A study into the electronic transfer of patient data between hospitals and long term care facilities

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Introduction:

1.1   Background and Rationale for Study

1.1.1 An Ageing Population

The World Health Organisation (WHO) predicts that by the year 2025 approximately 10% of the world's population will be over-65. This figure will amount to approximately 800 million people globally. In 1997 over-65's made up 6% of the world's population. This prospect of increasing longevity also brings with it the expectation that this will lead to a rise in demand for long-term residential care. (WHO, 1998; Forster et al 2009) This expectation is also substantiated based on the projected decrease in the proportion of working people, if the population is getting gradually older, which will therefore put "unprecedented stresses on societies and medical resources" (Marshall et al, 2002, p. 313).

1.1.2 Irish Long Term care system

The Health Service Executive (HSE) in Ireland has traditionally divided the broader population in Ireland into two categories – over 65 and under 65. For the purposes of this study when the researcher refers to those patients for long term care they are referring to the over 65 population.

Long term care is provided by Public, Private and Voluntary organisations in Ireland. Note: Voluntary organisations in this category are generally services for people with intellectual disabilities who operate a 'cradle to grave service' for people under their care regardless of age.

The HSE, in recent years, has taken to paying for public patients to be discharged to private nursing homes via Delayed Discharge Initiative funding in an effort to alleviate the pressure on acute hospital beds also.

Up until July 2009 the HSE commissioned its own Inspectorate reports on all long term care/nursing home facilities.
(Ref:
http://www.hse.ie/portal/eng/Find_a_Service/Older_People_Services/Residential_Care/Nursing_Home_Reports).

In July 2009 inspection of long term care facilities will fall under the remit of the Health Information and Quality Authority (HIQA).

1.1.3 Determination of need for long term care

Currently, in Ireland no standardised needs assessment or standardised data collection instrument is used in relation to assessing the care needs or provision of services for older people.

For the purposes of clarification the researcher refers the reader to a definition of a standardised assessment as 'any empirically developed examination with established reliability and validity as determined by

repeated evaluation of the method and results'. (Mosby's Medical Dictionary, 2009)

In the Government policy document 'Towards 2016' it refers to the fact that 'the HSE will develop a national standardised care needs assessment which will be completed by the end of 2006' (Dept. Of An Taoiseach, Towards 2016).   No reference is made in this document, however, in relation to:

        a) What this standardised assessment could be?

        b) What information this assessment will gather?

        c) How will the information be managed and used?

In October 2008 the Health Service Executive introduced a Common Summary Assessment Record (CSAR) to compliment the development of the 'Common Assessment Process' (CAP) which was developed based on the HSE Expert Advisory group document 'Clinical pathways to long term residential care' (Ref: Hartigan, 2008) and in preparation for the new nursing home support scheme - A Fair Deal, (HSE, 2008) for which legislation has been drafted but not passed.
The CSAR will undergo reviews in the coming months. It is a paper-based record whose purpose is to collect relevant information concerning older people who are being transferred to residential care facilities.   It is transferred via fax/post to residential care settings.

The Health Information and Quality Authority (HIQA) have published guidelines entitled 'National Quality Standards for Residential care settings for Older People' (HIQA, 2008). In this they suggest that a standardised 'Minimum Data Set tool' should be implemented in order to promote equitable assessment and needs identification for those people going to and residing in residential care.

HIQA's website gives a background and purpose to the new standards:

"The standards are a significant milestone for the protection of the rights of older people in residential care settings across the country. They will guide and assist service providers in the provision of the highest quality of care to their residents. The purpose of the standards is to promote best practice in residential care settings for older people and improve the quality of life of residents in these settings...... The quality standards have been developed based on legislation, research findings and best practice. Development of the standards was done in partnership with service users, service providers, healthcare professionals, older people's representative groups, the Department of Health and Children and the Health Service Executive. These standards were published following an extensive consultation process with the stakeholders mentioned and the wider public".

All in all, this is a time of significant change and progression in the long term care service provision sector in Ireland.

1.2   Research area of interest

The researcher's work with a Discharge Planning Team in an acute hospital highlights on a daily basis the demand for long term care beds. It also highlights that there are significant numbers of patients occupying acute hospital beds and delaying discharge whilst awaiting appropriate placement in a long term care facility. In the UK, the National Audit Office 2003 echoes this fact and reported that "the most common causes of delay in discharges from hospital are patients awaiting placement in a nursing or residential home". This is an 'important population' as far as the HSE is concerned, and with increasing numbers of older people it is only going to become more important.

On a day to day basis, the team I work in is involved in collating information concerning potential transfer of patients from acute hospital to residential care settings. The current paper-based system is a number of pages long and the timeframe for its completion within the hospital varies hugely. In addition to the completion time, the documentation is such that there is no clear 'ownership' of the information that is transferred. Likewise, there are no clear guidelines on the management of the information and data that is transferred about patients to long term care settings.

From a health informatics perspective the researcher speculates that there has to be a more efficient way of acquiring, managing and transferring relevant patient information between hospital and long term care settings.

1.3   Research Question

What are the optimum means and methods of transferring relevant patient information from acute hospital to long term care settings?

1.4   Research Hypothesis

That the use of an informatics application, such as the inter-RAI Minimum Data Set (MDS) would be of mutual benefit to patients and staff alike in the transfer of patient information between hospital and long term care facilities.

1.5 Research Aim

To carry out research into the means and methods that could enable the electronic transfer of needs assessment information for patients being

discharged from an acute hospital to a residential setting in a timely and efficient manner.

1.6 Research Objectives

The key objectives of this research in order to achieve the aim as outlined above are to investigate:

- Relevance of and examples of standardised assessments in the area of long term care patients?

- How is long term care patient information currently being transferred from acute hospital to long term care settings?

- How might long term care patient data be transferred electronically? Are there any existing tools that can do this job currently?

- Exploration of health professional user's perspective – attitudes, potential acceptance of IT, computers and electronic health records.

- Is there a need or desire for change from current paper-based system to electronic information transfer of long term care patient information?

1.7 Scope of Study

This study seeks to answer questions as outlined in the research objectives (Section 1.6) as a means of informing the general body of knowledge in Ireland in relation to:

a)   Methods of capturing long term care patient information and

b)   Options and opinions of end-users as to whether or how this information could be dealt with electronically.

The long term care/residential care sector for the over-65 population is at a key point of significance in Ireland currently due to three main factors:

1)   Steady increase in numbers of people ageing and requiring admission to long term care facilities from acute hospitals. Note: The people waiting either funding for long term care or nursing home beds themselves make up the vast proportion of the Delayed Discharges as per HSE Delayed Discharges National Report. (Ref: HSE 2009, as reported in Irish Independent June, 2009).

Note: *HSE Definition of a Delayed Discharge:*

Patients who have completed the Acute phase of their care and are medically fit for discharge.

2)   New Government legislation concerning the funding of long term care beds in the over-65 population is in its final stages – 'A Fair Deal'.

3) Change of governance in the process of nursing home inspections as the Health Information and Quality Authority (HIQA) under the remit of the Chief Inspector of Social services takes over from the HSE. This means that "for the first time HSE run centres, as well as private and voluntary nursing homes will be subject to independent registration and inspection". (HIQA website http://www.hiqa.ie - last accessed 2/7/09).

Health professional 'user' feedback and opinions and analysis of same will be the methods employed by the researcher to answer the aims and objectives of this study – by drawing correlations and comparisons.

This study will not be generaliseable as it is a stand-alone piece of research at this crucial time in the long term care sector in Ireland. The researcher would hope the study will offer an insight to policy-makers and challenge those looking into changing potential methods of data collection and assessment for this population to take note of health professional user feedback, international evidence and potential electronic applications to transfer this important information between hospital and long term care settings.

1.8 Assumptions

The researcher deems the following principles to be true on the basis of reason and logic:

1. All participants are not compelled to participate in this research but do so of their own volition.
2. There is no negative consequence to not filling in the questionnaire in this research.
3. Completion of questionnaire implies consent on the participant's part to partake in this research.
4. Ensuring quality of patient information and care is important to all health professionals.
5. Place of work has no bearing on quality of care provided to older patients.
6. Data analysis is not influenced by the researcher's bias but reflects the contribution of the participants in this study.

1.9 Target Population for Research Study

Health professionals who are involved in the assessment and transfer of patient information to/from acute hospital to long term care settings in a specific geographical area in Ireland.

    a) Health professionals in acute hospitals involved in needs assessment and transfer of information concerning patients to long term care settings currently.

b) Health professionals working in long term care settings (public or private) who receive patient transfer information from acute hospitals.

1.10 Limitations

The researcher draws the reader's attention to certain limitations in this study that need to be acknowledged:

Sampling:

Mainly on account of resource constraints (money and time), the researcher used a geographical limitation of the Dublin area to obtain the sample of participants for this research study from the population of:

a) ***Health professionals in acute hospitals***

The sample selection was limited to one site only - the acute hospital the researcher works in. There are 7 acute hospitals in the Dublin area; all of these would be involved in the transfer of patient information to long term care facilities via HSE documentation.

The reasons for this method of sample selection were not just due to convenience but also for the following reasons:

- It is not known to the researcher if each hospital manages the patient information and long term care patients in the same way, therefore attempting to generalise in this population area could be difficult from the outset.

- Attempting to ascertain an appropriate contact person(s) in other acute hospitals in the greater Dublin area was deemed as being time-prohibitive as well as a costly exercise as:

  i) not all health professionals in an acute hospital would be involved in the transfer of such patient information and,
  ii) the numbers of long term care patients in each hospital would vary considerably and between different types of wards within the hospital.

b) ***Health professionals in long term care facilities***

The sample of health professionals working in long term care facilities was obtained from the HSE website where it details lists of nursing home inspectorate reports for all private nursing homes that have been HSE approved specifically in the Dublin area.

Bias:

A single researcher was involved in the data collection, analysis and interpretation of data. This researcher had also worked with some of the participants from the acute hospital setting in her capacity as a professional. However, as participation in the research study was both anonymous and voluntary, it was felt this would reduce the level of potential bias to a degree.

Research study design:

As this was not a longitudinal study, but rather a 'snap-shot' in time, cognisance must be taken if attempting to generalise the results of this study to the transfer of long term care patient information across all services in Ireland.

Chapter 2

Literature Review:

This review will be guided by the key objectives for this research as outlined in Chapter 1 - namely to investigate:

- Relevance of and examples of standardised assessments in the area of long term care patients?

- How is long term care patient information currently being transferred from acute hospital to long term care settings?

- How might long term care patient data be transferred electronically? Are there any existing tools that can do this job currently?

- Exploration of health professional user's perspective – attitudes, potential acceptance of IT, computers and electronic health records.

- Is there a need or desire for change from current paper-based system to electronic information transfer of long term care patient information?

2.1 Literature Scope

Publication databases used for this review included Academic Search Premier, CINAHL, Emerald, Index of Theses, Pub-med and Science Direct using TCD online access. Databases were searched for the following Key Words, singularly and in combinations.

- Older people/Elderly

- Long term care/Residential care

- Needs assessment

- Standardised assessment

- Patient transfer (information)

- Hospital discharge

- Minimum Data set

- Informatics

Academic journal articles were the primary sources of reference; these journals, in summary, covered key subject areas such as:

- Medical

- Nursing

- Informatics

- Older people/Elderly/Ageing

- Quality and Health Management publications

- Health technology

Additional literature was obtained from hand searches in reference lists from relevant studies obtained via databases searches.

In addition, International Government policy and documents were recognised; most notably in the US and UK as well as the Organisation for Economic co-operation and development.

Lastly a search was carried out in the Bibliography section of the Inter-RAI organisation website (http://www.interrai.org). This contains over 500 peer-reviewed articles specifically about the minimum data set.

2.1.1 Literature Timeline

At this point it should be noted that the researcher did not limit the original search to a specific date range. The reason for this relates to the fact that a significant trend and discrepancy has been noted overall within the literature in terms of emphasis between US and rest of the world. US literature in relation to standardisation of information for long term care patients relates mainly to the Minimum Data Set (MDS) as there was a legislative and reimbursement mandate for its usage. This was developed and introduced in the early 1990's in the US – much of the data concerning its reasons for development and early implementation is captured in earlier publications.

In summary, therefore, time limitation for literature search stemmed from the early 1990's to the current year, 2009.

2.2 Clarification of Terms
- Patient/Client/Resident will be used interchangeably.

- Older people generally access services at 3 potential points – Hospital (patient), Community (client) and Residential care (Resident)

- Long term care/Residential care will be used interchangeably also.

2.3   Rationale for a standard approach to assessment

This review is guided by the main objectives as outlined in the introductory chapter to this research:

- Objective 1: Investigation of relevance of and examples of standardised assessments in the area of long term care patients?

2.3.1 "Standardisation"

By standardisation the researcher refers to four areas of standardisation that are recurrent themes in the literature reviewed. These are:

- Standardisation of and agreement on Definitions, Language and terms (NESF, 2005; Hirdes, J.P, 2006)

- Standardised assessment instrument (Hawes et al, 2007)

- Standardised assessment process, though some literature would make the point that with the use of a standardised instrument would automatically lead to a more standardised process.

- Standardised clinical data systems (Gray et al, 2008)

  Gray et al, 2008 summarise the potential benefits of such standardisation to an older person at the end of the day as "improving the effectiveness, efficiency and administration of health systems by facilitating electronic records; creating a common language among clinicians and providing data for outcome assessment, case mix analysis, quality monitoring, benchmarking and planning". (p. 536).
  The US had the foresight to recognise that standardised assessment data would not only be a useful source of clinical, resident-specific information to assist with care plans, but that it could be a source of management information to track case mix and allocate staffing resources (Rantz, M.J, 1999).

2.3.2 Worldwide examples of standardised assessments and processes in the Long Term Care population

- **United States: Resident Assessment Instrument Minimum Data Set (RAI-MDS)**

This has been a mandatory standardised assessment since 1991 and is used in all nursing homes in the US. (Hawes et al, 1997). The US was at the forefront of standardisation of assessment for residents and potential residents of long term care facilities. It was developed following a series of scandals in relation to quality

standards of nursing home care in the US. In the 1980s, the US congress requested the Institute of Medicine to study the issues around quality of care in nursing homes – a Committee on Nursing Home regulation was established.

In 1986 the committee's landmark study was published; its recommendations included revised performance standards and that there would be a stronger legislative role in improving quality. The Legislation that was passed following this was the 'Federal Nursing Home Reform Act' (1987) and the 'Omnibus Budget Reconciliation Act' (OBRA) (1987).

The Health Care Financing Administration (HCFA) 'commissioned' a team of experts to design an appropriate instrument based on research that would facilitate monitoring and improving quality standards and care planning in nursing homes. Its second aim was to assist in tracking payment rates.

Informatics component and health information from the MDS

 From the outset the minimum data set (MDS) was designed to be computerised; for data to be submitted electronically and for a database to be generated and used to be able to use the resident-specific information gleaned on a widespread level to track, measure and monitor the quality of care provided. (Morris et al, 1990)

- **UK: The Single Assessment process (SAP)**

The Department Of Health in the UK (2002) set out a National service framework for older people, part of which was to implement a single assessment process –

Aim: to improve the health and social care of people in the UK and use healthcare professionals effectively, avoiding duplication. This assessment is based on four levels of assessment; Contact, Overview, Specialist and Comprehensive. It refers specifically to an assessment like the Minimum Data Set to be used as part of the overview assessment.   It lists 38 standards and legislatively falls under the Care Standard Act 2000 and National Minimum Standards Care Homes for Older People.

- **Australia: Aged Care Assessment program (ACAP)**

This comprises of a set of 4 standards with 44 indicators. It is accredited by the Aged Care Standards and Accreditation Agency and under the legal regulations of the Aged Care Act, 1997.

- **New Zealand: National Needs Assessment**

Has a national need assessment used in the health and disability sector, and consists of 6 outcomes with 42 standards. The legal requirement governing it is related to necessary certification audits by auditing agencies and three other legal acts.

- **Ireland: The common assessment process (CAP) – Common Summary Assessment Record (CSAR)**

The Common Assessment Process is being developed in Ireland based on a document published by an Expert Advisory group – "Clinical pathways to long term Residential care". The Common Summary Assessment Record (CSAR) (HSE, 2008) is the first attempt at standardisation as the HSE requests that it is used across all settings when patients are transferred to long term care. However, there is no data in relation to its reliability or its validity.

There is no legislative basis for its completion and it is not explicitly referred to in the Health Information and Quality Authority (HIQA) guidelines entitled 'National Quality Standards for Residential care settings for Older People'.

Summary:

To answer the original question posed in Objective 1 of this research - to investigate the relevance of and examples of standardised assessments in the area of long term care patients -

There is overwhelming evidence in the literature as to the reported and perceived benefits of standardised assessments and the data they generate. From an informatics as well as a general health management and government strategy point of view, as Carpenter et al (2000) also note, databases based on information from standardised assessment measures, as well as data on interventions/treatments provided could provide lots of evidence based information to guide patient care and further research.

This review is guided by the main objectives as outlined in the introductory chapter to this research:

- Objective 2: How is long term care patient information is currently being transferred from acute hospital to long term care settings?

2.4 Information Transfer between hospital and long term care settings?

While a literature review will not answer this question in relation to this study's specific target population, the researcher did seek out answers to this question in general in the literature, with a view to being able to make potential comparisons or suggest potential changes to the current process.

2.4.1 Methods of Information Transfer

The US literature on the Minimum Data Set (MDS) although it refers to the informatics aspects of central databases etc generally does not reach

consensus on <u>how</u> the MDS information is captured and transferred. It would appear to be a combination of pen and paper at assessment level with subsequent computerised data entry by a clerk or MDS co-ordinator into a centralised database.

European literature, specifically in relation to a long term care patient population, appears to be lagging behind. Of all the literature the researcher came across on electronic health records, none referred directly to a standardised information transfer of long term care patient information – but specifically electronic discharge summaries or electronic prescriptions.

The researcher would hypothesise that paper-based and oral communication would be the predominant method of transferring patient information. Studies by Lilja et al (2000), Payne et al (2002) and Hagen Tjora & Scrambler (2009) do little to alter this perception. These articles refer to telephone methods of information transfer, as well as paper-based methods with Hagen Tjora & Scrambler et al specifically highlighting one of the reasons behind lack of uptake of electronic health records (EHR) is down to it not being easy to integrate into existing workflows. This view is also echoed by Muller et al (2005).

2.4.2   Potential difficulties with Information Transfer

Transitional Care

This is defined as "a set of actions designed to ensure the coordination and continuity of healthcare as patients transfer between different locations....Representative locations include(but are not limited to) hospitals, sub acute and post acute nursing facilities, the patient's own home ...and long term care facilities". (Coleman & Boult, 2003). There is a substantial body of evidence, with Coleman being amongst the most published, that this transitional care period can put patients at risk for things such as medical and pharmaceutical errors, duplication of services and communication about elements of a person's care plan (Coleman & Boult, 2003; Coleman, 2003).

In relation to the Information Transfer specifically and how this can have a negative effect on transitional care, authors suggest the following approaches should lead to an overall positive experience by the patient as they move from one setting to another:

- Enhanced bi-directional communication - this can be either verbal or written

- Technology that will support information transfer in a timely manner.

- Policies to guide practice

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- **Fragmentation of Care**

Coleman et al (2004) refers to the 'silos of care' (p. 1817) whereby the delivery of healthcare is often fragmented and divided into distinct 'patches' of care providers that "often have their own information systems and work in distinct isolation of each other". They also highlight the potential danger this can have on older people in particular, who as they age often become frequent users of frequent services when different healthcare professionals can sometimes operate very independently of each other with no common information sharing standards. Payne et al (2002) in their literature review and analysis of 53 studies also refer to this concept of fragmentation, or as they put it the breakdown of communication about patients.

The view taken whereby information has to be transferred across 3 potential boundaries is a useful one as it also summarises some of the difficulties other authors refer to in summarising potential difficulties with information transfer; these boundaries are professional, organisational and geographical.

In summary, the researcher did not come across any literature outlining positive aspects of transferring patient information in relation to this population. This is quite disconcerting; however, perhaps it is reflective of a general trend in research to investigate problem areas as opposed to areas that are performing well.

This review is guided by the main objectives as outlined in the introductory chapter to this research:

- Objective 3: How might long term care patient data be transferred electronically? Are there any existing tools that can do this job currently?

2.5   Electronic Transfer of Long term care patient data

As with the other sections of this literature review, there is a common theme of reference to the Minimum Data Set as evidence. Of all the other standardised assessments in relation to long term care patients (see Section 2.3.2) no other assessment process outlines any form of electronic transfer as part of its procedures or guidelines.

2.5.1 inter-RAI Minimum Data Set (MDS)

In 1992, the year after the US government mandated the MDS be completed in all nursing home facilities an international consortium of geriatricians founded the 'interRAI' organisation. (Ref: http://www.interrai.org). This organisation has continued to carry out extensive evidence based research in over 30 countries worldwide on minimum data set instruments, not just with long term care data but also extending to acute care and home care to name but two areas.

From the outset the minimum data set was designed to be computerised; for data to be submitted electronically and for a database to be generated and used to be able to use the resident-specific information gleaned on a widespread level to track, measure and monitor the quality of care provided. (Morris et al, 1990)

2.5.2 Informatics component of MDS

Since its first inception and format the MDS tools have placed strong emphasis on the value of detailed and cumulative health information stored and accessible in databases.

This electronic data system that collects data from a standardised clinical data collection form and is transmitted electronically has been this way for many years. As Liu and Castle (2009) point out, the nursing home sector may have an advantage over other healthcare areas in its early adoption of and emphasis on health information technology.

2.5.3   Web-based information to software designers

The Centres for Medicare and Medicaid services (CMS) website (http://www.cms.hhs.gov) outlines detailed information for software designers on:

- Software and specifications
- Software used is known as RAVEN. The site contains specifics on processor requirements, downloading capabilities and versions, ICD 9 coding information and who to contact in the event of technical difficulties. (http://www.cms.hhs.gov/MinimumDataSets20/07_RAVENSoftware.asp)

2.5.4 Limited research relating to use of software in   MDS literature

The researcher came across only one article specifically in relation to users opinions of the informatics component of the MDS instruments. This was also the most recent journal article referenced – Liu and Castle (2009) would have also appeared to have a similar outcome as the researcher in their literature search as they comment on the fact that

"there is no published literature examining nursing homes' experiences on the use of MDS software". (p. 44).

Liu and Castle's research focused on the prevalence of commercial MDS software, range of options available in MDS automation software and whether facilities were actually taking advantage of the numerous health informatics features beyond the minimum information required. Interestingly, although the RAVEN software is available for free download on the CMS website, in their survey 82.7% of nursing homes surveyed (n=2,397) had purchased commercial software.

This would suggest that there must be an interest in the advanced health informatics features of many of these systems although their results do suggest that there is a higher usage of 'Advanced' HI in facilities where there is a low occupancy rate and high levels of 'competition' for residents admissions.

