Total cost
Travel	120 miles @	Visit to fire service and home	These are not included
	34p per mile		separately as an allowance has
Support staff	Small	Documentation	been made as an overhead on
Stationery	Small	Documentation	inspection staff time
Telephone	1.5 hours	Peak rate	
Subtotal			No additional costs included
Total cost of case			£2,794
Outcome of case			
Section 11 emergency ca	ncellation of reg	istration of both homes due to unfit	tness of proprietor, although the
incident involved only or	he home. All res	idents were re-housed and both hou	mes closed.

Table 5.2 Outline of the costs incurred in enforcement action for case B

Type of Unit: Health

This table includes information relating to enforcement action on two homes for people with mental health problems owned by the same company. They will be referred to as Home A and Home B in order to distinguish between them. Unless otherwise stated, the costs of specific inputs refer to the enforcement against both homes.

Details of homes

Client group: Mental Health

Type of homes: Residential

Size of homes: Home A - 6 places, Home B - 10 places

Organisational structure: Private sector. Owner had these two homes plus four houses for clients with mental health problems who were able to live in supported living arrangements.

Details of problem

Relevant past history

Home A: There had been ongoing concerns regarding this home since its registration in 1994. Home B: From 1996, there had been no manager in charge of the home. There had been ongoing communication between the unit and the owner and several applications for registration of persons not considered suitable for the post.

Home A: In the autumn of 1996, the owner requested to de-register the home voluntarily and change the premises into supported living accommodation for people with mental health problems. He was advised that he could not do so without first arranging for all the residents to be re-housed. During a period of local government and inspection unit reorganisation, the owner de-registered unilaterally by breaching regulations. He had withdrawn staff from the home to reduce costs. There was a large amount of written communication between the unit and the owner and many visits to the home during which other problems were identified, including record keeping, inadequate fire precautions and medications as well as other issues.

Home B: When a decision to implement enforcement action against Home A had been taken and a range of problems identified, visits were made to Home B and serious concerns raised. These included issues relating to staffing, record keeping, fire precautions and medications.

Summary of enforcement action taken

Home A: Two Regulation 20 notices were issued without effect. Contingency plans were set up with other social care services to move residents at short notice, should an emergency closure under magistrate's order become necessary. A number of complaints about the home were subsequently received from relatives and a near fatal incident with a resident in July 1997 caused the Unit head to obtain an out of hours emergency closure order from the duty magistrate. A notice of proposal to cancel was also issued under Section 12 of the Registered Homes Act in case the emergency closure was overruled on appeal. The owner appealed against both enforcement actions and after a committee meeting representation hearing, a tribunal was arranged. The tribunal was adjourned twice and the appeal was withdrawn before the third date, at which time the cancellation of the registration became effective and the home remained closed.

Home B: In view of the problems identified during visits to the home, and several complaints made anonymously, by relatives and other agencies, a large number of visits were made and a notice of proposal to cancel the registration was issued in October 1997. An appeal to the committee was rejected and a Registered Homes Tribunal arranged. After two adjournments, a request from the owner for a further adjournment was made. This was rejected and the tribunal members were anxious about the welfare of residents as the home was still operating. An application to re-register the home to a new person in charge was rejected. Problems continued in the home including uncertain staffing arrangements and threats to essential services and of repossession of the property. There was no registered manager of the home during this time, the owner was obstructive in his dealings with the unit throughout and three Regulation 20 notices were issued without effect. The appeal was heard by the tribunal in July 1997 and the decision to cancel registration upheld.

Duration of enforcement action: 16 months

Table 5.2 Outline of the costs incurred in enforcement action for case B

Inputs: Home A			
Staff	Hours	Purpose	Total cost
Unit head	234	General administration of case, correspondence with proprietor, preparation of documents for magistrate's court, representation hearing and tribunal, liaison with other agencies.	£11,069
Inspector	576	Visits to the home, communication with proprietor, report writing, documentation, liaison with other agencies, collection of witness statements, preparation of documents for magistrate's court, representation hearing and tribunal	£22,589
Subtotal			£33,658
Notes			
Inputs: Home B			1
Staff	Hours	Purpose	Total cost
Unit head	406	General administration of case, Correspondence with proprietor, preparation of documents for representation hearing and tribunal, liaison with other agencies	£19,205
Inspector	1,196	Visits to the home, communication with proprietor, report writing, documentation, liaison with other agencies, collection of witness statements, preparation of documents for representation hearing and tribunal.	£46,904
Subtotal			£66,108
Legal	Hours	Purpose	Total cost
Solicitors	Not known	Legal advice, preparation of correspondence, statutory notices and documentation for magistrate's court and appeal hearings.	
Barristers	Not known	Advice, preparation for magistrate's court and appeal hearings	
Subtotal			£23,114

Table 5.2 Outline of the costs incurred in enforcement action for case B

Notes			
Other Experts	Hours	Purpose	Total cost
Social workers	Not known	Assessment of residents' care needs	No additional costs have been included as there was no cost to the
Community nurses	Not known	Monitoring of residents' mental and physical health.	unit budget and it is assumed that the involvement constituted part of
Local authority mental health commissioning team	Not known	Contingency planning with liaison with other agencies regarding relocation of residents.	own duties.
Subtotal			No additional costs included
Notes	The involvem to the lack of unit, residents residents' nee required.	anent of these external agencies was adequate staffing in Home A. De s were reluctant to move from this eds and monitoring of their mental	s considerable, especially in relation espite the problems identified by the home. Individual assessments of and physical health were, therefore,
Equipment	No specific e	quipment was required or purc	hased for this case.
Representations	77	D	
Social Services subcommittee members for two appeal hearings, one relating to each of the two	Not known	Appeal hearing	No cost included as cost not met from unit budget.
Clerk	Not known	Notetaking	No cost included as cost not met from unit budget.
Tribunal		L	
Item	Hours	Purpose	Total cost
Arrangements for tribunals made by unit support staff	Not known	Arrangements for tribunal	No additional costs included as support staff costs have been included as an overhead on inspection staff time.
Three members of tribunal	96	Appeal hearing over four days	No cost included as cost not met from unit budget.
Clerk	32	Notetaking during appeal hearing	No cost included as cost not met from unit budget.
Accommodation & subsistence	Nine nights plus witnesses	Accommodation for tribunal members and witnesses	No cost included as cost not met from unit budget.
Subtotal			No additional costs included
Notes	The tribunal p appeal was w appeal on Ho chairman's in	blanned to hear the appeal on Hon ithdrawn before the third planned me B was adjourned twice before sistence, in refusing another adjou	he A was adjourned twice and the hearing. The Tribunal to hear the it was eventually heard at the tribunal urnment.

