

Chapter 3

METHODOLOGY

PREFACE

This study was conducted in order to develop a set of standards, to be known as the Australian Quality Matrix, for the delivery of optimal treatment to those who live in nursing homes for the aged and who require high level care. As an investigation concerned with populations (all residents in Australian nursing homes) rather than individual elderly Australians, the study required a quantitative research design to accomplish its objectives. A qualitative method was also adopted during the initial stages of the study for reasons that are discussed below. The techniques chosen were those of epidemiology for the quantitative aspects of the project and triangulation for the qualitative aspects. The study design was constructed around the framework of the Commonwealth Aged Care Standards (1997) which identified four domains of care. Later, as the study evolved, it expanded to incorporate the measurement criteria of the Resident Classification Scale as well.

As shown in Figure 3.1 the project itself comprised a three-phase inquiry. The first consisted of a series of case studies and was conducted between July 1997 and January 1998. The second was a national survey of nursing homes, which ran between November 1998 and March 1999. The third phase took place between October 1999 and July 2000. In it the Australian Quality Matrix was

developed, trialed in a major metropolitan nursing home, evaluated and revised.

Figure 3.1 The *Quality of Care for Nursing Home Residents*' project

PHASE 1: JULY 1997 – JANUARY 1998

- 9 case studies in 4 states
- 121 in-depth interviews
- 35 sessions of participant observation
- Document review

Phase 1 was conducted to assemble a wide variety of information on current practical and social care of residents to aid the development of the national survey instrument.

PHASE 2: NOVEMBER 1998 – MARCH 1999

- National cross-sectional survey of 208 nursing homes

Phase 2 was designed to provide baseline information about current practices and procedures appropriate for inclusion in the Australian Quality Matrix.

PHASE 3: OCTOBER 1999 – JULY 2000

- Development of the draft matrix
- Trial of the draft in a 60 bed metropolitan nursing home in which all the residents required high level care
- Evaluation and revision of draft matrix

This chapter outlines the reasons for selecting both qualitative and quantitative methodologies for the study design. It also discusses sampling, recruitment and data analysis processes, and highlights the major limitations to the sampling techniques. Further, an account of the ethical considerations pertinent to the study design and the way in which they were dealt with at each stage is given, and a description of the manner in which each phase of the project was implemented concludes the chapter.

One further matter of consequence to the study was that it was supported by a partner from within the aged care industry. This multi service facility is located in a state capital city, and consists of three campuses offering nursing home and hostel accommodation and care, community aged care packages, a day therapy centre, and formal education and training facilities in collaboration with a major university. It employs in excess of 500 staff in management, direct care, and environmental services, and operates under the auspices of a Christian church. While taking an active interest in every phase of the project, the industry partner was excluded from participation in all phases of the undertaking to avoid any conflict of interest or other ethical issues.

RESEARCH HYPOTHESIS

Prior to setting the study within its methodological context, it may be helpful to restate the research hypothesis and objectives of the study. A detailed account of this and the aims of the project were discussed in Chapter 1.

It is hypothesised that the quality of care for residents in nursing homes will be improved by the application of standards designed specifically for residents with high level care needs. This will be achieved by:

- *Developing clinical indicators and comprehensive measures to identify, measure, and monitor quality care.*
- *Piloting the measures and indicators in practical settings, and then evaluating them, prior to their formal introduction to the national industry.*
- *Creating a quality assessment tool incorporating the indicators and measures for use by all members in the industry, irrespective of their location, structure, or size.*

RESEARCH DESIGN

Phase 1 of the *Quality of Care for Nursing Home Residents* project adopted a qualitative design, using triangulation strategies to obtain intensive levels of information about current care practices. The principal purpose of Phase 1 was to assemble sufficient unstructured data to guide the development of the national survey instrument for implementation in Phase 2.

Phase 2 utilised a quantitative design to obtain baseline information about national practices and procedures that applied throughout the entire aged care

industry. It took the form of a cross-sectional survey and used an instrument which had been drafted, pilot tested and revised specifically for this purpose.

Phase 3 adopted elements of both qualitative and quantitative design methods. A draft Australian Quality Matrix was developed using information obtained from the international literature, and the observations, outcomes and experiences of Phases 1 and 2. The draft matrix identified 18 clinical indicators in four care domains, and was trialed for a three-month period, in a metropolitan facility providing services to 60 high level care need residents. It was revised in light of the findings.

DESIGN CONTEXT

QUANTITATIVE METHODOLOGIES

The objective of the project was to develop a quality assessment tool for application in the aged care industry in Australia, and was predominantly quantitative in design. Hennekens and Buring (1987:3) indicated that an epidemiological approach to research design was developed originally to study 'the distribution and determinants of disease frequency in human populations'. However, these three closely interrelated components – distribution, determinants and frequency – encompass all the principles associated with the study of populations, and epidemiological techniques have applications in quantitative research outside those concerned strictly with disease epidemics.

The first component to be considered is measurement of *frequency*. As Hennekens and Buring (1987) observe, this involves quantification of the existence or occurrence of specific phenomena or events. The availability of such data is a prerequisite for any systematic investigation of patterns in occurrences. The second, *distribution*, considers such questions as whom, within a population, are experiencing the phenomenon or event, as well as where and when it is occurring. Such questions may involve comparisons between different populations at a given time, between subgroups of a population, or between various periods of observation. Knowledge of such distributions is essential to describe patterns of events, as well as to formulate hypotheses concerning possible causal or preventive factors. The third component, *determinants* of the phenomena derives from the first two, since knowledge of frequency and distribution is necessary to test epidemiological hypotheses.

Research design and data collection in quantitative studies may adopt an interventionist or a non-interventionist approach. Intervention studies may include experimental or quasi-experimental designs. Non-interventionist approaches include comparisons, surveys, and the use of secondary data such as agency records, as the means to seek answers to questions that affect large groups of people. The goal of intervention studies is to establish whether a particular factor (the independent variable) causes a change in other (dependent) variables. Independent variables are always under the control of the researcher (Hennekens & Buring 1987). Experimental designs are used to

establish whether or not a causal relationship exists between independent and dependent variables.

Hennekens and Buring (1987) identify several potential limitations associated with quantitative research. Experimental designs must take issues of internal and external validity into account. The matter of research ethics, important in all studies, is of even greater significance in experimental designs. The notion of informed consent to participate is particularly important when elderly potential respondents may not be cognitively intact. Further, the legitimacy of withholding treatments, which may be beneficial to some participants in control groups, must also be resolved. Quasi-experimental approaches must consider the selection effect in which lack of researcher control may result in a skewed sample.

In gerontology, the most widespread methods are non-experimental comparisons and surveys (Reinharz & Rowles 1988). One type of study used when the influence of age is questioned may be described as a comparative study because the researcher does not have control over the age of participants. This involves measuring groups of individuals when it is difficult or impossible to manipulate the independent variable. Of equal importance in the present context is another epidemiological approach that of a survey designed to gather quantitative information or analyse relationships between variables.

Herzog and Kaulka (1989) note that surveys usually utilise postal or telephone questionnaires or structured interviews to obtain their primary data. They ask

respondents the same questions systematically and then record and later code answers in categories with numerical values. Surveys assume that the researcher has already identified the 'right' questions, which will elucidate the relationships between variables thought to influence the topic under investigation. They may be cross sectional or longitudinal in design. Case control surveys are used in experimental research to measure the influence of exposure to a disease, treatment, or preventive intervention. This study adopted a cross sectional survey technique to undertake Phase 2.

Phase 3 of the study, the trial and evaluation of the draft matrix, represented the application and assessment of a prototype. It would have lent itself to a case control study design and, as Chapter 8 indicates, this is the recommended approach for subsequent trials of the model in multiple centres around Australia. To support this recommendation, the technique is discussed later in this chapter. For reasons that are detailed in Chapter 7, it was not possible to implement a traditional case control study in this context, and a comparative technique was employed.

The cross sectional study design, such as that used in Phase 2 of the project, involves selecting two or more respondents and testing them at the same time. It is (relatively) easy and cheap to execute, and enables differences to be assessed. Since they provide estimates of a community at just one point, cross sectional studies are suitable for measuring the prevalence of a condition or a situation, but not its incidence. For example, the number of registered nurses who currently hold gerontological qualifications could be assessed, but not the

rate at which this is changing. Another weakness is that any associations (causal or other) found to exist are difficult to interpret. However, the national survey of the *Quality of Care for Nursing Home Residents*' project was interested to understand present conditions throughout the country. For this reason it was considered that a cross sectional design would prove to be the most cost effective, easily executed methodological approach. A sample size of at least 200 respondents across the nation was necessary to provide statistically significant results. For reasons of economic efficiency, the technique proposed for this aspect of the project was that of a postal survey.

Response rates to postal surveys are notoriously low, according to Hugo et al. (1987), for a variety of reasons. It is easy for potential respondents to delay completing a questionnaire because there is nobody present to encourage them to do so immediately. With the passage of time, respondents may forget about the document, until the reply-by date has expired, and then respondents consider it 'too late' to reply. Unless there is a major incentive to respond, such as money, or a vested interest in the survey outcomes, the anonymity of the potential respondent, not pressed by the presence of a researcher to respond, makes it easy to ignore requests for information. Another reason is survey fatigue, in which industry leaders who are constantly approached to participate, actively or passively decline to answer 'yet another' questionnaire. Further, the loss of a reply-paid envelope or other initiatives may increase potential participant disinclination to respond. Finally, while confidentiality is almost always guaranteed in writing, some respondents express concern that their identity might be exposed. This study overcame these limitations using a

variety of strategies. As Appendix 5 illustrates, these include an attractive questionnaire design with a respondent friendly format and contact details for help or other information clearly displayed, and intensive recruitment and follow-up procedures. The techniques are explained later in the chapter.

Case control studies are used to compare a group of individuals who have been exposed to the disease or intervention of interest, and a comparison or control group of individuals who have not been exposed. In some instances such as treatment intervention, the one group may be both cases and controls. The group is measured prior to the intervention, and the information recorded becomes the 'control' data. The measurements are repeated following the intervention, to provide the data necessary for the 'cases' in the study. This was the strategy proposed for use in Phase 3 of the project, and while it did not prove to be entirely possible for reasons that are detailed in Chapter 7, it is the design recommended strongly for use in all subsequent applications of the Australian Quality Matrix. The reasons for this recommendation are outlined in Chapter 8.

As a consequence of these limitations, Phase 3 assumed the design of a comparative study because the researcher did not have control over the statistics collected by the host facility prior to the commencement of the trial. All occurrences of each of the 18 proposed indicators were recorded by the researcher during the three month trial, and monthly outcomes compared. An indicator score was calculated each month, and trend analysis performed, where trends were discernable. During that time the researcher was in regular

attendance in the home to observe first hand any difficulties with the design or the implementation of the matrix. At the conclusion of the trial, outcomes were evaluated and the matrix modified in light of the findings.

QUALITATIVE METHODOLOGIES

It was noted earlier that a qualitative research design was used during one stage of the project, and a triangulation multi-method approach adopted. This is defined by Polit and Hungler (1991:383) as:

The use of multiple methods to address a research problem (e.g. observation, interviews and/or inspection of documents).

The role of triangulation is to ‘use multiple referents to draw conclusions about what constitutes the truth and to provide a basis for convergence on truth’ (Polit & Hungler 1991:383). They argue that this process is similar to estimating reliability and validity, and that this method is being increasingly advocated.

Qualitative research aspires to understand the significance of human experiences from the perspective of the participant as described to the researcher. It requires the researcher to interact with the individual in their own environment, to hear normal language patterns, and to observe behaviour under usual conditions. In the view of Reinharz and Rowles (1986:6), qualitative gerontology is:

... concerned with describing patterns of behaviour and processes of interaction as well as revealing the meanings, values, and intentionalities that pervade elderly people’s experience, or the experience of others in relation to old age.

Minichiello et al. (1992) demonstrate that the ways in which researchers obtain knowledge, and the techniques by which they collect their information, are directly related to their image of social reality. Further, Browning et al. (1992) suggest that researchers who use qualitative methods believe that social reality exists as meaningful interactions between individuals.

The tools in qualitative methodologies are designed to help the researcher gain access to an individual's personal attitudes and actions. Participant observation places the researcher in a situation where knowledge is gained by living in and working as a member of a given 'community'. By participating and observing, the researcher is able to put this knowledge to a direct test. While there are many degrees of participation, the researcher's personal involvement in the research setting is the central means of understanding it. As Jorgensen (1989) points out, rather than using a research instrument, the researcher, in his or her role as participant observer, becomes the instrument. Fennell et al. (1988) observe that, in regard to participant observation in gerontological research, it is usually set in those locations where old people get together, such as day centres or residential facilities. These settings enable the researcher to observe or take part in daily activities.

In addition to participant observation, other triangulation techniques are also important. In-depth interviewing is a method in which data are collected through unhurried, unstructured or semi structured discussions with informants. The title 'informant' is used more frequently in qualitative research rather than

others such as ‘respondent’, common in quantitative studies, because it is anticipated that the interviewee will *inform* the research through participation in debate, rather than respond to predetermined questions. Directed by informants, with only minor intervention from the interviewer, these interviews follow the recursive model of interviewing detailed by Minichiello et al. (1995).

The purpose of the interview is to encourage informants to offer the relevant data through an extended exchange with the interviewer. The researcher decides the extent to which previous comments influence the structure and content of what will be asked. However, as Reinharz and Rowles (1988) indicate, non-structured techniques do not necessarily imply purposeless chatting about random topics, as might occur at a family dinner table, for example. Later in the chapter, the issues that preoccupied the in-depth interviews in Phase 1 of this project are outlined.

Carp (1989) provides a comprehensive account of the practicalities of interviewing older people. She points out that some researchers have an exaggerated expectation of poor comprehension and interview fatigue among older informants, and that participation may not be as onerous to the elderly as is popularly depicted. However she does recommend that when conducting structured interviews with older people, the number of response options should be limited, and the tendency for older people to provide overly optimistic responses in some circumstances should be taken into account. This final

feature was discussed extensively in Chapter 2 and will be considered further in Chapter 4.

Another triangulation technique of value is that of document review. As its name implies, data are collected from the range of paper records relevant to the inquiry at hand. In the case of residents in aged care facilities these may include medication charts and nursing care plans, together with statistics kept by nursing homes such as staff turnover rates, incident reports and similar material.

Phase 1 of the study was designed to utilise all of these techniques when it took the form of a series of case studies. This involved the participation of nine facilities across four states, for a period of 14 weeks. Further, it included 121 in-depth interviews with individual volunteers drawn from the residents, their families, care staff, and managerial personnel of the case study facilities. In addition, there were 35 eight-hour sessions of participant observations, and extended periods of document review.

Notwithstanding the attributes of the triangulation strategies outlined above, qualitative research techniques contain several fundamental limitations. Principal among them is their lack of replicability, and therefore their inability to permit generalisations. The findings in one set of circumstances cannot be repeated in others. Further, the view of any one informant may vary from day to day, or even at different times on the same day. Therefore, the researcher is obliged to determine which version applies when reaching conclusions. Care

must be taken when interpreting remarks to make allowance for this phenomenon, by seeking the views of others more familiar with the informant than the researcher to 'translate' the dialogue and other information. People in this situation may include family members or direct care workers.