Glover and Sinclair-Smith (2000) carried out a postal survey to determine how and whether users were currently using computers, how many computer systems were involved and how easy it would be to combine data collected from different computers. However, this study did not refer specifically to the MDS but to 'computerised information systems' in general in the UK.

Hirdes (2006) highlights the fact also that "the availability of computerized health information systems is a prerequisite to successful implementation" (p. 330) of a MDS instrument.

This literature review is guided by the main objectives as outlined in the introductory chapter to this research:

- Objective 4: Exploration of health professional user's perspective – attitudes, potential acceptance of IT, computers and electronic health records.

- Objective 5: Is there a need or desire for change from current paper-based system to electronic information transfer of long term care patient information?

Note: Objectives 4 & 5 will be dealt with concurrently in discussing evidence from the literature as both topics are quite inter-linked; objective 5 can really only be answered from the data collected in the course of this research, however, examples of user acceptance and barriers to the implementation of EHRs assist the researcher in hypothesising potential answers to the 5th objective of this research.

2.6   User (Health Professionals) - Acceptance of and attitudes towards IT and EHRs

2.6.1 Research area of focus

Barron McBride and Delmer (2008) refer to the Institute of Medicine publication on Health professions education in their introduction – that "using informatics is one of five competencies all health professionals are expected to possess in the 21st century".

In the researcher's preliminary research subjectively it was noted that quite a number of the researcher's health professional colleagues would not be aware of what the word 'informatics' meant. It also led the researcher to question in general as to what health professional's knowledge and experience are using computers and IT applications in.

2.6.2   User acceptance and Attitudes

There is a multitude of references in health informatics literature in relation to user acceptance of information technology; pitfalls, what to consider etc in relation to IT projects. The researcher's experience, one which is shared by Ward et al (2008) also, is that often research and explorations of user's acceptance and attitude towards IT projects more often than not only comes into play when people are designing or implementing <u>new</u> projects. Ward et al, also concluded from their research into different studies that "attitudes of health care professionals can be a significant factor in the acceptance and efficiency of IT in practice" (p. 93).

Health informatics literature and professionals are always at pains to point out that an IT solution should not be the instigator of change in work practices, but perhaps the facilitator of change.

Identifying barriers to implementation of IT systems has been well documented in the literature with various authors citing examples of both concern expressed by health professionals and what would need to be addressed in order for an IT system to work effectively within their work.

Author	Darr et al. (Concern with IT)	Campbell et al. (Concern with IT)	Krall & Sittig (Areas to consider with IT)	Terry et al. (Areas to consider with IT)
IT Issues to be addressed	1. Managerial implications of EMR	1. A professional's 'turf'	1. Efficiency	1. Expectations of users for IT system
	2. Effect on professional autonomy	2. Efficacy	2. Usefulness	2. What is needed to use

IT Issues to be addressed				IT software?
	3. Impact on communication with other health professionals	3. Context of practice	3. Information content	3. Level of commitment to EHR implementation and adoption
	4. Facilitating research	4. Apprehension amongst health care professionals	4. User interface	4. Availability of someone to take a leadership role
	5. Legal defence	5. Time to learn	5. Workflow	5. How much knowledge of computers potential EHR users have
	6. Influence on professional hierarchy in the hospital	6. Ownership		

Figure 2.1

Summary of Table

The table above summarises some key considerations and concerns in relation to IT and the implementation of electronic records in a health professional population.

Other considerations:

Other authors refer to barriers such as inter-professional and inter-organisational barriers to communication in general and that this will automatically create a difficulty with IT implementation. Likewise, a lot of users will want an electronic record to be 'fit for purpose' (Ward et al, 2008). Lastly, education and training in IT were also cited as factors contributing to the usage and adoption or not of IT systems. Availability of computers will obviously have an impact on a health professional's usage of an electronic record also. (Chiasson et al, 2000; Lee,2005; Chan et al, 2004).

2.6.3 Computer supported cooperative work

This field of research comprises of an interdisciplinary focus between informatics and social sciences. Tjora and Scambler (2009) raise the issue of contextual awareness as a potential problem and solution within a hospital environment where electronic health information systems and health professionals meet. This scenario is not dissimilar to the context from which the researcher operates and from which research sample has been obtained for this research.

These researchers have, as they put it, developed "a significant body of knowledge on information, communication and documentation practices as well as ICT use in hospitals" (p. 520). Some things they have noted could have some resonance and things to bear in mind for this research, for example:

- The oral, synchronous exchange of patient information is at the centre of many work tasks (Ellingsen & Monteiro, 2003; Tjora, 2001; Underland, 2001).

- At clinical departments the memory of health care personnel is an important repository of patient information (Ellingsen & Monteiro, 2003; Underland, 2001)

- Extensive use of EPR (Electronic Patient Record) requires the elimination of paper-based alternatives (Laerum,Karlsen & Faxvaag, 2003)

- Clinicians are willing to use computer systems as long as they support clinical core activities and that the people are capable of using computers (Tjora & Scambler, 2009)

2.6.4 Minimum Data Set (MDS): An example of an electronic record and data transfer for long term care patients

The MDS, as outlined in the Introduction chapter, was specifically designed to be an electronic data collection tool with this long term care population. It was the only assessment the researcher came across that had an electronic health record as one of its premises. As Morris (1990) points out that from the outset the minimum data set was designed to be computerised; for data to be submitted electronically and for a database to be generated and used to be able to use the resident-specific information gleaned on a widespread level to track, measure and monitor the quality of care provided.

Carpenter (2006) also refers to the fact that consideration of "person-level data aggregated from initial contact point with the patient/client can be used for outcome and service level evaluation as well as planning" and that this approach was adopted in 1992 when the inter-RAI organisation was formed.

What is interesting to note is that in an extensive search of MDS specific literature (as guided by 500+ articles listed on inter-RAI website bibliography: htpp://www.interrai.org) in addition to a combined search of the terms 'minimum data set' and 'user acceptance' results of these searches led to 'no results' in 5 of the 6 databases searched and a mere 6 results from one database. There have been endless publications in

informatics literature outlining and stressing how important it is to consider factors such as user acceptance and acceptability in relation to the introduction and rollout of any new IT/electronic based systems. Perhaps a reason for the lack of literature in relation to user acceptance of the MDS is because it was introduced originally in the form of legislation as being mandatory, so there was limited option in the matter for nursing homes to use it.

The inter-RAI organisation have also developed a specific tool called the MDS-AC (Acute care); essentially an equivalent of the original MDS tool for long term care patients – as per all MDS instruments it is designed to be interoperable and able to communicate with other data collection instruments. Jonsson et al (2006) do refer to the fact that it is worth considering the cost in terms of length of time it may take staff to complete the assessment and whether its use is justified in terms of the extra information that will become available. However, they counteract this potential negative aspect for the user of using a MDS-AC assessment by outlining its potential benefits as avoiding "double documentation" (p. 437).

In any case, the researcher would hypothesise that the introduction and implementation of a minimum data set instrument in an Irish context would generate lots of issues concerning the informatics side to its implementation; for instance issues such as data security, secure data transfer, access to information and who is responsible for the collection and maintenance of the information.

2.7 Summary

To summarise there are numerous examples in the literature of considerations in relation to health professional user's acceptance of and usage of IT applications and tools to assist in their work.

Specifically in relation to a long term care population there is no substantive body of evidence as to user's acceptance of electronic tools and IT applications.

The literature points to the importance of user's perceptions, knowledge and attitude in relation to the success or failure of information technology applications and it is this emphasis that has guided the researcher in relation to the methods of data collection used in this research.

My research question seeks to answer 'What are the optimum means and methods of transferring relevant patient information from acute hospital to long term care settings?'   Based on evidence from the literature, the best means of answering this question is by seeking the answers from the potential users of any IT application and those directly involved in the transfer of patient information – health professionals themselves.   This has guided the methodology of this research as outlined in the next chapter.

Chapter 3

Methodology:

3.1 Introduction

The aim of this study is to carry out research into the means and methods that could enable the electronic transfer of needs assessment information for patients being discharged from an acute hospital to a residential setting in a timely and efficient manner.

This chapter will detail the objectives of this research and information on what methods were used to carry out this investigation and achieve the objectives of this study as outlined below.

3.2 Research Objectives

The key objectives of this research in order to achieve the aim as outlined above are to investigate:

- Relevance of and examples of standardised assessments in the area of long term care patients?

- How is long term care patient information currently being transferred from acute hospital to long term care settings?

- How might long term care patient data be transferred electronically? Are there any existing tools that can do this job currently?

- Exploration of health professional user's perspective – attitudes, potential acceptance of IT, computers and Electronic health records.

- Is there a need or desire for change from current paper-based system to electronic information transfer of long term care patient information?

3.3 Potential Methodologies considered

Initially, it had been the researcher's intention to carry out research mainly on the use of the Minimum Data Set (MDS) electronic tool in an Irish context. Whilst attempting to determine research methodology it was discovered, through informal and preparatory discussions that actual knowledge of what a minimum data set is may be inconsistent and scant. Thus, the researcher predicted inevitable difficulties could be encountered by focusing in specifically on implementation of a MDS tool when there could be a knowledge gap around what it is in the first place.

The researcher consulted with a well published author and expert in the field of the inter-RAI MDS tools, Iain Carpenter originally. He suggested using the actual MDS tool on a patient population and doing an outcome comparison before and after discharge to a long term care facility. This was briefly considered as a potential methodology; however, there were three main reasons the researcher did not pursue this methodology:

1) Ethical issues around use of patient assessment data – as in if the researcher discovered a negative outcome post d/c by comparison, the researcher would have no ability to act on information due to jurisdiction difficulties – i.e. employed to work in an acute hospital, not in a private nursing home.

2) Issues relating to licensing and financially gaining access to potential MDS software could be cost-prohibitive to an individual researcher. NOTE: it was discovered though, towards latter end of methodology that one Irish company had recently gained 'recognition' from the inter-RAI organisation (Ref: http://www.interrai.org). This company is Epic Solutions.

3) At the time of data collection for this research the availability of long term care beds for patients transferring from an acute hospital was extremely variable; with months of having no funding and therefore no movement of patients between settings. Therefore, completing the tool as an outcome measure would not have been achievable in the allocated time period of two months for data collection.

3.4 Target Population for Research

a) Health professionals in acute hospitals involved in the needs assessment and transfer of information concerning patients to residential care settings.

b) Health professionals working in residential care settings from whom patient transfer assessment information is received from acute hospitals.

The main 'players' involved in the completion, transfer and receipt of existing long term care patient information/documentation are health professionals trained in nursing (Staff Nurses, Clinical Nurse Managers – in Acute hospital; Nurses, Directors of Nursing – in Long term care facilities). The other staff members involved are mainly non consultant hospital Doctors and Allied Health Professionals, for example medical social workers, dieticians, physiotherapists or occupational therapists). Note: There is no universal definition for an allied health professional – depending on a country's organisation of health services the number of

health professionals within this group can vary. For the purposes of clarification therefore, an allied health professional in general is any healthcare professional who is not a doctor, nurse or dentist.

3.5 Research Design and Reasoning

A mixed methodology, non experimental research design combining Qualitative and Quantitative approaches was determined by the researcher as being the most appropriate means of data triangulation in this study. Bailey (1997) refers to the purpose of triangulation as being "to confirm information about a phenomenon and to obtain convergent validity....confidence that a finding is valid because it has been confirmed by more than one method" (p. 38).

The researcher did not come across a comparable study of managing healthcare information for this population by which to replicate methodologies. Although there has been much published literature on assessments and actually managing long term care patients needs, comparable studies focusing on information transfer about such patients is negligible.

3.6 Qualitative Method: Focus Group

The researcher was advised that conducting two focus groups with a sample from the two population targets for the questionnaire would lead to better data quality and assist in questionnaire formulation. A focus group can be used for the intentions of "understanding rather than inferring, determining the range rather than generalising, and providing insights about how people" (Krueger & Casey (2000).

3.6.1 Sampling

As it concluded, one focus group only was carried out – with health professionals working in an acute hospital. The group was a purposive sample, comprising of Clinical Nurse Managers (Grades 1 & 2), Two Medical Social workers and a Senior Occupational Therapist – i.e. health professionals who are all involved to greater or lesser extents in the assessment and transfer of long term care patient information.

(See Appendices 3 and 4 for verbatim transcription of focus group session).

Chapters 4 & 5 (Results and Discussion) provide detailed information on the topic areas discussed and issues that were raised in the focus group.

3.6.2 Difficulties encountered in Sampling

Attempts to recruit focus group participants from the nursing homes professional population proved problematic. Reasons for this were as follows:

- Potential participants:

  a) Geographical distribution of professionals

  b) Difficulties in travelling to an agreed location

  c) Lack of incentive to participate in the research, despite researcher's offer to give a talk on their professional role and considerations with nursing home residents (The researcher is an Occupational Therapist by profession).

- Researcher:

  - Wary of 'choosing' participants for a focus group as the only nursing homes well known to the researcher would be local nursing homes to the hospital and the researcher would not want to be seen to be choosing one person over another in a different nursing home as the numbers for a focus group would always be limited.

  - Time constraints; could not delay questionnaire distribution indefinitely whilst waiting scheduling of second focus group.

The researcher had also considered carrying out a focus group with the Minimum Data Set special interest group that is currently in existence in Ireland. However, having spoken to its secretary, it was revealed that the group has not met for some time, was not actively meeting currently nor had no plans to do so. Therefore, the researcher had to conclude that running a focus group with this group was not an achievable method to use in relation to documenting the aim and objectives of this research.
The intended purpose of this would have been to get further more in-depth information than can be recovered from a questionnaire. It could also have provided an opportunity to explore in greater depth potential issues in relation to how and whether this group of professionals would see the MDS being used in an Irish context, in line with the UK for example, as part of the inter-RAI organisation.

3.6.3 Design of the Focus Group

The researcher formulated a list of key topic areas to be discussed within the focus group. This list was discussed with supervisor, a clinical nurse manager in work and an occupational therapist in work as a means of piloting the appropriateness of the type of topic area and item for discussion.

Appendix 2 contains the list of questions the researcher intended on asking in the focus group

3.7   Quantitative Method: Questionnaires

A custom-designed questionnaire was necessary to develop due to lack of comparable studies as evident from the literature review. Ward et al (2008) report that much of the literature they reviewed in their research on 'the attitudes of health care staff to information technology: a comprehensive review of the literature', "used questionnaires as the data collection method, although interviews, focus group and observation were also represented". (p. 92).

The researcher also deemed it as being an appropriate method by which to answer the research question: 'What are the optimum means and methods of transferring relevant patient information from acute hospital to long term care setting?'

A combination of themes in the literature review and those emerging from the focus group carried out guided the content of the questionnaire. These will be discussed in further detail in Chapter 5 of this research study in the overall discussion chapter.

See Appendix 6 for copy of questionnaire distributed.

3.7.1   Pilot Study: Questionnaire

A pilot study assists in the identification of any potential difficulties that may arise in the data collection process and assist the researcher in determining that the data that is being collected is appropriate and feasible (Drummond, 1998).   Difficulties may include unforeseen limitations in study design, time taken to complete data collection as well as problems with extraneous variables (Jenkins et al, 1998).

The questionnaire was piloted with two of the researcher's colleagues; one a clinical nurse manager, the other a medical social worker. Feedback was obtained verbally and following this pilot a number of alterations were made to the original questionnaire design both in relation to layout and content.

3.7.2 Aim of Questionnaire

Broadly speaking the intended purpose of the questionnaire was to:

a) Gather information on existing methods of data collection in relation to patients being transferred from acute hospital to residential care settings.

b) Gather information on existing methods of transferring this information to/from an acute hospital to residential care setting.

c) Ascertain knowledge base amongst health professionals in relation to standardised assessment tools, and specifically the inter-RAI Assessment tool- Minimum Data Set (MDS).

d) Explore user attitudes in relation to electronic assessment tools/computer software usage versus traditional paper-based methods.

e) Examine if there is a need or desire for change from current paper-based system to electronic information transfer of long term care patient information?

3.7.3 Questionnaire Formulation

The questionnaire comprised of a combination of open-ended and closed-ended questions. Although open-ended questions can be more difficult to analyse statistically, for this research it was deemed appropriate to have a combination of both. Bailey (1997) in her book outlined three reasons for using open-ended questions that the researcher would concur with:

1)   They are useful in dealing with complicated information when slight differences of opinion are important to know.

2)   Provide a good way to elaborated on a closed-ended question.

3)   May be used as a way of finding out which issue in a series of closed-ended questions is the most important or relevant to the respondent. (p. 99).

The questionnaire was divided into two sections. Section two of the questionnaire relates specifically to participant's knowledge on the Minimum Data Set (MDS) and the researcher outlined at the beginning of this section that ***"These questions can only be answered if you are familiar with the Minimum Data Set (MDS)".*** These are Questions 19-25.

3.7.4   Subject Criteria and Selection

A purposive sample was used to target the sample from the population for this research. This is a deliberate non-random method of sampling, which aims to sample a group of people, or settings, with a particular characteristic (Bowling, 2002).   In this case the 'particular characteristic'

being staff involved in the transfer of patient information between hospital and long term care facilities.

As stated previously, the two target populations from which the sample was drawn were:

a) Health professionals in acute hospitals involved in the needs assessment and transfer of information concerning patients to residential care settings. This group will be referred to as Sample A.

b) Health professionals working in residential care settings from whom patient transfer assessment information is received from acute hospitals. This group will be referred to as Sample B.

Reasons for focus on health professional population:

The researcher made a decision early on in the research process based on advice from her supervisor, an Age-related healthcare consultant in the hospital and direct line manager that seeking the opinions of healthcare professional staff would be the preferable and most logical source of answers to the aims and objectives of this research.

The only other populations from where to get feedback or information on the transfer of patient information between hospital and long term care facilities would be the patients themselves and/or their families.

Potential obstacles/considerations in relation to this population (patients/family members) would be:

- Feedback is likely to be very subjective as it would be reflective on the individual's personal experience in only their own individual case – and while this subjective information is not to be discounted, it would not be an appropriate means by which to investigate the aim and objectives of this piece of research.

- Ethical approval and consent on a number of levels would have to be obtained; from college, hospital authorities, the patient and potentially their next of kin.

- Research involving this particular patient data could also involve the necessity for further assessment and selection criteria to determine an older person's ability to participate in research – cognitive functioning and level of understanding, for example. The time frame for this research study would not have permitted such detailed subject selection criteria.

3.7.5   Data Collection

Health professional sample – acute hospitals
'Sample A'
A sample of convenience was used to access appropriate personnel who were involved in this long term care patient information exchange.   It should be noted that not all wards in the hospital the researcher works in or any other hospital would automatically have long term care patients in them; a number would be automatically excluded, for example, Intensive Care and Coronary care wards.

The researcher compiled a list of all inpatient wards where long term care patients have been transferred from (exceptions were Intensive care and Coronary care units) – this amounted to 10 wards. Five questionnaires were left on each ward. Each questionnaire was accompanied by a cover letter outlining the purpose of the research, that participation was voluntary and that any information provided by the participant would be dealt with in the strictest confidentiality.   See Appendices 5 and 6 in relation to Questionnaire & Cover Letter respectively.

The researcher left an envelope with the five questionnaires as well as an internal mail envelope with each Clinical Nurse Manager (CNM) on each of the wards.   The questionnaires were handed out in person by the researcher or her nursing colleague – it was explained to each CNM that the questionnaires could be filled in by either nursing or medical staff on the ward.

In addition to this, questionnaires were also distributed amongst other health professional groups likely to be involved in the transfer of pertinent long term care patient information, namely Medical social workers, Occupational Therapists and Dieticians. These groups were self-selecting as not all health professionals within these groups would necessarily work with long term care patients.
No. of Questionnaires distributed to ward staff: n = 54
No. of Questionnaires distributed to AHP (Allied Health Professional) Group: n= 25
_____
Total No. of Questionnaires distributed to 'Sample A': 79

Health professional sample - Long term care settings
 'Sample B'
The same questionnaire was distributed to this sample as per 'Sample A'. The first question asked the participant their work location (i.e. Hospital or

Long term care setting) so as to be able to discriminate and compare data from the two 'samples'.
See Appendix 6

This sample consisted of nursing staff in both private and public nursing home facilities. The sample of health professionals working in long term care facilities in Private nursing homes was obtained from the HSE website where it details lists of nursing home inspectorate reports for all private nursing homes that have been HSE approved specifically in the Dublin area:

- North Dublin City and County : n = 32   (Note: 33 nursing homes actually on website but no contact details for 1 x facility)

- South Dublin City and West Dublin: n = 36 (Note: 41 nursing homes listed on HSE website, but some of these have amalgamated or no longer exist)

- Dun Laoghaire/South County Dublin: n = 18

The most recent copy of the Nursing home inspectorate report for each nursing home was referenced and from it the researcher obtained the name of the person in charge as the person to address the envelope containing a copy of the cover letter and questionnaire to. A stamped addressed envelope to mail the questionnaire back to the researcher was also included.   These were posted to the long term care facilities.
In the majority of long term care facilities a nurse would be the main person responsible for the care. With the exception of some public facilities and occasional visits from sessional therapists, most private nursing home facilities would not have allied health professional staff on their 'books'.

The researcher also distributed the same information to five contact people in five public nursing home facilities (either CNM, nursing or social work staff).
Total No. of Questionnaires distributed to 'Sample B': 91

3.8 Data Analysis

Due to the combined mixed methodological nature of the data collection methods a combination of data analysis techniques were employed in this study.
i.e. Focus Group and open-ended nature of some of the questionnaire questions required a more <u>qualitative</u> data analysis approach. Questionnaires analysed using <u>quantitative</u> data analysis techniques.
- <u>Qualitative</u> data analysis took the following forms:

- As per Lincoln and Guba (1985) and Patton (1980) the researcher looked for patterns, categories and descriptive units as a way to describe the data, deduce causes, consequences and relationships.

- As per Miles and Huberman (1994), as cited in Bailey (1997) another method was to represent the data with coding and methods of display such as charts and drawings, "in an attempt to order and explain the data, to generate meaning from the data and to verify resulting conclusions". (p. 159).

- Quantitative data analysis took the form of:

- Combinations of descriptive and inferential statistics were used to analyse the data generated from the questionnaire.

- Note: the reader may question why the researcher chose to use inferential statistics after having stated in introductory chapter that the findings of this research were unlikely to be able to be generalised to a wider population due to relatively small sample sizes. The researcher deemed it appropriate to assist in the determination of probability of certain occurrences; for example: the likelihood of people being willing to use electronic means to transfer patient data between hospital and long term care facilities.

3.8.1 Sample comparisons

The two samples in the questionnaire were considered and analysed individually initially as a means of being able to describe the data obtained. Then specific correlations and comparisons were made between the two samples in order to answer the research question and provide evidence of meeting the research objectives of this study.