Table 5.2	Outline of	the costs	incurred in	n enforcement	action for	case B
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Other costs			
Item	Amount	Purpose	Total cost
Recorded delivery	Not known	Delivery of statutory notices	These are not included separately as
Travel	Not known	Travelling time for each of the 89 visits	overhead on staff time but in
Support staff	Not known	Documentation and administration	stationery etc. may exceed the level
Stationery	Not known	Documentation	of these mended.
Subtotal			No additional costs included
Total Cost of Case			£122,880
Outcome of case	<u>L</u>		
The registrations were ca	incelled on both	n homes	

Type of Unit: Local			
Details of home			
Client group: Elderly			
Type of home: Resident	ial		
Size of home: 30 beds			
Organisational structure:	Private single	home	
Details of problem	T HVate shigh	nome.	
Relevant nast history			
There had been a long hi	story of compl	aints by staff at the home but d	espite investigation by the unit nothing
could be upheld	story or compr	units by starr at the nome but a	espite investigation by the unit, nothing
Current incident/proble	m		
A formal complaint was	received from	a member of staff at the home	Problems were found to be wide ranging
and related to food issues	s staffing, clea	nliness, medications and gener	ally poor care.
Summary of enforceme	nt action take	n	
A full investigation and c	letailed plan w	as prepared by the unit to ensu	re sufficient evidence was presented. A
large number of enforcer	nent notices w	ere served before the decision of	of proposal to cancel. The decision was
upheld at a representation	n and a Registe	ered Homes Tribunal was arran	ged although the proprietor withdrew the
appeal on the first day of	the tribunal.		6 · · · · 6 · · · · · · · · · · · · · ·
Duration of enforcement	nt action: 18 1	nonths	
Inputs			
Staff	Hours	Purpose	Total cost
55			
Unit head	754	Collection of evidence.	£35,666
Inspector	877	Interviews of witnesses.	£34,393
-		Preparation for	
		representation and tribunal.	
Subtotal			£70,059
	25	1 1	
Notes	35 visits wer	e made by two officers, includi	ing the unit head.
	The case was	s complicated by the need to tra	ace former staff via electoral registers to
	collect stater	nents. Also by the number of e	enforcement notices served and the
T	volume of co	prrespondence received from the	Traditional segar representation.
Legal	Hours	Purpose	1 otal cost
Solicitors	78	Legal advice and	£8,580
	10	representation	
Barristers	22	Preparation and attendance	£2.420
2 41110 410		for tribunal	
Subtotal			£11.000
			···)···
Other Experts	Hours	Purpose	Total cost
Health and Safety	6	Two visits	No additional costs have been included
Fire dept	3	Visit and advice	as costs were not met through the unit
Food advisor	2	Advice	budget and it is assumed that the
Inland Revenue	1	Advice	involvement constituted part of own duties.
Nurse advisors	8	Visits and reports	£50
Pharmacist	2	Visit and advice	£54
Subtotal	-		£104
			~10 1

Table 5.3 Outline of the costs incurred in enforcement action for case C

Equipment	Purpose		Cost	
Mobile photocopier	Copying reco	ords on site	£500	
Calibrated air	Accurate air t	temperature readings.	£200	
thermometer				
Camera	Photographin	g of documents	£250	
Subtotal			£950	
Representation				
Item	Hours	Purpose	Total cost	
Three members of	Not known	Appeal hearing	No additional costs have been included	
social services			as costs were not met through the unit	
department			budget.	
Clerk	Not known	Notetaking		
Tribunal				
Item	Hours	Purpose	Total cost	
Arrangements were made by unit staff.	Not known	Arrangements for tribunal	No additional costs included as support staff costs have been included as an overhead on inspection staff time.	
Three tribunal	8	Appeal hearing	No additional costs have been included	
members			as costs were not met through the unit	
Clerk	8	Notetaking	budget.	
Subtotal		·	No additional costs included	
Notes	Due to the co	mplexity of the case, the tribu	nal had been booked for 14 days to hear	
110005	the volume of	f evidence and witness stateme	ents.	
	The appeal w	as withdrawn on the first day of	of the tribunal.	
Other costs	1 11			
Item	Amount	Purpose	Total cost	
Recorded delivery	Not known	Enforcement notices	These are not included separately as an	
Travel	Not known	Assumed travelling time	allowance has been made as an	
		for 35 visits to the home	overhead on staff time but in complex	
Support staff	Not known	Documentation and administration	cases, secretarial time, stationery etc. may exceed the level of these included.	
Stationery	Not known	Documentation		
Subtotal		1	No additional costs included	
Total cost of case			£82,113	
Outcome of case	•			
The home was sold and a	an application f	or a new registration was made	e by the new owners.	

Table 5.3 Outline of the costs incurred in enforcement action for case C

Table 5.4 Outline of the costs incurred in enforcement action for case D

Type of Unit: Local			
Details of home			
Client group: Elderly			
Then group: Elderly	· . 1		
Type of nome: Resident	iai		
Size of home: 24			
Organisational structure:	Private sector.	, single home	
Details of problem			
Relevant past history			
The owner had been obst	ructive to inspe	ections and difficult in dealings wi	th the unit. Numerous problems had
been identified in the pas	t, including the	ose relating to generally poor care,	understaffing, poor record keeping,
fire regulations and hygie	ene. It had not	been possible to rectify these prob	blems or to take specific enforcement
action in the past. The or	wner had failed	to comply with two Regulation 2	0 notices.
Current incident/proble	em		
The unit received a comp	plaint about und	lerstaffing at night. When officers	s visited, they found underage staff
working in the home and	other problems	s relating to record keeping. There	e was no access to patient records at
night and the staff were u	inable to contac	et the manager at night.	
Summary of enforceme	nt action take	n	
A case conference held a	t the unit agree	d to issue a notice of proposal to c	cancel the registration of the home
under Section 10 of the F	Registered Hom	es Act. It was also agreed to pros	ecute the owner for failure to comply
with the two Regulation	20 notices issue	ed the previous year. This prosecu	ition did not continue on the advice of
the barrister. The appeal	against the pro	posal to cancel was dismissed by	both the social services committee
and the Registered Home	es Tribunal. Th	e registration was cancelled, the h	nome closed, and all residents
relocated.		-	
Duration of enforcement	nt action: 19 n	nonths	
Inputs	1	1	1
Staff	Hours	Purpose	Total cost
Unit head and deputy	17	Case conference and report for	£804
		committee.	
Senior inspector	182	Preparation of evidence for	£8,320
		representation and tribunal.	
Inspector	435.5	Visits to home. Preparation of	£17,079
		evidence, statements and	
		reports.	
Subtotal			£26,203
Legal	Hours	Purpose	Total cost
Solicitors	48	Liaison, advice and	£5,280
		preparation for committee and	
		tribunal	
Barristers	Not known	Preparation for tribunal,	£2,233
		attendance and advice.	
Subtotal			£7.513
Other Experts	Hours	Purpose	Total cost
Social Services	Not known	Information and liaison.	No additional cost has been included
purchasing dept.		Relocation of residents.	since there is no cost to the unit and
1			it is assumed that the work involved
			constituted part of their own duties.
Subtotal		1	No additional costs included
	1		

Equipment	No equipment purchased specifically for this case.		
		The unit already use a port	able photocopier and mobile phones
Representation			
Item	Hours	Purpose	Total cost
Ten members of social services committee	5	Pre-hearing briefing session	No additional cost is included as these did not involve a cost to the
Ten members of social	80	Appeal hearing	unit.
Clerk	8	Notetaking	
Subtotal	0	Notetaking	No additional costs included
Subtotal			The additional costs included
Tribunal			
Item	Hours	Purpose	Total cost
Arrangements for tribunal made by unit support staff	Not known	Arrangements for tribunal	These are not included separately as an allowance has been made for support staff costs as an overhead on inspection staff time.
Three tribunal	72	Appeal hearing over three	No additional cost is included as
members		days	this did not involve a cost to the
Clerk	24	Notetaking	unit.
Accommodation and subsistence	9 nights plus witnesses	Overnight accommodation and subsistence for tribunal members and witnesses	
Subtotal		1	No additional costs included
Other costs	•		
Item	Amount	Purpose	Total cost
Recorded delivery	Not known	Delivery of statutory notices	These are not included separately as
Travel	10 hours	Assumed travelling time for 20 visits to the home	overhead on staff time but in
Support staff	Not known	Documentation and arrangements	stationery etc. may exceed the level
Stationery	Not known	Documentation	of these included
Subtotal			No additional costs included
Total Cost of Case			£33,716
Outcome of case	-		
The registration was can	celled and the h	nome closed. All residents were re	located.