This study overcame these limitations by utilising other methods, such as the national survey, to achieve generalisable, repeatable, outcomes. Lack of consistency in the views of individual participants was overcome when common experiences were reported by a variety of informants in a range of settings. The small sample was adequate for the purpose for which it was designed and, in regard to the matter of cost effectiveness, the modest nature of the sample (only nine homes were visited for a total of 14 weeks by a single researcher) rendered this inconsequential.

STUDY RATIONALE

As Chapter 2 demonstrated, a variety of indicators of quality aged care have been developed and described by international scholars such as Zimmerman et al. (1995, 1999). In addition, worldwide standards such as the ISO9000 series have been developed by organisations such as the Australian and New Zealand Standards Agency for application in a variety of industries, including health care. However, none had been developed which were directly applicable to Australian nursing homes or the residents for whom they provide care and accommodation until 1997. At that time, the (then) Department of Health and Family Services established the criteria against which compulsory accreditation

for the aged care industry would be measured. Even then, these outcomes represent the minimum level of quality of care a service must deliver if it is to receive Commonwealth subsidies. The *Quality of Care for Nursing Home Residents*' project aspired to develop a set of indicators or standards to achieve the most advantageous care for Australian residents with high level care needs. The project recognised that quality of life is equally as important as quality of care for those in an aged care residential facility. Indeed the delivery of optimal care is likely to enhance the quality of life of those who receive it and, it might be argued, that it is fundamental to it. However, the strategies for developing and evaluating quality of life indicators differ in many respects from those reflecting quality of care, and they do not form part of the current study.

In order to develop a set of clinical standards unique to Australian aged care, it was first necessary to establish base line data about current practices and procedures in the existing industry. As noted above, two strategies were proposed to achieve this objective. First, participants in the system could be approached for their views and experiences. Second, matters of policy and demography were on the public record and readily retrievable using data searches, literature reviews, and consultations with the relevant public authorities.

The written and electronic records represent only one, relatively small, facet of the Australian aged care industry. A primary weakness in any bureaucratic account is that it is frequently without the input of the people who are engaged in the provision or receipt of the service. No claim to an understanding of the

present system, or recommendations for its future, could be substantiated without due recognition of this group. Hence it was necessary to devise one or more means of learning their views.

The optimal manner for achieving this would be to ask all the participants including residents, their friends and family members, employees, proprietors, volunteers, community members, and all other interested parties. However, the impracticality of such a solution is self-evident. It was decided, therefore, to ask a representative sample of the industry population and, with the aid of the appropriate statistical techniques of analysis, generalise the findings from the sample to the population as a whole.

A variety of strategies were available to accomplish these goals and, as described above, two were utilised. First, a series of case studies was conducted to obtain information from individual care providers and care recipients and their families. This strategy also afforded an opportunity to peruse relevant documentation associated with individual services. Second, a national survey was undertaken to learn the views and practices of a representative sample of the industry as a whole.

Having achieved a comprehensive understanding of the current system, the next matter to be accomplished was the development, trial and evaluation of a new set of indicators or standards for the Australian industry. This represented the third and final phase of the project.

STUDY SAMPLE

The 1996 Commonwealth Year Book (1997:312) indicated that on 30 June 1996, there were 1473 nursing homes throughout the nation. This group comprised the study population. The decision to include only nursing homes in this study, rather than all forms of residential services such as hostels, independent living units and serviced apartments for the elderly, and the reasons for it, was discussed in Chapter 1. A variety of influences dictated the size of the study sample itself, and each phase of the project warranted the development of its own sub-sample.

The size of any quantitative study sample influences the magnitude of the *P* value of the results, and thus the likelihood that an observed pattern or difference will attain statistical significance. Consequently, one crucial question to be addressed concerning the study sample was how many subjects would be required to ensure that a statistically significant effect of a given magnitude would be detected. This was of greatest importance in regard to Phase 2, the national survey, when the aim was to achieve results that could be generalisable to the entire industry.

Kirkwood (1988) indicated that, in calculating a required sample size, it is necessary to specify the desired values for the probabilities of type I (alpha) and type II (beta) errors, the proportion of the baseline population that is exposed to the factor of interest, and the magnitude of the expected effect. Once these values have been nominated the sample size can be determined

using one of a number of standard formulae. Features of the study design, the particular research question being addressed, and the type of data to be collected dictate the specific formula chosen.

Ideally, in designing a study both types of error should be minimised. However, as Kirkwood (1988) indicates, due to their interrelationship, a decrease in the probability of one type of error is often achieved at the expense of an increase in the probability of the other. Because of sampling variability, it is unlikely that a relative risk of exactly 1.0 would be observed even if the null hypothesis were true, or exactly 1.5 even if the alternative hypothesis were true. However, larger values of the relative risk are considered more compatible with H_1 and smaller values are more compatible with H_0 . For reasons of convention it was determined that an alpha level of 0.05, and a beta level of 0.20 (responding to a power of 80% to detect a difference of the magnitude specified), and relative risk of 1.8, would apply for this study. It was also recognised that the larger the sample the better the opportunity to minimise the possibility of type I or type II errors. Using the statistical package *EpiInfo* (1996) it was determined that approximately 200 participant homes would have to be recruited for the national survey of homes to reach the agreed settings. Additional participants would also be required for Phases 1 and 3.

Another issue for consideration at the initial sample development stage was the need to overcome any inherent bias within the study population. The most effective means of achieving this is to utilise the technique of randomisation in

the selection of potential subjects. Randomisation means that every one of the 1473 nursing homes had an equal opportunity of being included.

A further refinement of the randomisation process, that of stratification, ensures the control of confounders in the analysis of a study. For example, the geographic location of the nursing home had the potential to confound the results of the project because resources available to homes in major urban centres differ markedly from those available in rural or remote districts. Therefore, those homes in one location could not be compared with homes in another without some adjustment. By separating informants according to geographic location, each stratum specific estimate is, by definition, unconfounded by location, since there is no variability of the confounder within the stratum. Following the work of Braithwaite et al. (1993) and Gregory (1994), the sample was stratified on the following variables: geographic location (urban, rural, remote), size (the number of beds), and ownership or proprietorship (for-profit, not-for-profit, State 'owned').

CONSTRUCTION OF THE STUDY POPULATION DATA BASE

The data base of Commonwealth funded aged care services for high level care recipients was assembled in the following manner. The Delegate of the Secretary of the (then) Department of Health and Family Services in each state was approached in writing, by the researcher, for permission to obtain access to their list of nursing homes, under section 45DB of the National Health Act. All Delegate representatives agreed to do so, with the proviso that the researcher

observed all the applicable limitations, such as confidentiality and similar ethical or other regulatory requirements.

The decision to tackle the project state by state was undertaken for two reasons. First, their records of their own facilities were more likely to be up-to-date than the Commonwealth office's records. This is due to the immediacy of their involvement in each new application, extension of bed numbers, and similar operations. Second, a state-by-state investigation permitted local idiosyncrasies to be taken into account. For example, Queensland is a much more decentralised state than many of the others, and there are more people located outside the capital city than within it. Many major urban centres, such as Townsville, are more than 1000 kilometres from Brisbane. Their geographic location might imply that they be 'treated' as a regional or even rural setting when, in fact, their resources are almost the equal of a capital city.

This procedure yielded slightly higher numbers of nursing homes than the Year Book had indicated, 1569 in total, distributed as follows: New South Wales and the ACT 487 nursing homes, Victoria 441, Queensland 303, South Australia and the NT 181, Western Australia 96 and Tasmania 67 nursing homes. The definition of nursing homes, as discussed in Chapter 1, included special units dedicated for the provision of long term aged care and attached to district hospitals or multipurpose centres, provided the recipients met the criteria of being in need of high level care as determined by the local Aged Care Assessment Teams. It also included the nursing home components of multi service facilities, once again providing their occupants were high level care

recipients. It did not include hostels, independent living units, or serviced apartments for those requiring lower levels of care. Another exclusion criterion also applied. Hostels or similar facilities which provided ageing-in-place services, and therefore might have one or a number of high level care recipients but which did not have dedicated nursing home resources, were also not included in the data base.

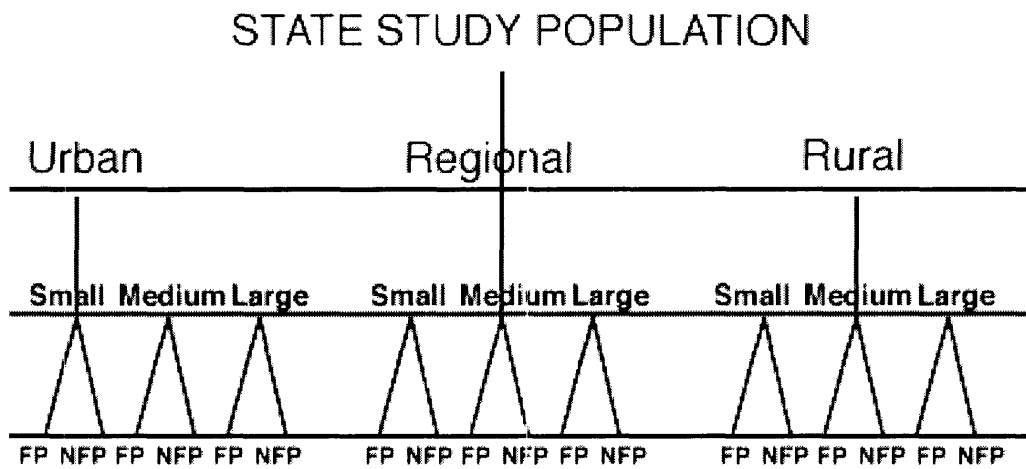
CONSTRUCTION OF THE STUDY SAMPLES

A stratified random sample of 400 nursing homes was developed from the study population data base, with the aid of the Australian Bureau of Statistics Consultancy Service. The numbers were determined state by state in the same proportions as they appeared in the study population, and the sample comprised 128 nursing homes in New South Wales and the ACT, 112 nursing homes in Victoria, 76 nursing homes in Queensland, 44 nursing homes in South Australia and the NT, 24 nursing homes in Western Australia, and 16 nursing homes in Tasmania. This represented 32%, 28%, 19%, 11%, 6% and 4% of the total respectively.

Incorporated in the lists of nursing homes provided by the state offices of the Department of Health and Family Services was information about their location, size, proprietorship and contact details. These items of information were essential to enable the stratification procedures, according to the predetermined criteria, to proceed. At first, all nursing homes were given a number and classified according to their geographic location – urban, regional or rural. Postcode information was used to determine these categories. Then

they were distributed according to their size – less than 50 beds, 50 to 100 beds and more than 100 beds. Finally, facilities were classified according to their proprietor’s status: either not-for-profit or private commercial homes. For the benefit of this procedure, the small numbers of long stay wards or aged care units attached to hospitals in the sample were allocated to the not-for-profit sections. This yielded a total of 18 groups of nursing homes identified by their population numbers. Once the groups had been determined, the fourth home drawn at random from each category was allocated to the sample until the state quota was reached or the category exhausted. Figure 3.2 details the procedure.

Figure 3.2 Study sample development



(Once the groups had been determined, the fourth home was drawn from each category until the state quota was reached or the category exhausted.)

Key: Small = < 50 bed, Medium = 50-100 beds, Large = > 100 beds

FP = For-Profit (commercial) NFP = Not-for-profit
 (The small number of units attached to District hospitals were included in the NFP group)

The size of the sample was twice that recommended by the *EpiInfo (1996)* calculation for several reasons. Firstly, the study population itself was marginally larger than that on which the calculation had been performed. Second, as indicated earlier, 200 respondents were the minimum required for the national survey to ensure *P* values of 0.05 or better. Third, this sample represented the 'pool' from which informants in all three stages would have to be drawn. Finally, allowance had to be made for those homes which, when approached, declined to participate.

SAMPLE LIMITATIONS

There were two major limitations in the development of the sample for the overall study. First, as noted above, an industry partner sponsored the project. As part of the research design, personnel from this facility contributed advice to many aspects of the study including interview guides and instrument development. However, because of the potential for conflict of interest, the industry partner was excluded from all sampling procedures and hence was ineligible for actual participation, as a case study site, national survey respondent, or the home in which Phase 3 was conducted.

The second limitation concerns one aspect of confounding not included in the stratification process. Braithwaite et al. (1993) and Gregory (1994) found one other factor influenced the status of nursing homes, and that was whether or not the home formed part of a multi-stage service. Facilities in this category provide additional services such as co-located hostels, day therapy centres, or are part of a network of homes owned by the same proprietor, for example, the

Uniting Church. Braithwaite et al. (1993) and Gregory (1994) noted differences between homes in this category and those that are single, stand alone facilities. During the initial planning stages of the project, an attempt was made to incorporate this fourth stratum when calculating the sample size. However, this degree of refinement resulted in many cells being left empty because, for example, in some rural communities there would only be one home or none in the strata of interest. In an effort to control for this confounder, a question as to their service status was incorporated in the national survey instrument and comparisons made in the data analysis. The results are detailed in Chapter 5.

RECRUITMENT

PHASE 1 – CASE STUDIES

Ten potential case study sites were chosen at random from the study sample of 400. They came from four states and were distributed as follows: four urban facilities; three regional and three rural or remote. Each was approached initially by phone, then by letter, with an invitation to participate. All accepted; however, one withdrew from Phase 1, although not from the study itself. Eventually that home participated in the pilot testing stage of Phase 2.

As noted earlier, the case study phase also necessitated the recruitment of a series of informants from each participating site to contribute to the qualitative aspects of the study. All residents, family members and friends, staff and managers were invited to play a part in the in-depth interviews on a range of

topics that are detailed below. Eventually 121 volunteers from the nine homes were recruited.

PHASE 2 – NATIONAL SURVEY

There were two components to Phase 2 that necessitated the recruitment of respondents. First, a pilot test of the draft survey instrument was undertaken. This required a series of facilities in which the Director of Nursing or their nominee would participate in an instrument test re-test procedure. Second, the national survey required at least 200 respondents for the results to be statistically significant, and therefore representative of the industry as a whole.

By virtue of having participated in Phase 1, all the case study homes were excluded from Phase 2. In addition, as noted above, the tenth home originally proposed for inclusion in Phase 1 volunteered to contribute to the pilot test aspect of Phase 2. It was decided that a representative of each state would be invited to participate in the pilot test and five homes were drawn at random, one from each of the remaining states. In total, six homes were approached to participate in the pilot testing component of Phase 2, all agreed, and eventually five returned responses.

At the point where prospective participants for the pilot test had been determined, 385 facilities remained in the sample. With the aim of maximising the response rate, it was decided that all would be approached to participate in one way or another to the project. To fulfil this objective it was necessary to

select the home in which Phase 3 could be conducted, and all the others would be invited to reply to the national survey.

The intensive nature of Phase 3, requiring the researcher to be based in the facility for a period of between three and six months meant that this was the only component of the recruitment process in which randomisation did not play a major part. The criteria by which homes would be eligible to support Phase 3 are outlined below and, ultimately, three homes were suitable. All were excluded from the Phase 2 sample, (although none were approached until months later), and this left a total of 382 potential respondents to the second component of Phase 2, the national survey.

Every Director of Nursing or Director of Care in the 382 homes was approached, initially by phone, appraised of the nature of the project and their possible role in it, and invited to participate. Three hundred and fifty eight agreed to do so. Questionnaires were posted to them, follow up phone calls were made to non-responders and, eventually, 208 documents were returned: a response rate of 58%.