3.9 Ethical Considerations

In the initial stages of this study the researcher discussed the need to get ethical approval with her supervisor and with her direct line manager in work. The researcher also directed the question of whether there was a need for ethical approval in the hospital the researcher works in with the Education and Training Manager for the hospital. All were satisfied that as a) no patient data was being used; b) researcher not using hospital logo on information concerning research and c) any information the researcher was going to obtain from a questionnaire would be anonymous and confidential for the participant, and so could or would not be used by the researcher for any other purpose other than that intended in the research study.

In June 2009, the researcher did receive written notification from the Course Director of Health Informatics about the recently established Ethics Committee in the School of Computer Science and Statistics requiring whereby it now requires that ALL research involving humans be given ethical approval in advance of commencing field work. However, in light of the fact that the data collection phase of the research study was nearing completion at the point of receipt of this notification, the researcher deemed this requirement to not be achievable or applicable to this research study.

3.9.1 Focus group participants

Focus group participants (Total of 5) consented verbally to participate in the taped focus group discussion. Each participant was also given written information in advance of the discussion broadly informing them the purpose of the research study and advising them that participation was voluntary and any information received would be confidential and not connected to the participant in the findings.

3.9.2 Questionnaire participants

Completion of the questionnaire by health professionals assumed consent; if a recipient of the questionnaire received the questionnaire there was no obligation to fill in and return. The questionnaire was designed such that the researcher would be able to differentiate between professionals working in nursing homes or hospitals, but other than that there was no form of personal data so as to ensure anonymity.

Each questionnaire was also given a number so the researcher was able to systematically locate any missing information quickly, if required, when compiling qualitative data.

Note: the researcher did state that if the participant sought feedback on the outcomes and results of this research that they could indicate an e-mail address via which the researcher could forward on this information. Doing this does not automatically reduce anonymity as it cannot be assumed that every e-mail address contains details of a person's name.

3.10   Summary

The methodology for this research consisted of two main methods of data collection – a Focus Group (Qualitative) method and Questionnaires (Quantitative) method. The aim of the Focus Group was to get more in-depth information from health professional staff as to their experiences of and thoughts around the transfer of patient information between acute hospitals and long term care facilities. The Focus Group topic areas were led by key thematic areas in literature as well as linking in with the main aim and objectives of this study. The Questionnaire formulation was somewhat guided by the themes generated by the Focus Group, as well as additional information the researcher sought to investigate to assist with answering the main objectives posed by the researcher. The results chapter aims to present the findings of the Focus Group and Questionnaire data in a clear and objective way to the reader.

Chapter 4

Results:

4.1 Introduction

As has been previously stated, the aim of this research study is to look at the means and methods that could enable the electronic transfer of needs assessment information for patients being discharged from an acute hospital to a residential setting in a timely and efficient manner.

The key objectives consequently of this research are to investigate:

- The relevance of and examples of standardised assessments in the area of long term care patients?

- How is long term care patient information currently being transferred from acute hospital to long term care settings?

- How might long term care patient data be transferred electronically? Are there any existing tools that can do this job currently?

- Exploration of health professional user's perspective – attitudes, potential acceptance of IT, computers and electronic health records.

- Is there a need or desire for change from current paper-based system to electronic information transfer of long term care patient information?

This chapter will detail the results obtained from the data collected in this study, as outlined in the previous chapter; i.e. a combination of qualitative and quantitative methodologies have been used to collect the data.

A non-experimental research design was used in this research study, with much of the data collected being analysed descriptively as random selection was not used for the samples of the two target populations in this research.

4.2 Type of Data Collected

4.2.1 Qualitative Data

The data obtained from the focus group participants could be described as "thick descriptions". (As cited in Bailey, 1997 - based on original work by Geertz, 1973). This implies the data which was obtained provide "thick descriptions" that are 'nested in a real context and have a ring of truth that has a strong impact on the reader' (p. 40). This data mainly consists of thematic descriptions and illustrative quotations based on what the health care professionals expressed as their views in the focus group. Miles and Huberman (1994) summarise succinctly the reason for and type

of qualitative data generated in this research when they state that qualitative data in general can be 'the best strategy for exploring a new area and developing hypotheses; and they are useful when one needs to supplement, validate, explain, illuminate or reinterpret quantitative data gathered'.

The questionnaires used in this study also comprise a qualitative aspect. See Appendix 6 for full copy of questionnaire distributed. To summarise - of a total of 25 Questions, 8 Questions were completely open-ended requiring the participant's own opinion and views to be expressed. Although these answers are harder to quantify and impossible to generalise, the researcher felt the area of research was sufficiently unexplored that there was a justification in attempting to get further information and views from the participants as opposed to tick-box answers.

See Appendix 7 for tables outlining health professional participants'
answers to the open-ended questions in this research
i.e. Questions 6, 7, 11, 12, 13, 18, 21 and 25

4.2.2 Quantitative Data

The data obtained from the questionnaire distributed in this research can be characterised as being of nominal, ordinal and ratio data type.

Summary of Questionnaire Data Types	Question Numbers
1. ***Nominal Data*** i.e. numbers applied to non-numerical variables; nonparametric data	Q 1, Q 3, Q 5, Q 8, Q 17- 20, Q 23, Q24
2. ***Ordinal Data*** i.e. discrete numbers that are ordered but the intervals between the categories are not known and cannot be assumed to be equal	Q 4, Q 14, Q 15, Q16, Q 22
3. ***Ratio Data***	Q 2
4. ***Interval Data***	Q 10

Table 4.1

* Q 6-7, Q 11-13, Q 18, Q 21 and Q 25 are the open ended questions resulting in descriptive, qualitative data as outlined in paragraph 4.2.1.

**Q 9 required purely tick box data completion in no particular rank order. The researcher subsequent to the data collection process deemed this question to be largely uninformative and it was therefore not included as data in the overall analysis as the majority of participants ticked all 5 boxes in both samples. (See next page)

Question 9: Describe your role in relation to a patient's clinical information being transferred from a hospital to a long term care facility or vice versa

Tick the box/boxes that apply

Data collection/capturing   Information transfer

Patient assessment   ☐   Liaison with patient's   ☐
                            ☐   family

Contact with nursing home/acute hospital facility ☐   Other

_____

4.3   Sample Description and number of respondents

Sample A

Health professional sample – acute hospitals

Total No. of Questionnaires Distributed	79
Total No. of Questionnaires Returned	53
Percentage of Respondents	67%

Table 4.2

n = 53

Sample B

Health professional sample – long term care settings

Total No. of Questionnaires Distributed	91
Total No. of Questionnaires Returned	38
Percentage of Respondents	42%

Table 4.3

n = 38

4.4   Quantitative Data obtained – Part 1

Method: Questionnaire.   See Appendix 6

Questions: 1, 2, 3, 4, 5, 8, 10, 14, 15, 16, 17, 18

Data from both samples is outlined below for each question respectively.

4.4.1   Question 1:   What is your occupation?

Sample A

Occupation	No. of participants
Nurse	30
Clinical Nurse Manager (CNM)	5
Doctor	2
Allied Health Professional	16

Table 4.4

Sample B

Occupation	No. of participants
Nurse	4
Clinical Nurse Manager (CNM)	14
Director of Nursing	16
Director of Care	2
Manager	1
Not stated	1

Table 4.5

4.4.2   Question 2: How many years of experience do you have in your job?

Sample A: Acute hospital respondents: n = 53
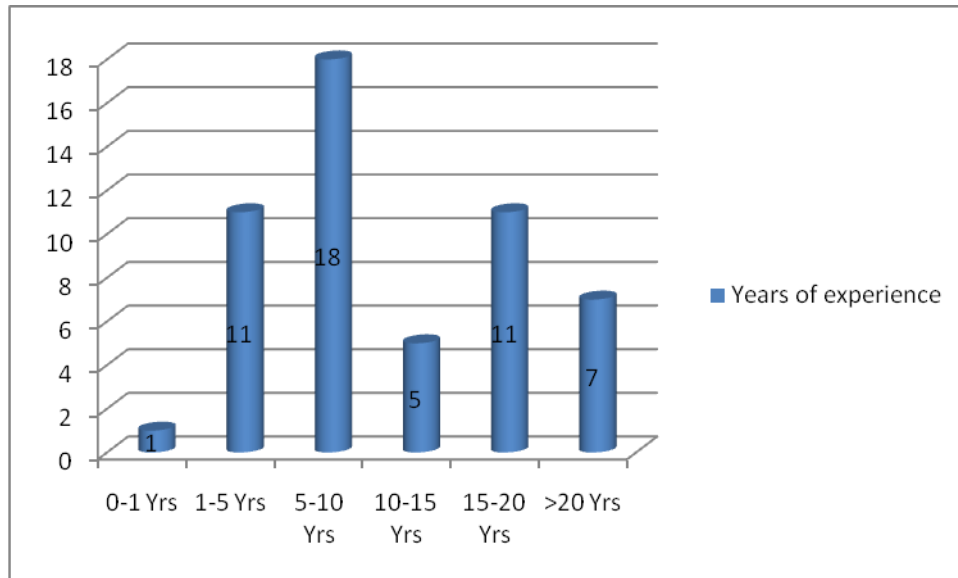
Figure 4.1

Sample B: Long term care setting respondents: n = 38
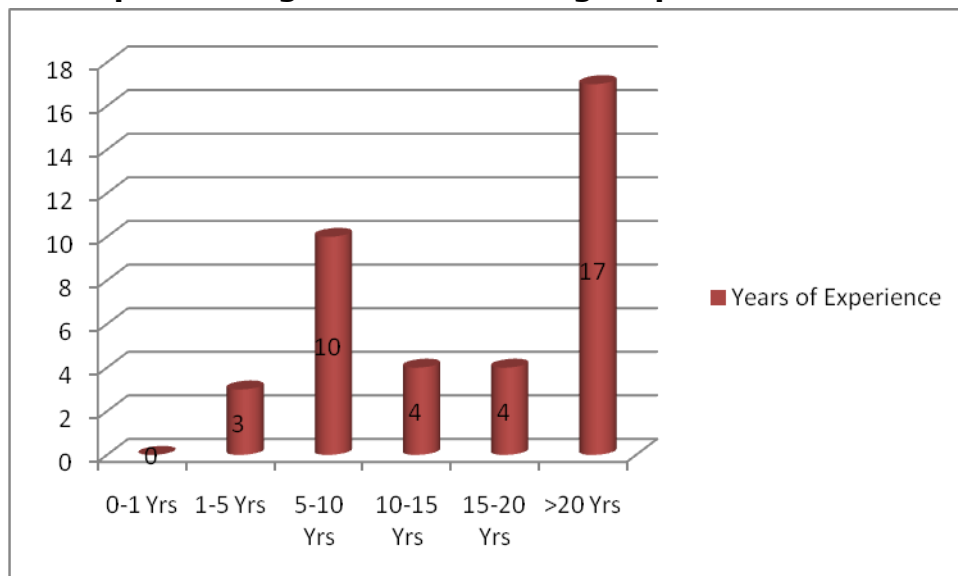
Figure 4.2

4.4.3   Question 3: How often are you involved in the transfer of patient information to/from the healthcare facility in which you work?

Sample A: Acute hospital respondents: n = 53
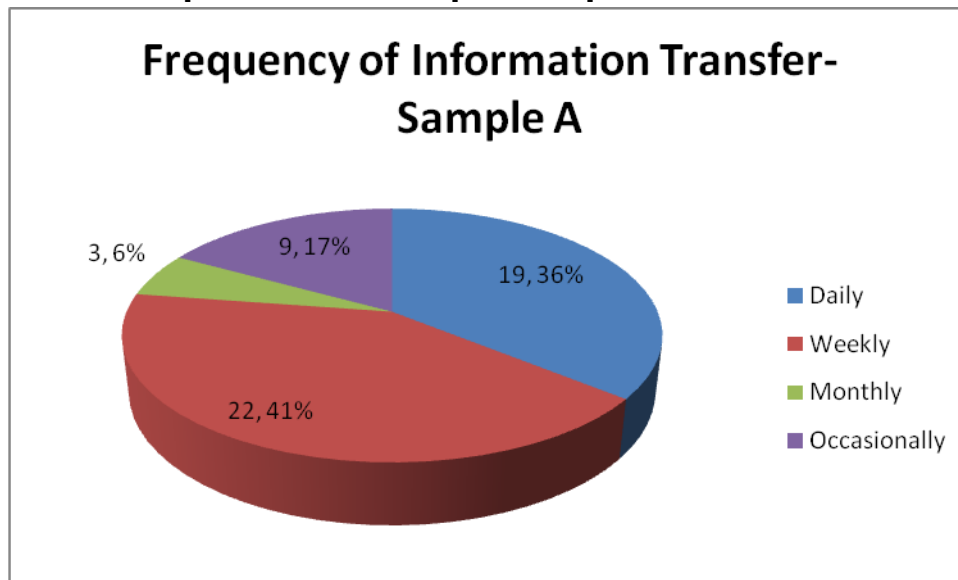
Figure 4.3

Sample B: Long term care setting respondents: n = 38
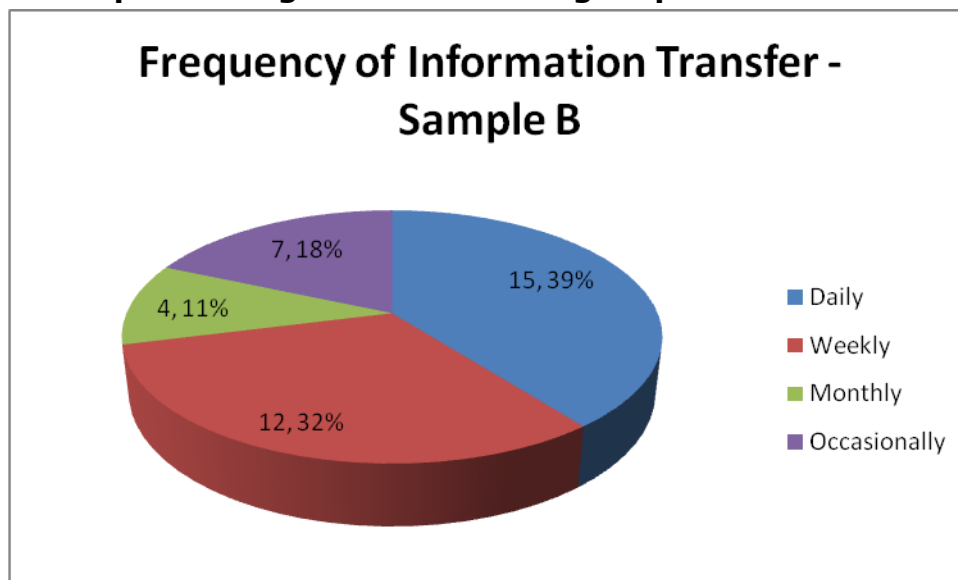
Figure 4.4

4.4.4 Question 4: Rank in order of the most commonly used the main method of communicating patient information in the healthcare facility in which you work (1=most commonly used, no. 2, 3 etc)

SAMPLE A						SAMPLE B					
Main method of communication	1st	2nd	3rd	4th	5th	**Main method of communication**	1st	2nd	3rd	4th	5th
Telephone	20	9	9	-----	----	Telephone	17	8	8	3	0
Paper	7	7	13	7	----	Paper	15	7	7	3	3
Fax	2	12	4	6	12	Fax	2	15	11	6	1
In Person	11	8	5	6	3	In Person	3	6	4	8	4
Computer	0	3	5	12	13	Computer	1	0	2	7	11

Table 4.6

<u>To summarise:</u>
It should be noted that there were a number of 'Missing' pieces of ranked information:
For example:
a)   Participant only ranked most common method of communication and left other methods blank
b)   Participant ranked 1, 2 Top choices and did not assign a rank to other data collection methods.

4.4.5 Question 5: How is patient information currently transferred to a long term care facility from an acute hospital?

Participants were asked to tick the appropriate box that applies between the following choices:

Paper document that is posted ☐   via phone call ☐

Paper document that is faxed ☐   Computerised document ☐

No documentation completed ☐   Do not know ☐

Note: Most participants ticked more than one box so figures do not add together to make total no. of people surveyed

Method of Information Transfer	Sample A Most→least common	Sample B Most→ least common
Paper document Posted	49	30
Paper document Faxed	18	11
Phone Call	8	11
Computerised document	5	1
Do not know	0	0
No documentation	0	0

Table 4.7

In Sample B: 5 respondents to the questionnaire added in additional option of transferring the information **directly with the Patient.**

4.4.6 Question 8: To your knowledge, is a standardised assessment carried out and completed when a patient is transferred from an acute hospital to a long term care facility?

Sample A: Acute hospital respondents: n = 53
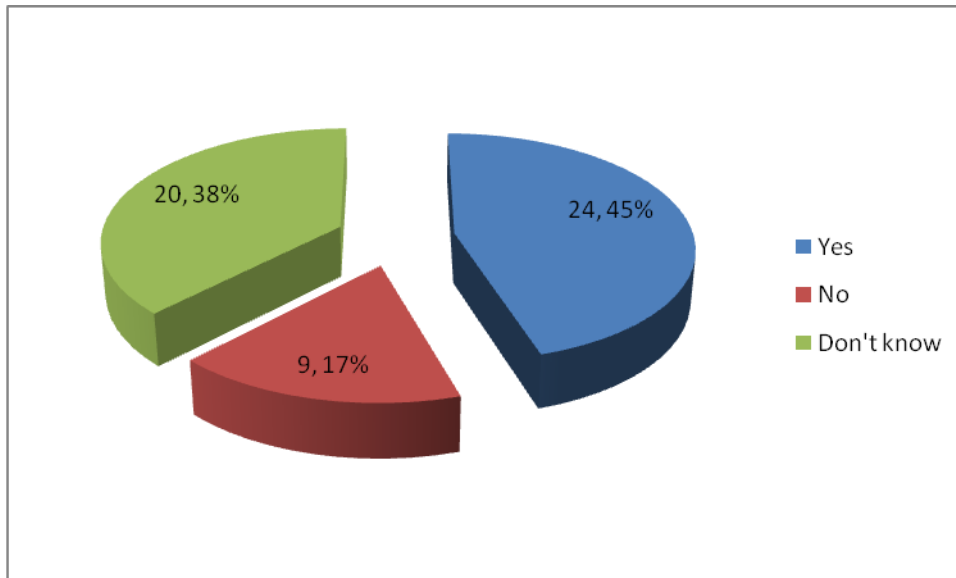
Figure 4.5

Sample B: Long term care setting respondents: n = 38
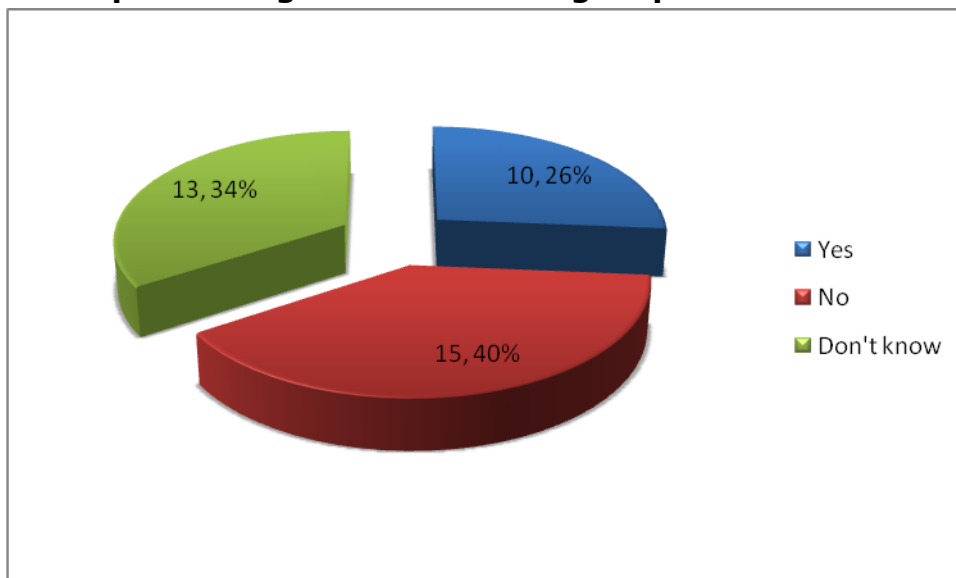
Figure 4.6

This Question consists of an 'If' statement

– "If Yes, what is the name of the assessment?" The answers to this question are listed below, but will be discussed in greater detail in the next chapter: Chapter 5 Discussion.

[**Note:**   The word Assessment will be abbreviated as Ax
                 The word Discharge will be abbreviated as D/c]

Sample A respondents	Sample B respondents
• Peamount MDT Assessment • CSAR (Common Summary Ax Record) • Long term care Ax forms • D/c summary • Nursing D/c and Doctor's D/c letters • Nursing transfer letter • Roper Logan and Tierney model of Ax • Extended care transfer form • Transfer of patient form • HSE long term care form • MMSE • Modified Barthel	• Common Summary Ax • D/c letter • "the assessment form was devised by ourselves" • Roper Logan & Tierney model of nursing • Waterlow • BMI • Barthel • MMSE • CSAR

Table 4.8

See Abbreviations page for explanation of terms

4.4.7 Question 10: How much time do you spend (on average) per patient completing current information for transfer from hospital to long term care facilities or vice versa?