Table 5.4 Outline of the costs incurred in enforcement action for case D

Table 5.5	Outline of	the costs in	curred in	enforcement	action for	case E
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_			
Type of Unit: Heal	th		
Details of home			
Client group: Adul	lt		
Type of home: Nu	rsing		
Size of home: 16 r	esidents plus 4	day care places	
Organisational stru	cture: Private.	The registered person was also registered for	or a residential home
Details of problem	1		
Relevant past hist	ory		
There had been ong	going problems	s with the home and generally poor standards	of care. The registered person
previously voluntar	rily de-register	ed the home for accepting elderly mental hea	Ith patients. The unit had never
been able to gather	sufficient evic	lence for enforcement action in the past.	
Current incident/	problem		
A formal complain	t was made to	the unit by an agency nurse who disagreed w	ith an instruction given to her by
the registered perso	on to withhold	fluids from a patient for 24 hours apparently	as part of a behaviour
modification progra	amme.		
Summary of enfor	cement action	n taken	
A Section 31 cance	d this was have	was issued relating to the unfitness of the reg	istered person. The registered
Person appealed an	u unis was near	ru at a Health Authority representation which	normon withdraw her appeal
approvimately one	month bafara	the tribunel was due to take place and volunt	person withdrew her appear
Duration of onfor	mont action	• 7 months	arry closed the nome
Inputs	cement action	: / monuis	
Staff	Houng	Dumose	Total cost
Siajj	nours	rurpose	1 otal cost
Their hand	16	Information lining and manitoring	CC21
Unit nead	10	Information, naison and monitoring	±031
Inspector	488	investigation of complaint, visits, liaison	£17,509
		documentation preparation for	
		representation and tribunal	
Subtotal		representation and tribunal.	f18 140
Subtotal			210,140
Notes	12 visits wer	e made to the home by 2 officers.	
1,000	There was a	session of clinical reflection by the 8 officers	of the near by Health Authorities
	Group, lastin	g 4 hours for which 32 hours of inspector tin	ne has been included.
Legal	Hours	Purpose	Total cost
0		1	
Solicitors	Not known	Legal advice	
			£2,593
Subtotal			£2,593
		-	
Other Experts	Hours	Purpose	Total cost
D I'	NT / 1	D: : 1.1.	
Police	Not known	Discussion and advice	No additional costs have been
Social services	Not known	Cancellation of residential home	included as there were no costs
Inspectors	N. (1	registration.	to the unit budget and it is
Director of Public	Not known	Discussion and advice. Report to be used	constituted part of own duties
Freattin Surbtatal		at UNCC nearing.	No odditional soft in the half
Subiolal			no additional costs included

Table 5.5	Outline of	f the costs	incurred in	enforcement action	for	case E
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included.

Equipment		No s	pecific equipment was purchased for this case.	
Representation				
Item	Hours	Purpose	Total cost	
Three executive members of Health Authority	15	Appeal hearing	No additional costs have been included as there were no costs to the unit budget.	
Clerk	7	Notetaking/typing	1	
Tribunal				
Item	Hours	Purpose	Total cost	
Arrangements by unit support staff.	10	Arrangements for tribunal	No additional costs included as support staff costs have been included as an overhead on inspection staff time.	
Subtotal			No additional costs included	
Notes	The tribunal was cancelled when the appeal was withdrawn one month before the hearing.			
Other costs				
Item	Amount	Purpose	Total cost	
Travel	6 hours	Assumed travelling time for 12 visits to home	These are not included separately as an allowance has been made as an overhead on staff time but in complex cases, secretarial	
Support staff	Not known	Documentation and administration	time, travel stationery etc. may exceed the level of these included	
Stationery	Not known	Documentation]	
Subtotal			No additional costs included	
Total cost of case			£20,733	
Outcome of case				
Both the registered perso required additional inspe made for this time and th	n and a night n ctor time spent le costs of relate	urse who had obeyed the o attending meetings and he ed expenses, the UKCC ir	order were reported to the UKCC. This earings in London. No allowance has been ivestigation and hearing have not been	

Table 5.6 Outline of the costs incurred in enforcement action for case F

Type of Unit: Health			
Details of home			
Client group: Elderly			
Type of home: Nursing			
Size of home: 11			
Organisational structure:	Driveta sector	single home	
Details of problem	Plivate sector,		
Details of problem Delevent past history			
The home was registered	in October 100	14 Two months later problems a	ross relating to understaffing
Current incident/proble			Tose relating to understarting.
During 1995, problems w notices were sent. The p were considered to be ev	vere identified c roblems were c idence of the u	luring numerous visits to the hom oncerned with staffing, fire, medi nfitness of the owner manager.	e. A large number of Regulation 15 cines, generally poor care and they
Summary of enforceme	nt action taker		
When the owner did not	respond to the s	statutory notices, the unit served a	proposal to cancel the registration.
The owner appealed to the	e Health Autho	prity committee and was given 3 r	nonths in which to improve the
standards. Sixth months	later, an incide	nt of physical abuse to a resident of	occurred and a wide range of
problems was identified.	Further Regula	ation 15 notices and a proposal to	cancel the registration were served.
A committee meeting up	held the decisio	on to cancel and a Registered Horr	nes Tribunal was arranged to hear the
appeal. After two adjour	nments and a fa	ailed plan for a management comp	pany to run the home, a tribunal was
convened on the first day	of which the a	ppeal was withdrawn. The registr	ration was extended and the running
given to the management	company until	the home was sold as a going cor	ncern and re-registered.
Duration of enforcemen	<u>it action: 26 m</u>	ionths	
Inputs	1		
Staff	Hours	Purpose	Total cost
Unit head	116	Visits, statutory notices,	£4,577
Inspector	757	liaison with other agencies,	£27,160
-		preparation for the committee and tribunal.	
Subtotal			£31,737
			···· ,
Legal	Hours	Purpose	Total cost
Solicitors	4	Advice	£440
Barristers	Not known	Preparation and attendance at Tribunal	£15,000
Subtotal			£15,440
			· · · · · · · · · · · · · · · · · · ·
Other Experts	Hours	Purpose	Total cost
Fire	4	Visit, advice and report	No additional costs have been
			included as there was no costs met
			through the unit budget and it is
			assumed that the involvement
			constituted part of own duties.
Pharmacist	6	Visit, advice and report	£161
Diabetic nurse	2	Visit, advice and report	£50
Subtotal			£211
Notes	The unit has a	a pharmacist working as an inspec	tor who participated in this case. The
110000	cost of emplo	oving an external pharmacist to un	dertake the work have been included.
Eauinment	Purnose	Juig an enternar r	Cost
Dympmen	1		
Mobile photocopier			
Mobile photocopier	Copying reco	rds on site	£500
Subtotal	Copying reco	ords on site	£500 £500

Table 5.6	Outline of	the costs	incurred	in enfor	cement action	for case I	F
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Representations and C	ommittee Mee	etings	
Item	Hours	Purpose	Total cost
Three members of	18	Two appeal hearings and two	No cost included as cost not met
health authority		emergency committee	from unit budget.
committee		meetings	
Clerk	4	Note taking at the appeal	
		hearings and the emergency	
		committee meetings.	
Notes	These costs r	elate to two representations meeting	ngs and two emergency committee
	meetings.		
Tribunals			
Item	Hours	Purpose	Total cost
Three members of	96	Appeal hearing over four days	No cost included as cost not met
tribunal			from unit budget.
Clerk	32	Notetaking	
Hotel and subsistence	12 nights	Accommodation for tribunal	
		members and witnesses.	
Arrangements made by	Not known	Arrangements for tribunal	No additional costs included as
unit support staff for			support staff costs have been
tribunal which was			included as an overhead on
cancelled.			inspection staff time.
Subtotal			No additional costs included
Other costs			
Item	Amount	Purpose	Total cost
Recorded delivery	Not known	Delivery of statutory notices	These are not included separately as
Travel	47 hours	Travel of 1 hour for each of 47 visits	overhead on staff time but in
Support staff	Not known	Documentation and	stationery etc. may exceed the level
		administration	of these included
Stationery	Not known	Documentation	of these mended.
Subtotal			
Total Cost of Case			£47,888
Outcome of case	-		
The home was eventually	y sold as a goin	g concern, re-registered and is nov	w satisfactory. It was sold to the
people who originally ov	vned the house	before it was converted into a nurs	sing home. This created
complications because th	e proprietor of	the home introduced them as buye	ers and this required additional
checks.			1

Table 5.7 Outline of the costs incurred in enforcement action for case G

Type of Unit: Local

Details of home

Client group: Elderly

Type of home: Dual registered

Size of home: 16 beds

Organisational structure: Private. The owners also have another small home.