PHASE 3 – THE TRIAL AND EVALUATION OF THE DRAFT QUALITY MATRIX

Phase 3 of the *Quality of Care for Nursing Home Residents*’ project necessitated the close interaction of the researcher with all members of the participant facility: residents and their families, staff, managerial personnel, and many other people who came into regular contact with the home. For the period of the trial itself the researcher was required to be on site on a very

frequent, if not daily, basis. As a consequence the researcher would become familiar with all aspects of the daily functioning of the home, good and otherwise. Hence, any Director of Care willing to participate must be equally willing for all aspects of their service to be exposed to the researcher, including features that did not necessarily play a role in the investigation itself. The various ethical issues associated with this interaction were a major issue for consideration, and are canvassed later in the chapter.

One other factor influenced the eligibility of homes to participate. Due to the length of time this aspect of the study required, the researcher was obliged to live within relatively close proximity to the service. The cost of accommodation for an extended period had to be taken into account, as did any other additional resources such as the availability of computers and miscellaneous technical support necessary to continue the project away from the researcher's home base.

As a consequence of all of these considerations, it was decided that the home in which Phase 3 took place would be one in which the researcher had a previous personal association, or in which the project could receive the personal recommendation of a member of the investigation team such as an academic supervisor, industry partner or similar individual. From the sample of 385 homes that remained after the case studies sites, and the national survey instrument pilot test sites had been excluded, three homes complied with all the inclusion criteria. Each was approached, all agreed, and one was 'drawn out of a hat'.

This home was a stand alone facility in a capital city, providing services to 60 high level care residents. It employed approximately 80 personnel including permanent part time and casual staff in clinical, administrative and support service areas. The researcher made several visits to the participant home following the conclusion of Phase 2, and spent four months of intensive activity in the facility between November 1999 and February 2000. The application of the draft quality matrix required the active support of all registered nursing (RN) staff, approximately 15 in total, for reasons that are detailed in Courtney and Spencer (2000). Staff members were free to decline to participate, but as the exercise did not involve them in any additional work, none refused.

ETHICS

Each of the three phases of the study was the subject of separate applications to the Human Research Ethics Committee of the University of New England. At every stage, a copy of the research protocols, research instruments, draft correspondence including interview guides, information papers and Informed Consent forms were included. Copies of these documents appear in Appendices 3.1, 3.2, 3.3, 4.1(a), 4.1(b), 4.1(c), 5 and 6. Applications for approval, with all the associated documentation, were also submitted to the Ethics Committees (where they existed) of those homes into which the researcher planned to enter. These comprised the case study homes, the Phase 3 home, and the industry partner's Ethics Committee. As the letters indicate,

absolute confidentiality was guaranteed to all participants, and the means by which this would be secured described in detail. In addition, the opportunity for any participant to withdraw without prejudice at any time was outlined. These conditions were honoured under all circumstances.

During Phase 1, the case study phase, where in-depth interviews were proposed, substantial additional ethical deliberations were required. Whether or not the study would attempt to ascertain the views of those with cognitive impairment presented a major challenge. Given the magnitude of the study, and the highly specialised nature of the skills required for determining matters such as informed consent among those for whom this could not be measured, it was decided to omit anyone whose clinical diagnosis testified to an impaired mental status. Hence those with recognised Alzheimer's disease, Parkinsonian Dementia or similar conditions were not eligible to participate. This did not apply to their family members, however, and, fortuitously, several family members of residents in that situation agreed to do so. While it was recognised by Lavizzo-Mourney et al. (1992) that this offered a less than ideal solution from a study's point of view, it is possible that family members in this context were able to convey some of the feelings of the residents themselves.

IMPLEMENTATION

The protocols adopted for each of the three phases of the *Quality of Care for Nursing Home Residents*' project were developed following an extensive review of the literature, and in association with the study's reference group

comprising industry practitioners and academic advisors. It will be recalled that Phases 1 and 2 were designed to obtain baseline information about current practices and procedures in contemporary Australian nursing homes, while Phase 3 aspired to develop standards of optimal clinical care for implementation.

PHASE 1 – CASE STUDIES

Introduction

It was determined that using qualitative research methodologies, the case study protocol would comprise a series of participant observation sessions, document reviews, and interviews with residents and their families who volunteered to participate. These interviews included both structured and unstructured components. Staff members who volunteered to do so were also interviewed using semi-structured techniques. Issues considered by line staff varied in some degree from those considered by managerial personnel, and each is detailed below. Copies of the various interview guides are contained in Appendix 4.

The time allocated for each of the case studies varied according to the size of the facility. In the case of the six-bed long stay ward of a rural hospital, the visit lasted three days. At the opposite end of the scale, in the 108 bed metropolitan home the case study lasted two weeks, with four follow-up sessions of approximately half a day each.

Participant observation

The participant observations took the form of the researcher accompanying individual members of staff for a series of shifts, in addition to watching

unobtrusively in public areas such as the dining room. Matters examined in the participant observation sessions in which the researcher accompanied staff members included the duties being performed by the carer, which varied with the role of the employee and the time of day. Other observations included the interactions between residents and staff, with particular reference to the attention paid by staff members to resident choice and resident independence. Exchanges between staff were also noted, as was the speed with which personnel responded to calls for assistance. The researcher recorded these events in a small notebook stored unobtrusively in a pocket of her clothing. A copy of these notes is included in Appendix 4.2(i).

The five sessions of unobtrusive 'watching' encompassed the following situations. One meal was observed in three separate facilities: breakfast in case study 1, lunch in case study 4 and dinner in case study 9, in which the researcher sat in a corner and noted all the events and interactions during that event. She also made a point of attending all meals in every facility in her role as 'participant' as well as 'observer'. The other two events at which the researcher simply observed the undertakings included a residents' committee meeting, to which she had been invited, and a concert in the company of residents, family members and staff. The purpose of these observations was to examine interactions between residents, the behaviour of staff towards the residents, and the manner in which unexpected events were resolved. For example, one resident had a choking episode at the table during the evening meal. The researcher was able to note the speed with which staff responded, the strategies used to alleviate co-residents anxieties, and the post event

strategies which included returning him to his room, obtaining a supplementary meal, and the provision of a progress report to interested co-residents. The events were also recorded in the researcher's notebook, and an example of one session is illustrated in Appendix 4.2(ii)

As the researcher has extensive experience in working as a registered nurse in aged care facilities, it was considered that her presence would be of only marginal consequence to staff members who volunteered to participate. This shadowing technique has been used with considerable success by Bowers and Becker (1992). Chapter 4 indicates that a total of 35 eight hour shifts of participant observation were conducted, including 10 shifts using the shadowing techniques of Bowers and Becker (1992). An example of the researcher's participant observation notes is included in Appendix 4.2 (i).

One feature of a triangulation approach to research design of particular value during the early stages of Phase 1 of this study is the ability to revise practices and procedures in light of the findings that emerge periodically. This was to prove particularly useful in the practice of shadowing because the outcome of this procedure, following the first case study, was such that it was modified for all subsequent case studies. Individual RNs were affected only minimally by the presence of the researcher. However, despite her volunteering to participate, an enrolled nurse (EN) whom the researcher shadowed during the first case study reported to her Director of Nursing subsequently that she found the researcher's presence discomfoting for a variety of reasons. From that point the only personnel to be formally 'shadowed' were registered nurses who

volunteered to participate. While the researcher followed closely the activities of assistant and enrolled nurses at every subsequent facility, because they are the group which provide the bulk of direct care, technically she was always associated with the duty RN for the shift.

Another aspect of the shadowing technique also became apparent after the first case study, and resulted in an additional modification to the protocol. Shadowing individual volunteers for entire shifts placed the researcher in a position whereby it would seem less than gracious only to 'observe'. That is to say, for reasons of good will, the researcher found it impossible not to contribute to the performance of some duties, such as assisting to distribute medications, undertaking some resident feeding and similar activities. Given the researcher's previous experience, the study reference group was of the view that this would not compromise the researcher's ability to observe accurately. However it had the ancillary effect of influencing, to some degree, the time necessary to perform some tasks.

In order to determine, for example, whether or not the volume of work required of staff members differed between facilities, or according to managerial philosophies, it was decided that, where possible, the researcher would observe by participating as a temporary member of staff. In residential aged care this is not an uncommon practice, as the use of agency staff is widespread. It is a practice adopted in each of the case study facilities, with the exception of the long stay unit attached to the hospital. and all of the homes in the national survey. To illustrate the point – the Phase 3 nursing home operates three shifts

a day of nursing care for each day of the month. In September 1999, it engaged the services of four casual registered nurses and 11 assistant or enrolled nurses from nursing agencies to supplement the labour of its regular staff that were absent for one or more shifts due to illness or other circumstances. Between them the agency staff were present at the facility for 22 of the 90 shifts that month. As the researcher is registered as a nurse in three of the four states in which the case studies took place, the feasibility of this option was quite practicable. The strategy also enabled any potential Hawthorne effect, in which the presence of a researcher might influence the outcome of an action simply by observing it, to be minimised.

Each of the Directors of Nursing (DONs) had agreed to invite members of their staff to volunteer to have the researcher shadow them, at the time of the initial approach to participate in the case studies. Subsequent to the first case study experience, the DONs in the states in which the researcher was registered were also asked if they would be willing to use the researcher as a casual employee, if a shift became available during the case study period. Notwithstanding the administrative difficulties, three DONs agreed to this request, and a total of 20 paid shifts were worked during the 14-week case study period, in addition to the 15 in which the researcher shadowed staff or observed alone. Field notes of each day's activities, observations and findings were kept by the researcher, transcribed following each case study, and the contents stored in a locked metal cabinet at the University of New England. An example of the researcher's notes is included at Appendix 4.3. Monies earned by the researcher in her role

as a 'casual employee' were donated back to the facilities concerned, as a contribution to the staff Christmas or social activities.

In-depth interviews – recruitment

All staff, residents and family members of the case study sites were advised by facility Chief Executives or Directors of Nursing of the intending visits. Information sheets supplied by the researcher were distributed at that time together with Informed Consent forms, inviting participation (see Appendix 3). Those who volunteered to participate in the in-depth interviews were invited to sign the form, and return it to the nursing home administration. When the researcher arrived, she approached all of those who had agreed to participate to ascertain that they were still willing to do so, and make appointment arrangements. Meetings took place at times and in locations to suit the informants, such as in private alcoves, residents' rooms or facility gardens.

In all but two cases, the Chair of the Residents' Committees volunteered to participate. The position held by these individuals is considered to be of major consequence by government and the majority of aged care providers, because they become 'de facto' spokespeople for the residents. So the researcher actively approached the two who had not returned consent forms. One agreed, and one declined due to ill health. Otherwise, only those who had volunteered to do so were included in the informant 'catchment'.

In-depth interviews – content

Appendix 3 contains copies of the Information Sheet and Consent Form documents. Apart from the structured components of the resident interviews, copies of which are in Appendix 4, and which are detailed below, interviews with all other informants were semi-structured. A comprehensive literature review, described in Chapter 2, provided the initial impetus in determining the topics to be covered.

Residents and/or their families were asked about their activities of daily living, their relocation experiences, their social support, and their perceptions of the care they received. Demographic information, including their care category, and education levels, were taken from resident records prior to the interview. During the course of the interview, residents were asked to complete a Health Status Self Report and Nursing Home Satisfaction questionnaire, adapted from Kruzich et al. (1992), copies of which are in Appendix 4. The merits or otherwise of inviting residents to express their levels of satisfaction about living in a nursing home are canvassed extensively in Chapter 4. The Kruzich et al. (1992) model was chosen because of its high validity and reliability, a matter discussed more comprehensively later in the chapter when the issue of the development of the national survey instrument is considered.

Managerial informants were invited to comment on their organisation's philosophies and about how these principles influenced their individual positions. They were also asked to express their personal views on issues of quality of care, together with their recommendations for clinical indicators that

should be incorporated into the final matrix developed by the study, where they were eligible to do so. For example, Directors of Nursing or Chief Executive Officers (CEOs) who were also registered nurses were invited to nominate clinical indicators, but CEOs who were accountants or had other professional training were ineligible. The reasons why they chose their particular indicators were also sought. Further, executive level informants were asked to identify practical matters, such as the nature of any statistics maintained by the home, for example, trend analysis in resident falls, and current and optimal education and training standards for staff, important in light of Standards 1.3, 2.3, 3.3, and 4.3.

Non-managerial staff, including environmental services personnel, nursing and other direct care staff, and visiting practitioners such as dietitians, were asked about some or all of the following: (a) the nature of their work, (b) how they set their priorities, (c) the compromises they found necessary, and (d) how they were achieved. Comment was also invited on the supervision they received, together with their personal views on quality care and recommendations how to achieve it. Each person was invited to make suggestions about indicators to be incorporated in the proposed matrix, and the reasons for their inclusion. Finally, they were asked about their own education and training standards, and any views they might have about furthering them.

In-depth interviews – execution

All in-depth interviews for each category of informant were conducted at times and places convenient to the interviewee. They ranged in length from 30

minutes to one and a half hours, depending on the loquacity of the individual informant and the role they held in the organisation. For example, none of the gardeners talked for as long as any of the Chief Executive Officers. At the time of the actual interview, the Consent Form, which had been returned to the home administration following the initial invitation to contribute, was signed by the researcher in the presence of the informant, and dated by both. A study number was also allocated to each person at that time. The researcher retained these documents, which remain confidential to the study. They are stored in a locked cabinet at the University.

The content of the interviews was recorded in hand writing by the researcher during the interview, following permission being granted by the interviewee for this to occur. During the first case study an attempt had been made by the researcher to tape record conversations, but the majority of informants were reluctant to give their permission. This was the case despite assurances of confidentiality being given, and the offer of a copy being made available to them if they wanted it. To ensure uniformity between cases studies, the practice was discontinued, and the only record of the interviews for all informants is the written document, identified only by the informant's study number, which is stored in a separate locked cupboard at the University of New England. A profile of study informants is located in Table 4.2.

Secondary sources – documents

In addition to the information obtained from interviews and observations, a third source of data was available at the case study sites. Resident related

documents, which were reviewed by the researcher, included records such as care plans, progress notes, medication sheets and the like. Facility related documents examined included: accident and incident forms, staff ratios, resident classification scale (RCS) category numbers, and the use of agency staff. Further, quality assurance manuals were readily available for perusal by the researcher, and internal research activity, where it was undertaken, was also sought. This covered matters such as infection rates in the home, sleep patterns of residents, back care programs, and bereavement strategies.

Case study completion

Following the conclusion of the period 'in residence', the researcher wrote to the individual facilities to thank them for their hospitality and offer them an executive summary of the study's findings at the conclusion of the project. She also volunteered to act as a conduit to assist members of staff with their internal research, if they sought her help. On her return to the University, the field notes, records of interview, and other debriefing activities were transcribed. Information received from individual informants was stored separately to the consent forms, and identified only by their case study number. Documents for use in the study itself were transcribed onto computer disk, in password secured files. Back-up copies of these files are held off campus by the researcher. Original written material was stored in a separate locked container, in a different location from the consent forms.

Ultimately the case studies encompassed visits to nine residential aged care facilities in four states, for 14 weeks during the period July 1997 to January

1998 inclusive. They included 121 interviews with residents, family members, staff, proprietors and other interested parties, and a total of 35 eight-hour shifts of participant observations using either shadowing (10) or solo practitioner (20) techniques, and five of general observations. The details of the findings are presented in Chapter 4.