Sample A: Acute hospital respondents: n = 53
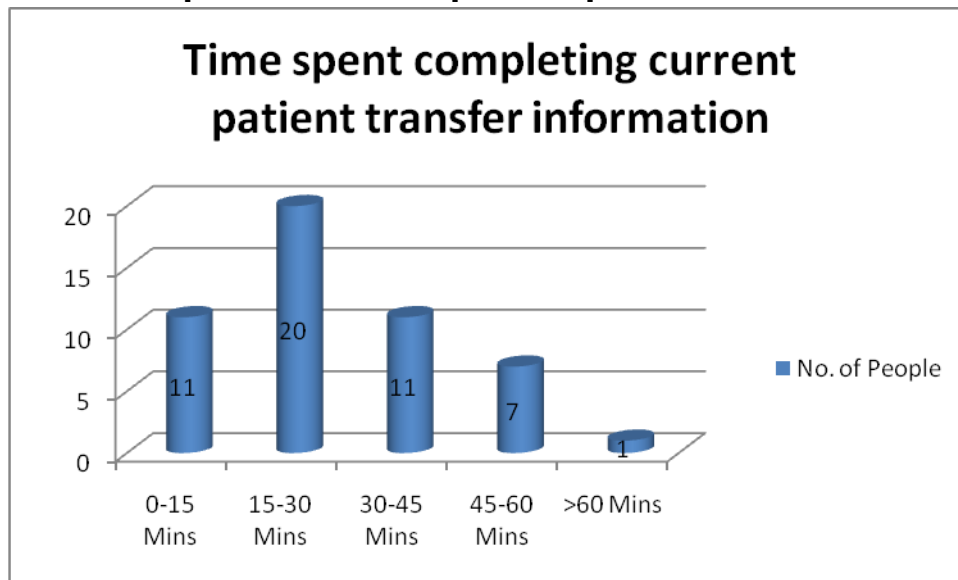
Figure 4.7   * Note: 3 respondents did not answer the question

Sample B: Long term care setting respondents: n = 38
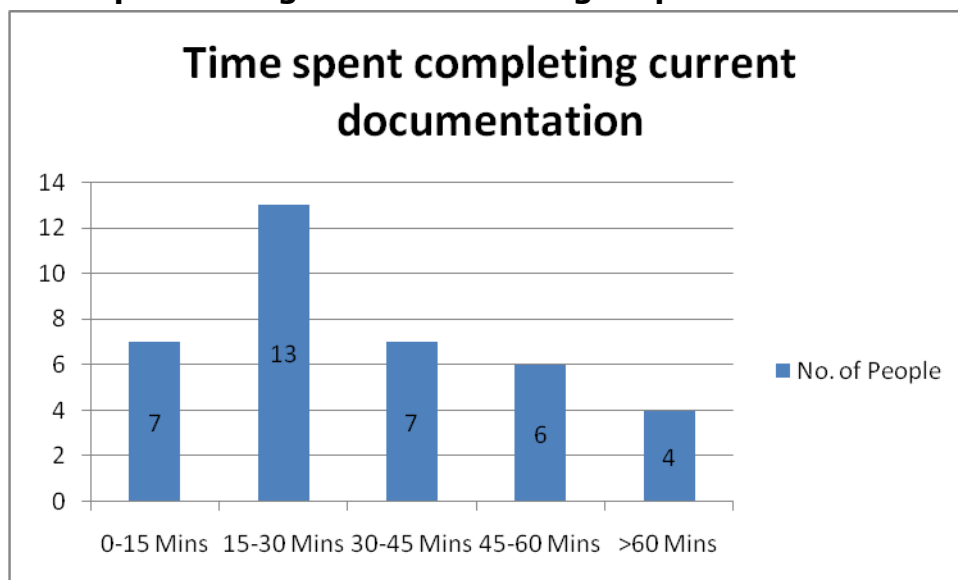
Figure 4.8   * Note: 1 respondent did not answer the question

4.4.8   Question 14: How familiar are you with using computers in the clinical setting?
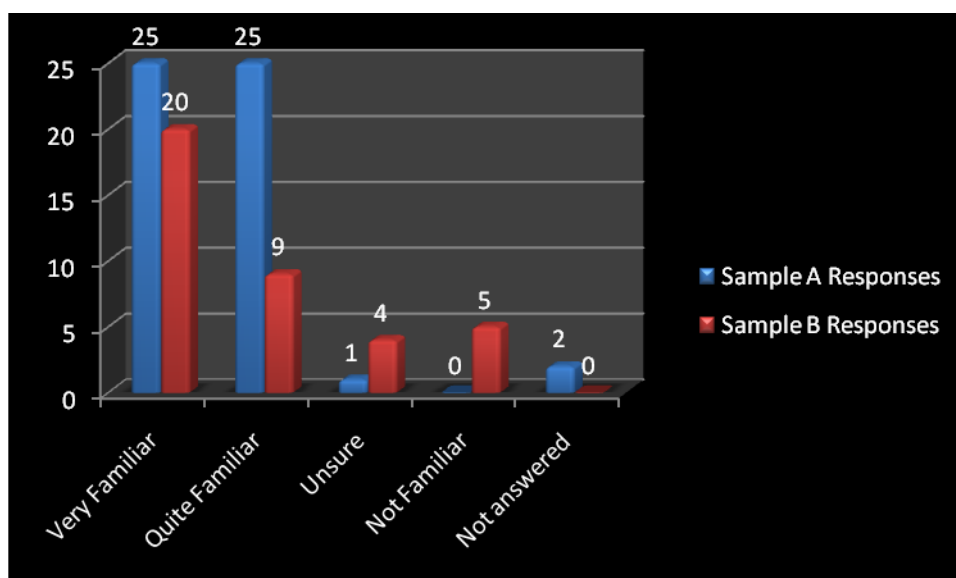
Figure 4.9

Familiarity with Computers	Sample A Responses	Sample B Responses
Very Familiar	25	20
Quite Familiar	25	9
Unsure	1	4
Not Familiar	0	5
Not Answered	2	0

Table 4.9

4.4.9 Question 15: How familiar are you with computer databases?
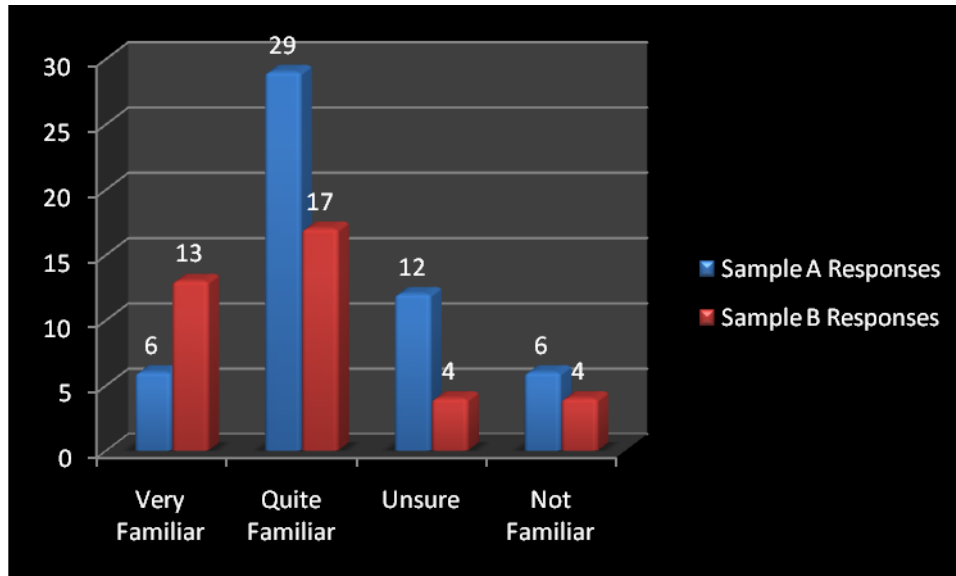
Figure 4.10

Familiarity with Computer Databases	Sample A Responses	Sample B Responses
Very Familiar	6	13
Quite Familiar	29	17
Unsure	12	4
Not Familiar	6	4

Table 4.10

4.4.10 Question 16: How familiar are you with the concept of an electronic health record?
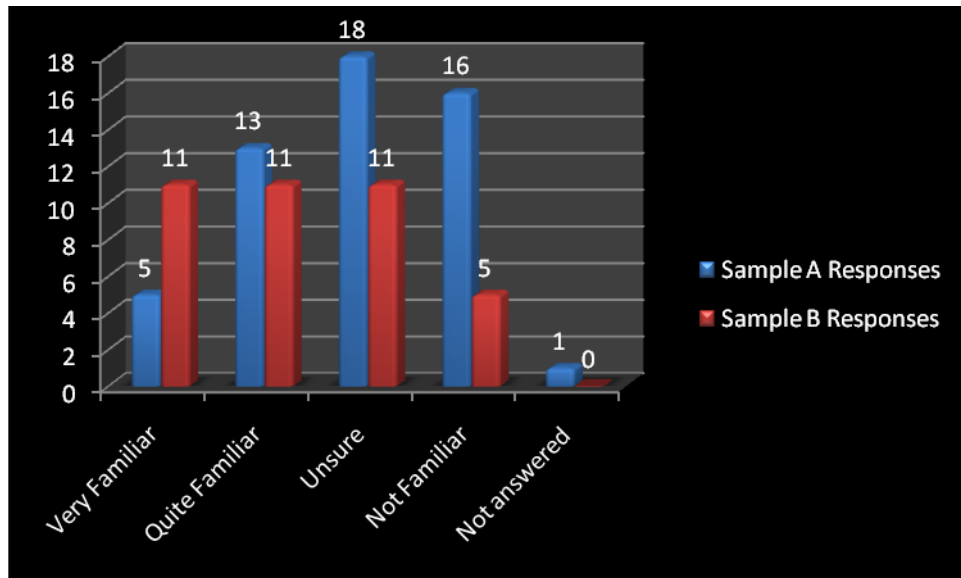
Figure 4.11

Familiarity with Electronic Health Records	Sample A Responses	Sample B Responses
Very Familiar	5	11
Quite Familiar	13	11
Unsure	18	11
Not Familiar	16	5
Not Answered	1	0

Table 4.11

4.4.11 Question 17: Tick which of the following you have heard of and give brief explanation as to your understanding of each term:

- Single Assessment Process (SAP)

- Common Summary Assessment Record (CSAR)

- Minimum Data Set (MDS)

- Common Assessment Process (CAP)
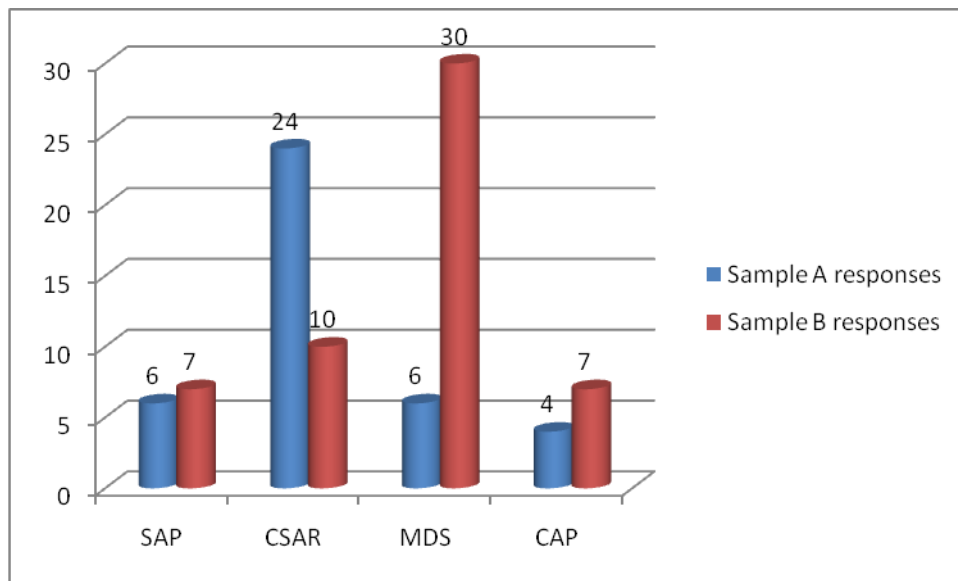
Figure 4.12

See Abbreviations page for explanation of terms

4.4.12 **Question 18:** **Would you be in favour of electronic transfer of patient data to/from acute hospitals to nursing homes?**

Sample A: Acute hospital respondents: n = 53

Sample B: Long term care setting respondents: n = 38
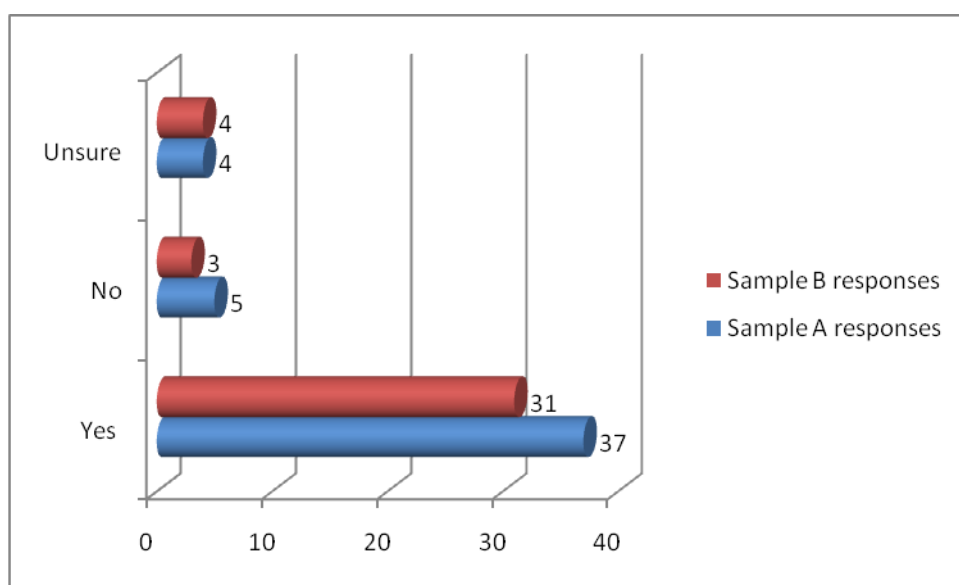
Figure 4.13

4.5   Quantitative Data obtained – Part 2

Method: Questionnaire
Questions: 19, 20, 22, 23, 24

Note: *this section of the Questionnaire relates specifically to Qs on Minimum Data Set (MDS)*

4.5.1   Classification of response rate

Sample A

- A total of 10 of 53 health professionals who responded to the questionnaire answered this question: i.e. 18.9% of the sample.

- 6 of these 10 health professionals answered 'No' or 'Unsure' to all 7 questions in this section.

- 4 health professionals in this sample are familiar, therefore, with the MDS. They consisted of one nurse, two doctors and one occupational therapist

Sample B

- A total of 25 of 38 health professionals who responded to the questionnaire answered this question: i.e. 66% of the sample.

- The remaining 13 participants in the sample did not answer the question; i.e. none of the participants answered "No"

4.5.2 Question 19: Are you aware that use of a minimum data set is recommended in the new HIQA guidelines for nursing home residents?

Sample A: Acute hospital respondents

*n = 4. See Section 4.5.1 for Description of sample in this section of the questionnaire

Aware of guidelines	No. of people
Yes	4
No	0

Table 4.12

Sample B: Long term care setting respondents

*n = 25.   See Section 4.5.1 for Description of sample in this section of the questionnaire

Aware of guidelines	No. of people
Yes	25
No	0
Not answered	13

Table 4.13

4.5.3 Question 20: Are you familiar with the type of information that is captured by a MDS tool in relation to long term care residents?

Sample A

Familiarity with information of MDS	No. of people
Yes	4
No	0
Unsure	0

Note: 3 of the 4 respondents gave specific examples of information covered

Table 4.14

Sample B

Familiarity with information of MDS	No. of people
Yes	21
No	0
Unsure	4

Table 4.15

4.5.4 Question 22: What, in your opinion is the best way of capturing MDS information?

Sample A: Acute hospital respondents

* n = 4
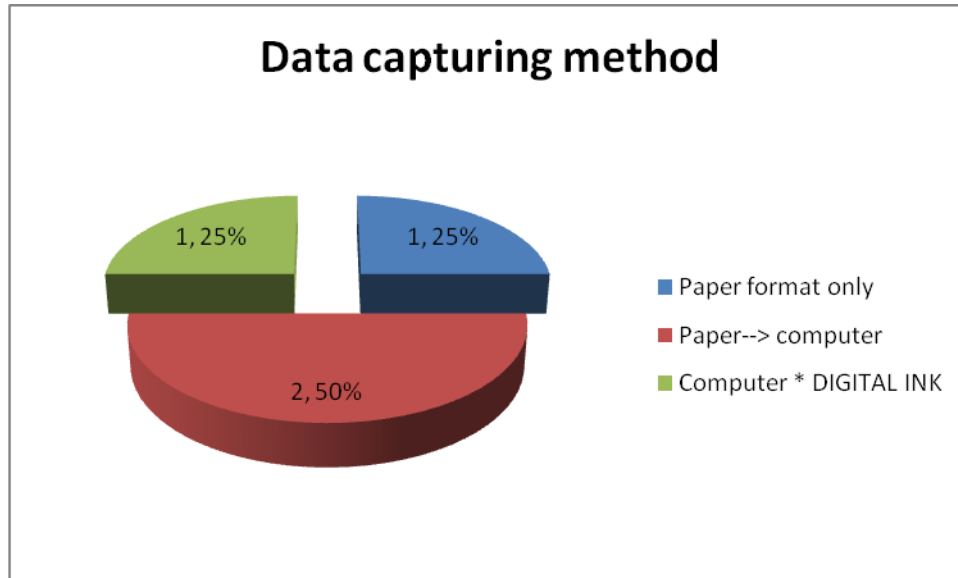
Figure 4.14

Sample B: Long term care setting respondents

* n = 25
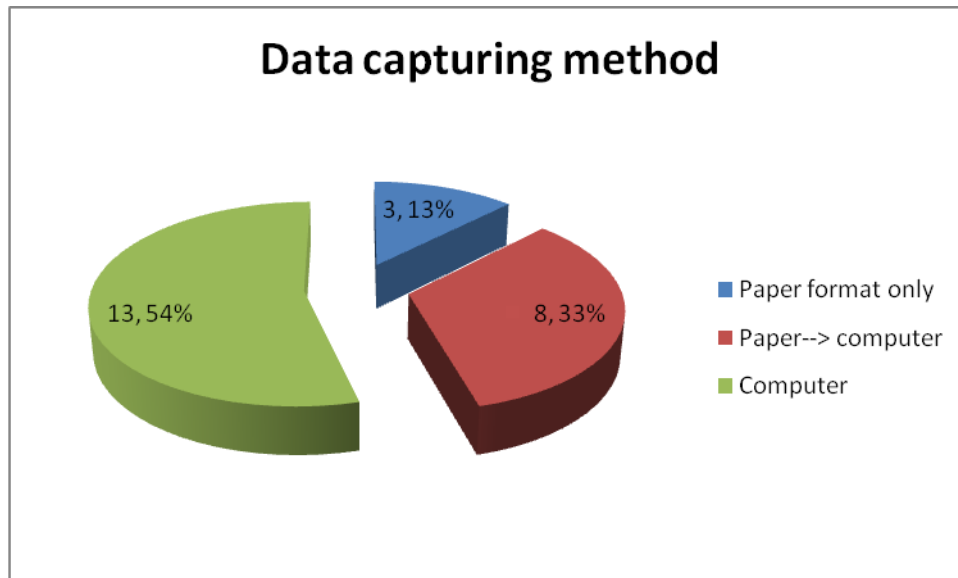
Figure 4.15

4.5.5 Question 23: Are you familiar with the inter-RAI organisation?

Sample A:

*n=4

Familiar with inter-RAI	No. of respondents
Yes	2
No	1
Unsure	1

Table 4.16

Sample B:

*n=25

Familiar with inter-RAI	No. of respondents
Yes	11
No	8
Unsure	6

Table 4.17

4.5.6 Question 24: Do you know of any countries that use the MDS to routinely capture information on nursing home residents or patients for transfer to nursing homes?

Sample A: *n=4
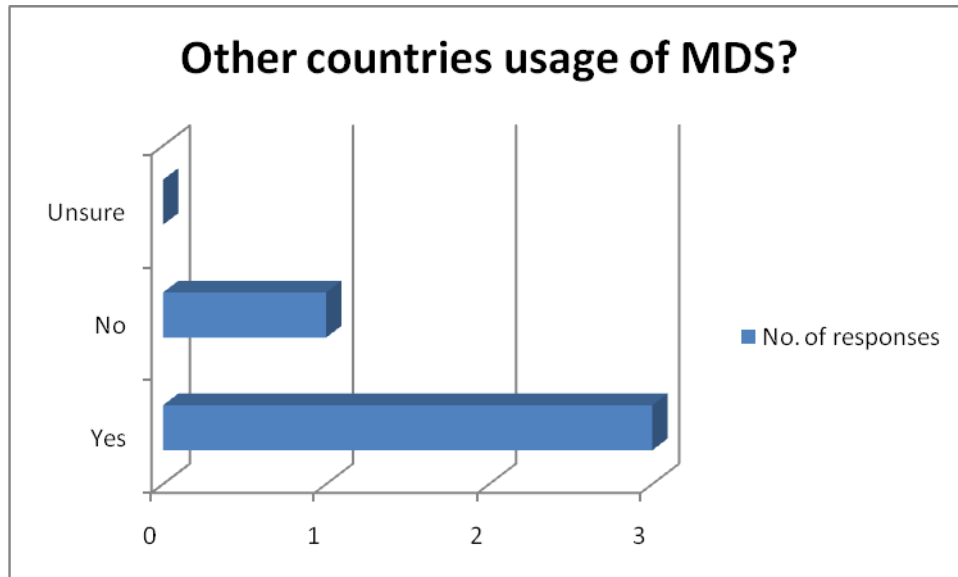
Figure 4.16

Sample B: *n=25
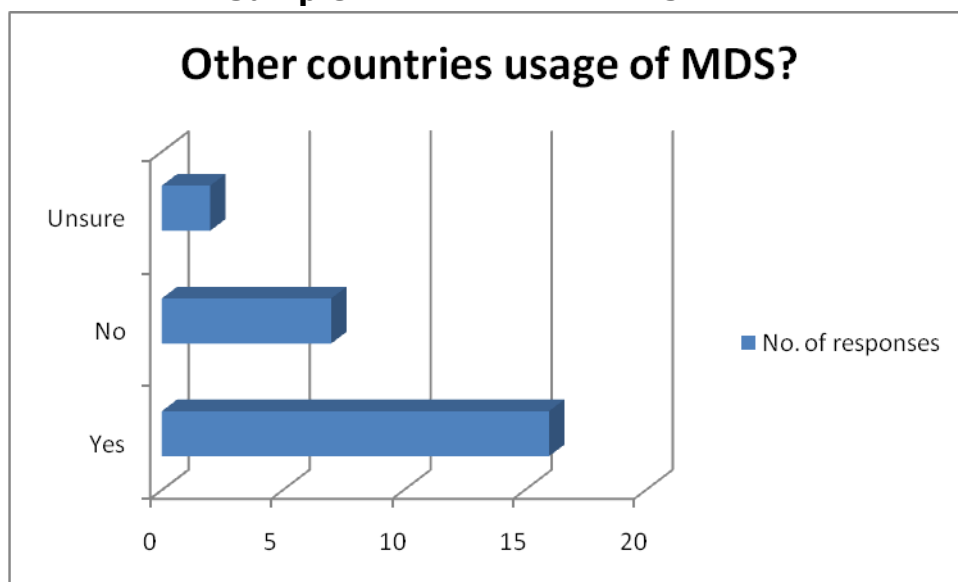
Figure 4.17

4.6 Qualitative Data (Questionnaires)

In this research this data was obtained via two main methods:

1)   From Focus Group with health professionals in an acute hospital setting

2)   From open-ended questions in Questionnaire that was distributed to health professionals in acute hospital and long term care settings.

Note:

For the purpose of clarity, results of data obtained from the Focus Group conducted will be dealt with in Section 4.7

Method: **Questionnaire – open ended Questions**

Questions: 6, 7, 11, 12, 13, 18, 21*, 25*

(Questions *21 & *25 relate specifically to questions for people familiar with the Minimum Data Set).

Information and exact comments from participants were transcribed into tabular form with a cross reference the sample they were from: A or B. These tables can be found in Appendix 7.

From this the researcher was able to categorise participant answers as there was much commonality and these are referred to in the following sections of the results.

4.6.1 Question 6: What type of information is received if a patient is transferred from a nursing home to an acute hospital?