Details of problem

Relevant past history

The unit had had considerable concerns about the home during the previous two years. The home had required approximately 15 days of additional unit staff input during this time, compared to the average for other homes. There had been several meetings with the owner during this time to convey these concerns.

Current incident/problem

The unit received two complaints about the home. One was from a former member of staff and the other from a relative. During investigation of these, the unit identified web of financial deceit which became more complex during the case.

Summary of enforcement action taken

The unit issued a proposal to de-register the home. The proprietor appealed to the authority and then to a tribunal. The tribunal dismissed the appeal and the home was de-registered.

Duration of enforcement action: 9 months					
Inputs					
Staff	Hours	Purpose	Total cost		
Unit head	138.5	Meetings with solicitors	£6,551		
		and unit staff, preparation			
		for and attendance and			
		tribunal, liaison with other			
		agencies.			
Principal inspector	20	Visits to the home and to	£727		
Inspector	655	witnesses, collection of	£25,687		
		evidence and statements,			
		meetings with legal staff			
		and unit staff, preparation			
		for and attendance at			
		tribunal.			
Subtotal			£32,966		
NY					
Notes	The case was	complicated by the nature of the	he problem, the number of witnesses and		
	liaison with o	ther agencies including other L	ocal authorities.		
Legal	Hours	Purpose	Total cost		
Solicitors	38	Meetings with the unit.	£4,180		
		One day of preparation.			
Barristers	49	Preparation and attendance	£5,390		
		at tribunal.			
Subtotal			£9,570		
Notes	The barrister	was paid a retainer and then pa	id hourly for his input. The time		
	information is	based on information from the	e unit but they were not willing to share		
	details of exp	enditure of legal expertise.			

Table 5.7 Outline of the costs incurred in enforcement action for case G

Other Experts	Hours	Purpose	Total cost
Social services finance	6 Assumed	Advice	£252
dept.			
Health authority	4	Visit as home was dual	£133
inspectors		registered.	
Police	Not known	Advice and liaison	No additional costs have been included
			as there was no costs met through the
			unit budget and it is assumed that the
			involvement constituted part of own
			duties.
Subtotal			£385
Eauinment	Purpose		Cost
-1			
Mobile photocopier	Copying of re	ecords on site.	£500
Subtotal			£500
Representation	•		
Item	Hours	Purpose	Total cost
Three members of	1.5	Appeal hearing	No additional cost has been included as
social services			the cost is not met by the unit budget.
committee			
Clerk	0.5	Notetaking	
Tribunal		1	
Item	Hours	Purpose	Total cost
Arangements made by	Not known	Arrangements for tribunal	No additional costs included as support
support staff at unit			staff costs have been included as an
TT1 (1 1 1	0.6		overhead on inspection staff time.
Three tribunal members	96	Appeal hearing over eight	No additional cost has been included as the cost is not met by the unit budget
Clerk	32	Notetaking	the cost is not met by the unit budget.
Hotel	16 nights	Accommodation for	
	plus	tribunal members and	
	witnesses	witnesses	
Subtotal		•	No additional costs included

Table 5.7	Outline of	the costs incurred	l in enforcement	action for	case G
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Other costs						
Item	Hours	Purpose	Total cost			
Travel	5 Not known	Assumed travelling time for 10 visits to the home.	These are not included separately as an allowance has been made as an overhead on staff time but in complex			
Support start	THE KIN WI	administration	cases, secretarial time, stationery etc.			
Stationery	Not known	A large amount of written material was presented including 900 pages per copy to the tribunal	may exceed the level of these included.			
Subtotal	No additional costs included					
Total cost of case			£43,431			
Outcome of case	Outcome of case					
The appeal was dismissed	d at tribunal and	d the registration of the home w	vas cancelled.			

Table 5.8 Outline of the costs incurred in enforcement action for case H

Type of Unit: Local
Details of home
Client group: Elderly
Type of home: Residential
Size of home: 8 (4 shared rooms)
Organisational structure: Single home
Details of problem

Relevant past history

The home was first registered in the mid 1980's. It was situated in a detached Victorian house with four shared bedrooms and no lift. It was regarded as a good home with a pleasant environment and good care. In 1988 the owner proposed to build an extension and a lift. Continued registration was conditional upon these conversions.

By 1991, after the changes in Community Care legislation, the residents were becoming more dependent. London standards had been revised and required that no more than 20% of rooms should be shared and all accommodation for disabled residents must have a lift. Building work had not yet commenced on the home but the owner insisted that she planned to build the extension and lift.

By 1996, these conversions had still not commenced.

Current incident/problem

In 1996, the head of unit wrote to the owner stating that if building work had not started within four months, she would propose to cancel the registration of the home. At the end of this period, building work had not yet started.

Summary of enforcement action taken

The head of unit issued a notice proposing to cancel registration The owner appealed to a committee which upheld the decision to cancel. A tribunal was arranged but the appeal was withdrawn before the hearing. The home was then re-registered as a small home housing all residents on the ground floor and in single rooms.

Soon after this, the unit later received a letter of complaint of physical abuse by the deputy matron of the home. The claim was investigated and a proposal to cancel registration issued. The owner appealed against this and the case was heard by committee which upheld the decision and a Registered Homes Tribunal was arranged. The appeal was withdrawn one week before the hearing was due to be held.

Duration of enforcement action: Approx. 2 years	5	
Enforcement activity	Activities involved	Cost
Communication with Directors of company	Eleven letters, two notices of intention to	£925
owning home, including legal advice on letters.	cancel registration and interviews with	
	directors	
Meetings	Six meetings between inspection staff and	£3,350
	legal dept., legal advice, two meetings with	
	social services, two meetings with police.	
Administration	Preparation of documentation, arrangements	£2,360
	for committee meetings and tribunal.	
Dealings with relatives	Three meetings with relatives, letters to	£1,090
	relatives	
Dealings with staff	Interviews and letters to staff	£510
Equipment	Camera	£600
Inspections and visits to home	Seven visits and one announced inspection	£1,670
Total cost of case		£10,505
Outcome of case		
The registration was cancelled and the home closed	1.	

The format of this table is different from that of the other tables reflecting the way in which the information about the cost of the case was supplied by the inspection unit.

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Chapter 6

Conclusion

6.1 Introduction

Information to date about the costs of regulating care homes for adults has been problematic, suffering difficulties of measurement and interpretation. Chapter 1 identified some of the issues of concern including evidence that fees were not adequate to meet the current costs of regulation, variations in total budgets and variation in the degree to which fee income fell short of the costs incurred. Previous observers had identified problems associated with estimating the costs given the other regulatory responsibilities held by units, variations in the quality of the service provided and variations in efficiency. Here we consider the evidence from this study about these issues.

We start by identifying some reservations about the estimation of the costs of regulation. Turning to the results of the study we discuss the evidence about how variations in budgets and the degree to which fee income falls short of expenditure are likely to result from variations in responsibilities of units and how expenditure is measured. We then consider the expected effect of factors affecting costs on the relationship between fee income and costs of regulation. Finally, we identify some issues that need to be considered when setting national fee levels.