PHASE 2 – NATIONAL SURVEY

It was noted above that the results from a qualitative research sample are not necessarily representative of the population as a whole. Nor does the technique permit the study to be replicated in other situations. In light of the aim of the *Quality of Care for Nursing Home Residents*' project, to develop a set of clinical indicators for use in all Australian nursing homes, the outcomes from the series of nine case studies could not be generalised for application throughout the country. They were not designed to do so. Rather, the case studies were intended to provide the information around which a national survey instrument could be developed. and as such they fulfilled their role admirably. The means chosen to identify *national* practices was that of a nationwide cross sectional study.

Instrument development

The themes and concepts that preoccupied case study informants formed the basis for the draft questionnaire, which would ultimately become the national survey instrument. The next challenge was to convert them into questions. Using the techniques developed by Bowling (1997) a series of possible questions were written into a draft survey document. This was reviewed and

modified by the study's reference group comprising the supervisory team, the DON of the industry partner's facility, and three senior aged care practitioners, to ensure questionnaire validity. Furthermore, due to the clinical nature of some of the questions on the instrument, it was decided that all invitations to participate in Phase 2 would be confined to the Director of Nursing of each facility or his or her nominee. This ensured that respondents would be in a position to understand all the questions, and also know all the answers, or have the authority to find out, if they themselves did not know.

As mentioned above, the systematic collection and analysis of data involves the determination of whether a statistical association exists – in other words, the presence of a given factor or exposure is different from the corresponding probability in its absence. It is then necessary to assess the validity and reliability of any observed statistical association by excluding possible alternative explanations such as chance, systematic errors in collection or interpreting data (bias), as well as the effects of additional variables that might be responsible for the observed association (confounding). The validity and reliability of an instrument are also fundamental to ensuring the representativeness of sample responses, which can be generalised to the study population as a whole. All of these issues must be kept foremost in the minds of those designing and implementing new research instruments.

As Green and Lewis (1986) identify, the ideal instrument is both valid and reliable. The validity of an instrument represents the extent to which it correctly measures the characteristic(s) under study. A consistently incorrect

measure is reliable but invalid. Instruments that are valid provide the assurance that results obtained from the measurement or evaluations are an accurate reflection of reality. A reliable instrument does it consistently. Reducing the amount of error in an instrument increases its reliability, and the greater the amount of error the less reliable the measurements.

Reliable instruments yield a more dependable measure of the relevant baseline, impact or outcome variables. Estimates of instrument reliability enable researchers to place varying degrees of confidence in the obtained information. Measurement error in an instrument decreases the amount of confidence an evaluator can have in the study results. By minimising measurement error, the researcher can achieve a higher degree of assurance in the obtained measurements. Both systematic or constant error and random error are broad classes of measurement error. Internal reliability reflects the degree of association, correlation or covariance of a set of measurements that are developed to measure a single or one-dimensional concept. Stability or test retest reliability is the degree of association between sets of measurements collected at two or more different times.

Green and Lewis (1986) also identify three broad types of validity: content, criterion and construct. Content validity focuses on the degree to which the instrument adequately sampled from the total of possible meanings of a concept. Subtypes of content validity include face validity and consensual validity. In both types, an external expert judges content validity. In the instance of face validity, the instrument is judged by an expert in the field, who

determines if the instrument 'looks like' what it is supposed to measure. Here, the external reviewer judges the significance or meaningfulness of the measures. Face validity is judged after the instrument is constructed; it is a check on the completed product. Consensual validity extends face validity from one expert to a panel of experts who examine and rate the appropriateness of each item in the completed instrument (Green & Lewis 1986). The reference group used in this study is typical of this type of panel of experts.

According to Green and Lewis (1986) criterion validity is the degree of relationship between two measures of the same phenomenon. There are two types of criterion validity: concurrent and predictive. Concurrent validity assesses the degree of correlation between two presumed similar measures at the same point in time. Predictive validity assesses the degree of correlation of a current measure, with a future measure of a presumed similar phenomenon. Construct validity is the extent to which the hypothesised theoretical relationships between the concepts and their measures are verified or not verified on the basis of obtained data. As a process, construct validation is an ongoing effort in which relationships between concepts are tested and revised on the basis of repeated studies.

The second draft of the national survey instrument was the subject of a pilot test, in which a test re-test procedure was implemented in order to confirm questions of validity and reliability. Six homes were approached to participate in this process, one from each state. The first was the home that had withdrawn from Phase 1, and the others were selected at random from the state based

study populations, excluding the case study homes. Five homes ultimately complied.

As noted above, the test re-test procedure is a widely used statistical technique to ensure the instrument has both validity and reliability. Two copies of the document were forwarded to the participants, with the request that the same respondent complete them, on separate occasions, but within close proximity, such as two days apart.

Pilot questionnaires were returned to the researcher and answers subjected to a series of student t tests, to determine statistical associations. Questions which posed any uncertainty were removed from the instrument, or reworded to enable the content to be included in a more clear or concise manner. This third draft was then the subject of a further review by the reference committee. The version of the document that became the survey instrument represented its fourth draft, a copy of which is in Appendix 5, and the results are detailed in Chapter 5.

Postal survey

To help overcome potential low response rates highlighted by Hugo et al. (1987) and Herzog and Kaulka (1989), the survey questionnaire was designed to be respondent friendly, with contact details for help or other information clearly displayed. All remaining 382 homes in the study sample were eligible to participate in the national survey, and each DON was approached by phone, informed about the nature of the study, the reason it was undertaken, and the

goals it aimed to achieve. These strategies were also implemented to encourage a substantial response.

The DONs of 358 facilities agreed to participate and were posted the study packages, which were addressed to them personally. A reply paid envelope was included in the package, together with a letter of explanation about the project. The letter contained contact details for the researcher and the Human Research Ethics Committee of the University of New England, and an assurance of confidentiality of replies. A copy of this letter is included in Appendix 6. Respondents were asked to return the completed document by a specified date, one month after it had been dispatched.

To reinforce the matter of confidentiality, the questionnaire itself was anonymous, with no coding or identifying questions or symbols displayed. The reply paid envelopes were numbered in pencil on the outside with the study population number, to facilitate a follow-up procedure. Questionnaires were removed from the envelopes immediately they were received at the university by a project research assistant, and stored all together in a secured box. The research assistant removed the envelope number of the responding home from the data base, and there were no other means by which a particular facility could be identified with a specific questionnaire. Prior to discarding the reply-paid envelope, the research assistant checked to ensure that the postcode of the respondent facility had been recorded, as requested, in question 3. If not, she examined the external surface of the envelopes for any postmarks that would indicate where questionnaires had been posted. While recognising that

this technique was not fool proof, because facility secretaries might post documents near their place of residence rather than near the homes themselves, it served the purpose of identifying five homes which may not otherwise have been recognised. Ultimately only two postcodes were missed.

A fortnight after the commencement of the survey period, the researcher made a series of follow-up phone calls to each of the (then) non responders to encourage them to return their documents. The process was repeated at the end of the first month, and a second closing date nominated. Additional packages were forwarded to facilities that requested them after each phone call. They included a further copy of the questionnaire, a new reply-paid envelope, and a second letter of explanation and encouragement from the researcher. At the conclusion of the second month of the survey, the data collection period of the study was declared completed, and no further follow up procedures were implemented. The national survey took place in the months of February and March 1999. A total of 208 replies were received: a response rate of 58 percent.

PHASE 3 – TRIAL AND EVALUATION OF THE DRAFT AUSTRALIAN QUALITY MATRIX

Following the analysis of Phase 1 and 2 results, a draft Australian Quality Matrix was constructed. It contained 18 clinical indicators divided among four care domains that had been determined, following a further review of the international literature, and taking into account the Commonwealth Aged Care Standards (1997) and the most recent version of the Commonwealth's Resident

Classification Scale (1998). The importance of each of these contributions is detailed in Chapter 6 on the development of the matrix.

The selection process for determining which of the homes in the study sample would play host to Phase 3 of the project has been outlined in detail above. The trial and evaluation of the draft matrix took place between November 1999 and February 2000. In the period immediately prior to this process, the researcher visited the facility on a number of occasions and addressed its Board, and a series of staff meetings, outlining the nature of the study and the facility's role in it. It had been planned to assemble base line information about the 18 indicators proposed for inclusion in the AQM at this time. However, the host facility recorded statistics on fewer than half of them prior to the trial, and the research design for Phase 3 had to be modified from a case control to a comparative study in light of this unanticipated limitation.

The researcher, acting alone, collected the information on each indicator every month for the three month trial. In addition, it was the practice of the facility to hold a case conference on each resident on the anniversary of his or her RCS assessment, and the researcher attended every one of these that took place while she was 'in residence'. Participants in case conferences included the resident and/or their representative, clinical care staff such as medical officers, RNs, and the facility DON. Allied health workers such as the physiotherapist or diversional therapist, responsible for aspects of the resident's care, also attended. The researcher took these opportunities to discuss the potential clinical indicators with all participants.

At the end of the trial period, the researcher chaired a series of meetings with registered nurses, allied health personnel, and representatives of the facility's management and the Board. She provided an account of the trial's findings, and invited their opinions on the application of an Australian Quality Matrix to their facility. Evaluations of the outcomes of this aspect of Phase 3 were submitted to the study's reference group and the draft matrix modified in light of their responses.

DATA ANALYSIS

PHASE 1 – CASE STUDIES

Being primarily a quantitative study with a clinical focus, it was not considered necessary to utilise qualitative software packages such as NUD*IST (1996) to assist in the analysis of case study data. Themes and concepts anticipated to emerge from the content of the case studies had been identified prior to the commencement of the process, from the literature review and past experiences of the project team. They were confirmed or denied manually, using cognitive maps for ideas structuring, problem solving and identifying consequences. New ideas, themes, and concepts were isolated in the same manner.

PHASE 2 – NATIONAL SURVEY

Data from all the quantitative research associated with the *Quality of Care for Nursing Home Residents*' project were analysed using the software package SPSS Version 6.1 (1996). The analysis was supported using the manual 'SPSS

Analysis Without Anguish' (Coakes & Steed 1997). A variety of statistical tests were used including t tests for the pilot study of the survey instrument, and descriptive statistics and chi square tests of significance on the national survey results. The use of each test and the reasons for its selection are detailed in Chapter 5.

PHASE 3 – TRIAL AND EVALUATION OF DRAFT AUSTRALIAN QUALITY MATRIX

Descriptive statistics comprised the primary tool used in the analysis of this stage of the project. Because only one facility was involved, and the instrument under investigation a prototype, little would have been gained from the use of inferential statistics in the analysis of these results. It had been anticipated that a modified version of a case control study might have been possible in Phase 3, which would have permitted a more comprehensive statistical analysis. However, the home chosen at random from the three that met the inclusion criteria, had not previously kept statistics on the 18 indicators which eventually made up the Australian Quality Matrix. As is noted in Chapter 8, the study will recommend a multi state multi centre trial of the revised matrix. At that juncture it would be useful to make comparisons between the results from various facilities and a case control study, with its associated opportunity for a comprehensive statistical analysis, would be the most suitable design for this purpose.

Features of the indicators under review included either prevalence or incidence rates of specific factors evident between designated periods of assessment. As Christie et al. (1987) explain, the incidence of an event refers to the number of

new cases occurring in a defined population over a specific time period. Prevalence refers to the number of cases of a disease or event that exist in a defined population at a particular point in time. The degree of risk of experiencing the specific condition or event will also be influential in these outcomes. These issues are detailed comprehensively in Chapter 7.

In general terms, the analysis of a case control study is basically a comparison between cases and controls with respect to the frequency of an exposure or intervention whose potential aetiologic role is being evaluated. In the vast majority of case control studies, this comparison is made primarily by estimating the relative risk as computed by the odds ratio. If the case control study is population based, or if estimates of event incidence are available from an outside source, rates for those exposed and non exposed can be computed and compared directly. By testing the significance of this measure of association and calculating confidence intervals, the role of chance can be evaluated. Cases and controls must also be compared to ensure similarity with respect to other baseline differences that could be associated with the risk of developing the outcome under investigation. In the circumstances of the present study, when participating residents would have been their own 'control' group as well as the 'cases', this reservation does not apply. One factor, which may compromise this is a significant deterioration in the condition of any resident between the times in which the control measurements are taken, and those following the intervention. Depending on the circumstances, the least complicated means for resolving the matter may be to exclude the individual from the study.

SYNOPSIS

This study was conducted to develop a set of standards for the delivery of optimal care to those Australians with high level needs who reside in nursing homes for the aged. The project comprised a three phase study, and utilised both quantitative and qualitative methodologies to achieve its aims. It sought and obtained the views of current participants in the industry, and reviewed documents produced by providers and governments about the present system. It examined local and national practices and procedures, and finally it developed, trialed, evaluated and modified a set of clinical standards, described as the Australian Quality Matrix. The following chapter presents the results of Phase 1 of this project, the nine case studies.

Chapter 4

PHASE 1: THE CASE STUDIES IMPLEMENTATION AND OUTCOMES

PREFACE

The case studies protocol, together with the strategies required for its implementation was described in Chapter 3. Using methodological triangulation, Phase 1 sought to understand the experiences of individual residents living in nursing homes and dependent on others for high level care and support. The personal opinions of care givers were also obtained. This required the researcher to interact with each human being in their own environment, to hear normal language patterns, and to observe behaviour under everyday conditions.

Ultimately the case studies encompassed visits to nine residential aged care facilities in four states for 14 weeks during the period July 1997 to January 1998. They included 121 in-depth interviews with residents, family members, staff, proprietors and other interested parties. A total of 35 eight-hour shifts of participant observations were also undertaken using either the shadowing (10) or solo practitioner (20) techniques detailed in Chapter 3, and five of general observations. In addition, a third source of data was available at the case study sites. The researcher investigated all documentation associated with residents such as care plans, statistics kept by the facilities including incident forms and

staff data, internal research, and systems material such as workplace health and safety manuals.

The case study phase of the research afforded an excellent opportunity to examine every aspect of a resident's life. While the project was primarily clinical in focus, it also recognised that the notion of care encompassed the whole personality, not simply those biological systems with faulty pathology. Relationships with family members, care providers, and others with whom residents came into contact on a regular or even infrequent basis were examined, in addition to their clinical care and the activities of daily living in which they took part.

PARTICIPANT FACILITIES

The facilities selected for both the case studies and the national survey were chosen in order to achieve a representative sample of the Australian nursing home population. The variables on which the sample was stratified were considered by Braithwaite et al. (1993) and Gregory (1994) to be pre-eminent in terms of influences on the structure of the nursing home industry. The use of a random sample ensured that each of the homes in the study population had an equal opportunity for inclusion. The nine case study sites are depicted in Table 4.1, and the names used are fictitious to ensure that the identity of each remains confidential to the study.

Table 4.1 Summary of case study sites (n=208)

NAME	SIZE	OWNER	STATUS	LOCATION
Gardens Rest Home	52	NFP	Co-located	Outer suburban
Eventide Lodge	108	FP	Stand alone	Metropolitan
Bountiful Centre	72	NFP	Co-located	Metropolitan
Pearl Town	14	Government 1	Stand alone	Rural/remote
Seaview Cottage	6	Government 2	Hospital unit	Rural/remote
My Country Home	50	Government 3	Stand alone	Isolated
Capricornia	15	NFP	Stand alone	Isolated
Paradise Gardens	45	NFP	Co-located	Regional
Quality House	56	FP	Stand alone	Metropolitan

Keys:

Ownership: Not-for-profit (NFP); For profit or commercial (FP); Government 1 = Jointly funded by Commonwealth instrumentalities such as ATSIC and state health grants; Government 2 = state health funds only; Government 3 = Commonwealth subsidies, state health administration.