Sample A: Acute hospital respondents
51 out of 53 respondents answered this question. I.e. 96% response rate

4.6.1.1 Transfer letters/documentation
These were mentioned by a number of participants as being received. They are generally either Nursing or Doctor's (GP) transfer letters

4.6.1.2 Description of type of information received
Information such as "patient's current mobility, level of dependence/independence, nutritional status, activities of daily living, medications, insulin regime, diagnosis, personal information, skin condition, medical history, NOK (next of kin)".

4.6.1.3 Format of information received
All respondents referred to receiving any information either via a paper document or telephone call.

4.6.1.4 Variability of information received
A number of respondents made lengthy comments about this, such as:
- *"depends on the nursing home. Some won't sent any information; if you need to go and seek it out. Others just send very basic info with no real detail"*
- *"sometimes a nursing transfer letter but usually nothing"*
"A basic overview"
"Not aware of information received"
- *"very little – can be difficult to establish baseline and results in delays in implementing treatment plan or can lead to inappropriate treatment being commenced"*
- *"none or very little unless sought by staff in the hospital (apart from medical details"*

Sample B: Long term care setting respondents
All 38 respondents answered this question, i.e. 100% response rate

4.6.1.5 Transfer letters/documentation
- As per the acute hospital these were mentioned by a number of participants as being. They are generally either Nursing or Doctor's (GP) transfer letters. Some participants reported that a transfer form/letter as well as a separate doctor's letter was sent.

- "full patient assessment and care plans"

4.6.1.6   Description of type of information provided

The following information was detailed by a number of participants, such as "social information, copy of current medication sheet/Kardex, past medical history, ADLs, demographic details, reason for admission, known allergies, falls risks, diet, continence, BP, latest blood work, pulse, temperature on admission, cognition of resident, family contacts, list of meds given, GP details, religion, pressure areas condition"

4.6.1.7   Format of information provided

This was not detailed by every respondent. Three participants commented on this; one has "a computerised system for nursing notes which has all information required to transfer residents". Second participant referred to a "transfer letter (paper)". The third respondent referred to information being given "via phone call, fax".

4.6.2   Question 7:   What is a standardised assessment?

Sample A
- 48 out of a total of 53 health professionals responded to this question, i.e. 91% response rate.
- Answers given have been broadly summarised by the researcher into five main categories of response:

4.6.2.1   Alternative names suggested
Tool vs. Assessment: *"Standard tool", "Standardised tool", "assessment tool"*
Form vs. Assessment: *"Standard form", "general form"*
"The first time assessment"
"Form for everyone"
"A complete general assessment"

4.6.2.2   Descriptions of format of standardised assessment
- *"an assessment that is carried out in a consistent way for each patient looking at functional and care needs"*
- *"multidisciplinary agreed measure of assessment"*
- *"a standard set of questions/activities used to assess patients"*
- *"Routine assessment of a number of questions that are completed routine to everyone"*

4.6.2.3   Applications of standardised assessment
a) Content of assessment
- *"assessing a patient in relation to their ADLs"*
- *"assessment of patient's functional and medical diagnosis"*
- *"an assessment of each of the activities of daily living"*
b) Locations to use assessment
- "used by all facilities"
- "using a common and general method ......between/in all health care settings".

4.6.2.4   Standardised assessment related to care provided
- *"a common system of assessment used for the standardised care"*

4.6.2.5   Validity and reliability as a definition of standardised assessment
- *"one that is valid, reliable and fit for purpose"*
- *"formal Ax with proven validity and reliability. Usually have instructions and also what client groups with whom it is recommended"*
- *"is an Ax that has standardised instructions for completion and usually has information re validity, reliability and responsiveness"*

- *"an Ax that is designed so that it is completed in the same way no matter what therapist uses it – it gives a result that is reliable and valid. Can be interpreted in a standard way"*

Sample B
-        31 out of 38 respondents answered this question, i.e. 82% response rate
-        Answers given have been broadly summarised by the researcher into three main categories of response:

4.6.2.6   Where a standardised assessment could be applied
-*"Ax tool that is used in all healthcare settings, leading to standardised information"*
- *"An Ax tool, i.e. MDS, that is used whether the patient is admitted to an acute hospital or a long term care setting"*
- *"All facilities use same Ax tools, e.g. MDS"*
- *"An Ax sheet which would be used by both hospitals and nursing homes so that each facility would be working in unison"*
- *"An Ax of a person that is used in all care settings"*
- *"That all facilities should be doing the same paper work"*

4.6.2.7   Alternative names suggested for a standardised assessment
-*"shared documentation"*
-*"one assessment that is used everywhere"*

4.6.2.8   What a standardised assessment can be used for
-*"Ax carried out capturing all relevant information pertaining to the resident; condition, likes, dislikes, medications, abilities, etc"*
- *"Ax which information on all ADLs"*
-*"Standard nursing Ax would refer to ADL Ax"*
-*"It would be a universal Ax – same questions answered and core needs Ax through a common document"*
- *"Complete and accurate Ax of patient, providing background information and considering it with current status....."*
-*"it is a comprehensive overview of an individual's medical, physical, psychological and emotional status so as to allow you to put in place best practice nursing care".*

4.6.3 <u>Question 11</u>: What are the advantages of the current system by which patient information is transferred?

Sample A
41 of 53 respondents answered this question – i.e. 77% response rate.

4.6.3.1 "No advantages"
4 participants who responded state made a point of saying there weren't any advantages.

4.6.3.2 "Don't know" response/unsure of current system
3 respondents stated they did not know and/or did not know the current system whereby patient information is transferred.

4.6.3.3 Health professional involvement
- 3 respondents referred to the fact that having multi-disciplinary involvement was an advantage.

4.6.3.4 Patient information provided
-*"provides full overview of patient"*
-*"information to the nurses who's gone to provide successive care to patient's transferred"*
-*"gets overall view of the patient"*
-*"standardised form which means that similar amount of information documented about each patient"*
-*"up to date information of the patient and their needs"*
-*"information is tailored to the patient i.e. appropriate and applicable to their individual situation"*

4.6.3.5 Format of current system
a) Description of current system
-*"a complete system, which includes all patient's information"*
-*"standardised form which means that similar amount of information documented about each patient"*
-*"uniform appearance"*
-*"relatively standardised"*
-*"it's a standard form: all will be used to seeing it"*
-*"written information as legal document"*
b) Information access
-*"easy access to complete"*
-*"a complete system, which includes all patient's information"*
-*"easily understandable"*
-*"perhaps more secure in comparison to electronic transfer of confidential information"*
- Other advantages listed include the current system being:

-"Fast and efficient" and "cheap".

Sample B
32 of the respondents answered this question. I.e. 84%
4.6.3.6   "None"
- 9 of the respondents to this question made a point of saying that there were either "*no advantages*" or "*none*" to the current system of patient information transfer. One of the respondents stated there were "*very few if any – it's familiar at this point"*.
- 4 other respondents filled in answers that reflected Disadvantages as opposed to Advantages and so will be considered as part of the next section: 4.6.4

4.6.3.7   Facilitation of care
-"*continuity of care may be provided"*
-"*it facilitates the degree of nursing care required and the general background of the patient"*
-"*getting info on patient prior to admission to LTC – know equipment needs etc; aware of risks, falls, including pressure sore risk"*
-"*we expect that the hospital should have all necessary information to treat and care for our patient"*

4.6.3.8   Format of current system
a)   Type of information
-"*comprehensive written documentation completed for hospital"*
-"*information up to date"*
-"*on one form (transfer letter)"*
-"*detailed information pertaining to resident"*
-"*written on transfer – most current information available"*
b)   Information content
-"*it is patient-specific. It can be very detailed and be augmented by verbal reports"*
-"*based on Roper, Logan & Tierney model of nursing"*

4.6.4   Question 12:   What are the disadvantages/challenges of the current system by which patient information is transferred?

Sample A
42 respondents answered this question, i.e. 79% response rate
4.6.4.1   Criticisms of information that is transferred
-"*It's not a very complete form; i.e. no section for certain specialities to complete. Therefore need to send a separate form"*
-"*depends on who fills it how good it is"*

-*"not specific to patient"*
-*"need proper section relaying the medication administered prior to transfer"*
-*"information being omitted"* (2 respondents)
-*"limited information can be given"*
-*"some information not captured/clearly visible"*
-*"little space for detailed information on seating, pressure care needs or details of functional status. Also, no space to sign – which can lead to sections being inaccurately filled in"*
-*"current system does not capture all information needed i.e. equipment needs"*

4.6.4.2   System of information capturing
a)   Information Completion
-a number of nurses commented on how it was up to them to get forms completed:
"We have to ensure everybody has given their information (members of MDT). End up chasing doctors to make sure they have their discharge letters filled out. We end up documenting physios and probably OTs input"
"It's left to nurses to bleep and contact each discipline"
"Getting all MDTs to complete the forms!"
- Other criticisms specifically related to <u>TIME</u> include:
-"it takes a lot of time; all hand written information. Some handwriting tends to be illegible; information may get lost/overlooked"
"Not everyone on the day knows the patient so information should be collected over a few days
"It is always done in a rush"
b)   Information Design
-"over time bulky storage from accumulation"
-"current form is poorly designed and form is not divided into specific sections for specific professions – leads to confusion about who should complete what. Also leaves little room for documenting more complex cases"
- "little consideration given to how patients feel about information being transferred"
-"poor structure, does not give adequate space for details. Poor design – paper based"

4.6.4.3   Transfer of Information
-*"documents missing, fax machine... no paper/toner"*
-*"quality is poor of faxes, confidentiality cannot be ensured"*
-*"delay of information transfer"*
-*"the correct person receiving the information and having to re-send information again"*

-*"documents missing"*
-*"there is no record kept of the transfer letter; it may be misplaced/lost in the transfer"*
-*"ad hoc"*

Sample B
33 out of 38 respondents answered this question, i.e. 87% response rate.
4.6.4.4   Time
a)   Time spent
-*"time consuming- multiple phone calls to nursing home from acute hospitals requesting information that is already written".*
-*"sometimes patient arrives without transfer letter and you waste time on phone chasing it up"*
b)   Timeframe of information
-*"the information can be misleading due to the fact that the assessment can be a month – 6 weeks old"*

4.6.4.5   Methods of Information Transfer
-*"information can get lost during patient transfer"*
-*"information is lost, not signed/dated"*
-*"ad hoc"*
-*"we would find current transfer system when receiving a patient to be very unsatisfactory when dealing with acute hospitals"*
- *"poor print quality, writing difficult to understand all details"*
-*"sometimes paper lost in transfer"*

4.6.4.6   System of Information capturing
a)   Information completion
-*"hospital staff often omit important relevant information"*
-*"missing important information on occasions, i.e. allergies, telephone no's"*
-*"Generally very poor. It takes many phone calls to get information"*
-*"inaccurate, incomplete information from wards and incomplete prescriptions"*
-*"Not a complete assessment. Multidisciplinary team need to complete separate documents. Very often documents are missing, not complete, not legible etc"*
-*"it is individual perception and documentation.......not all information given; poor handwriting"*
-Too little information. Whole systems approach not addressed"*

b)   Information design

-*"the common summary Ax record is not always complete and does not capture dependency levels in dementia care – behaviours that challenge"*

-*"not standardised"*

4.6.5   Question 13: Have you any suggestions for improvement in the way patient information is transferred?

Sample A

35 of the 53 respondents answered this question, i.e. 66% response rate

4.6.5.1   Information design

-*"r/v the form – section for each discipline"*
-*"for an over-haul of the current documents that are used, to give a fully comprehensive picture"*
-*"complete information details should be incorporated in the form"*
-*"design of CSAR could be improved to capture more information and clarify which discipline should complete each section and when additional reports are required"*

4.6.5.2   Standardisation

-*"standard document"*
-*"there should be a standard form for assessing patient and for transfer"*
-*"the form should be standardised"*
-*"standardised form needed"*
-*"a standard format"*

4.6.5.3   Information transfer to be electronic

10 respondents specified this in their answer with statements such as:
-*"should all be done electronically"*
-*"via e-mail or internet would be good"*
-*"electronic HSE-wide"*
-*"computerised record of transfer under patient protected ID i.e. part of electronic patient record"*
-*"computerise"*
-*"filling the form electronically; this will facilitate efficiency in filling form, transfer of information to all MDT members and timely transfer of information to another institution".*

4.6.5.4 Information completion changes - relating to communication

-"*proper communication between multidisciplinary team*"
-"*communications to nursing staff for more easy job from all members of staff*"

4.6.5.5 Time factor

-"*adequate time/notice for form to be completed*"
-"*information should be sent in a timely manner to allow for long term care facility to adequately prepare for arrival of patient*"

4.6.5.6 Patient involvement

One respondent stated that "*where possible....should be done in consultation with patient*"

Sample B

34 of the 38 respondents answered this question, i.e. 89%

4.6.5.7 Standardisation

11 of the respondents specified this in their answer with statements such as:
-"*a standardised tool needs to be used*"
-"*all hospitals and nursing homes have the same assessment documentation*"
-"*standardise documentation*"
-"*standardised information transfer*"/"*standardised transfer for documentation*"
-"*standard form for use by all*"

4.6.5.8 Electronic information transfer

-"*electronically would improve time factor*"
-"*electronic transfer of all information belonging to the resident*"
-"*if a standardised assessment was formed and completed via computer – it would be a lot more efficient*"
-"*computer*", "*e-mail*"
-"*we would support the creation of a computerised transfer form, making mandatory requirements of information prior to it being sent on to another facility*"

4.6.5.9 Information design

- 2 respondents suggested a '*tick the box'* type format.
-"*validated assessment tools which are common to all settings*"

4.6.5.10   MDS – inter-RAI

3 respondents referred to this directly, for example:

-*"standardise documentation; e.g. MDS captures everything"*

- *"MDS inter-RAI validated system of assessment will lead to care planning that is focused on needs"*

-*"a standardised minimum data set to be implemented across the country"*

4.6.5.11   Communication of information

-*"better co-ordination between all services"*

-*"ensure patient information is not just left lying around A & E and that all members of the MDT get to read it. Improve communication and knowledge by sharing documentation".*

4.6.6 <u>Question 18</u>: Would you be in favour of electronic transfer of patient data to/from acute hospitals to nursing homes?

Part 1:   Yes/No – see Section 4.4.12 for results.
Part 2:   Please outline 3 reasons for your view

Sample A
44 respondents gave reasons for their view when answering the question.
'Yes' respondents & reasons: 39
'No' respondents & reasons: 5

4.6.6.1   Summary of recurring themes/comments

A	Reason for YES	No. of responses
1	Time factor "Timely, Time efficient, Time saving, Less time, Quicker", "can be completed faster, at the same time by disciplines", "reaching the nursing home in less time span", "can reduce delays due to posting documents or no one available to answer phones"	**20**
2	Availability of Data "ability to update section if needed", "written document for future reference", "easily accessible if other staff need to use it", "easily accessible record if queried", "won't get lost or not available on the ward...don't have to worry about making copies", "allows comparison of patient need if re-admitted to hospital".	**10**

A	Reason for YES	No. of responses
3	Easier "easy transfer of information", "easier", "easy and quick to reach", "easy to read", "easy access", "easily accessible if other staff need to use it"	10
4	Traceable/Trackable "Transparent to all involved", "easily traced. i.e. faxes can get 'lost'", "easy track as don't get lost as easily as paperwork", "information can be easily accessed"	8
5	Efficiency "Efficient time-wise", "more efficient and reliable".	6
6	Standardised	6
7	Less paper work→ permanent record "Less handwriting...permanent record stored safely on computer", "less paper work...less likelihood of misplacing paper	4
8	Secure; confidentiality "more secure...proof of delivery", "could ensure greater confidentiality"	3
9	Legibility "simple to read", "more legible than hand written forms",	3
10	Facilitates Audit "data collected could be used for stats/research", "audit"	2
11	Integration with other health information "able to integrate with hospital records on computer", "in line with HSE moving towards electronic records"	2

Table 4.18

A	Reasons for NO	No. of responses
	Concerns re. security and confidentiality	2
	Preference for verbal communication	1
	Uncertainty as to what an electronic record is	1

Table 4.19

Sample B
30 respondents gave reasons for their view when answering the question.
'Yes' respondents & reasons: 26
'No' respondents & reasons: 4

4.6.6.2   Summary of recurring themes/comments

B	Reasons for YES	No. of responses
1	Improvements in information quality "accurate information", "captures all information required", "ease of transfer of clinical information", "reduces overlap & doubling up of lost or Ax done", "more detailed info can be transferred", "clarity of information", "clear, legible, accurate and up to date", "less errors as only one input; no transcribing", "visiting GPs would have access to investigations, making their Ax & workload easier".	**12**
2	Time factors "less time consuming for both parties", "time saving", "quick,instant", "faster information if sent before patient arrives", "less time wasted on phone to follow up documents", "speed of delivery", "timely handover"	**9**

3	Usability of information "information can be forwarded on to patient's GP", "full picture of resident available", "clear documentation of treatment and suggestions from medical team", "traceability and less paperwork....reduce error"	**5**
4	Data availability "easier accessed", "no risk of losing paperwork in the process"	**3**
5	Effects on communication "improved communication for multidisciplinary team", "less phone calls to hospital....smoother information trail", "improve communication though all relevant information would need to be covered"	**3**
6	Efficiency "more efficient....less ambiguity", "avoid duplication of work"	**3**
7	Legibility "easy to read – some handwriting is not legible"	**3**
8	Legalities "legally, it will cover us more instead of hard to read reports or being unable to understand someone on the phone"	**1**

Table 4.20

B	Reasons for NO	No. of responses
1	Staff Reasons Literacy "I prefer hard copy transfers because not all staff are computer literate"	**2**

	Accessibility of information to all staff in nursing home "needs to be in written format for use by MDT team e.g. accommodation, catering, pastoral care as well as nursing and medical"	
2	Uncertainty as to what an electronic record is	**1**
3	Resistance to computers due to size of facility "Small units such as this would be forced to computerise. Many errors on computer reports"	**1**

Table 4.21

4.6.7 *Question 21: Can you list advantages and disadvantages associated with use of a MDS tool?

Sample A

4 respondents from the sample number of 53 answered Qs 19-25 on the minimum data set.

Advantages	Disadvantages
Legible	_____
Internationally recognised & validated. Comprehensive & easy to use	Paint by no's approach to patient assessment. Mental health not fully assessed
Comprehensive; fits with ICD 10 & ICF	HSE unwilling to invest time and money into assessment of frail older people
Patient centred – essential info. captured& communicated	?updated regularly enough ?security of information transfer

Table 4.22

Sample B

18 people responded to this question; all who did responded listed advantages with 13 of the 18 listing disadvantages to the MDS.
Reasons for its <u>Advantages</u> included:
a)   "person centred and very detailed"
b)   "standardised tool not open to variations"
c)   "single Ax; has community, acute & LTC sections"
d)   "accurate Ax without duplication of different agencies"
e)   "comprehensive Ax that highlights deficits and enables care planning"

There were 3 main reasons for its <u>Disadvantages</u> included:
i)   Queries as to its language and its cultural relevance within an Irish population
ii)   Training necessary for staff to use – associated time & cost implications
iii)   Potential costliness of its implementation

4.6.8   *Question 25: How do you think a MDS tool could be implemented in an Irish context?

Sample A

3 respondents gave detailed answers to this question. Their responses were as follows:

- ▪ "Firstly, have a common, nationwide, computerised/electronic health record system then information sharing ..."

- ▪ "I think it could be difficult due to different governance, current lack of integration on all levels (IT, structures etc). Funding may be a problem. Would need guarantee of security of confidential information.

- ▪ "with potential - will!"

Sample B

16 participants responded to this question and gave a variety of answers - mainly in 6 key areas:

4.6.8.1   Need to increase general usage of computers and IT in Ireland

- ▪   "Increase use of computerised information. Input in all healthcare settings"

4.6.8.2   Support from all sectors

- ▪   "It will require input from all sections of a multidisciplinary team, and there will need to be some sort of system put in place to achieve this"

- ▪   "It will need much support and effort from the HSE"

- ▪   "Cooperation and partnership between all settings"....... "acute care staff reaching out to long term settings and visa versa – cross training"

4.6.8.3   Training
"in house education", "Educate. Train all stake holders".
"Education may also be costly"
"With proper training and compliance by all successfully"

4.6.8.4 If it is fit for purpose

- "Check to see if it is 'all singing and dancing'.

- "Where it is now used or just another new fangled idea promised by academics that doesn't make sense and is made compulsory by HIQA!!"

4.7 Qualitative Data (Focus Group)

The aim of the Focus Group was to explore health professionals' opinions, attitudes and interests in relation to the potential of electronic transfer of patient information between acute hospital and long term care facilities. Its main purpose was to inform the questionnaire formulation and make its content relevant as the researcher did not come across a similar study with such a questionnaire. The Focus Group lasted approximately 45 minutes. The researcher transcribed verbatim based on recording of group. See Appendices 3 and 4.

A total of 10 main ideas/issues arose from Focus Group discussion. They are summarised below with direct quotes demonstrating this opinion.

4.7.1 Use of computers

All five participants reported used computers on a daily basis for variable lengths of time. Computer-based work was identified as often being directly in relation to patients and not necessarily just for admin tasks.

Nursing participants referred to their usage for "*checking bloods; listing patient's orders; referrals to allied health professionals*". One CNM identified using them "*for patient handover*". Other CNM reported using mainly for "*rostering and e-mails*".

Both medical social work participants and OT reported using "*for electronic referrals and e-mails*", with social workers also reporting using computers for "*documenting input*".

4.7.2 Views on current system of information transfer

4.7.2.1 Common Summary Assessment Record (CSAR)

- All group participants were aware of the HSE document: the Common Summary Assessment record (CSAR) that are currently used to transfer information when patient's in hospital are transferred to long term care facilities. All had some comment to make in relation to this system, such as:

- Some felt a lot less information that was transferred is now being transferred (compared to previous system of documentation).
- Nursing homes still call hospital staff requesting further information e.g. re. what equipment needs they may have,
- No ownership of the form as it is not clear what professionals need to take responsibility to fill in what section
- Lengthy
- Not capturing/summarising in any way the input of hospital staff during the patient's stay
- One participant felt strongly that there was no consultation with the people involved in transferring the patient
- Information is faxed

4.7.2.2   Nursing transfer letter

CNMs referred to the information that is transferred on this: ADLs, skin condition, nutritional status, and medication administered on day of transfer. Information is brought by patient/carer to long term care facility.

4.7.3   Ideas as to how information could be transferred differently

4.7.3.1   Computerised

-"*One piece of software; used in the HSE and nursing homes - nursing home staff would have access to clinical notes, access to the 'same system'*"

-"Internally – e-mail notification to all disciplines required to fill in relevant documentation; storage of documentation in a shared folder that can be accessed by relevant people"

4.7.3.2   Improved communication

-"*Having access to details of relevant person (people) to contact in nursing homes*"

-"*Internally, sharing information about nursing home details could be improved*"

-"*Two way communication path; get feedback from nursing homes*"

4.7.3.3   Changes in information itself

- "*More patient-specific information could be included; as in the time, which can often be considerable, hospital staff have come to know people, their likes, dislikes, how to manage any behaviours etc and some of that information, if it was transferred to the nursing home, could be helpful*".