6.2 Limitations of the study

Every attempt has been made to identify the full economic costs of regulating care homes for adults. As identified in Chapter 1, this is a far from straightforward task, and inevitably compromises and assumptions have been made in the estimates. These have been identified throughout. Here we clarify the implications of some of these assumptions for interpretation of the results.

6.2.1 Allocation of the costs of regulatory activities

Although the great majority of time is spent on inspection and registration, the other key tasks of enforcement, dealing with complaints, and development, represent a substantial workload for units. In order to allocate the costs of these across homes we have allocated the costs on to the cost of inspector time. This inflates the inspection and registration costs in a way that spreads the costs of these regulatory activities according to the intensity of input to the registration and inspection process. The total costs of inspections, when these additional activities are excluded, are between 21 per cent and 48 per cent lower (see Chapter 4, Table 4.14).

Other approaches could be used to allocate the costs. However, it is important that whatever approach is used there is some mechanism for identifying the costs of enforcement, complaints, and development. On the principle that the full costs of regulation should be linked to those who are regulated these should be allocated in a way that relates to the homes that benefit directly or indirectly from these activities. It could be argued that these activities should be allocated entirely to homes that are already registered, so only regarded as an overhead to the inspection process. However, heads and managers of units are far less likely to get involved in such processes. This may mean that the costs of their inputs are inadequately reflected in the total cost estimate of regulation.

6.2.2 Costs of external advice

The cost of external advice required to deliver inspections and registrations has been identified. The way we have estimated the costs of inspector time allows for the time spent on the other regulatory activities of enforcement, complaints and development activities. However, the approach does not allow for the costs of external advice associated with these other regulatory activities.

In order to have an alternative estimate of external advice costs associated with enforcement and some estimate of costs associated with complaints, units were also asked if they could estimate the proportion of total expenditure on external advice that was associated with residential care for adults. Within this they were asked to distinguish between expenditure on complaints, enforcement and registration or inspection. Unfortunately, very few units had any information about expenditure on external advice and, of those that did, even fewer felt able to allocate this expenditure across different types of activity.

The information collected about the small sample of cases reported in Chapter 5 at least provides some data on which to base an estimate of the external advice costs of enforcement actions¹. It is probable that the external advice costs associated with complaints are not substantial but we have insufficient evidence to make any estimates of what these costs might be. However, it is important that if decisions are being made on assumptions about these costs, they should be monitored in future.

6.2.3 Representativeness of the data

The analysis has identified the costs of the specific examples of inspection and registration. For the purposes here it was most important that we had sufficient examples of factors (such as client group) that were hypothesised to affect the costs of these activities. Necessarily, however, the sample was not nationally representative of all inspections and registrations, or of homes regulated. In order to identify national average costs the predicted costs need to be weighted to reflect the national distribution of those factors found to be associated with the costs.

6.2.4 Quality of the inspection process

It was not possible in this type of study to include any indicators of the quality of the inspections carried out. Measures of outcome have been limited to the outcome of the inspection or registration. At best, the costs we present here reflect the current average quality of inspections and registrations that are being carried out with the current resource constraints on units. However, for the purpose of identifying the current costs of regulation this is an adequate measure. Moreover, the data presented provide us with a starting point for any discussions about the resource implications of any policies with the aim of enhancing the quality of the regulatory process.

¹ Legal expertise from within the authority may be adequately covered by the overhead costs. This would suggest an element of double counting in the estimates of total costs of enforcement actions in Chapter 5. However, it is possible for these cases to identify the level of external legal expenditure which would not have been provided by the authority.

6.3 Responsibilities and structures of units

In Chapter 2 the wide range of inspection unit responsibilities was identified. The diversity was particularly marked for local authority units in terms of the range of responsibilities for adults and children. This was illustrated by the difference between the average size of the unit overall (about 11 inspectors and managers) and the number of staff with responsibilities for adult care homes (about seven inspectors and managers). Even among those staff who had responsibilities for adult care homes, there was still a substantial proportion with other regulatory responsibilities (see table 2.7). For none of these other regulatory responsibilities are fees set at a national level. It is not surprising, therefore, that there should be a wide range in fee income, and the proportion of expenditure that it covers.

This range of responsibilities was reflected in very different structures for health and local authority inspection units. Local authority units were larger and more likely to have managerial staff. Within local authority units there was a considerable range in numbers of staff, largely reflecting geographical area and thus numbers of homes for which the unit was responsible. Given this range in levels of responsibility and numbers of staff it is not surprising that there should be a wide range of overall budget levels.

6.4 Estimates of expenditure

The variety of activities being undertaken by units would make any top-down exercise in estimating costs very difficult. But, as Chapter 3 shows, even were it feasible to identify an appropriate way of allocating expenditure, it was clearly impossible for many units to identify the total expenditure associated with these activities. In part this was because of the way that we had requested the information to be broken down. However, we did ask for accounts information from those units that found the information difficult to provide in the way that we wanted it categorised. We felt that we could reasonably reliably identify full overhead costs, other than direct staffing and travel costs, from just 33, or 21 per cent, of the 153 units that responded.

Overhead costs, estimated on a per inspector head basis, did appear high. However, a number of respondents, who were unable to identify all of their costs, did note on their questionnaires that they made considerable use of other resources within their authority.

This would suggest that just differences in levels of knowledge about resource use would account for a proportion of the variation in unit budgets. Perhaps more importantly, the lack of information about full costs would suggest that the degree to which authorities have been subsidising the regulatory function would be underestimated using national estimates of expenditure and fee income.

6.5 Factors affecting the costs of regulation

Some of the variation in levels of expenditure recouped by fee income will be associated with the differences between actual costs of regulating care homes for adults and fees charged. These differences arise from the mismatch of the variation in costs and the variation in fees.

Chapter 4 explored the relationship between the characteristics of the homes inspected and registered, the inspecting unit and the costs of regulation. First, the factors that have been found to be associated with cost variation and which are not reflected in annual fees include:

outcomes of inspections, client group, sector of home, and the location of the unit. Factors associated with registrations that are not reflected in fees include: client group, type of home, whether the home was purpose-built and type of provider organisation. The more that homes inspected and registered by a unit vary from the average level experienced by other units, the more fee income will diverge from the average difference between fees and the costs of regulating homes for adults.

The most important factor affecting the difference between fees and costs, however, is the issue of size of home. Currently annual fees are charged on a per bed basis. Although a statistically significant relationship was found between total number of places in the homes and costs of inspections, overall the size of the relationship was not marked. The implication of this is that while fee income increases rapidly with home size, the cost of inspections (and other regulatory functions) does not. So, if an authority has a lot of relatively small homes, the fee income will be much less than the costs of regulating those homes. If on the other hand, the authority has a lot of large homes, the fee income may cover or even exceed the costs of regulating those homes.

Costs were also found to vary with the size of the inspecting or registering unit, after accounting for the relationships mentioned above. Larger units appear to benefit from lower costs although the incremental savings associated with increases in unit size are diminishing. This finding is consistent with units operating with fairly sizeable fixed costs, costs that can be spread out over higher levels of activity for the bigger units. If we accept this inference then larger units could be described as reaping some cost efficiency savings. Although the data point to this interpretation, alternative explanations that do not have efficiency implications are possible. Some caution in drawing conclusions about efficiency is always appropriate.

Chapter 5 identified the high cost of enforcement actions. As these are rare, smaller units are not staffed to cope with such demands on their resources. When a unit is dealing with a costly enforcement action, the opportunity cost tends to be other regulatory functions rather than clearly identified expenditure. In such instances other homes covered by the unit are not receiving the regulatory function: the opportunity cost is potentially lower levels of welfare for residents of homes.