Status: Co-located with either or both independent living units and/or hostels; Stand alone = having no other services attached to their home.

INFORMANTS

There were 121 individuals who volunteered to participate in case study in-depth interviews. Table 4.2 depicts the number of individuals and the categories into which they fell.

Table 4.2 Case study informants (n=121)

CATEGORY	N	%
Residents	28	23
Family and friends	13	11
CEOs, Board Members	11	9
Directors of Nursing/Care	11	9
Registered nurses	26	21.5
Enrolled or assistant nurses	16	13.5
Therapists	4	3
Environmental/support services	12	10

RESIDENT INFORMANTS

Forty-one interviews were conducted with 28 residents and 13 of their family members. Demographic information about the resident informants was obtained from their resident records in advance of their interviews with the researcher, and is described in Table 4.3. The marital status of one female informant was not documented.

The resident informants consisted of 10 males and 18 females who ranged in age from 51 to 94 years. Their average age was 79.5 years. Half the men (N=5) were married, compared with only 10% (N=2) of the women. This result is not unexpected for a variety of reasons. As Gibson (1998) notes, following both world wars it was usual for Australian men to marry women several years their junior. In addition, the average age at time of death is higher for women than for men. This results in many elderly men having spouses who are still alive, and many elderly women whose spouses have died at the time they are admitted to care. Gibson's (1998) evidence is supported by the resident sample in which only a third of the men, but more than half of the women are widowed. The number of 'never married' women, almost 25% of the sample, may also reflect this situation, in which those without informal carers are admitted into nursing homes more readily than others (Gibson 1998). Alternatively, this may be a characteristic of the current generation of seniors. While it would have been discourteous to have asked why they never married, the loss of potential husbands during the world wars meant that the opportunity

to do so was more restricted for this group than for the generations which succeeded them.

Table 4.3 Resident informant demographic details (n=28)

DETAIL	NUMBER
Gender	
- Males	10
- Females	18
Age range in years	
- Youngest	51
- Oldest	94
- Average	79.5
Marital status - Males	
- Married	5
- Widowed	3
- Divorced	1
- Never married	1
Marital status – Female	
- Married	2
- Widowed	10
- Divorced	1
- Never married	4

These characteristics varied in minor details from those indicated by Gregory (1994) to be typical of residents in aged care facilities throughout Australia. However, as noted in Chapter 3, the selection criteria for resident informants

deliberately excluded anyone with a clinically diagnosed mental illness such as dementia. Any atypicality in the composition of this group may be attributed to the selection criteria which applied to the resident informant sample. Family members who participated included five partners – three wives, one husband and one male companion. The balance comprised four daughters, two grand daughters, one sister and one nephew.

CARE PROVIDER INFORMANTS

All of the Directors of Nursing (DONs) or Directors of Care (DOCs) attached to case study facilities were interviewed, plus two of their Deputies. Ten were female and one male. Of the nine homes, seven had Chief Executive Officer or managerial positions, and each of these individuals also participated. Six were male and one was female. Of the remaining two sites, one was administered by the CEO of the regional Area Health Board. He was visiting another of his facilities at the time of the case study and was unavailable for interview. However, he had been approached for permission to enter his nursing home, which had been given readily. A volunteer Board administered the final facility – a 14 bed rural nursing home. Its Chairman declined to be interviewed for personal reasons. Other managerial personnel interviewed were Heads of various departments including a Human Resources Manager and an accountant, all of whom were men.

Among the 62 non-managerial staff members who volunteered to participate, all but seven were female. The seven males included a chef, two maintenance

supervisors, two registered nurses, one physiotherapist and one assistant nurse. Staff informants were not asked their age for reasons of courtesy. However, one registered nurse was in her first year after graduation, and three of the assistant nurses or environmental staff were occupying their first paid positions. The remaining informants were experienced work force participants. Studies by the NSW Department of Health (1999) indicate that the average age of nurses working in the aged care sector is 45.5 years.

RESULTS

In addition to residents and their families, there were two groups of individuals who informed the *Quality of Care for Nursing Home Residents*' project, those who provided care at the bedside and those who occupied managerial positions. As will be demonstrated, the groups rarely concurred wholeheartedly with each other and the results of their interviews are considered separately. An account of the findings from the residents and their family members is given first, followed by responses from the bedside workers, who are closer to the residents than other informants. Managerial results will be described subsequently and finally, the results of research observations, specifically an account of the need for culturally empathic care, will conclude the chapter.

RESIDENT INFORMANTS RESULTS

The interviews with residents included two structured components. The first was a self reported health status analysis, recognised by social gerontologists such as Pearse (1990) to be a useful predictor of resident health and well-being. Table 4.4 depicts these results. The second was a short questionnaire about nursing home satisfaction levels, adapted from Kruzich et al. (1992). Family members as well as residents were also given this questionnaire. While recognising the reservations about using instruments such as Nursing Home Satisfaction surveys, the need for some empirical, rather than anecdotal evidence justified the implementation of strategies such as these. Further, this is a study about populations rather than individuals and the results gleaned were designed to form part of the background to the national survey instrument, rather than being of specific consequence in themselves. Therefore, inclusion of initiatives such as these affords the opportunity for 'richer' knowledge about what is of consequence to those who reside in Australian nursing homes. Table 4.5 depicts the residents' responses and Table 4.6 those of families and friends.

Table 4.4 Self-reported health status (N = 28)

My health is				
Excellent	Good	Reasonable	Fair	Poor
2 (7%)	9 (32%)	7 (25%)	5 (18%)	5 (18%)

Table 4.5 Resident nursing home satisfaction levels (n = 28)

(Adapted from Kruzich et al. 1992, 32(3): 342)

QUESTION	AGREE	DON'T KNOW	DISAGREE
The food is good here	9 (32%)	Nil	19 (68%)
My room and surrounds are clean	16 (57%)	7 (25%)	5 (18%)
I can keep as many personal possessions as I want in my room	10 (36%)	6 (21%)	12 (43%)
I can see a doctor as often as I like	20 (71%)	2 (7%)	6 (21%)
Most of the staff have the skills to provide the care I need	21 (75%)	Nil	7 (25%)
At night I can go to bed whenever I want to	13 (46%)	9 (32%)	6 (21%)
The amount of noise here bothers me	3 (11%)	10 (36%)	15 (54%)
When I need help someone comes within a reasonable time	10 (36%)	9 (32%)	9 (32%)
I have enough privacy here	11 (39%)	5 (18%)	12 (43%)
This is a cheerful place	17 (61%)	4 (14%)	7 (25%)
I can decide what clothes I wear every day	15 (54%)	9 (32%)	4 (14%)
When I have a complaint something is done about it	12 (43%)	6 (21%)	10 (36%)
Life is boring here	13 (46%)	4 (14%)	11 (39%)
Some of my personal things have disappeared from my room	8 (29%)	11 (39%)	9 (32%)
Most of the staff show a personal interest in me	16 (57%)	3 (11%)	9 (32%)
I get called by the name I prefer	21 (75%)	Nil	7 (25%)
I can have a bath or a shower whenever I want to	14 (50%)	5 (18%)	9 (32%)
The staff sit and chat with me as often as I want	10 (36%)	3 (11%)	15 (54%)
Life is better here than I expected when I first arrived	17 (61%)	8 (28%)	3 (11%)

Table 4.6 Family members nursing home satisfaction levels (n = 13)

(Adapted from Kruzich et al. 1992, 32(3): 342)

QUESTION	AGREE	DON'T KNOW	DISAGREE
The food is good here	9 (69%)	Nil	4 (31%)
My loved one's room and surrounds are clean	11 (85%)	Nil	2 (15%)
My loved one can keep as many personal possessions as they want in their room	4 (31%)	4 (31%)	5 (38%)
My loved one can see a doctor as often as they like	7 (54%)	3 (23%)	3 (23%)
Most of the staff have the skills to provide the care my loved one needs	10 (77%)	1 (8%)	2 (15%)
My loved one can go to bed whenever they want to	9 (69%)	3 (23%)	1 (8%)
The amount of noise here bothers my loved one	5 (38%)	4 (31%)	4 (31%)
When my loved one needs help someone comes within a reasonable time	7 (54%)	5 (38%)	1 (8%)
My loved one has enough privacy here	3 (23%)	1 (8%)	9 (69%)
This is a cheerful place	8 (62%)	2 (15%)	3 (23%)
My loved one can decide what clothes they wear every day	9 (69%)	2 (15%)	2 (15%)
When my loved one or I have a complaint something is done about it	8 (62%)	2 (15%)	3 (23%)
Life is boring here	4 (31%)	2 (15%)	7 (54%)
Some of my loved one's personal things have disappeared from their room	5 (38%)	2 (15%)	6 (46%)
Most of the staff show a personal interest in my loved one	10 (77%)	Nil	3 (23%)
My loved one gets called by the name they prefer	9 (69%)	3 (23%)	1 (8%)
My loved one can have a bath or a shower whenever they want to	4 (31%)	7 (54%)	2 (15%)
The staff sit and chat with my loved one as often as they want	5 (38%)	5 (38%)	3 (23%)
Life is better here than my loved one expected when they first arrived	8 (62%)	2 (15%)	3 (23%)

Other than the data mentioned above, residents and their families were invited to comment on a range of topics during the in-depth interviews. The formal interview guides form part of Appendix 4; however, the principal areas of investigation are repeated here to assist the reader's understanding of the results. The researcher was interested in activities of daily living such as skin care. In addition, residents were asked to comment on their relocation experiences because, as Courtney (1995) demonstrated, the orientation and settling in period in a nursing home has the potential to determine the quality of life thereafter of the individuals who reside in them. Furthermore, the social aspects of the lives of residents and their families were also investigated, such as their leisure activities and the cultural and spiritual support they received. The topic of clinical indicators of quality care was not raised with this group, due to the specialised nature of these services. However, residents were able to comment on the treatments they received, if they so wished. Finally, informants were free to comment on the care staff and/or their co-residents, although the topics were not raised specifically with them, except in regard to the satisfaction questionnaire.

ACTIVITIES OF DAILY LIVING

Nutrition and hydration

Table 4.5 indicates that over two thirds of resident informants were dissatisfied with some aspects of the food they received although, interestingly, two thirds of family members thought that the food was good. During the interviews, the quality of the food was seen to be important by 27 of the 28 informants, with about one third satisfied and two thirds dissatisfied with the meals they were

offered. Almost all resident informants (n=24) mentioned the temperature at which their meals reached them. Some were satisfied, while others found it a source of major dissatisfaction. As one resident remarked:

I like to eat ice cream which is cold and hard.

Interview 3:14.11.97

Lack of variety in menus or predictability of menus were issues raised by 10 (36%) resident informants. Food that was presented in an attractive manner was considered to be an indicator of a high quality service by 12 (43%) informants. Culturally relevant meals were another source of disquiet for five informants and are discussed more extensively later in the chapter.

All of the resident informants were capable of feeding themselves. However, three with rheumatism or other difficulties with dexterity raised the matter of suitable eating utensils to ensure they retained their independence. Each indicated that he or she was satisfied with this aspect of the service they received – meals were cut up for them discretely, appliances modified for ease of use, or provisions made to eat meals in private, thereby not calling attention to the disability.

The matter of fluids appeared to be of minor consequence to resident informants, although, as discussed later, it is an issue of paramount importance to both clinical and managerial care staff. Only two residents mentioned the

matter during their in-depth interviews. One commented how unpalatable 'thickened' fluids are, and the other rejoiced that they resided in a home that served 'real' rather than instant coffee to those who requested it.

Skin integrity

All aspects of care provided in supporting the activities of daily living are interrelated, and any distinctions made between them are to some extent arbitrary. This is most clearly demonstrated when the matter of adequate care of the skin is considered. From the residents' point of view this is primarily about cleansing, moisturising and comfort, as the following quotation indicates. The informant was describing one event, which falls into two categories of care: activities of daily living, and the leisure or diversional therapy program. Staff define skin care somewhat differently, and this is detailed later in the chapter.

- *My favourite activity is attending the spa bath. After it is over they give me a massage. It is the most comfortable I feel all week.*

Interview 3: 12.11.97

One of the most influential characteristics that governs the manner in which skin care is provided is the mobility and/or dexterity level of individual residents. While the results of the staff interviews address the care of those who are bed fast or mobility compromised, none of the resident informants were in this category, although some were very frail. In considering the resident

responses to this issue, another example also serves to illustrate the interrelated nature of not only the physical care associated with activities of daily living, but also the social support epitomised by a resident's right to choose his or her own care. Figure 4.1 highlights the example.

Figure 4.1 Skin care, mobility and freedom of choice

At the time of the interview with 'Mr Smith' he was an 89 year old male resident who preferred baths to showers. His admission to the home was due to Parkinson's disease, and his care level needs were such that he had help every day with cleansing activities. He expressed his preference for baths to his carer, and she willingly agreed to arrange them. Due to his immobility, and the location of the bath some distance from his en suite bedroom, having a bath became a major undertaking. 'Mr Smith' needed a wheelchair to get to the bathroom, and a mechanical lifter was necessary to get him into and out of the water. His carer required the assistance of a colleague to use these pieces of equipment. In all, this more than doubled the preparation and cleaning up time for her resident. However, the carer informed both the resident at the time, and the researcher later, that she was perfectly happy to do the extra work. Sadly, the resident, while claiming that he had thoroughly enjoyed his bath, informed the researcher that he would never ask for another one, as a result of all the extra work it involved. The home also possessed a mobile bath, but when this was made available 'Mr Smith' felt that this was 'not the same as a proper bath'.

(Interview 5: 14.1.98)

Other activities of daily living associated with physical care

It was noted previously that all resident informants were cognitively intact. When the subject of mouth care and oral hygiene was raised, all indicated they were capable of either cleaning their own teeth, or asking staff to do it for them. The same was also true for care of other senses such as annual visits to the ophthalmologist and audiologist. The only intervention informants required of staff or other carers was making the appointment, keeping a record of the

date of the visit, and any follow up actions such as the purchasing of new spectacles.

SOCIAL INDICATORS OF QUALITY CARE

Phase 1 informants used the phrase 'quality of life' most frequently when discussing the social indicators of quality care. The reader will recall that this project deliberately excluded consideration of quality of life indicators because they represent and warrant a separate investigation of their own. However, it is not difficult to see why informants might consider topics such as: their relocation experiences, their independence, their privacy and dignity, their leisure activities and interests and their cultural and spiritual well-being to be influential contributors to the quality of their lives, as well as their quality of care.

The relocation experience

It was noted earlier that the relocation experience plays a fundamental role in the success or otherwise of the transition to supported accommodation and life in a nursing home. Courtney (1995) highlights the aspects of this experience that are particularly influential. These include the reasons for the residents' admission, their location immediately prior to their admission, who made the decision to be admitted, whether or not, as individuals, the residents had any choice about which home to enter, and how long they had been in care.