- *"A standardised form for patients transferred from a nursing home to a hospital would be good".*

4.7.3.4   'System' changes
-*"Accountability as to who is responsible for filling in and for the patient information in general; otherwise no one takes ownership and getting the information/trying to co-ordinate it can be effortful and a burden".*
-*"Option of a follow-up mechanism to ensure helpful information can be made available; e.g. patient with challenging behaviour – hospital staff could advise on what was tried/not tried, worked/didn't work when they were in hospital".*

4.7.4   Information access from Nursing homes in relation to patients

- One participant estimates that approx 80% of the time if a patient is transferred into hospital from a nursing home they receive no information, *"so it involves phone calls"*

- General consensus from participants that the only '*correspondence'* they might get from nursing homes is if the staff have a problem with equipment or medication

- *"That would be really beneficial to have like some information, if it's like what is that you know and what is it that you want us to tell you or what is it that you want to know from us?"*

4.7.5   Standardised Assessment
- Can often comprise of a *"tick-box format can be limiting"*

- *"Using tools that are familiar to all is advantageous"*

- *"A standardised form for transfer from a nursing home to a hospital would be good"*

4.7.6 Difficulties with speed of patient transfer from hospital to nursing home:
Overall, there was a general consensus among participants that the speed of the way patients get transferred to nursing home beds is not necessarily a good thing.
-"It's a bit of a paradox sometimes that people have been in hospital for six months, eight months and suddenly we need to get them out within 48 hours"

-"At the end of the day it is a decision about where the person will be spending the rest of their lives"
-"Turnover speed not necessarily linked to vacant beds but timing of funding release from the HSE".

4.7.7   Electronic transfer of patient data
Participants outlined both pros and cons of electronic as opposed to faxing a paper document (current system).
Reasons in favour:

- "Electronic information transfer is very quick"

- "Less storage space required than current paper information"
- "Probably more secure than paper; e.g. open filing cabinets, patient notes available on trolleys or at end of beds; lost or missing notes"
- "Computers improve readability"
- "An electronic system could 'red flag' say to remind people they need to complete the patient transfer form, for example"
- "Electronic records can be easily and quickly amended or updated; e.g. if existing paper form completed then patient is not transferred to nursing home for 3-4 months, then paperwork often needs to be re-done"

Reasons against:

- "Confidentiality"
- "Security of the information"
- "Possibility of losing information if computer malfunctions vs. Paper copy in your hand"
- "Access to data; ensuring appropriate access

General comments:

- need to develop trust re. patient information in the same way online banking has become so commonplace

- how much information do we really need to transfer across?"

4.7.8 Involvement of patient and/or their family in transfer of patient information to/from acute hospitals to long term care facilities

- "Family could be more involved in contributing to patient transfer information documentation as they know the patient in ways hospital staff may not"

One social worker reports that "involvement currently limited to information concerning the DDI bed (see Appendices), nursing home charges, going out to see the nursing home".

"why don't we get the family involved in filling out the form; why don't ....cos they're the ones that know the person"

"they're not that involved, it's more us taking ownership on the whole thing".

Another participant reports "One of the things that I think is missing is that when we transfer a patient to a nursing home it's a person with habits, with a life, with a lifestyle, with likes and dislikes and I think we miss an awful lot on that".

The next chapter will discuss the findings of this research in greater depth based on the information obtained from the results of the data collection methods.

Chapter 5

Discussion:

5.1 Introduction

This study was designed to carry out research into the means and methods that could enable the electronic transfer of needs assessment information for patients being discharged from an acute hospital to a residential setting in a timely and efficient manner.

In line with the format of previous chapters, this chapter will be guided by the key objectives for this research; namely to investigate:

- Relevance of and examples of standardised assessments in the area of long term care patients?

- How is long term care patient information currently being transferred from acute hospital to long term care settings?

- How might long term care patient data be transferred electronically? Are there any existing tools that can do this job currently?

- Exploration of health professional user's perspective – attitudes, potential acceptance of IT, computers and Electronic health records.

- Is there a need or desire for change from current paper-based system to electronic information transfer of long term care patient information?

Discussion of the main findings and conclusions of this research will be structured in line with these objectives. Although the sample sizes and research methods in this study were not on a large scale such that more general inferences could be made to the general health professional population, the researcher would hope the study will offer an insight to policy-makers and challenge those looking into changing potential methods of data collection and assessment for this population to take note of health professional user feedback, international evidence and potential electronic applications to transfer this important information between hospital and long term care settings.

5.2 Standardised Assessments used in relation to long term care patients for transfer between acute hospital and residential settings.

5.2.1 Introduction

From the findings of this research, based on the answers to two specific questions that dealt with the area of standardised assessment, there was much evidence to suggest that there was nothing 'standardised' about the health professionals in these sample's understanding of a standardised assessment. I will refer the reader back to the predefined and medical dictionary definition of a standardised assessment as 'any empirically developed examination with established reliability and validity as determined by repeated evaluation of the method and results' (Mosby's Medical Dictionary, 2009).

5.2.2 Understanding of a standardised assessment

Four main themes arose in the findings in relation to participant's definitions of what a standardised assessment is:

- i   – Alternative names suggested for it e.g. "standardised tool" or "standard form"
- ii   – Descriptions of the format of a standardised assessment
- iii   – Description of when/where to use a standardised assessment, e.g. used by all facilities"
- iv   - Validity and reliability as a definition of standardised assessment.

5.2.3 Agreement on need for standardisation

Despite the variation in definition, the importance of standardisation was widely suggested as a way of improving the current process of patient information transfer between the two settings. Qualitative data obtained from Question 13 of the questionnaire when participants were asked 'Have you any suggestions for improvement in the way patient information is transferred?' illustrate this point as participants from both acute hospital and long term care settings agreed on this.

Illustrations of agreement about standardisation between acute hospital and long term care setting participants	
Sample A Response Examples	**Sample B Response Examples**
"standardised form needed"	*"a standardised tool needs to be used"*
"a standard format"	*"standardise documentation"*

"there should be a standard form for assessing patient and for transfer"	*"all hospitals and nursing homes have the same assessment documentation"*

Table 5.1

5.2.4 Evidence-based standardised assessment in   long term care patient population

The assessment tool(s) with the main body of evidence as to its standardisation and work done on validity and reliability that the researcher came across in the literature was in relation to the Minimum Data Set (MDS) (see www.interRAI.org) and its various applications. (See also Chapter 2).

A presentation the researcher came across on the inter-RAI website summarises three examples of the functionality of the MDS instrument:

- a)   inter-RAI assessment instruments are built to specific principles and standards.
- b)   Each assessment creates a minimum data set which provides an entire range of measures to assist in care planning, client monitoring and administration.
- c)   High quality data is collected once and then used for multiple purposes. One of the big advantages to this is that it encourages accuracy and reduces duplication.

    Ref: www.**interrai**-au.**org**/downloads/**interRAI**_HC_overview.pps

5.2.5   Knowledge on MDS applications in an Irish context

The second part of the questionnaire the researcher distributed to health care professionals in acute hospital and long term care settings was specifically to investigate knowledge levels amongst the samples in relation to this standardised assessment format.

From the results obtained i.e. numbers of responses in both samples, there is clearly more widespread knowledge of the MDS amongst long term care health professionals.

Sample A: (Acute sector) - 10% average response rate to Questions 19-25

Sample B: (LTC sector) - 59% average response rate to Questions 19-25

Of the respondents who answered the questions, there is also an evident support for the MDS applications based on some of the comments written as to its advantages; for example:

"..Internationally recognised & validated..."

"..Comprehensive and fits with ICD 10 and ICF"

"Standardised tool not open to variations"

"Accurate Ax without duplication of different agencies"
"Comprehensive Ax that highlights deficits and enables care planning"

The researcher had hypothesised at the end of the literature review carried out (See Chapter 2), that the introduction and implementation of a minimum data set instrument in an Irish context would generate lots of issues concerning the informatics side to its implementation; for instance issues such as data security, secure data transfer, access to information and who is responsible for the collection and maintenance of the information.

In analysing the responses given to listing the disadvantages of the MDS the three main areas referred to were:

    i)   Queries as to its language and its cultural relevance within an Irish population
    ii) Training necessary for staff to use – associated time & cost implications
    iii) Potential costliness of its implementation

Data security and confidentiality was mentioned by one participant, but one would expect greater concern for this area based on generic health informatics literature about acceptance of electronic health records, as which the MDS would generally be considered. The researcher also noted there was no reference or mention given in either of the samples, in any of the open ended 'opinion' questions, as to overall data management, maintenance of data integrity, and usability of data in the longer term for population health studies.

Nor was there any evidence to suggest, based on participant responses, that databases based on information from standardised assessment measures, as well as data on interventions/treatments provided could provide lots of evidence based information to guide patient care and further research, as Carpenter et al (2000) refer to.

Having come across limited evidence in the mainly health literature around the MDS of health professionals familiarity with computer databases in general, the researcher also sought to investigate this area further. On a likert-type scale in Question 15 respondents were asked to circle an appropriate response: a) Very Familiar, b) Quite Familiar, c) Unsure or d) Not Familiar – in relation to Computer Databases. The results indicate that in both the acute hospital and long term care setting health professional samples that the majority of respondents would be 'Quite familiar' with computer databases.

This result does not therefore give any clarification or explanation as to why then the potential functionality of computer databases was not considered an advantage or an implementation consideration in relation to the minimum data set.

5.2.6   Summary

In conclusion, to summarise the potential value of standardised assessment to the 'long term care patient', the researcher defers to the article by Carpenter et al (2000) entitled 'Building evidence on chronic disease in old age'. In this the authors end by saying that systematic data analysis of the data from comprehensive standardised assessments populated into "high quality databases should contribute to evaluating the effectiveness and outcome of care provided to frail elderly people with chronic disease" (p. 529).

5.3   How is long term care patient information currently being transferred from acute hospital to long term care settings?

The researcher acknowledges that answers obtained in relation to investigating this objective are not generaliseable to the wider population as the sample of acute hospital participants was a convenience sample from one geographical location only. (See Chapter 1:10 also).
As part of the investigation into this objective the researcher also deemed it pertinent to ascertain:

- Frequency of staff involvement in patient information transfer in the setting that they work

- The most commonly used method of communicating patient information in the healthcare facility they work

- Time spent completing current information that is transferred on patients to/from acute hospital to long term care facilities

The researcher had hypothesised, based on personal experience, that paper-based transfer of information would be the predominant method. Literature supports this view also (Lilja et al, 2000, Payne et al, 2002, Hagen Tjora & Scrambler, 2009).

5.3.1 Methods of transferring patient information

Results obtained rank the main methods reported as follows, in order from most common to least common. Note method frequency was mirrored between both samples:

Method of Information Transfer	Sample A: No. of Responses (Acute hospital)	Sample B : No. of Responses (Long term care)
Paper document Posted	49	30
Paper document Faxed	18	11
Phone Call	8	11
Computerised document	5	1
Do not know	0	0
No documentation	0	0

Table 5.2

* <u>Note</u>: respondents were free to choose as many answers as they deemed appropriate so no's are not reflective of actual sample size

The researcher, with working in the particular acute hospital setting with long term care patient transfers is very aware of the existing methods of information transfer. Of note, is that the <u>actual</u> main method of long term care patient information transfer as opposed to participant's perceived viewpoint is a paper document that is <u>faxed</u>.

5.3.2 Frequency of staff involvement in transfer of patient information in the healthcare facility they work

In the comparison of acute hospital and long term care setting, health professionals reveal some differences in how often they are involved in transferring patient information. More staff is involved in Weekly vs. Daily patient information transfer in the acute setting whereas the opposite is the case in the long term care settings. Looking at the figures as a whole it illustrates the researcher's perception of the frequency of information flow in general from both settings, as most respondents would have indicated information was transferred either Daily/Weekly, with few staff indicating it would be any less frequent.

5.3.3 Main method overall of communicating patient information

In rank order, starting with the most common method, are the methods of communicating patient information in <u>both</u> acute hospital and long term care health professional respondent samples:
1) By Telephone
2) By Paper
3) By Fax
4) In Person

5)   By Computer
(See Table 4.6)

Lilja et al's (2000) research was also in relation to older people; they specifically looked into the transfer of information about geriatric clients in the Occupational Therapy chain of care. Their research, similar to the findings in this study, found that the most common way of transferring information about clients to other colleagues was also by telephone.

5.3.4   Time spent completing patient information

In both samples again, the most frequent response as to how long it currently took the healthcare professional, on average, to complete the current patient transfer information was in the 15-30 Minute bracket.

Looking at the basic information on both samples of participants in this study one could not say they are both necessarily comparable. Health professionals with a nursing background make up the vast majority of both samples (66% Sample A; 97% Sample B); however, the remainder of the acute hospital sample consist of a combination of doctors and allied health professionals.

In relation to all of the aspects of the time spent and current methods of patient information transfer from/between hospital and long term care facilities, consensus does appear to have been reached among these samples in any case.

5.4   How might long term care patient data be transferred electronically? Are there any existing tools that can do this job currently?

The researcher had hypothesised that the inter-RAI Minimum Data Set tool would be an optimum means of ensuring long term care patient data is efficiently transferred between acute hospital and long term care settings. As has been noted in the literature, there was little evidence to disprove this hypothesis.

5.4.1 MDS: a tool that could do the job currently

From the outset the minimum data set (MDS) was designed to be computerised; for data to be submitted electronically and for a database to be generated and used to be able to use the resident-specific information gleaned on a widespread level to track, measure and monitor the quality of care provided. (Morris et al, 1990). The researcher as part of this study sought to investigate health professional's awareness of this tool also. Results suggested a greater awareness of the MDS tool, its content and its functionality amongst the sample of professionals working

in long term care settings. Reasons for this could be due to the recent introduction of the HIQA 'National quality standards for residential care settings for older people' (2008). Appendix A refers specifically to 'Supplementary Guidance for the choice and use of a minimum data set tool'.

- Sample A: 10/53 responded to the questionnaire answered this question: i.e. 18.9% of the sample. 6 of these 10 health professionals answered 'NO' or 'Unsure' to all 7 questions in this section. Therefore, the researcher asserts that just 4 of the health professionals in this sample are familiar with the MDS.

- Sample B: A total of 25 of 38 health professionals who responded to the questionnaire answered this question: i.e. 66% of the sample.

Although the HIQA guidelines do not explicitly refer to the inter-RAI MDS set of instruments, based on their stipulation about the Minimum Data Set tool having the following qualities:

> "Reliability – inter and intra-rater reliability have been shown to be acceptable

> Validity – the scale has been shown to measure that which it set out to measure

> Fit for purpose – the scale is of proven value in extended care settings

> International comparability – benchmarking, with international practice is possible" (p. 70)

... The researcher did not come across an equivalent tool that would meet these criteria.

The HIQA guidelines do not specify that the MDS tool needs to be implemented electronically; however, based on results from the respondents in the study who listed advantages of the MDS, the electronic nature of its use was one of them.

5.4.1.1 Informatics component to MDS

Since its first inception and format the MDS tools have placed strong emphasis on the value of detailed and cumulative health information stored and accessible in databases. This electronic data system that collects data from a standardised clinical data collection form and is transmitted electronically has been this way for many years. The inter-RAI website outlines licensing and software restriction information. The Centres for Medicare and Medicaid services (CMS) website (http://www.cms.hhs.gov) outlines detailed information for software designers on: - Software and specifications

  - Software used is known as RAVEN. The site contains specifics on processor requirements, downloading capabilities and

versions, ICD 9 coding information and who to contact in the event of technical difficulties.

- (http://www.cms.hhs.gov/MinimumDataSets20/07_RAVENSoftware.asp)

The researcher, in the course of preparatory research, was informed by Professor Iain Carpenter, a member and considerably published author with inter-RAI that one company in Ireland is a licensed software vendor with inter-RAI; this company is called Epic Solutions.

5.4.2 Alternative means of electronic data transmission
5.4.2.1 - E-mail transfer
Some respondents suggested the transfer of data via e-mail. There are quite a few examples of standards of e-mail encryption, including: pgp e-mail encryption, nist encryption standards, aes encryption standard, s mime e-mail encryption and rsa encryption standard.
While e-mail transfer of patient information would almost certainly have advantages over the current predominant paper based system, the data would still be quite one-dimensional; i.e. it may not necessarily be kept or linked to a patient's general health record

5.4.2.2 Electronic discharge summaries
While there is much work being done in the development and implementation of electronic discharge summaries, these generally relate purely to medical and/or pharmaceutical related discharge prescriptions. Long term care patient data is of a more detailed variety, and even with dictation, an automatically generated discharge summary is unlikely to have sufficiently comprehensive information. As per e-mail methods, these can be quite stand-alone in their nature too and not necessarily accessible to all disciplines who may wish to read it.

Summary (Objective 3):
The MDS instruments demonstrate have been purposefully designed from the outset to be able to transfer long term care patient data electronically and to be able to formulate an integrated health record based on patient level data that can also be applied to population health level data and care planning for the future.
Standardised assessments the researcher came across in the course of the study, e.g. Aged Care Assessment Program (Australia), although outlined adherence to specific standards, there is no agreed methods of or evidence of consideration of electronic data transmission.

5.5   Exploration of health professional user's perspective – attitudes, potential acceptance of IT, computers and Electronic health records

One of the questions asked on the questionnaire related to the respondent's views in favour/against the electronic transfer of patient data to/from acute hospitals to nursing homes? The answers from both samples suggest the overwhelming majority of participants would be in favour of this method of transferring patient information.
Sample A: 70% respondents in favour. Sample B: 82% in favour.

5.5.1   Use of computers and electronic health records in the clinical setting

In this study, a significant percentage of respondents reported being 'Very Familiar' with using computers. (Sample A: 47%; Sample B: 52%).

5.5.1.1   Relationship to a person's age?

There is much assumption amongst the wider population that younger people are more likely to use and be open to computers/technology. Scientific evidence has refuted this and indeed one could be quite likely to be referred to as being ageist for suggesting such a thing. Although, for confidentiality and anonymity purposes the researcher did not enquire with the respondents as to their age, an enquiry was made in Question 2 of the questionnaire as to the number of years of experience they had had in their job. (Answer options: 0-1 year, 1-5 years, 5-10 years, 10-15 years, 15-20 years and >20 years). The researcher made the assumption that those with more years of experience are likely to be older than those with fewer years of experience. In analysing the results of this: i.e. that 45% of the long term care sample respondents were in the >20 years of experience bracket, this in itself, demonstrates that age is not an indicator of computer usage.

Terry et al (2008) reports in his study that the willingness of a healthcare provider to accept EHRs is 'linked to baseline levels of computer knowledge; i.e. little experience with computers leads to challenge in process of both using the computer and the software'. The researcher therefore, posed the question to participants as to their familiarity with the concept of an electronic health record also.

So far, the researcher could conclude a similar response to questions from both acute hospital and long term care respondents, however, not in relation to the area of EHRs. Acute hospital professionals fell mainly into the 'Unsure' and 'Not Familiar' categories, with a total of 64% of respondents. By contrast the level of familiarity amongst long term care health professionals is more evenly distributed with 29% indicating their familiarity as being 'Very Familiar', 'Quite Familiar' and 'Unsure'

respectively, but only 13% indicating they were 'Not Familiar' (vs. 30% of acute care professionals).

5.5.2 Reasons in favour of electronic transfer of long term care patient data

Due to the fact that the researcher had come across limited evidence as to healthcare professional's views on electronic data transfer in this population, it was deemed pertinent to allow the participant to expand on their reasons.   Respondents in both samples reported some similar explanations, for example:

a) Perceived efficiency and improvements in length of time taken to transfer information successfully between acute hospital and long term care settings

b) Availability of data: easier to access; track and keep account of. Prevention of "missing documents/no toner or paper for fax machine", as one respondent had outlined.

c) More standardised format

d) Improved legibility of data: "Easy to read – some handwriting is not legible"

e) Improvement in quality of information and its usability

f) Improvements in communication

g) Facilitation of audit

h) Legally; more secure as it would be a permanent record with "...no risk of losing paperwork..."

5.5.3 Reasons against the electronic transfer of patient information

Of those who reported not to be in favour of electronic transfer of patient information the main reasons were on account of:

i) Respondents unsure of what an electronic health record is

ii) Staffing reasons: cost of training if staff are not computer literate and ensuring all relevant staff can access the patient information they need; example given of catering etc.

5.5.4 Summary

The vast majority of the respondents in this study would express agreement as to the merit of electronic versus paper-based information transfer. Meadows (2003) also make a valid point, and one which the researcher has personally encountered also; that "paper-based information gathering can mean patients have to answer the same questions over and over" (p. 300). There is the reported phenomenon of the 'communication silo' with each discipline often having their own records of input with the patient.   Implementation of an electronic

instrument such as the MDS or any other electronic health record, for that matter, should ensure that information about the patient is 'followed' regardless of their location (Miller et al, 2005).

5.6 Is there a need or desire for change from current paper-based system to electronic information transfer of long term care patient information?

5.6.1 Introduction

The original interest of the researcher in this area of information transfer concerning long term care patients stemmed from experience in work of faxing paper documents to nursing homes; frustrations about the time it takes and concerns about the security of data at 'the other end' of the fax. This could not be assumed by the researcher to be the case of every healthcare professional and so the decision was made to have certain qualitative data via open-ended questions on the questionnaire to get healthcare professionals opinions in relation to three different aspects of information transfer to long term care:

- i) What are the advantages of the current system by which patient information is transferred?
- ii) What are the disadvantages/challenges of the current system by which patient information is transferred?
- iii) Have you any suggestions for improvement in the way patient information is transferred?

5.6.2 'None' or 'No Advantages'

The researcher was struck by this common sentiment expressed in both acute hospital and long term care setting participants. 30% of the responses given by Sample B participants gave this as their answer to the question. This compared to a figure of 10% for Sample A participants. However, there were also more respondents still who claimed they weren't aware of what the current system of transfer of patient information was.

5.6.3 Quality of information provided

The responses of participants from both samples reflected overall quite a difference of opinion in relation to this area; for example:

- Sample A Respondent: on information given to nursing home staff- *"provides full overview of patient".*
- Sample B Respondent: on types of information received from acute hospitals – *"hospital staff often omit important relevant information".*
    - Sample A Respondent: on information received from nursing homes: "sometimes I feel its one way information which is

we send information to nursing homes; we never hear anything than yes or no"

- Sample B Respondent: on information given to acute hospitals: -"*comprehensive written documentation completed for hospital*".

The researcher will make two comments in relation to these findings:

1) Remarks indicate aspects of communication in general that need to be improved upon.

2) The comments about acute hospitals do not necessarily refer to the acute hospital that Sample A consist of, as long term care respondents were sampled based on HSE list of nursing homes in the greater Dublin area in general.