6.6 Setting cost-based fees

The study results confirmed the expectation that fees do not currently cover the full costs of regulating care homes for adults. The next step is to consider how fees can be set in a way that reflects cost variations, a way that is also straightforward to administer and is transparent to providers. It has been identified above that this will probably require some further or different assumptions and adjustments to be made to the analysis. For example, re-weighting to reflect the national picture. Moreover, not all factors that affect costs should or would be practical to include in fees. Nevertheless, where fees are expected to cover costs, it will be important to monitor those characteristics which affect costs, as this will assist in both explaining where fees and income diverge and assist in updating fees at a rate that reflects real cost increases.

6.7 Conclusion

The complexity of the process of regulating care homes for adults and the range of other activities undertaken by units mean that estimating the costs of regulation is a far from straightforward process. We have identified a number of limitations to the data and analysis presented. Nevertheless the study has largely succeeded in estimating the comprehensive costs of regulating homes. The survey identified the resources associated with the five key regulatory activities: inspection, registration, development, complaints and enforcement. The factors associated with variations in the costs of inspection and registration have been identified, facilitating the setting of cost-based fees.

Clearly other policy issues will need to be taken into consideration when setting fees. It is important that inappropriate incentives are not set up and that the issue of affordability by providers is considered. Nevertheless, the results provide an important starting point in the process of revising the current arrangements for charging providers for the regulatory function. Once the decision is made about how fees are to be set, the analysis presented allows the derivation of indicators that would reflect the expected changes in underlying costs of regulation.

The immediate focus of the study was the costs under the current arrangements. However, effective regulation is a key theme of current policy in the field of social care and planned changes will have important cost implications. This study also provides a basis for considering the cost consequences of changes in policy in the longer term.

Technical appendix 1

Total internal costs

The total cost of a registration or inspection is the sum over all input types of the amount of each input used multiplied by the unit cost:

(1)
$$T_{ki} = \sum_{q=1}^{Q} y_{ki}^{q} P_{i}^{q}$$

where, k = 1,...,K refers to the activity in question, i = 1,...,m refers to the Unit, q indicates the type of input, y is the intensity of use of input h, and P is its price (strictly the unit opportunity cost). Inputs are the direct labour inputs by all kinds of staff, the indirect labour inputs and the capital inputs. The unit opportunity cost, or price for short, is the total cost of the input divided by the total hours of input: $P_{ki}^q = T_{ki}^q / y_{ki}^q$.

We have specific information only about direct labour inputs in four categories: inspector, unit head, managers with caseloads and managers without caseload. We can write total costs as:

(2)
$$T_{ki} = \sum_{h=1}^{H} y_{ki1}^{h} P_{i1}^{h} + \sum_{h=1}^{H} y_{ki2}^{h} P_{i2}^{h} + \sum_{h=1}^{H} y_{ki3}^{h} P_{i3}^{h} + \sum_{h=1}^{H} y_{ki4}^{h} P_{i4}^{h} = \hat{T}_{ki1} + \hat{T}_{ki2} + \hat{T}_{ki3} + \hat{T}_{ki4}$$

where h = 2,...,H denotes the type of inputs other than direct labour inputs (so there are H - 1 other inputs) and each y is the intensity of the direct labour and other inputs that pertains to each of the four staff types.

As all four *subtotal* costs $\hat{T}_{ki,1-4}$ can be treated in exactly the same way we can drop the superscript referring to direct labour input type. Subtotal costs take the following form:

(3)
$$\hat{T}_{ki} = y_{ki}^{1} \left(P_{i}^{1} + \frac{y_{ki}^{2} P_{i}^{2}}{y_{ki}^{1}} + \dots + \frac{y_{ki}^{H} P_{i}^{H}}{y_{ki}^{1}} \right)$$

We do not have information about the specific value of $y_{ki}^2, ..., y_{ki}^H$, the other inputs. However, we do have information about the amount of each activity/input that was undertaken in all of our sample units in a representative period, *d*. We can take the average across all sample units of the total amount of each input/activity. Thus for input *h* we have:

(4)
$$\overline{y}^h = \frac{\sum_{i=1}^m y_i^h}{m}$$

m

Some inputs take the form of labour inputs (either direct or indirect) which can be measured in hours. This subset of all inputs we denote with the superscript g = 1,..., G and we

write $\alpha^{g} = \overline{y}^{g}$. Note that the sum of α^{h} across all activities *G* is equal to the average length of the representative period, i.e. *d*:

(5)
$$\alpha^{1} + \alpha^{2} + ... + \alpha^{G} = \frac{\sum_{i=1}^{m} y_{i}^{1} + ... + \sum_{i=1}^{m} y_{i}^{G}}{m} = d$$

A day was chosen to be the representative period. We asked for all professional staff to provide information of their activities in a particular day. Taking an average over the 373 LA responses and the 177 HA responses we were able to calculate a representative indication of activities for different categories of staff. Each activity was calculated as being undertaken for an average of α_i^h hours, where *j* refers to the different staff categories.

This information can be used to derive values for the intensity of use of other inputs on each inspection or registration by assuming a relationship between y_{ki}^1 and the amount of other inputs used. Specifically, suppose that for regulatory activity, *k*, the use of other inputs is at the same rate as the average for the all regulatory activities. The average rate of use of resources can be found from our representative day. Therefore we have:

(6)
$$\frac{y_{ik}^h}{y_{ik}^1} = \frac{\overline{y}_i^h}{\overline{y}_i^1} = \frac{\sum_i y_i^h}{\sum_i y_i^1}$$

and unit price is:

(7)
$$P_i^h = \frac{\sum_i T_i^h}{\sum_i y_i^h} = \frac{\overline{T_i}^h}{\overline{y_i}^h}$$

Taken together we have:

(8)
$$\frac{y_{ik}^{h}}{y_{ik}^{1}}P_{i}^{h} = \frac{\sum_{k} y_{ki}^{h}}{\sum_{k} y_{ki}^{1}} \frac{\sum_{k} T_{ki}^{h}}{\sum_{k} y_{ki}^{h}} = \frac{\sum_{k} T_{ki}^{h}}{\sum_{k} y_{ki}^{1}} = \frac{T_{i}^{h}}{y_{i}^{1}}$$

where T_i^h is the total costs of all regulatory activities of unit *i* and y_i^1 is the total hours spent on these activities. Note that we are averaging across each of the 4 direct labour types. Using this function in (3) above we have:

(9)
$$\hat{T}_{ki} = y_{ki}^1 \left(P_i^1 + \frac{T_i^2}{y_i^1} + \dots + \frac{T_i^H}{y_i^1} \right)$$

Having derived a method for calculating the input intensity of the other inputs, it remains to determine which of all Unit activities constitute appropriate requisite inputs for registration and inspection.

Non (direct) labour inputs

As noted above we suppose that there are H inputs into registration and inspection, of which there are G labour inputs. For each labour input there are further inputs of supervision, capital and other costs (such as overheads). Capital costs, on-costs, overheads etc., can be applied equally to each hour of labour input regardless of the type of activity be generated.

Total input costs to all activities undertaken by period *d* are:

(9)
$$\hat{T}_{ij} = \left(y_{ij}^{1}P_{i}^{1} + y_{ij}^{2}P_{i}^{2} + \dots + y_{ij}^{H}P_{i}^{H}\right)$$

(10)
$$\hat{T}_{ij} = \left(y_{ij}^{1} + y_{ij}^{2} + ... + y_{j1}^{G}\right) \left(C_{ij}^{D} + \frac{\hat{T}_{ij}^{K}}{d}\right) = d_{i1}\left(C_{ij}^{D} + C_{ij}^{K}\right)$$

Therefore hourly costs are:

(11)
$$C_{ii} = C_{ii}^D + C_{ii}^K$$

The superscripts D and K distinguish between the individual (direct labour) and capital/other elements on each of the G activities.