Predominant among the causes of admission of the 28 resident informants to the case study nursing homes were cerebro vascular accidents (strokes) n=6; chronic obstructive airways disease or other respiratory disorders n=5; fractures of various bones n=5; and arthritis or other rheumatic conditions n=3. Other reasons, such as the loss of a carer, were also influential, as were multiple pathologies. (The reader will recall that, due to their inability to give informed consent, it was decided to omit residents with a diagnosed cerebral impairment such as Alzheimer's disease from among the case studies' potential resident contributors. Hence, this range of reasons would not be typical of the nursing home population in general, where mental impairment features prominently.)

The locations from which resident informants were admitted to care are listed in Table 4.7.

Table 4.7 Resident informants locations prior to admission (n=28)

Resident	Own Home	Relatives Home	Hospital	Hostel	Boarding House	Other NH
Males	2	3	1	1	2	1
Females	7	4	4	2	Nil	1

In the view of the resident informants, the principal decision maker involved in their admission was the resident themselves in six instances. Family members made the decision for 10 residents, and their local General Practitioner made the decision for 12 informants. With regard to the choice of home, only two

residents claimed that they made the decision, while 10 attributed the choice of facility to family members, and the Aged Care Assessment Teams were instrumental in 14 cases. Two residents stated that they did not know who decided which facility they should enter, and four had been obliged to leave their own district for admission to a facility close to the homes of family members. The following is typical of remarks made to the researcher by resident informants about their move.

My daughter chose this place for me, because it is easier for her to come and visit me. While I was grateful that they cared for me, I was very sad to leave my own town. I'd lived there all my married life.

Interview 1:21.7.97

Lengths of stay varied, and Courtney (1995) is of the view that this influences perceptions about the relocation experience. Ten residents had been in their facilities for less than 12 months, four between one and two years and four between two and three years. The remainder had been in care for over three years. As Chapter 1 indicated, admission criteria into nursing homes have changed significantly during the past decade. The not uncommon feature of residents living in nursing homes for prolonged periods which characterised the demographic profile of many facilities prior to 1987 is no longer in evidence. That nearly one third of the resident informants had been in care for more than three years at the time of interview reflects the earlier situation. (The average length of stay from admission to separation in the Phase 3 home during 1999, for example, was 19 weeks.)

Independence

The predominant users of community funded residential services for the aged are those without the means to purchase them independently. For example, the likelihood that the widow or mother of a successful business person or other affluent individual will spend her final months in a nursing home is extremely low. Seniors in need, without independent means to meet the need, are obliged to consume only those services that are available from external sources. As has been noted, freedom of choice may not even extend to ensuring admission into the consumer's preferred facility. Even more fundamentally, the decision to enter a home at all may have been taken by someone else. It is ironic to note that sometimes seniors take the decision to enter care themselves to avoid being a 'burden' on their family members. As one informant advised the researcher:

I want to retain my independence.

Interview 2: 13.1.98

However, the admission to supported accommodation is frequently accompanied by a diminution in a resident's level of independence. This was aptly demonstrated by one informant (Interview 4: 10.11.97) who complained that she was obliged to accept food prepared for her by someone else, despite her own belief, and that of her daughter, that her culinary skills had not been compromised by conditions such as dementia or rheumatism.

Privacy and dignity

Notions of independence may be reinforced or diminished by the manner in which privacy and dignity are handled in nursing homes. More resident informants considered that their lives lacked privacy than those for whom their privacy was sufficiently observed (43%:39% respectively). The proportions were even more extreme when viewed from the perspective of the residents' family members (69%: 23%). Matters that were raised with the researcher included such items as being exposed during bathing and elimination events, nowhere to entertain visitors, or indulge in personal behaviours which may be seen to be anti-social, and for those in a multiple bed rooms, nowhere to escape from other residents.

Personal security was an issue also raised in this context, with five of the 28 residents expressing dissatisfaction with the security provided. All but one of the case study sites had multiple security strategies, which varied from encoded electronic doors on all external walls, to the engagement of a permanent team of security guards to patrol the grounds at night. However, only two had fences around all boundaries, and none were above 1.5 metres in height. This height may keep elderly residents in, but does little to keep strangers out.

The personal security issue featured prominently in responses from one particular facility because a neighbouring home had recently been broken into and a resident harmed. In the police inquiries which followed, it was learned that a resident other than the one who was hurt chose to sleep with their

window open, thereby offering a ready point of entry. Subsequently, no one located on the ground floor of the case study home was permitted to leave his or her windows unlocked at night.

Leisure activities and interests

Nearly half of resident informants (46%) and a third of family members (31%) indicated that they or their loved ones were not sufficiently engaged in activities and interests. However, when asked in the formal interviews about additional activities in which they would like to participate which were not presently offered, very few practical suggestions were made. For example, one informant mentioned chess. Dominos and some other games were available, and the informant knew that he was welcome to participate, but chose not to do so. He had his own chess set, but there was no one to play with outside the hours when his son came to visit. In the future, solutions such as computer chess might be an answer but they were too costly for either the resident or the home to purchase to overcome the current dilemma. As a consequence, the resident felt that boredom was a feature of his life. In his own words:

I have nothing to do most of the time, except wait for my son to come

Interview 3:3.10.97

One additional characteristic of leisure activities nominated by seven resident informants concerned the fact that activities programs were only welcome if they were tailored to the individual preferences of particular residents. Furthermore, the implied obligation to participate is resented by many, even in regard to their own programs. Just because the Diversional Therapist offers to

supervise a handicraft program does not necessarily mean that even the most dedicated hobbyist will wish to participate on any given day.

Cultural and spiritual issues

Many people, not least those who reside in nursing homes, welcome the opportunity to pursue matters of a spiritual nature. Nine resident informants and five of their family members saw ready access to pastoral care and worship services as being important. The availability of advice on end-of-life decisions, such as making wills, was also considered essential by residents and some family members.

The matter of culturally appropriate care was mentioned earlier. As a consequence of the visits to the nine case study sites around Australia, its importance became increasingly apparent to the researcher. The repercussion of this experience has been that entire sections of the thesis are dedicated to the topic, including a discussion about culturally appropriate spiritual care. This appears later in the chapter.

Care staff and other residents

Three quarters of resident informants commented on the high quality of staff who cared for them. However, the precautions about bias in answers to questions of this type, highlighted in Chapter 2, must be taken into account when interpreting these findings. In addition, while several residents and

family members commented on new friendships that had been formed since the resident's admission to the home, others were less happy. Five residents and four family members expressed exasperation about fellow residents. Those who were cognitively intact found those with mental impairment to be disturbing, and while allowance was made initially for confused residents intruding in the rooms or among the personal possessions of others, the sympathy wore off over time.

BEDSIDE CARER INFORMANTS' RESULTS

All professional care givers, bedside staff and managers alike were asked to *nominate indicators of quality in the care you deliver*. Informants were invited to suggest as many as they considered useful, the only inclusion criterion being that the indicators be measurable. Answers were classified according to whether they pertained to clinical matters, the activities of daily living, or the social aspects of care. These concepts had been drawn from the international literature reported in Chapter 2 and ideas prevailing in the current industry, demonstrated most clearly in the Commonwealth's Aged Care Standards and the Resident Classification Scale (RCS). It should be recalled, however, that any distinction between classes of indicators is, to some degree, arbitrary, because of the inter-relatedness of all aspects of care. This section focuses on the answers given by bedside carers, while the comments of managerial level informants are detailed later in the chapter.

Recognising the heterogeneity of the educational levels of informants who worked at the bedside, indicators were defined in the most general terms possible, and were categorised primarily according to either the Aged Care Standards or the Resident Classification Scale (RCS) descriptors. 'Clinical' indicators encompassed those items that warranted specialised nursing care (Standard 2.5 and RCS Item 18) and/or professional certificates to perform, such as medication management (Standard 2.7, RCS Item 17). Indicators incorporated into the 'activities of daily living' class addressed those items that did not require formal professional knowledge but were fundamental to an individual's quality of life. Standards 2.10 and 4.8 and RCS Item 3, for example, covered food issues. Social issues such as resident privacy and dignity were also classified using the Commonwealth descriptors as a guide. In the rare situation in which there was some ambiguity as to the category into which a nominated indicator might be distributed, the study reference group reviewed the matter and it was allocated according to the majority vote.

Due to the specialised knowledge associated with understanding the notion of clinical indicators, only the answers given by registered nurse informants were included in the analysis. Twenty-six registered nurse informants provided care at the bedside and it is their views that are reflected in the following commentary. The responses of all the bedside care givers (n = 62) were included in the other two categories. Table 4.8 outlines the six most frequently nominated indicators in the three categories, in rank order.

Table 4.8 Indicators of quality care nominated by bedside staff in rank order (n=62 unless otherwise stated.)

CLINICAL INDICATORS N = 26	ACTIVITIES OF DAILY LIVING INDICATORS	SOCIAL INDICATORS
Pressure ulcer rates	Mobility rates	Contact with the outside world
Continence rates	Food issues	Leisure activities
Hydration management	Mouth care	Privacy and dignity
Infection rates	Other sensory care	Complaints mechanism
Skin integrity	Restraint issues	Cultural and spiritual issues
Poly pharmacy	Resident transfers	Confined lifestyle difficulties

CLINICAL INDICATORS OF QUALITY CARE

Pressure ulcer rates

One hundred percent of clinical practitioners (n=26) stated that they considered low or no rates of pressure ulcers to be the clearest indicator of high quality clinical care. In part, this may be attributed to the role they know they can play in minimising this problem. Typical of their responses was that of a nursing unit manager who claimed that:

Our actions can prevent this [pressure sores].

Interview 12: 19.1.98

Ultimately this indicator was included in the Australian Quality Matrix (AQM), and is discussed at length in Chapter 6.

Continence management and hydration

Each RN identified that the management of the incontinent resident is fundamental to their clinical and social well-being. All informants nominated a variety of techniques for achieving this goal, and respondents to the national survey reinforced many of the suggestions made by case study RNs. This is another indicator that was included in the AQM.

All 26 RNs also nominated hydration management to be indicative of high quality care. Holmes (1986) attests that the very old are disinclined to drink water, and frequently confine their fluid intake to limited numbers of cups of tea. In addition, the palatability of water stored on bedside lockers for many hours is unlikely to induce residents to consume much of their own volition, and the problem of ‘thickened fluids’ was mentioned earlier in the chapter. Finally, residents with even intermittent incontinence have been known to attribute this problem to their fluid intake, and curtail it as a consequence. Therefore, registered nurses, who are alerted to these matters during their training, regularly monitor resident intake and output to avoid the dangers which dehydration represents. This probably accounts for its high priority among indicators of quality care.

Infection rates

Low rates of infection – urinary tract (UTIs) and respiratory tract infections (RTIs), in particular, were also seen as being an indicator of good quality care by 96% (n = 25) of clinical RN informants. The relationship between UTIs, poor hydration, and continence management was mentioned, in one form or another, by all of the scholars nominated in the continence management section of Chapter 2. This reinforces the findings of the case study RNs. Cross infection management techniques suggested by informants as simple preventive strategies included hand washing between delivering care to each individual resident, and barrier nursing for those with known disease. In addition, routine pathological testing of staff, during outbreaks of eye infections, for example, was adopted by three of the case study homes, to reinforce preventive actions.

Skin integrity

All but one of the RN informants also nominated high levels of skin integrity as being indicative of good quality care. In particular low rates of skin tears for both individual residents, and for the nursing home population overall, were nominated. Other factors, such as minimal numbers of residents with heat rashes were also considered important in the tropics. In one of the clearest references to the manner in which all of these characteristics overlap, one RN stated that:

I can always tell if my nurses are completing their hydration programs, by the condition of their residents' skin.

Interview 4: 23.10.97

Poly pharmacy

The sixth clinical indicator mentioned was that of poly pharmacy. Ten bedside RNs (39%) mentioned high levels of medication as one criterion of poor quality care. Interestingly, this was frequently coupled with the perception that there was too much medical intervention in resident care. Many individual residents suffer multiple pathologies, which are treated with separate medications. Drug side effects and interactions may be coupled with dispensing mistakes to contribute to this problem. The reluctance of some medical practitioners to review their prescribing habits also contributes to potentially dangerous situations for residents, in the opinion of five RN informants. In addition, some medications such as diuretics, designed to treat diseases common in old age, such as congestive cardiac failure (CCF), may exacerbate incontinence problems. It is interesting to note, however, that there is one class of drugs that informants viewed positively. Analgesia, particularly its intensive use in palliative care to alleviate the pain of terminal illness, was viewed as a positive indicator of good quality care.

All the indicators nominated by bedside RNs as being indicative of quality of care were incorporated in one form or another into the Australian Quality Matrix. These matters are discussed in greater detail in Chapter 6 on the development of the matrix.

INDICATORS OF QUALITY CARE DERIVED FROM THE ACTIVITIES OF DAILY LIVING

The opinions of all informants (nurses, therapists, support staff, etc.) were included in the analysis of all non-clinical indicators of quality care (n=62). As Table 4.8 indicates, bedside care givers consider high levels of resident mobility to be the most important indicator of high quality in this aspect of resident care. This was followed by a range of food related issues. Mouth and other sensory care ranked third and fourth respectively, while low rates of resident restraint (physical and chemical) and secure resident transfers claimed fifth and sixth positions.

One other matter, which was addressed by all resident informants and the majority of DONs (n=9, 81%), but only three (7%) bedside nursing staff, was that of response times. Table 4.5 indicates that only 36% of resident informants were satisfied with the time it takes for a staff member to respond to their calls. Therefore, while it did not attain a position in the top six ADL indicators nominated by bedside carers, it is an indicator of importance in the view of many other study informants and it will be discussed as well.

Resident mobility

Resident mobility issues are not simply those confined to ambulation, but due to its importance in the role of resident independence, the ability to move beyond the bedside will be considered first. Fifty-six (90%) non-managerial staff mentioned this at interview. Matters raised included the use of appliances such as wheelchairs and Zimmer frames (n=10), the introduction of walking programs with physiotherapy or nursing staff (n=7), and passive exercise

regimes (n=4) to overcome any physical limitation associated with walking unaided.

Even if a resident is able to walk alone, issues of balance and gait, and potential problems such as slips, trips, and falls, were mentioned by 11 study informants. For example, a resident being treated with diuretics for CCF may be labelled incontinent because they move too slowly to reach the toilet prior to voiding. Had they hurried, and thereby avoided soiling their clothing, they may have been susceptible to slipping or falling on the bathroom tiles.

Other than ambulation, the major issue associated with mobility is that of upper body joints. For example, those with rheumatism in the hands or shoulders may have difficulty with other ADLs, such as feeding themselves or cleaning their teeth. They may also be proscribed from participation in social activities such as handicrafts or gardening.

Food

The second most important aspect of care associated with activities of daily living, in the view of bedside care providers, is related to food. Fifty-five (89%) of the possible 62 informants raised one or more aspects of this indicator. All of them considered that having a resident's special dietary needs met was fundamental to good quality care. Fifty-one (82%) considered the quality of the food to be important, while 36 (58%) mentioned feeding. The researcher considers this to be of paramount importance because in three of the nine facilities she observed members of staff feeding two or more residents

simultaneously. The quantity of food was seen to be of consequence by 27 (43%) informants. While many residents claimed they received too much food, several members of night staff had a different view. They commented that their kitchen staff rarely left enough food for residents who were hungry during the night. Alternatively, they left inappropriate food such as sweet biscuits, which would do little to alleviate the needs of insulin dependent diabetics, in danger of lapsing into comas. Culturally relevant menus were nominated by 22 (35%) informants, and are discussed more extensively later in the chapter. Food that was presented in an attractive manner was considered to be an indicator of a high quality service by 12 (19%) informants, all of whom mentioned the temperature at which it is served.