5.6.4   Methods of transferring patient information

Sample A respondents referred to the Common Summary Assessment Record (CSAR) as being the main method of transferring patient information from acute hospital to long term care facilities. By contrast, only 2 respondents in the long term care professional sample even referred to the CSAR by name.

There were a number of negative comments made in the participant responses as to the ineffectual nature of the current methods of transferring patient information.   Examples of criticisms referred to include:

-"*It's not a very complete form; i.e. no section for certain specialities to complete. Therefore need to send a separate form*"
-"*depends on who fills it how good it is*"
- "*not specific to patient*"
-"*some information - not captured/clearly visible*".

5.6.5   The Time Factor

Respondents to these three questions and also, focus group participants referred to several aspects in the area of 'Time' that have various impacts on the process of transferring patient information between hospital and long term care facilities.

5.6.5.1   Time saving potential of electronic data transfer

The immediacy and efficient nature of transferring patient data was noted as being potentially beneficial to all concerned. Respondents from both the acute hospital sample and long term care sample described time wasting situations where they were making 'follow-up phone calls' and trying to 'catch the right people' to get more detailed patient information.

5.6.5.2 Consideration of time factor for healthcare professionals

Two participants from the acute hospital sample referred to potential time considerations that should be taken into account in the system of transferring patient data...

"*adequate time/notice for form to be completed"* and, that

-"*information should be sent in a timely manner to allow for long term care facility to adequately prepare for arrival of patient"*

5.6.5.3   Consideration of time factor for patients

Although this consideration was only mentioned in the Focus Group session, the researcher felt the issue raised should be outlined to the reader. The participant raised her difficulty in relation to the speed of patient transfer from hospital to nursing home:

"It's a bit of a paradox sometimes that people have been in hospital for six months, eight months and suddenly we need to get them out within 48 hours" ...At the end of the day it is a decision about where the person will be spending the rest of their lives".

5.6.6   Information and/or format to be standardised

This was an area which participants from both acute and long term care samples agreed on; the need for "...all *hospitals and nursing homes to have the same assessment documentation..."* Three respondents from the sample of long term care health professionals specifically referred to the interRAI MDS as the means of achieving this. Responses such as *"MDS interRAI validated system of assessment will lead to care planning that is focused on needs"* and -"*a standardised minimum data set to be implemented across the country*" illustrates this view.

5.6.7 Change to electronic information transfer

This was another key area of agreement between the two samples as to suggestions for change in the current system.   One healthcare professional in the acute sample outlined their reason for this view "...*"Filling the form electronically; this will facilitate efficiency in filling form, transfer of information to all MDT members and timely transfer of information to another institution..."*

5.7 Summary

The aim of this research was to carry out research into the means and methods that could enable the electronic transfer of needs assessment information for patients being discharged from an acute hospital to a residential setting in a timely and efficient manner.

This study sought to answer questions as outlined in the research objectives (Section 1.6) as a means of informing the general body of knowledge in Ireland in relation to:

a)   Methods of capturing long term care patient information and

b)   Options and opinions of end-users as to whether or how this information could be dealt with electronically.

The long term care/residential care sector for the Over-65 population is at a key point of significance in Ireland currently due to three main factors:

1)   Steady increase in numbers of people ageing and requiring admission to long term care facilities from acute hospitals

2)   New Government legislation concerning the funding of long term care beds in the over 65 population; 'A Fair Deal'

3)   Change of governance in the process of nursing home inspections as the Health Information and Quality Authority (HIQA) under the remit of the Chief Inspector of Social services takes over from the HSE.

Based on evidence obtained from a combination of literature analysis and investigation of health professional user's perspectives there would appear to be agreement on the fact that there is a distinct shift towards electronic versus paper capturing and transfer of patient information across all healthcare sectors. De Clercq (2008) summarise this view as it is stated that it is becoming a general consensus that "paper records can no longer meet the requirements of modern health care" (p. 565)

5.8   Considerations and Recommendations

The researcher would advise that the inter-RAI minimum data set series of instruments should be implemented in an Irish context.

This statement is substantiated by three key factors:

1)   Analysis of the evidence presented by and the very existence of a non-profit organisation such as inter-RAI in relation to its research on evidence based practice, validity and implementation of assessment and care planning tools for older people since the early 1990s. Its membership comprises of prominent researchers and clinicians from over 30 different countries. No other assessment tool(s) the researcher came across demonstrated such thorough considerations of factors of not only patient level data and quality of healthcare provision but also population-based data indicators to assist in overall care planning as the worldwide population continues to age.

2)   Recommendations in the new HIQA Guidelines 'National quality standards for residential care settings for older people' (2008). Appendix A refers specifically to 'Supplementary Guidance for the

choice and use of a minimum data set tool'. All that is absent from this is an assertion that the data should be captured and/or transferred electronically.

3) There is no evidence of another tool that would fit the criteria/suggestions for a change in the current system, as indicated by the respondents in this survey; for example; its need to be standardised, valid, reliable and electronic.

Straker & Bailey, 2008, do however, make the point that when the MDS was first implemented it was viewed quite negatively (in the US) for being "complex and burdensome"; since then the study concludes that nursing homes have adjusted their staffing levels, received appropriate training in use of instrument and multidisciplinary team processes.

Hirdes (2006) gives the best synopsis the researcher has come across into considerations about implementation of the MDS. His research describes the experience in Ontario and the researcher notes its potential relevance and advice to those policy-makers or health care providers who may seek its implementation in an Irish context:

"1. Change-management considerations and effective processes

2. Availability of computerised information systems

3. Education of clinicians, managers and policy-makers in the use of these instruments and the data they yield must be provided on an ongoing basis

4. Feedback to stakeholders; this data must be used to inform decision making at all levels of the health care system.

5. Although the data can be used for many purposes, there must be a clear emphasis on its clinical applications to sustain its use in daily care provision" (p. 330).

5.9 Conclusion

The researcher's original hypothesis upon commencement of this research study was that the use of an informatics application, such as the inter-RAI Minimum Data Set (MDS) would be of mutual benefit to patients and staff alike in the transfer of patient information between hospital and long term care facilities.

Having found little or no evidence to disprove this view, and clear agreed feedback received from both acute care and long term care health professionals that changes in the current system of data transfer of long

term care patient information should occur, the researcher is encouraged to pursue this matter, as appropriate, within the context of her work.

As there is no evidence of any clear guideline or agreement on the optimum means of transferring patient data between these two settings, the researcher would hope, in conclusion that the research will be a means of informing the general body of knowledge in Ireland in relation to appropriate methods of capturing and communicating long term care patient information.

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Appendices

Appendix 1:   Focus Group Introduction Letter

My name is Ciara Blair and I am an Occupational Therapist.   I am currently undertaking research to go towards completion of a Masters' Dissertation in Health Informatics in Trinity College Dublin this year.
As you may know, I work on the Discharge planning team in this hospital. Our work is to assist in facilitating patient discharges from hospital; specifically long term care patients, those requiring interim care and those patients highlighted as being a delayed discharge.

Purpose of Research:
- Define or clarify existing long term care patient data collection methods.
- Exploration of positive/negative aspects of same; what could be improved upon
- Investigate existing awareness of computers and examples of IT applications in the area of long term care assessment data.

Focus Group
I am currently seeking to recruit 4-6 staff members (multi-disciplinary) who are involved on a regular basis in the transfer of patient information from hospital to long term care settings.

Please note that no personal information will be collected in this research and participation is voluntary

Appendix 2:   Focus Group Key Topic Areas

- Day-to-day usage of information technology?

- Understanding of 'informatics'?

- Type of information currently given/received on nursing home residents?

- Describe the current method of (patient) information transfer?

  - o   What are the good things about it?
  - o   Are there things that could be done differently?

- Views on Electronic document transfer and storage of patient information

- Familiarity with the term Single assessment process?

- Knowledge of standardised assessments/tools?

- Familiarity with the minimum data set tool?

- Ideal world scenarios?

Appendix 3: Focus Group Verbatim Transcription

Focus Group 1 (Hospital) Verbatim Transcription

Participants:
CNM 1: Clinical Nurse Manager Grade I
CNM 2: Clinical Nurse Manager Grade II
MSW 1: Medical Social Worker Team Leader
MSW 2: Medical Social Worker Team Leader
OT: Occupational Therapist, Senior Grade
R: Researcher

_____

R: So I suppose just a general question to start; like what kind of day to day usage of Information Technology and computers would you have in your daily job? ....Do you use them everyday/sometimes?
MSW 2: Well I suppose everyday......for well, for a public unit I've only ever gotten one, emm, e-mail referral form from a public unit and that was St. Joseph's in Trim. Emm, but generally its phone calls, but you would say for DDI beds you would send a quick e-mail to Mairead Behan to make sure that you can use that DDI bed.
R: OK
MSW 2: And that would be e-mail.
MSW 1: I have some...... Our Lady's Hospice the, the referral is electronic as well if you want to use it. Eh but then there would be the problem of them electronic, you know the confidentiality and hope to where it's secure, emm so we are not that keen emm in using electronic eh information exchange with other institutions.
R: Ok
MSW 2: like within the hospital I understand it's safe
R: And like from a nursing point of view obviously when you're on the wards and all that you don't have time to be going near computers, but how much time on average would you guys spend say in an average shift on a computer as in computer-based tasks?
CNM 1: In general we do, we do; we check the bloods emm yeah we check blood results and patients have lists of orders
R: Yeah yeah
CNM 2: Emm for other Allied Health referrals well the majority of them are on computer now so we're doing that. Emm for us we have a shared folder for the ward handover; eh for the, all the staff would have access to that, and it would be updated throughout the day.
R: As well as the paper notes?
CNM 2: Yeah. Emm it just aids with any handover and speed; and then e-mail as well, the whole hospital I suppose it's just an e-mail hospital.
R: Do you think CNMs would spend more time on computers than staff nurses or does it vary hugely.....out of interest?
CNM 1: No it's probably about 50/50.

CNM 2: Yeah I would say it depends; as such, like for admin, from me anyway I would spend more time on the computer –rostering and stuff like that and probably not as much in checking bloods.

R: Yeah ok

CNM 1: Mainly for checking bloods but emm we use also for patients.

R: Ok yeah, and paper?

CNM 1& 2: Yes and paper

OT: We use them *(computers)* daily for checking our referrals and e-mail.

R: Yeah ok.

R: What would peoples understanding of the word 'informatics' be? Or do you have any understanding of the word 'informatics'?

(Pauses and laughs as all participants shrugged shoulders)

MSW 1: Well I guess it's all the information that is recorded in a personal computer somehow and the support for it other than paper or an electronic recording

R: Yeah pretty much exactly I suppose........well what I'm doing; Health informatics is just like that I suppose looking at IT applications in relation to health information that's all. Emm so what types of information are you currently giving about nursing home residents in your job; for say someone who's going to a nursing home – what type of information would be giving generally?

MSW 2: To the patient's family?

R: To the nursing home

MSW 2: Well that would be the CSAR

R: Can you explain what the CSAR is?

CNM 1: The CSAR is the common summary assessment record (got assistance from other group participants to remember exactly what it stood for).

R: Ok. And what type of information is on that?

CNM 1: On the CSAR?

R: Well, that is if that's the information being used?

CNM 1: Well all information about the patient, you know, eh medical history, both past and present, intervention, you know the level of dependency, emm professional therapists involvement; whether what you've done for them, speech and language; all the therapies and medical social worker; if they live alone, where they live, why do you think and you they are suitable to go to the nursing home, what options have you discussed with them,

R: Ok

CNM 1: like did you give them any options and emm was any prior assessment conducted and emm are you sure that they are not being compelled to go or is it do just do you think that's the best option for them and if you are making that decision why do you think that's the best for them

R: Ok

CNM 1: *(pause)* you know, all the medications they are on and everything

CNM 2: I suppose the other thing is then you'd fill out the actual transfer from a nursing point of view there's the nursing transfer letter

CNM 1: Transfer letter

R: There's a nursing transfer letter?

CNM 2: There is a nursing transfer letter for if you're transferring patients out

R: And what kind of information is on that?

CNM 2: It's very, it's a very brief form so that it doesn't leave a lot of room, but it has *(pause)* skin conditions, it's kinda done under activities of daily living so it's their nutrition, their mobility, their the need for assistance that they need; again medication we'd go into that, reason for admission

R: But some of the stuff is already on the CSAR

CNM 2: Yep! But you still get, you transfer that with the patient on the day of transfer; it goes as part of their notes

CNM 1: And actually for the medication it's the medication that you have actually administered before; on that day; and maybe that family are aware that you are transferring the patient.

R: Ok yeah *(pause from group)*

OT: Since the CSAR form has come in I'd say OT has transferred an awful lot less information than we would have..........cos there's no ownership of it, nobody's signing for it; emm *(pause)* nursing staff are in a better position to fill in the barthel that's on it on a day to day basis cos there's an awful lot more time there, so unless they've got specialised seating or pressure care needs I'd say that we're not transferring that much information at all.

R: And do you think that's a good or bad thing?

OT: It's a bad thing

R: Ok

OT: because there's no record that they've been seen or what's been done

R: Ok

CNM 2: It's a form with at length; a form that if it doesn't have a title on the top of who fills it out then no one fills it out, so the standard of it is quite poor

OT: It's already filled in, the Barthel index is already filled in by the time it gets to our desk, so we're hardly going to *(interrupted so couldn't make out end of sentence)*

CNM 2: Yeah actually that's wrong. Yeah

CNM 1: The form it just stated that if you have any additional document that you want to attach and that's where we use the old which is not special...

OT: but given the choice about not ticking the box and sticking on an additional report or spending time on the computer doing an additional report; most people aren't going to send an additional report.

R: Mmmm

OT: What are the good things about the current methods of that patient information transfer? *(pause in group).* I'm trying to focus on the positive first!

MSW 1: Ok

OT: It's all in the one document; it's not all these additional pages being put in and it is structured

(*General pause from group members*)

R: And are you aware of how that document is transferred to the nursing home? *(Pause)* no ones mentioned that

CNM 2: The magic discharge planners take it! Or the magic social workers

MSW 2: It's yeah its discharge planning

R: And what happens next?

MSW 2: Emmm I suppose we wait until we get funding and then if we get funding it is then decided by discharge planning to the nursing home; whichever has been identified by the families and which we think may be suitable..

R: And is it posted?

MSW 2: It's faxed

CNM 1: And there are some bad things about it and the thing, the bad things

R: So no more good things?

CNM 1: Well other good thing, she said it, that the information is in one place, but the other thing, the bad thing about it is that emm the nursing home, they still come back requiring detailed information about OT involvement, and if we can send them detailed report about the patient, but this is not originally in the handover – no space for them to actually fill in involvement and you have to kind of start getting in touch with them again to, to tell them or you start you know giving them feedback on what you think.

CNM 2: It doesn't seem in a way there is partnership about it

CNM 1: There's no detail emm, it's not detailed enough. Yeah even for the nursing I repeat it's not detailed enough.

R: So are there, like what could be done differently then, on the flipside?

CNM 1: Ah anyway the only thing is I just think emm when that CSAR form was being developed there was no consultation with the therapists, you know with the professionals that were looking after the patient to really get the feel of what information they think will be required in transferring the patient.

R: Mmmm ok

CNM 2: You could look at the software; if you wanted to look at a software and if the HSE had one piece of software that we were using so that we could all be updating our clinical details so that there would be no reason and that they could; that if the nursing home needs information that there would be where they could actually just download the current notes, so then there wouldn't be a need to actually come back and someone to sit down and start filling out a form or even filling out something on screen that you could just; that they would have access to the same system that we would if we were using, if we were non-paper just computer (pause), in an ideal world.

R: Yeah absolutely...........are there any other ideas as to how things could be done differently, I mean, I suppose, I can't be seen to be criticising the CSAR as such but obviously that is the current method that's being used

OT: If there was an electronic way of doing it then it would be quicker, yeah quicker

R: Ok

OT: Like even if the contact details for a nursing home that we're sending the patient to; we don't always know – we get the name of the nursing home from Discharge planning when the patients been identified from here but then it's very hard to chase up who in the nursing home is going to be looking after, who's in charge or even the phone number can be difficult to get sometimes

R: Mmmm

OT: Just the sharing of information even among ourselves as to where they're going

R: Yeah that's an interesting, that's a good point and I mean in terms of, thinking it over, do you ever get it, like say if you've a nursing home patient in what kind of information do you receive about them from the nursing home if they're in the hospital?

CNM 2: Most of the time very little information. Emm they're might; that institution or hospital or nursing home might have a transfer letter. From a nursing point of view they might have a nursing transfer letter emm and might not. I'd say 80% of the time for patients we would have we wouldn't have information or it would be the briefest piece of information, so it involves phone calls in working time, so if the patient comes in at night they won't do phone calls. And probably phone calls from all disciplines because we need about all the different activities so it means numerous phone calls and trying to get someone who knows the person in the nursing home.

CNM 1: Actually before they get down to us on William Stokes Unit all this could have been sorted and like the hospital nurses will have actually done the assessment of them before being in there so we, we don't need to find our own therapy or information there.

(Tape turned over)

MSW 1: One of the things that I think is missing is that when we transfer a patient to a nursing home it's a person with habits, with a life, with a lifestyle, with likes and dislikes and I think we miss an awful lot on that. Emm from the lets say a person who never liked eh orange juice and we stubbornly tried to give them a drink with orange juice and then we found them non-compliant but its not the peel, its the orange juice and then we don't know that. And that thing that perhaps we came to know here in hospital we could easily write a few things about what they like, what they don't like; like some people, even eating habits, emm sleeping habits like some people just like to stay up at night longer and they are early risers and not early risers; like they're are many things or or people who enjoy talking to other people and being sociable or people who are loners and don't really want to talk to anyone about their lives, are very private. And I think all the information sometimes is missing in all these reports that are so professional and so down to the point. And we miss the fact that we are transferring persons; course I don't know how to go about that, having said it I'm not sure how to go about it; perhaps a life history or a brief history and sometimes families are in a position to provide that to the nursing home – my mum has always been like that or such and such. But for people who don't have relations, and we have them, emm we should be able to put down a few things about what we have known of them, why they have been in hospital .

R: Mmmmmm. *(pause)* I suppose is that kind of link into, they're trying to, I suppose standardise things like that. Emm a lot of electronic things come with standardisation; like what would your knowledge of standardised assessments be and like that what would your views on standardised assessment tools be? (pause) Could they be used in that transfer of that patient information? (pause) Or is that enough?

CNM 2: I suppose they can but they're limited by the fact that they are standardised, so you have to tick the box with a, b and c or but then if you're using tools everyone's familiar with at least, even if its something

like lifting and handling or something that people have an idea of what the level of dependency is emm yeah – they're a tool, but they're probably back to us as far as health professionals. But even when you said that about emm the family then you have to look at why don't we get the family involved in filling out the form; why don't ....cos they're the ones that know the person and we're only talking about long term care here, aren't we

R: Yeah yeah

CNM 2: so why don't they fill out what, you know, cos they're could be things that the patient really likes and then we never know.

R: Is family involved at all at the moment in any kind of formal way as you guys as hospital staff in that transfer from hospital to nursing home?

MSW 2: Apart from the information that you give them about say the DDI bed, and the charges, and the financial forms the, any other form wouldn't involve the family. **CNM 2**: Even then they get to go out and see the nursing homes and stuff but they don't, they can say no or whatever but they're not that involved, it's more us taking ownership on the whole thing.

MSW 2: Yeah I suppose initially it is to see whether the nursing home would be suitable and then you go onto the family and ask for them to go out but I suppose the difficulty is that it's all very rushed.

"Mmmmm" & "yeah" and nodding head agreement by all participants

MSW 2: when it actually comes to us hearing that they're is funding then emm we try to move quickly on it.

R: Mmm hmmm

MSW 1: It's a bit of a paradox sometimes that people have been in hospital for six months, eight months and suddenly we need to get them out within 48 hours

R: Yeah

MSW 1: It's like I'm not rushing you but give me an answer by tomorrow. Emmm but it's just the way that the HSE, the HSE's pressure on us and we keep saying to them that we are moving people not furniture – it's not that easy to say; we are determining where are they going to spend the rest of their lives pretty much, but they *(HSE)* think all the time is money and having that bed not occupied for the one day represents "X" amount of euro and that's all, it bothers them *(the HSE).*

R: Yeah

CNM 2: So is that the turnover there would be on a bed so that when a bed comes up in a nursing home that they'd only come up that day or it wouldn't me empty for....

MSW 2: Well it's probably been empty but the funding hasn't been there

CNM 2: Ok

MSW 2: So each private nursing home probably has a number of empty beds but it's only at the point where we hear from the HSE that we are given funding that we can act on it

(Pause)

R: I might just get back to the, what you mentioned earlier (MSW 1) about the sort of emm, the security I suppose of transferring that patient data; like what would your views be on that electronic document transfer or storing patient information electronically?

MSW 1: Emm *(pause)* I'm very keen on computers and storing things electronically but I also know that it's very difficult that paper is going to

disappear that easily, whereas computers for some reason, sometimes just freeze and you lose information and IT sometimes, it's not that they are not helpful, they just can't retrieve the information. So it is a very fast system of putting information out there, eh my concern would be what if one day everything gets erased? *(pause)* emm I don't know if I've just been watching too many movies? But it does worry me.

R: What does the nurse think about that?

CNM 2: You kind of trust, ok, maybe using the bank is the wrong one at the moment but like we do trust computer banking with your finances – i know things can happen but like we have to get to the stage at some stage where we're gonna have to just have secure systems and stuff; that we can't keep living in paper world; that, even from a storage, and like you see charts it's just........

OT: Look at European countries. Is it Sweden that has the system and everyone has like a credit card that it's like their PPS number and you go to your GP, you go to hospital they put; all your information is there so your GPs information to your hospital and they haven't had any breaches

CNM 2: I think we're just......

OT: I think we're just nervous of change

CNM 1: Or the thing we need to discuss is how much information do we really like, how much information do we really need to pass across and what information is actually available? And you know regarding security, really now, if I want to know every detail about you all I need to know is your date of birth, your name, maybe your address and whatever it kind of security in place where not just anybody can access other people's information. Do you get me?

R: Mmmm. Access yeah yeah

CNM 1: Will it be kind of limited to the people that really need it for their purpose? And not for ....

CNM 2: Then think about it; we're talking about the documentation but really it's not our documentation, it should be, it's all about the patient; technically it should be following them not us. So that's like what you were saying.......

OT: Yeah and it's probably more secure having it electronically cos I can tell you sitting here where you've got filing cabinets of patient notes, the doors unlocked and walk into any desk drawer nursing notes are at the end of beds or in trolleys

CNM 2: yeah yeah

OT: patients' medical notes are; but at least if it's on computer there's actually less chance of someone who's not meant to get access, getting hold of it.