Supervision costs

Management and supervision is an important input into the undertaking of inspection and registration activities. We assume that unit heads and managers provide supervision inputs that apply to the functioning of all members of the Unit. Supervision is applied on a pro-rata basis to each eligible staff category with the whole-time-equivalent number of staff as weights. Supervision inputs by managers do not apply to more senior management staff (such as unit heads), but they do in part apply to staff in the same category (or less senior). Inspectors are an eligible staff category for all supervision inputs.

Supervision is treated as being an input for all types of activity – inspections, registration, enforcement, administration and so forth. Thus over a representative period – where all activities are undertaken – the total costs of an inspector would be the basic inspector input cost for that period and also the inspector's total share of supervision costs allocated by managers. Call the representative period d_1 for inspectors. Then total adjusted input costs to all activities is from above:

(12)
$$\hat{T}_{i1} = \left(y_{i1}^1 P_i^1 + y_{i1}^2 P_i^2 + \dots + y_{i1}^H P_i^H\right)$$

(13)
$$\hat{T}_{i1} = \left(y_{i1}^1 + y_{i1}^2 + \dots + y_{i1}^G\right) \left(C_{i1} + \frac{\hat{T}_{i1}^S}{d_{i1}}\right) = d_{i1}C_{i1} + \hat{T}_{i1}^S$$

(14)
$$\hat{T}_{i1} = d_{i1}C_{i1} + \left[\frac{w_{i1}}{n}S_{i4} + \frac{w_{i1}}{n - w_{i4}}S_{i3} + \frac{w_{i1}}{n - w_{i4} - w_{i3}}S_{i2}\right]\frac{1}{w_{i1}}$$

(15)
$$\hat{T}_{i1} = d_{i1}C_{i1} + \frac{S_{i4}}{n} + \frac{S_{i3}}{n - w_{i4}} + \frac{S_{i2}}{n - w_{i4} - w_{i3}}$$

where \hat{T}_{i1} is the supervision adjusted total cost, for inspectors in unit *i*. Also, C_{ij} is the basic hourly input cost, w_{ij} is the w.t.e staff of type *j* and the term *n* is the (average) number of staff in the unit working on adult regulation, i.e. $n = \overline{v}N$. S_{ij} is the total supervision input in the period *d* of staff type *j*. Staff of type j = 1 are inspections, j = 2 are managers with caseloads, j = 3 are managers with no caseload and j = 4 are unit heads.

The total supervision cost (valid for adult care) for the unit is: $S_{ij} = w_{ij}v_j\alpha_j^3C_{ij}$, j = 2,3,4. In words total supervision cost is the total valid number (wte) of supervisory staff (*v* is the valid time allocated to adult care regulation) multiplied by the proportion of time *d* spent on supervision (which is the term α_j^3) and the input cost of that type of staff.

We can calculate an adjusted hour of inspector's time by dividing through by d the number of hours worked in the representative period:

(16)
$$\hat{C}_{i1} = C_{i1} + \frac{S_{i4}}{nd_{i1}} + \frac{S_{i3}}{(n - w_{i4})d_{i1}} + \frac{S_{i2}}{(n - w_{i4} - w_{i3})d_{i1}}$$

Heads of unit are only supervised by themselves, but spend a significant proportion of their time managing others within the Unit. Their total costs in period d are:

(17)
$$\hat{T}_{i4} = \left(y_{i4}^1 + y_{i4}^2 + \dots + y_{i4}^G\right) \left(C_{i4} + \frac{\hat{T}_{i4}^S}{d_{i4}}\right) = d_{i4}C_{i4} + \hat{T}_{i4}^S$$

(18)
$$\hat{T}_{i4} = d_{i4}C_{i4} + \left[\frac{w_{i4}}{n}S_{i4} - \frac{(w_{i1} + w_{i2} + w_{i3} + w_{i4})}{n}S_{i4}\right]\frac{1}{w_{i4}}$$

and so hourly costs are:

(19)
$$\hat{C}_{i4} = C_{i4} - \frac{(w_{i1} + w_{i2} + w_{i3})}{nw_{i4}}S_{i4}$$

Middle managers without a caseload receive supervision from unit heads and also supervise themselves and inspectors. Their costs by analogy with the above are:

(20)
$$\hat{T}_{i3} = d_3 C_{i3} + \left[\frac{w_{i3}}{n}S_{i4} + \frac{w_{i3}}{n - w_{i4}}S_{i3} - \frac{w_{i1} + w_{i2} + w_{i3}}{n - w_{i4}}S_{i3}\right] \frac{1}{w_{i3}}$$

(21)
$$\hat{C}_{i3} = C_{i3} + \frac{S_{i4}}{nd_3} + \frac{S_{i3}}{(n - w_{i4})d_3} - \frac{(w_{i1} + w_{i2} + w_{i3})S_{i3}}{(n - w_{i4})w_{i3}d_3}$$

Similarly, managers with a caseload have costs of:

(22)
$$\hat{T}_{i2} = d_2 C_{i2} + \left[\frac{w_{i2}}{n}S_{i4} + \frac{w_{i2}}{n - w_{i4}}S_{i3} + \frac{w_{i2}}{n - w_{i4} - w_{i3}}S_{i2} - \frac{(w_{i1} + w_{i2})S_{i2}}{n - w_{i4} - w_{i3}}\right]\frac{1}{w_{i2}}$$

(23)
$$\hat{C}_{i2} = C_{i2} + \frac{S_{i4}}{nd_2} + \frac{S_{i3}}{(n - w_{i4})d_2} - \frac{w_{i1}S_{i2}}{(n - w_{i4} - w_{i3})w_{i2}d_2}$$

If we add the four adjusted hourly input cost together, weighted by the number of staff of each of these four types we have:

(24)
$$w_{i1}\hat{C}_{i1} + w_{i2}\hat{C}_{i2} + w_{i3}\hat{C}_{i3} + w_{i4}\hat{C}_{i4} = w_{i1}C_{i1} + w_{i2}C_{i2} + w_{i3}C_{i3} + w_{i4}C_{i4}$$

This equality indicates that the difference between supervision adjusted and basic input cost in individual cases is just a re-distribution of total input costs.

Other labour inputs

A number of activities undertaken by staff can be conceived as inputs into registration and inspection. An *inclusive* conception would have activities such as development, dealing with complaints, enforcement, administration, training etc., as inputs required in conducting registrations and inspections. A more *exclusive* conception would use only a subset of these activities as appropriate inputs.