The ability to accommodate swallowing or other disabilities, with the provision of special eating implements for those with rheumatism, for example, was mentioned by 10 individuals and, perhaps surprisingly, food variety was considered important by only nine (14%) carer informants. This is in marked contrast to the resident informants, 36% of whom commented on the lack of variety or predictability of menus. In particular, the involvement of the chef or cook in menu planning was seen as being indicative of good quality care. Interestingly, only two of the nine case study sites actively pursued this practice. In general, the DONs, in consultation with independent dietitians, planned the menus.

Care of the senses

Care of the senses was seen as an important indicator of quality by 25 (40%) informants. Mouth care, including regular teeth cleaning, gum hygiene, and dental check ups, ranked highly. Sight and hearing should be tested annually in the view of 16 (25%) informants, and prostheses such as hearing aids and spectacles cleaned and maintained on a regular basis. Ideally this process should be undertaken by the residents themselves to encourage their independence. However, others such as diversional therapists also have a role, for example, in recognising that dirty spectacles inhibit a resident's ability to read.

Restraint

Low levels of physical restraint were also viewed by 40 (64%) informants to be an indicator of good quality care. Matters raised in this context included the frequency of restraint use, the regularity of restraint release when in use, and the revision of restraint orders. All informants who nominated this indicator considered its impact on confused residents to be fundamental. Many had experienced the problem of residents falling over bed rails in the middle of the night, and fracturing the neck of their femur or similar outcome. Needless to say, this defeats the purpose of having the bed rails in the first place. Informants commented that those with dementia are unlikely to recognise or remember the need for the cot sides. Mention of chemical restraint was confined to four registered nurses. As with continence management, suggestions from this group have been incorporated into the Australian Quality Matrix, and are discussed in detail in Chapter 6.

Resident transfers

Comfortable and safe resident transfers were considered important to good quality care by a third of all bedside carer informants. Previously nurses used to lift residents unable to move themselves. However, mechanical lifters and appliances such as slip sheets have reduced the need for direct human intervention in this regard. This holds implications, both good and bad, for clinical and other indicators, such as skin integrity. It takes longer to attach residents to mobile slings, and the machinery itself generates apprehension and anxiety in some residents. The need for explanations, in terms that residents can comprehend, and the need to repeat them periodically, to reinforce this knowledge, is important. Staff training in the use of these devices, plus regular and appropriate maintenance of equipment, also form part of a quality service. Time management skills are also necessary, as those responsible for moving residents must 'factor in' tasks such as collecting the equipment, preparing residents to participate, and obtaining assistance from colleagues, among other matters. As one night shift RN advised:

It is often quicker and easier to do it myself.

Interview 1: 27.7.97

Response times

As foreshadowed, the matter of response times will be discussed, despite it having an apparently low priority among bedside carers. Many resident informants, and all members of the nursing managerial teams, nominated speedy response times as being fundamental to notions of quality care. It has

social as well as physical implications. Issues raised by residents included the time taken to answer call bells, and being left alone, sometimes in dangerous situations such as the shower, while nurses responded to other demands. Another problem consisted of being left without access to a call system, either by being located beyond the reach of the buzzer, or without a hand bell. One resident informed the researcher that she had been left wet and cold in a shower stall, without any clothes or a towel, for 20 minutes, when her nurse was taken away. She was unable to reach the call system, and when she eventually attracted attention by calling out loudly, the nurse who responded 'gave me a ticking off' for disturbing everybody else. That bedside carers did not appear to recognise the physical implications of leaving a resident unaccompanied in a shower stall is disturbing. Their ability to ignore call bells (for whatever reason), not knowing the seriousness of the situation that generated the call for help, is equally concerning.

SOCIAL INDICATORS

In pursuit of a complete understanding of quality care, social as well as clinical indicators required to be investigated. While the Commonwealth Standards provided a formal framework of social phenomena considered to be essential, the words of a resident captured this more poignantly than any dictionary would be able to achieve. A 91 year old widow described it this way:

[In social terms, quality care] is being valued, not just being cared for.

Interview 3: 10.11.97

As Table 4.8 indicates, the major indicators of high quality social care, in the opinion of bedside care providers, include contact with the outside world, leisure activities, privacy and dignity, complaints mechanisms, cultural and spiritual care, and solutions to overcome confined lifestyle difficulties.

Contact with the outside world

Perhaps not surprisingly, the most frequently nominated indicator of social care was that which might be described loosely as providing an opportunity to interact with the outside world. Forty of the possible 62 informants mentioned this in one form or another. Most obviously, this takes the form of visits from or to family and friends. It also includes exchanges with staff members whose time in the nursing home rarely exceeds eight hours per day under average conditions. Other exchanges mentioned by staff informants include resident interactions with friendly 'strangers' such as volunteers to the home, service providers such as general practitioners, hairdressers, chaplains and the like, who visit the facility on a regular basis. They are all instrumental in bringing the outside world to the residents inside.

Another fundamental component of this indicator is the ability to integrate residents' families and friends into the life of the home. This is particularly important for residents with compromised mobility. Numerous strategies were adopted by case study homes to achieve this goal. They included the opportunity for residents to extend hospitality to guests, and invite them to dine in private settings within the home. Family members were also invited to join nursing home activities such as social evenings, holiday camps and similar

events. Facility resources such as the chapel, and landscaped grounds were made available for use by family members and friends. In one instance, land adjacent to one of the rural case study facilities was made available for use as a campsite by visiting members of an Aboriginal resident's family. This was particularly valuable during the wet season, when impassable roads made it impossible to travel into town to see their loved one.

Leisure activities

Staff members also raised the same essential elements as residents and therefore it will not be discussed further, other than to state that 43 (70%) of the possible 62 informants mentioned one or another aspect of the indicator.

Privacy and dignity

Privacy is another indicator with implications for many aspects of resident care, including their social well-being and many of their activities of daily living. Twenty-one (34%) staff informants named privacy as being of major importance. Staff consider it vital for contemplation and reflection and for emotional interaction and intimacy with loved ones. Three staff, but no residents, raised its importance in the expression of sexuality. In lives lived in nursing homes this is not always easy, when bedrooms may be shared with strangers, and bathrooms located well away from beds. Privacy is also important with regard to elimination activities. Curtains around beds do not prevent the noises and smells escaping, thereby indicating to those around the nature of the activities being performed.

Cultural and spiritual care

One of the case study sites employed a full time chaplain, and each offered access to a variety of pastoral services and counselling. Nineteen staff (31%) informants raised aspects of resident spirituality, and the topics mentioned were similar to those indicated by the residents themselves. None made any reference to their own spiritual needs, although the chaplain indicated that she saw her role as providing a ministry to the staff as well as residents and their families.

Complaints mechanisms

The ready availability and easy accessibility of mechanisms for resolving complaints was seen as being of primary importance by 18 (29%) staff informants. Their concerns may be unwarranted because, as Tables 4.5 and 4.6 indicate, 43% of residents were satisfied with the resources for resolving their complaints and 62% of family members were also satisfied. Among staff members who expressed reservations, either about their own complaints or those raised by residents, the most frequently stated problem was that, while 'lip service' was paid by listening to complaints and comments, nothing ever happened. Some family members also mentioned to the researcher that they were reluctant to make formal complaints for fear of retribution against their loved one. Further, residents indicated that there were difficulties for them in making formal complaints. These included a lack of writing materials and the inability to write legibly.

Confined lifestyle

Recognition of the difficulties associated with a confined lifestyle was considered a hallmark of high quality care by 16 (26%) bedside carer informants. Issues raised in this regard include residents having the same scenic outlook all the time, particularly consequential for bed fast residents. Other matters included the inability of some residents to go shopping or indulge in other entertainments when the need or desire arises. Staff and family members indicated that they were willing and happy to provide this service to their resident or loved one. However, some residents expressed discontent at being dependent on staff or family, and also the loss of the pleasure of the experience itself. Four of the case study facilities offered shopping trips on a regular basis, in recognition of the need to meet this indicator of social well-being. However, several staff and resident informants mentioned the extra work and logistical difficulties associated with accomplishing this activity. This response reflected the concerns expressed by 'Mr Smith' in relation to his bath, which were described in Figure 4.1.

MANAGERIAL INFORMANT RESULTS

As Appendix 4 indicates, managers were invited to comment on a range of topics that were not raised with either resident or staff informants. This usually occurred because these were issues about which the other categories of interviewees would not have been obliged to hold views, as a condition of their professional duties. Naturally, as individuals, many are likely to have personal opinions about any or all of the matters listed below. However, topics such as the proprietorship of the home, the philosophical approach to its

administration, the management of its human resources including the work schedules and time lines for fulfilling its responsibilities, the recruitment and retention of staff, and their education levels, are the domain of management in the usual course of events.

PROPRIETORSHIP

The matter of proprietorship was raised exclusively with managerial informants, because of their proximity to the issue. For example, in two of the case study facilities, the CEO was also the owner or proprietor. Harrington (1984) and Bates and Linder-Pelz (1987) have queried whether there is a discernable difference between care provided in facilities owned or operated in the not-for-profit (NFP) sector, and that provided in the for-profit (FP) commercial sector of the aged care industry. Furthermore, in some jurisdictions state governments also operate residential aged care facilities. Historically, these homes did not receive Commonwealth subsidies and therefore were not obliged to comply with the (previous) Commonwealth Outcome Standards, so the issue of the quality of the care being delivered in them was also one of potential concern. In the move to industry accreditation, the majority of state-run homes have also indicated their willingness to comply with the new Commonwealth standards, irrespective of their funding arrangements. Hence, past anxieties about the quality of care in state-run homes no longer apply.

Confining any observations to the nine case study sites, there was no empirical evidence, and no discernable difference in the nature or quality of care being delivered *at the bedside* of each type of facility. Later in the chapter some

differences, which might be attributable, indirectly and in part, to the proprietorship of the establishment, are discussed. Furthermore, in Chapter 5 on the results of the national survey, statistical differences between FP and NFP facilities are analysed in detail.

As in any commercial versus charitable venture, profits or surpluses have different destinations. Managers in the case study homes from the NFP sector were keen to tell the researcher that their surpluses are all returned to their clients, in this instance elderly residents, while implying that proprietors in the commercial sector must meet the expectations of their shareholders or other interested parties. However, the FP managers were equally adamant that, during the current 'challenging' environment for the nursing home industry, profits must be reinvested in infrastructure and services, to attract new residents. This was especially true at the time of the case studies (July 1997 – January 1998) in locations such as the Gold Coast in Queensland, where the supply of beds exceeded the demand from potential residents.

All providers receive the same levels of Commonwealth resident subsidies, which are tied to the resident's condition (what level of care they need) and to their assets (whether or not residents are financially disadvantaged). However, until the advent of the Goods and Services Tax in July 2000, and certainly during the period of the case studies, the not-for-profit sector received a range of 'hidden' subsidies, such as taxation concessions, capital grants for infrastructure development, and supplements for rural and remote services, to nominate a few.

PHILOSOPHY

Each executive level informant, irrespective of the type of facility they administered, claimed that they, as individuals, and the facility they managed, were influenced by philosophies of care. In all but one case study home, each facility had a Mission Statement that was displayed in a conspicuous position in their front entrance or other suitable public location. Further, each informant indicated that they and their Board or proprietor fully endorsed the principles of Residents Rights, as outlined in the Commonwealth's Charter of Residents Rights and Responsibilities (1987). They were also unanimous that each strove for the provision of what was termed under the previous Outcome Standards a *home-like environment*. (This phrase does not appear in the Accreditation Standards but, as noted above, the case studies were conducted prior to their introduction.) When asked to nominate their indicators of quality care, all managers indicated that meeting the (then) Outcome Standards, and meeting resident expectations, were the criteria by which they judged the performance of their facility.

With regard to meeting resident expectations, this was measured using a variety of techniques. Each of the non-government facilities conducted anonymous resident/family surveys on a regular basis and all had Resident Committees that met monthly, or at the convenience of the residents. While residents chaired these committees, managerial personnel were always represented at every gathering to which they were invited. Separate Complaints Committees or similar mechanisms existed in each home, and each also had a

suggestion box for anonymous suggestions, although the researcher was advised that residents seldom used them.

With regard to the three government facilities, two were of such small size that feedback occurred as part of everyday exchanges. The third, a 50 bed facility in which all but two of the residents were Aboriginal, adopted a somewhat different approach. A Residents' Committee had been established at an earlier period, in which no one was willing to participate (according to the DON). The current strategy is for an Aboriginal Liaison Officer (ALO) to include 'resident feed back' as one of her prescribed duties. Once a month, and as the need arises, the ALO seeks the views of all residents, and they are conveyed to the DON, either as part of their monthly Resident Review, or immediately they arise, in the case of urgent matters. The ALO is also included in the periodic meetings with the Area Health Board CEO, who has administrative responsibility for the facility.

Other indicators of quality adopted by managerial staff included high staff retention rates, and levels of staff education. They are discussed in the next section of the chapter.

In addition to an adherence to the prescribed philosophical approaches of the Commonwealth and the proprietors, each executive offered comments about their individual attitudes. A characteristic response was given by a DON in a NFP facility:

Both my personal philosophy and that of the organisation is based on the Christian ethic. Our duty is to act as advocates for the residents and their families. We are further obliged to ensure that individual staff members understand and adhere to the general organisational principles, irrespective of their own religious or philosophical approaches to life.

Interview 1: 26.8.97

Other informants addressed the matter of ensuring a caring environment. All non-metropolitan facility managers, in addition to two of the four city based executives, made mention of a culturally sensitive service. The two homes in which this was not raised had extremely homogeneous populations, which may account for the lower level of leader awareness. Managers, but not DONs, used terms such as being the 'coach' of the team, or the 'parent' in a family. This may reflect the gender differences in occupations, or the different types of work performed in the two positions. Note was made of vision and commitment, and the need to ensure that the organisation is effectively and efficiently governed and managed to ensure quality care. All private sector informants addressed the Commonwealth Accreditation and Certification issues in one form or another, each aspiring to achieve this within 12 months. Those homes (1 FP, 1 NFP) which had also implemented Australian Council of Health Care Standards (ACHCS) or International Standards Organisation (ISO) quality programs made a variety of remarks about the experience. General comments included:

Quality is being dynamic, in moving forward. Each endeavour should be looking to take the next step.

CEO, FP Home. Interview 1: 13.1.98

Another said:

[Quality is] achieving a more approachable management team, with increased staff involvement. Better educated staff equals better care.

ADON, NFP Home, Interview 4: 19.11.97

A third stated:

Quality is assured with the use of external appraisals, with resident and family surveys, and a complaints mechanism that is chaired by the DON.

Administrator Gov. Home, Interview 6: 18.7.97

It was evident to the researcher, and (hopefully) is evident to the reader that, with regard to quality care, all three forms of proprietorship: commercial, NFP, and Government, in the case study sample, were equally diligent.

HUMAN RESOURCE MANAGEMENT

One of the major topics of concern to managerial informants was that of staff. With the possible exception of nursing homes run by religious orders, none of which featured in the case study sample, at least one of the reasons why people work in nursing homes is as a source of income. The NSW Health Department Nursing Specialty Workforce group (1999) estimated that, in 1997, the aged care workforce in that state included 10,525 registered nurses. This estimate did not include enrolled nurses, assistant nurses or support personnel of any kind. Furthermore, it represented only one state, albeit the largest. That is to say, the implications of human resources in the aged care industry for the national economy are immense (to say nothing of the voting power of its

constituent members). However, the motivation that drives workers to engage and remain in such employment, and its contribution to the ideal of optimal quality care, is highly variable.

There were 80 paid personnel among the 121 case study informants. Approximately one third (n=29) informed the researcher that they had deliberately sought employment in this industry because they wished to care for the aged. While none held idealised views of the nature of their occupation, four managers or DONs, including one from the FP sector, claimed that many of their staff had a 'vocation' or 'calling' to work with the elderly. Interestingly, two (white) registered nurses in the remote nursing home informed the researcher that they had a similar philosophy, but to act in the service of Aboriginal people. Perhaps not surprisingly, the group with a vocation were distributed in the ratio of approximately 2:1 in the not-for-profit sector. Eighteen were employed in church or charitable facilities, two in government homes, and nine in the commercial sector. All of the Directors of Nursing of the nine facilities expressed views of this type, as did the four CEOs from the NFP homes. The other 16 informants occupied positions at every level of the industry, from environmental services to Assistant Director of Nursing.

Managers informed the researcher that a variety of other reasons for seeking work in their facility were offered by potential staff members. These included the convenience of the location, the opportunity to work part time, at hours to suit themselves, and the regularity of the pay packet, being the most prominent.

Least it be construed otherwise, it should be stated that, in so far as it is possible to tell during observation periods, the researcher found that there was little apparent difference in the outcomes of either group. All members of the second group appeared to be thorough and conscientious, and fulfilled their duty of care to their residents with diligence and kindness. They may not have claimed to have a vocation, but in terms of their day-to-day performance, each group was equally concerned for the well-being of those in their care.

WORKLOAD

Pearson et al. (1996) and Courtney (1995) have highlighted features of residential aged care facilities as a work environment. All managerial informants commented on the quality of the work experience for both themselves and their staff and, by implication, the quality of the care they deliver. Issues raised by managers included the volume of the work, staff education levels, and harmonious relations between staff members and between care staff and managers.

The volume of work to be completed each shift was raised by 34 of the possible 62 non-managerial staff informants, in addition to comments made by managers. Each expressed the view that there was too much to do for the time available to ensure its thorough completion. Comments included statements such as:

There is only time for personal maintenance, not quality care.

(AIN, Interview 3: 11.11.97)

and

I only go home when the work is done.

(RN, Interview 9: 18.11.97)

The volume of documentation required, particularly by registered nurses (to demonstrate the work performed and justify subsidy claims), was of significance to all 26 non-managerial RNs in the sample. In particular, the need to write care plans in a noise free, unhurried environment meant that 21 RNs took these documents home to complete, fully aware that it is illegal to remove material from the nursing home. The DONs admitted they knew about this practice, but chose not to 'know', because they claimed that they did not have the financial resources to provide supplementary staff to enable the RNs to be relieved from their clinical duties to attend to documentation.

Duplication of documentation is another problem according to 17 informants. For example, in some facilities assistant nurses are required to complete 'tick sheet' or write down the daily care provided to 'their' residents on pieces of paper. This information is then transcribed onto progress notes for RCS assessments or other purposes by the registered nurses.

WORKING IN NOT-FOR-PROFIT HOMES

One feature of the case studies, which is of importance at this juncture because it was prevalent in three of the four NFP homes, but none of the others, is the amount of unpaid overtime the researcher observed being performed routinely by registered nursing staff. Three possible explanations are offered to account for this, although caution is expressed that the sample size is too small to draw

any statistically significant conclusions. Further, it is important to note that the ratio of RNs to residents did not differ between FP and NFP homes, and that all of the government run facilities had more staff than any of the private sector homes.

First, as indicated above, the NFP sector attracts more personnel who might be described as having a vocation to serve the aged than the other two sectors. This is particularly true at the managerial level. The behaviour of this group may be driven by personal goals to provide optimal levels of care at all times. As managers, the executives may set themselves higher standards and expect their immediate subordinates to do likewise. It is notable that none of the ENs or AINs was permitted to work unpaid overtime by their supervising RNs. Nor were environmental services/support staff permitted to remain beyond their nominated hours by their supervisors, at least during the periods in which they were observed by the researcher. It is unlikely that either the managers or the registered nurses would be willing to accept that their philosophical approach leads them to be exploited or to exploit others. However, it is interesting to speculate that if these individuals, particularly the line staff, insisted that they be paid for the extra hours they work, whether or not their church or charitable employers would permit them to work beyond their rostered hours.

A second explanation may lie in the apparent reluctance of some non-managerial RNs to pursue further education, an idea expressed to the researcher by a DON in a NFP home. Only five of the 26 clinical RNs interviewed during the case studies had completed degrees, or other updated

credentials. Only one of them worked in a NFP facility. As noted earlier, the average age of RNs in the aged care industry is in the mid 40s. Hospital based nursing training in the 1970s placed little emphasis on time-management or work organisational skills. It is possible that those who only possess credentials from the earlier era have never learned to manage their time or organise their workload efficiently. Therefore, as the volume of work has increased, they have been obliged to expend additional hours to achieve the same results as their better educated or more recently educated colleagues.

A third possible explanation arises as a result of those mentioned earlier. It is possible that under-educated, long term registered nurses are reluctant to delegate duties which in the past might have been seen as the work of the 'trained' nurse. Several were observed by the researcher to be performing semi-skilled tasks, which could be delegated to junior staff. For example, it does not require a university degree, or several nursing certificates, to place a butterfly closure on a small skin tear. It may also be that the RNs see their role being eroded by up-to-date ENs and AINs.

STAFF RECRUITMENT AND RETENTION

One of the matters that preoccupied all 22 managerial informants was the difficulty of recruiting and retaining suitable staff. This was true for all positions from senior nursing administrators to gardeners. Case study facilities varied astonishingly in this regard. One facility, in an isolated town 1500 kilometres from the state capital city, with a predominantly Aboriginal population, had a turnover rate exceeding 200%, in the year before the case

study. At the opposite end of the scale, a facility in an outer suburb of a metropolitan area had retained more than 50% of its staff for over five years, and the DON and administrator had been there for 13 and 15 years respectively. The home was one of the major employers in the area, and there were very few other sources of employment except for a small retail sector.

All facilities, including both cited above, are required to use the services of agency nurses – registered and assistant – from time to time, usually to overcome staff absenteeism. In addition to the extra cost per shift which this arrangement imposes on management, it was agreed by all nine DONs that agency staff contribute little to high levels of quality care, except in the immediate emergency. Unfamiliar with residents, and resented by many permanent staff because they are being paid more for performing the same duties, agency staff are perceived to have less commitment to the work. They are only there for a short time and do not have to ‘live with’ any mistakes they make. The principal value in utilising agency staff, according to managerial informants, is to overcome an immediate staff shortage.

STAFF EDUCATION

The final indicator of a high quality service nominated by all managerial informants was that of a well educated staff. While all managerial personnel had completed university degrees or similar tertiary qualifications, only five of the 26 non-managerial registered nurse informants had degrees, or any other upgraded credentials such as Associate Diplomas. In addition, almost three quarters (n = 19) had completed their hospital-based training before 1980.

However, 18 had undertaken some gerontological sub-specialist courses run by the Royal College of Nursing Australia, or charitable foundations such as Geriaction, 14 in dementia care, three in palliative care, and one in therapeutic massage. Even this group is better than the national average, as the Phase 2 survey revealed, where fewer than 25% of RNs have completed any post basic training at all.

Team leaders from a variety of work areas made comments to the researcher about the disadvantages associated with untrained staff. Seventeen informants stated that the industry should not employ anyone 'off the street', and 12 mentioned that while environmental or support staff such as kitchen hands and laundry workers have the most resident contact, this group was the least likely to have received any formal training. Certificate Level III Courses for assistant nurses currently being offered by TAFE colleges around Australia received the endorsement of 20 registered nurses. All mentioned the improvement detectable in the quality of care delivered by those AINs who had completed the program. This endorsement was not universal, however. One respondent considered the program to be undesirable, stating:

A little knowledge is dangerous.

RN, Interview 6: 17.1.98

It is ironic to note that, when the researcher inquired what individual managers were doing to encourage the development of a better educated workforce, over half indicated that this was a private matter for each employee. Four indicated that they subsidised a proportion of course fees for all personnel willing to

undertake further training, but none paid for non-managerial staff members to attend conferences or seminars outside those related directly to their work. No staff member below the level of a registered nurse was ever released to attend a conference or seminar, even if they were willing to meet the fees themselves. If gardeners or housekeepers wished to enhance their professional skills, they were obliged to do it in their own time as well as with their own funds. With the advent of accreditation, all homes will be required to meet Standards 1.3, 2.3, 3.3 and 4.3, which address the matter of education and staff development. This may help to achieve a better educated aged care workforce in the 21st century.

CLINICAL INDICATORS

Because the duties associated with administering a residential aged care facility rarely required those who occupy managerial positions to deliver 'hands on' care, this category of informants were not asked questions about indicators of quality care as they pertain to the activities of daily living. However, 10 of the 11 DONs or DOCs were registered nurses, and the matter of clinical indicators of high quality care was raised with them. When asked to nominate the major clinical indicators of high quality residential care, all 26 RNs who worked at the bedside stated that the absence of decubitus ulcers was the pre-eminent factor. While five managerial RNs also mentioned low rates of pressure ulcers, only two ranked it first. Hydration management was the clinical indicator nominated most frequently by managerial nurses. This was followed by rates of pressure ulcers, infections from all sources, poly pharmacy, skin integrity and other skin related issues. The differences in priorities between each group were

statistically significant and have been reported elsewhere, (Courtney & Spencer 2000).

CULTURALLY APPROPRIATE CARE

Perhaps the greatest weakness in the structure of the aged care industry observed by the researcher concerns care available to those whose race or ethnic background is not that of the majority of the population. Despite, or sometimes because of, the application of national standards, significant numbers of elderly consumers of aged care services are not having their needs met in the manner most appropriate to them. Lack of cultural sensitivity is also an issue for staff and managers as well as residents.

ONE 'STANDARD' DOES NOT FIT ALL RESIDENTS

In 1987, the Commonwealth introduced 31 Outcome Standards for residential aged care, against which it was claimed that quality of life and quality of care should be measured. In a 1993 review of these Standards, Braithwaite et al. stated that:

... in its fundamentals it is a better designed process than that operating in any of these countries [USA, UK, Japan, Canada] ... over the long haul it is the Australian regulatory processes that stands a better change than these alternatives of securing substantial improvements in the quality of nursing home life and better value for the tax payer's dollar.

(Braithwaite et al. 1993b, xi)

Contrary to the findings of these consultants, the nine case studies demonstrated a different outcome. Compliance with the Commonwealth

Standards did not always result in all residents across the nation achieving the quality of life and quality of care to which the government loftily aspired. In particular, those who were not from the cultural majority or who resided outside the major centres of population were at considerable risk of having their preferences of a lifetime being ignored, or even deliberately rejected, in the name of meeting the standards. For example, the researcher was told that single bed rooms with en suite bathrooms are an anathema to elderly members of the Aboriginal community, who prefer to sleep in company, with multiple companions, in communal rooms, or preferably in the open. The use of toilet pedestals, frequent washing of their bodies, or the wearing of multiple layers of clothes, represent unusual activities for those who have lived most of their lives in remote bush settings.

It was not uncommon in several of the rural or remote homes with Aboriginal populations visited by the researcher for residents to avoid the use of underwear, to perform their acts of elimination wherever they were at the time the need arose, and to resist bathing more than once a week. While residents in a suburban home in a capital city are unlikely to void over the veranda railing, and even those with a dementing illness are unlikely to do this, the contrary may be true for some Aboriginal seniors. In so far as it is possible, the DONs and members of staff of homes with predominantly Aboriginal residents, permit them to follow the behaviour patterns of a lifetime. However, Standards Monitoring Teams, made aware of these behaviours, could choose to designate the relevant standard as being 'not met'. This could bring the home into disrepute, despite the fact that it was offering a culturally empathic service.

SPIRITUAL CARE

Spiritual care is also a principal component of a culturally empathic service. The researcher was advised that, for many Aboriginal seniors the need to stay in their own country is essential to their spiritual well-being. In one community visited by the researcher, where the nearest nursing home was 200 kilometres to the north, elderly locals, their families and, in many instances their medical advisors, resisted referral to the Aged Care Assessment Team with great intensity. The potential residents were fearful of being 'dispossessed' of their country. One previous resident of the hostel – the town's major aged care facility, who was relocated to the northern nursing home, absconded within hours of being admitted. Despite an extensive search, his body was never found.

This fear has a subsidiary outcome. Carers are reluctant to draw the condition of their relative to the attention of the health authorities. Consequently seniors are being looked after at home for much longer than is usual, and the carers are even more exhausted than their European equivalents. In addition, conditions such as diabetes, which require continuous monitoring, deteriorate for want of supervision. The researcher is of the view that more residential facilities are not necessarily the answer in these situations. Community Aged Care Packages or similar initiatives are a more cost effective and socially desirable solution to circumstances such as these.

FOOD

The matter of culturally sensitive menus was raised by some residents and their families, and also by each category of professional informants. While only three residents and two family members expressed dissatisfaction with the attention paid to the dietary customs of their country of origin, 22 (35%) non-managerial informants nominated it as an indicator of high quality care. Furthermore, all managerial respondents concurred with the researcher that observance of all cultural traditions, including the menus of their residents, was a fundamental principle of their managerial style. However, only four mentioned it without prompting.

HUMAN RELATIONS

The matter of staff retention was discussed earlier. In the rural and remote case study homes, as many workers as possible from the culture of origin of the majority of residents are employed, in a variety of positions. For example, Aboriginal Liaison Officers or equivalent positions were on the staff complement of all the case study sites in these locations. Where available, Aboriginal assistant nurses, activity officers, and kitchen hands were also employed in both the homes, and in any other services, such as a Day Centre.

However, each administrator and DON informant of these facilities (all of whom were white) expressed some concern about their Aboriginal employees' attitude to their work. Late arrivals to commence duty, and greater absenteeism without timely warning to obtain substitute staff were two problems frequently mentioned. While each manager recognised that conformity with the 'white

Anglo Saxon Puritan' (WASP) work ethic is not the only indicator of quality care, the researcher was left in no doubt that being empathic to cultural sensitivities has sometimes resulted in managerial misgivings that they are not meeting their own duty of care.

It is recognised that the focus of this discussion has been on homes with a large proportion of Aboriginal residents. This is because homes in this category featured prominently in the case study sample. However, one of the homes in the pilot test stage of Phase 2 provided care to a multicultural client group. In addition, questions in the national survey invited reactions from providers in culture specific homes, and it is hoped that this provides insight into many of the non English speaking background groups for whom the Australian aged care industry aspires to deliver a service.

SYNOPSIS

Phase 1 of the study comprised a series of nine case studies in four states during the period July 1997 to January 1998. It was undertaken to establish present practices associated with the delivery and monitoring of quality care, and to provide information for the survey instrument developed in Phase 2. This chapter has described the indicators associated with clinical care, services provided to meet the activities of daily living, and the social dimensions of the lives of residents in the case study facilities. Further, it acknowledged the inter-relationship between quality of care and quality of life, particularly during the investigation of social indicators of care. The following chapter presents the outcomes of Phase 2.