Suppose that the period d is our representative day. Then total costs of inspection and registration in that day are from (9):

(25)
$$\hat{T}_{ki} = y_{ki}^{1} \left(P_{i}^{1} + \frac{T_{i}^{2}}{y_{i}^{1}} + \dots + \frac{T_{i}^{H}}{y_{i}^{1}} \right)$$

or

(26)
$$\hat{T}_{ki} = y_{ki}^{1} \left(\frac{T_{i}^{1D}}{\alpha_{j}^{1}} + \frac{T_{i}^{1K}}{\alpha_{j}^{1}} + \frac{T_{i}^{1S}}{\alpha_{j}^{1}} + \frac{T_{i}^{2D}}{\alpha_{j}^{1}} + \frac{T_{i}^{2K}}{\alpha_{j}^{1}} + \frac{T_{i}^{2S}}{\alpha_{j}^{1}} + \dots + \frac{T_{i}^{GD}}{\alpha_{j}^{1}} + \frac{T_{i}^{GK}}{\alpha_{j}^{1}} + \frac{T_{i}^{GS}}{\alpha_{j}^{1}} \right)$$

where $G = \frac{1}{2}H$ and, because over the day the hours of inspection and registration direct labour input average to α_j^1 , $y_i^1 = \alpha_j^1$. The superscripts *D*, *K* and *S* distinguish between the individual, capital/other and supervision element on each of the *G* activities. Total costs of each activity/input are $T^{gD} = \alpha_j^g C_{ij}^D$, $T^{gK} = \alpha_j^g C_{ij}^K$ and $T^{gS} = \alpha_j^g (\hat{C}_{ij} - C_{ij})$ where \hat{C}_{ij} is the supervision adjusted hourly cost as given above. Also, $C_{ij} = C_{ij}^D + C_{ij}^K$. Therefore:

$$(27)\hat{T}_{ki} = y_{ki}^{1}\left(\frac{\alpha_{j}^{1}\hat{C}_{ij}}{\alpha_{j}^{1}} + \frac{\alpha_{j}^{2}\hat{C}_{ij}}{\alpha_{j}^{1}} + \dots + \frac{\alpha_{j}^{G}\hat{C}_{ij}}{\alpha_{j}^{1}}\right) = y_{ki}^{1}\left(\frac{\alpha_{j}^{1} + \alpha_{j}^{2} + \dots + \alpha_{j}^{G}}{\alpha_{j}^{1}}\hat{C}_{ij}\right) = y_{ki}^{1}z_{j}\hat{C}_{ij} = y_{ki}^{1}\tilde{C}_{ij}$$

where $z_j = \frac{\alpha_j^1 + \alpha_j^2 + ... + \alpha_j^G}{\alpha_j^1}$ is the adjusted hourly cost *multiplier*. This multiplier is

calculated using our data about the average inspector's daily time use. The supervision adjusted hourly cost is calculated using the Unit level data, particularly that regarding basic salary costs and staffing information that is plugged into the above formulae.

With reference to Box 1 in the main text two specifications of included other staff activities are used to give the *inclusive* and *exclusive* multipliers. In both cases supervision is included although. The individual salary or labour costs of managers includes the costs of their supervision that is re-distribute across the Unit. The input costs of generating this supervision should therefore be net of the re-distributed supervision, that is \hat{C}_{ij} . In other words we do not count the value of supervision of inspectors for example when calculating the manager's unit input cost in generating this supervision. The supervision received by an inspector is not an appropriate input counted alongside the labour time employed by the manager to create that supervision. For managers the value \hat{C}_{ij} is less than their labour input cost C_{ij} as they are net donators of supervision. Accordingly for managers the value C_{ij} can be understood as having incorporating some of the costs of creating supervision for others. Logically therefore it cannot be the input cost for *their time* devoted to supervision, and indeed the net value \hat{C}_{ij} is the appropriate amount. Consequently, the manager supervision time input estimated from the representative day information for a manager of the specified type, i.e. α_i^s , l = 2, 3, 4, is multiplied by \hat{C}_{ij} in the above equation.

Registration and inspection input costs

By using the value of \tilde{C}_i for each of the 4 direct labour inputs we can calculate the total internal costs of regulatory activity *k* using information about the hours of direct labour input:

(28)
$$T_{ki} = y_{ki1}^1 \widetilde{C}_{i1} + y_{ki2}^1 \widetilde{C}_{i2} + y_{ki3}^1 \widetilde{C}_{i3} + y_{ki4}^1 \widetilde{C}_{i4}$$

Values for the terms $y_{ki1}^1, ..., y_{ki4}^1$, the intensity of direct labour inputs, were collected from respondents as the total hours in each staff category that were employed on the registration or inspection activity.

Technical appendix 2

Missing values

Missing values can be divided into three groups. First, missing data regarding direct staff input activity, data that was to be collected by the inspection and registration questionnaires. Second, missing data regarding input costs of direct staff inputs, data that was to be collected by the unit and expenditure questionnaires. These first two categories refer to data required to construct the estimate of total costs of inspection and registration. This estimate forms the dependent variable in the regressions and is the left-hand-side of the theoretical model. The third category of missing values refers to cases without data for all the explanatory proxy variables.

The first kind of missing values refers in particular to the measure of direct labour inputs on inspection and registrations – that is, hours by staff-type as described above. For local authority inspections we had 227 available cases of the 242 total returns. The health authority inspections sample had 210 cases with activity data out of 214 total returns. Of a total return of 127 the new registration sample was 107 cases. Finally, the available cases for variation in registration was 111 cases out of a possible 123.

The second kind of missing values refers to that data required for the input cost estimations. The data requirements include staff salary costs, all on-costs and overheads, capital and equipment, and also the full sets of inputs for the 'other' activities – enforcement, complaints, development, supervision and so on. Of the 227 cases with local authority inspection activity data, 178 cases had input cost data. For health authority inspections, 141 cases had input cost data out of the 210 that had activity data. For new registrations the respective figures were 81 of 107, and for variations in registration there were 84 of 111 cases.

The third kind of missing value are those from the set of independent variables. Two of these variables that had a number of missing cases were total number of places of the investigated home and the total number of inspection undertaken in the year by the unit. For local authority inspections this meant the loss of 27 cases, a loss of nine cases for health authority inspections, 6 more missing values for new registrations, but no further missing cases of variations in registration.

The final sample sizes for the regression analyses are listed in Table A1. The loss in cases overall is relatively small at each step but cumulatively missing values were larger for some of the samples, in particular the local authority inspection sample. Because losses in cases at each stage do not differ much in proportionate terms from the other three samples there are no particular grounds to suspect that missing values are systematically correlated with variations in total costs.

Table A1. Analysis of missing values

	Total returns	which also	which also	which also
		have input	have input cost	have cost-factor
		activity data	data	proxy data.
Local authority	242	227	178	151
inspections				
Health authority	214	210	141	132
inspections				
New	127	107	81	75
registrations				
Variation in	123	111	84	84
registration				

Estimation

Two specifications of the model were undertaken for each of the four samples. The first used total activity cost as the dependent variable, whilst the second used a log transform of total activity costs. The right-hand-side or independent variables, which proxy the cost factors, were all deemed to be exogenously determined. Exogeneity, which is the condition that the independent variables are not determined (in part) by the dependent variable, and a continuous dependent variable – that is, no truncation or arbitrary censoring of sample costs – means that, *a priori*, ordinary least squares (OLS) estimation is the appropriate (practical) estimation technique.

Diagnostics

OLS estimators inappropriately measure the statistical significance of the independent variables when the error is hetreroscedastic – that is, the error has non-constant variance – or when the error is not (asymptotically) normally distributed. The OLS coefficients are biased if an incorrect model specification is employed, meaning that the size of the correlation between the cost dependent variable and the independent variables is inappropriately measured. Diagnostic statistics were calculated for all estimates to test for these conditions. A Breusch-Pagan test rejected hetreroscedasticity for all models, which means that the error is not correlated with the dependent variable. Furthermore a normal distribution of the error for all models was not rejected by Bowman-Shenton test.

The four models with non-transformed dependent variables failed a Ramsey Reset test for specification, but the four log-transformed models could not be rejected as being misspecified by this test. Consequently only the results of the log-transformed models are reported. Respectively the four regression analyses are reported in tables 4.16 to 4.19. Predictions on the basis of log-transformed models do so on the basis of the geometric mean of total activity cost, rather than the arithmetic mean. When the dependent variable is skewed to the right this means that the arithmetic mean is likely to be greater than the geometric mean. As a results the partial effects of a log-transformed model may be under-estimates of the actual effects. Comparisons with the non-transformed suggested that the differences are small for our data.

Each model was significant overall; an F-test statistic exceeded the usual critical value. The jointly estimated correlation coefficients are different from zero overall.

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