CNM 2: And you do lose; and lots of notes get lost and loosely filed notes and then new charts that aren't being filed, you know people tossing stuff in so

MSW 1: And computers improve readability anyway, cos when you're trying to interpret, 'like what is this person trying to say'....when you're typing yeah you might have a couple of wrong spelling or something like that but nothing worse than that.

R: Emm you were talking about (*directed to CNM 1*) how much information is acquired, like what, have you got thoughts, I mean you've given opinions on the CSAR but do you think we give not enough

information at the moment seems to be a common theme here but, like that, is there such a thing as too much information as well?

OT: I think the form itself just by allowing a couple of lines for sort of 'other information' emm that you know doesn't fit neatly into the boxes because it's a standardised form might be useful. Like I know it's more awkward for people to have to read free text cos it's not tick-boxes but at least, as MSW 1 says you might get more of a sense of the person who it's about.

R: Yeah absolutely. *(Pause)* Is there anyone here familiar with the minimum data set tool?

MSW 2: No

MSW 1: I've heard about it but nothing emm more than that

CNM 1: I have heard about it but don't know enough about it. Like just having it structured well, doing it

R: And how do you get that, like so that there is agreement emm, you know you mentioned earlier that like with the CSAR there wasn't consultation; how do you think, like in an ideal world scenario of that patient information journey from here to a nursing home in the sense of the way it's transferred and what that information is, do you think there will be ever full agreement on the actual information that is transferred from hospitals to nursing homes?

(Most participants either shrugged shoulders, or muttered No)

OT: No, like you're never going to get full (referring to agreement)

CNM 2: And how much we document emm you know in the ICP, with ICPs from the UK and the States and for the same paper exercise, but there were tiny – like ours is 120 pages and these were like 14 page documents but there's a serious, much more about documentation done by us so you have to decide well do we have to, I know we want to document everything but we've decided we need to document everything; what is sensible......

(Pause)

R: And if all, the 5 people around the table today, and you were deciding on what would be the best way of transferring that patient information across what would, you know, what would you do?

(Pause from group)

MSW 2: In terms of what format?

R: Yeah format mainly

MSW 2: Well you'd look back on successes or failures of the past, or other countries or past experiences and you'd need to do a bit of research into that. And then do like a pilot study analysis to know what could work

CNM 2: Or you know just go for it! We rule the world! We made the form and we know this works! Emm no but we'd do something; I think what we said earlier on about making it very specific to the, that the accountability of who is responsible for a section rather than leaving it open as it is because then no one takes the ownership and it's more of a burden whereas even the form before that – people knew their section had to be filled out and ok it was maybe not as 'slick', it was more of a cumbersome chart or whatever but still people knew what to do and there was more information definitely and it was easier to get filled as well.

(Mmmm & nodding head agreement from other participants)

CNM 2: because you could go and go this is filled in, this this and this.

R: And do you think that sort of equivalent would be easy to do if it wasn't on paper? (Pause) than the way things are currently?

MSW 2, OT, CNM 2: Yeah, oh yeah.

MSW 2: You could do; I mean once somebody is say listed for long term care you could notify or each person on the team would know that the person is listed for long term care and they know then that they have to do their report and

CNM 2: And that information could be going in a emm, oh can't find my words...., that you wouldn't have to wait say, you wouldn't, the nursing home or whoever was reading the notes wouldn't have to wait for me to have it in – at least they could have the social worker or they could have the OT information already in and then, ok and there could be some kind of emm, you know, red flag situation where you're reminded you haven't done it, you haven't done it and keep reminding you until you just know you do it before you're bullied!!!

CNM 2: Emm you could do that, then at least then, I can't think of the word, but it would be going in.

R: I think you've explained it (*addressing CNM 2*). I know what you mean, but even a reminder system or also as in you don't have to wait for someone else to fill it out

CNM 2: At least some of the information goes over

MSW 1: Other than the format, something we could ask for and I don't think we are getting any kind of feedback; like sometimes I feel it's one way information which is - we send information to nursing homes; we never hear anything than yes or no.

R: Ok

MSW 1: Like certainly I've never had a phone call from a nursing home saying 'could you clarify this for me, do you have any more information on this lady, could you explain anything more about children and it's not that i'm giving such detailed information but it would be good if they also told us what they think, like to close the circle.

MSW 2: Yeah

MSW 1: I don't know if they are asking any of the other disciplines but….

MSW 2: I would say it's probably more to do with either equipment or medication or like either from a nursing or medical point of view and then say OT in terms of equipment – they would be the kind of the key areas

R: Would you ever get any feedback from nursing homes (question directed to OT)?

OT: Unless there is something gone wrong with a piece of equipment due to be delivered and they come looking for where it is. And in terms of patients coming in and being admitted, I sat a woman out recently who it turns out had been bed bound for 9 years which I finally found out when I rang the nursing home. She was un-seatable and we spent hours and we finally got her into a chair to be told that she hadn't been sitting out for 9 years! So

CNM 2: And we mobilised someone today who hasn't walked for 2 years

OT: So we're not getting that information back so we're pushing people into something that really they haven't been doing

MSW 1: That would be really beneficial to have like some information, if it's like what is that you know and what is it that you want us to tell you or what is it that you want to know from us?

R: I mean even in this small piece of research that's probably something very achievable, to get some sense of that, or answer to that question actually, because emm I would be trying to do a similar piece of research with the nursing home; with a representation group and even them maybe even knowing that might be helpful. If there's nothing else I can do from

CNM 2: Even for like a standardised form for transfer from a nursing home to an acute hospital would be really good

OT: Even can this person mobilise?

CNM 2: Can they mobilise, do they fluid; like thickened fluids, communication, sight.
For the moment we give loads of information if you're going to a nursing home but if you have a fall and come back we get….

CNM 1: Little or nothing

CNM 2: We're getting little or nothing

CNM 1: Oh and though we too can still improve in our method if we can standardise things just like we have said but the standardisation with the kind of somebody taking, maybe discharge planning co-ordinating the whole thing into a folder where if the patient is in my department; they will now say 'Susan' is listed for long term care and you know all the therapists that are involved and e-mails can be sent to them so that each and every one of us fills out our part and send it as a form of e-mail and its kept in the folder so that it can be easily tracked down to save myself and everybody running after each and every one of us until it is filled.

MSW 2: The thing about the part of keeping an electronic record is that you can easily amend it; in that, an update, rather than going back with a brand new form maybe because the old form is, say 2 months old now because we've been waiting so long for a bed and when you come back with a brand new form everyone has to go through it again whereas if you had something on e-mail either cut and paste or you could actually amend it without re-writing the whole thing again.

(Pause)

OT: And like or even

CNM 2: Things might have changed.

MSW 2, CNM 1: Yeah. Definitely

CNM 2: Equipment might change or mobility might change.

OT: Or we discharge them from OT generally as soon as they're listed for long term care, so those patients in 2 months and we're being asked to fill out forms it's very difficult to because you don't have the up to date information and in an acute hospital it's very hard to drop everything you're doing to go and reassess the patient to

CNM 1: Yes but definitely we need co-ordination; somebody to actually co-ordinate the information.

MSW 1: Emm yeah another thought that I was having, but that's in an ideal world, is that emm when people get transferred to nursing homes somehow we forget about them completely.

R: Yeah

MSW 1: and then some placements are not successful emm cos the nursing home can't find a way to manage the patient and then they bounce back to the hospital. So perhaps in patients that have been specialed here that have special behavioural difficulties, it would be good if within the first week or the first fortnight we would do some follow up

or they would be ringing us saying 'oh emm the patient is exhibiting this behaviour; how did you deal with it?' or cos it takes sometimes when we have people down here in the ward; at the beginning you don't really know and it's not for you to say that than for me *(indicating to CNM 1)* cos I'm not there eh but I've heard how up until you really manage them (the patient) it's a trial and error trial and error; and then the nursing homes could benefit from that information and from a bit of assistance or follow up.

R: Mmmmm

MSW 1: Just for, for the sake of the patients settling in later

OT: Community mental health teams do that, don't they when the patient is placed they'll be followed up for a couple of weeks............

(Pause)

R: Well, if no one else has anything to say we'll leave it at that. Thanks for your input.

Appendix 4: Verbatim Transcription Abbreviation explanations

- ***Allied Health Professionals***
  (Explanation: Health professionals such as Physiotherapists, Social workers, Occupational Therapists, Speech and Language Therapists, Radiographers etc.)
- ***Barthel Index***
  (Explanation: An outcome measure used to determine a person's level of dependence/independence in tasks of everyday living; e.g. feeding, dressing)
- ***CNM***: Clinical Nurse manager
- ***CSAR***: Common Summary Assessment Record
  (Explanation: HSE document to be filled in when a patient is transferred from a hospital to a nursing home for the 1st time)
- ***DDI***: Delayed Discharge Initiative

  (Explanation: Health Service Executive pays money for public patients to be placed into private nursing homes, so they are no longer Delayed Discharge patients in a hospital setting)
- ***HSE***: Health Service Executive
- ***ICP***: Individual Care Plans
- Individual places/people mentioned – Mairead Behan (works in Nursing home section of the HSE), William Stokes Unit (Rehab unit for older persons in Tallaght Hospital)
- ***MSW***: Medical Social worker
- ***OT***: Occupational Therapist
- ***PPS No***: Personal Public Service Number
- ***R***: the Researcher

Appendix 5:   Questionnaire Cover Letter

Background info about Researcher

My name is Ciara Blair and I am an Occupational Therapist. I am currently undertaking research to go towards completion of a Masters' Dissertation in Health Informatics in Trinity College Dublin this year.

I work in an acute hospital in Dublin on a team that assists in identifying and working on patient discharges from hospital; specifically long term care patients, those requiring interim care and those patients highlighted as being a delayed discharge.

Overall Purpose

To carry out research into the means and methods that could enable the electronic transfer of needs assessment information for patients being discharged from an acute hospital to a long term care setting, in a timely and efficient manner.

Research Hypothesis

That the use of an informatics application such as the inter-RAI Minimum Data Set would be of mutual benefit to patients and staff alike in the transfer of patient information between hospital and long term care facilities.

REQUEST

I would be grateful if you could take a few minutes out of your day to fill in the attached questionnaire as you see fit (Note: if it is your wish you may omit answering any question)

I would be more than happy to give you feedback on results/conclusions drawn from the research. If this is something you would like to receive, please include an email address and I will send them to you.

Please note that no personal information will be collected in this research and participation is voluntary. No information provided will be identifiable to an individual.

Thank you for agreeing to participate in this research.

Appendix 6:   Research Questionnaire

Firstly, please indicate your place of work

Hospital   ☐   Long term care   ☐

setting

1. What is your occupation? (*Tick the box that applies*)

Nurse   ☐

Clinical Nurse Manager   ☐

Doctor   ☐

Allied Health Professional   ☐   Please state exact profession:

_____

Other   ☐   Please state exact profession:

_____

2. How many years experience do you have in your job? (*Tick the box that applies*)

0-1   Year   ☐   10-15 Years   ☐

1-5   Years   ☐   15-20 Years   ☐

5-10 Years   ☐   >20 Years   ☐

3. How often are you involved in the transfer of patient information to/from the healthcare facility you work?

Tick the box that applies

Daily   ☐   Monthly   ☐

Weekly   ☐   Occasionally   ☐

4. Rank in order of most commonly used the main method of communicating patient information in the healthcare facility you work *(No. 1 = most commonly used, No. 2, No. 3) etc*

By Telephone   ☐   In Person   ☐

By Paper   ☐   By Computer   ☐

By Fax   ☐

5. How is patient information currently transferred to a long term care facility from an acute hospital?

Tick the box that applies

Paper document that is posted   ☐   Via phone call   ☐

Paper document that is faxed   ☐   Computerised   ☐

document

No documentation completed   ☐   Do not know   ☐

6. **What type of information is received if a patient is transferred from a nursing home to an acute hospital?**

_____
_____
_____
_____
_____

7. **What is your understanding of the term standardised assessment?**

_____
_____
_____
_____
_____

8. **To your knowledge, is a standardised assessment carried out and completed when a patient is transferred from an acute hospital to a long term care facility?**

Tick the box that applies

Yes ☐ If "Yes" what is the name of the assessment?

_____

AND Are you aware of any other instruments that could be used?

_____

No ☐
Don't know ☐

9. **Describe your role in relation to a patient's clinical information being transferred from a hospital to a long term care facility or visa versa**

Tick the box/boxes that apply

Data collection/capturing ☐ Information Transfer ☐
Patient assessment Liaison with patient's family ☐
Contact with nursing home/acute hospital ☐ facility
Other ☐ ☐

_____

10. **How much time do you spend (on average) per patient completing current information for transfer from hospital to long term care facility or visa versa?**

Tick the box that applies

0-15 mins ☐ 45-60 mins ☐
15-30 mins ☐ >60 mins [please specify] ____

30-45 mins ☐

11. **What are the advantages of the current system by which patient information is transferred?**

_____
_____
_____
_____

12. **What are the disadvantages/challenges of the current system by which patient information is transferred?**

_____
_____
_____
_____

13. **Have you any suggestions for improvement in the way patient information is transferred?**

_____
_____
_____
_____

14. **How familiar are you with using computers in the clinical setting?**

Please circle answer most applicable to yourself

Very Familiar	Quite Familiar	Unsure	Not Familiar

15. **How familiar are you with computer databases?**

Very Familiar	Quite Familiar	Unsure	Not Familiar

16. **How familiar are you with the concept of an electronic health record?**

Very Familiar	Quite Familiar	Unsure	Not Familiar

17. **Tick which of the following you have heard of and give brief explanation as to your understanding of each term:**

- Single Assessment Process (SAP) ☐

_____

- Common Summary Assessment Record (CSAR)

  ☐

_____

- Minimum Data Set (MDS) ☐

_____

- Common Assessment Process (CAP) ☐

_____

18. **Would you be in favour of electronic transfer of patient data to/from acute hospitals to nursing homes?**

Yes ☐
No ☐

Please outline 3 reasons for your view:

_____
_____

_____
_____

Questions 19-25 relate specifically to the Minimum Data Set (MDS)
If you are not familiar with this do not complete and this is the end of the
questionnaire.

Thank you

Section Two

Specific questions on Minimum Data Set (MDS) – inter-RAI MDS Ref: www.interrai.org

These questions can only be answered if you are familiar with the Minimum Data Set (MDS)

19   Are you aware that use of a minimum data set is recommended in the new HIQA guidelines for nursing home residents?

Yes   ☐   No   ☐

20   Are you familiar with the type of information that is captured by a MDS tool in relation to long term care residents?

Yes   ☐   No   ☐   Unsure   ☐

If Yes, can you give examples of types of information captured?
_____
_____
_____
_____

21   Can you list advantages and disadvantages associated with use of a MDS tool?
Advantages   Disadvantages
_____
_____
_____
_____

22   What, in your opinion, is the best way of capturing MDS information?
Please tick appropriate box
Paper Format only   ☐
Info. captured on paper and inputted manually into a computer   ☐
Direct inputting onto computer   ☐

23   Are you familiar with the inter-RAI organisation?

Yes   ☐   No   ☐   Unsure   ☐

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**24   Do you know of any countries that use the MDS routinely to capture
       information on nursing home residents or patients for transfer to nursing
       homes?**

Yes   ☐   No   ☐   Unsure   ☐

If "Yes" please
specify_____

25   How do you think a MDS tool could be implemented in an Irish context?

_____
_____
_____
_____
_____
_____
_____

Thank you for taking the time to complete this questionnaire

Appendix 7: Questionnaire: Qualitative Data Tables
Tables outline written answers to Questions 6, 7, 11, 12, 13, 18, 25

7.1   Question 6   SAMPLE A

1	Dietician	Depends depending on the NH. Some won't send any information; if you need to go & seek out. Others just send very basic info with no real detail
2	Nurse	Transfer letter (paper)
3	CNM	Transfer letter from nurses
4	Nurse	Nursing transfer letter
5	Nurse	Paper transfer document
6	Nurse	General information re patient's current mobility, level of independence, nutrition, ADLs, any medications that they are on. Referrers note
7	Nurse	Medication list, level of dependency, toileting needs, diet plan, insulin regime, NOK, Mobility
8	Nurse	Mobility, medications, independent or dependent
9	Nurse	Doctors and nurse transfer letters
10	Nurse	Patient's hx, medications, diet, general mobility
11	Nurse	Paper document as transfer letter
12	Nurse	Overall view of ADls, medication chart
13	Nurse	--
14	MSW	Info. from NH could be conveyed verbally or copy of report from attending Dr. In the NH. Sometimes care attendant with the patient in A&E –verbal communication
15	Nurse	Just nursing transfer letter
16	Nurse	Short nursing transfer letter
17	CNM	Nurse transfer letter with information on patient's ADLs and doctor's letter
18	Nurse	Basic patient details – DOB, address, ADLs & past medical Hx
19	CNM	Nursing transfer letter, doctor transfer letter
20	Nurse	Referral letter/Nursing transfer letter
21	Nurse	From GP referral
22	Nurse	Medical Hx & present medications hx
23	Nurse	GP referral
24	Nurse	GP referral
25	Nurse	Sometimes a nursing transfer letter but usually nothing
26	Nurse	A basic overview involving patients needs with ADLs
27	MSW	Sometimes NH will phone SW dept
28	MSW	Nursing d/c summary. Social report, d/c summary – at discretion of SW
29	MSW	Usually verbal communication from nursing home, GP letter
30	MSW	Unsure as transfer information would usually be received by admitting ward
31	MSW	ADLs, medical hx, and meds given
32	MSW	None directly given to SW

33	MSW	Very little?
34	MSW	Generally nursing home sends a transfer letter from referring GP and/or nursing transfer
35	CNM	Usually a patient is admitted to A & E so information is given to them first
36	Nurse	--
37	Nurse	ADLs
38	Nurse	Nursing transfer letter, prescription, GP letter
39	Doctor	Variable – usually letter with drug prescription
40	Doctor	Variable
41	OT	Not aware of information received
42	OT	Very little – can be difficult to establish baseline and results in delays in implementing treatment plan or can lead to inappropriate Tx being commenced
43	OT	Transfer letter with details of reason for transfer as well as medical and functional status
44	OT	Baseline i.e. level of dependence in NH and care needs
45	OT	Patient's diagnosis, personal information, medical Hx, level of dependence
46	OT	Very little – from my experience I have had to contact them re. seating and pressure needs; what seating is in situ in NH etc
47	OT	None or very little unless sought by staff in the hospital (apart from medical details)
48	CNM	Written and verbal
49	Nurse	Transfer Letter
50	Nurse	Biographical details, mobility, skin condition, medical history, assistance needed, current meds, diet, cognitive status
51	Nurse	Nursing transfer letter and medical letter
52	Nurse	Nursing transfer letter
53	Nurse	Written nurse and medical transfer letters

SAMPLE B

1	DON	A completed transfer form and doctor's letter
2	CNM	Medical, nursing, social information
3	Nurse	Transfer letters, doctor's letter, copy of current medication sheet. Nurse's transfer letter including all relevant information about patient's abilities, NOK etc
4	CNS	Transfer letter
5	CNM	All medical and social details, including past medical history, medications, NOK
6	CNM	N/A
7	CNM	Transfer form – details of ADL, medication and medical history
8	DOC	A detailed transfer letter is sent with the resident
9	DON	Transfer letter outlining the problem, ADLs, medication
10	N	Transfer letter, drug sheet. Name, DOB, NOK, Address, Med card no., PMHx, current condition, reason for admission, falls risks, diet, continence, BP, pulse, temp on admission

11	DON	We have computerised system for nursing notes which has all information required to transfer residents – NOK, PMHx, condition, reason for transfer ,meds etc
12	DON	Name, address, NOK, GP, reason for transfer, Med Hx, current meds
13	CNM	Current list of meds, brief Hx of reason for admission. Brief overview of ADLs, cognition of resident
14	DON	Transfer letter
15	DON	Doctor's letter, copy of meds, recent blood test, mental health report
16	CNM	Nursing letter, doctor's letter, medication list
17	DON	Transfer letter with PMHx, current reason for hospital transfer, family contacts, list of all meds, observations, any other relevant info re. ADLs
18	DON	Full medical background. List of medication, current complaints, family details, allergies known, Name of GP & phone no.
19	CNM	Previous history, present problems, recent nursing management, current meds, current vital signs, BMI, BP etc, GP, family details and copy of previous medical notes
20	NM	Full patient Ax & care plans. Nursing transfer, medical transfer, medication transfer, dietary requirements, NOK details
21	DON	Medication list, prescription sheet, nursing transfer letter, doctor's letter
22	CNM	DOB, NOK, Med Hx, Social Hx, Meds, allergies, current nursing status, reason for transfer, GP details, religion, pressure areas condition
23	CNM	Personal details, Dx, Tx
24	CNM	All necessary personal information, past Med Hx, acute situation, medications records
25	CNM	We have a detailed transfer sheet and copy of medication kardex
26	DON	Nursing transfer form, copy of current prescription, Dr., referral letters
27	DON	Transfer letter (paper), copy of drug authorisation and list of meds given, copy of lab reports
28	DON	Minimal – what the person did on day of d/c; what tests performed, medication list
29	DON	Nurse transfer letter, doctor transfer/referral letter. Copy of biographical details, copy of current medications
30	?	Paper documentation accompanying the patient
31	M	Dx, name, DOB, meds, Mobility, assistance needed in ADLs, incontinence level
32	DON	Name, DOB, NOK, GP, List of meds (allergies), covering letter detailing reason for transfer including if relatives have been told, med card no., VHI no
33	CNM	Info. Sent to A & E involves copy of nursing care plan, risk assessments, personal details, medication chart, doctor's letter
34	DON	Complete resident summary (very comprehensive),

		medication list, latest blood work
35	DON	Phone call, fax
36	DON	A transfer letter, a copy of drug chart, a doctor's letter, any recent blood results
37	CNM	We write a transfer letter
38	CNM	Drug Kardex, nursing transfer letter. GP letter sometimes

7.2 Question 7 SAMPLE A

1	Dietician	Are tool used to assess All patients
2	Nurse	Everybody being assessed
3	CNM	1 document or programme for all institutions
4	Nurse	Standard Ax of ADLs
5	Nurse	Comprehensive Ax that can be used for all patients, containing all relevant information
6	Nurse	An Ax that follows a standardised criteria
7	Nurse	A standard Ax might be the outlay of a patients ADLs
8	Nurse	OT, Dietician, SALT, physio Ax
9	Nurse	Multi-disciplinary team assess patient i.e. OT, dietician, SALT, physio as appropriate to patient's condition
10	Nurse	--
11	Nurse	--
12	Nurse	A standard set of questions/activities used to assess patients
13	Nurse	---
14	MSW	General form encapsulating all relevant information pertinent to the patient used by all facilities e.g. NHs or hospitals
15	Nurse	It's a general standardised form in patient Ax prior to transfer patient between hospital to LTC, NH and convalescence or vice versa within Ireland
16	Nurse	All disciplines use the same tool of Ax
17	CNM	---
18	Nurse	Generalised less detailed Ax that can be used on any patient
19	CNM	Similar assessment for each patient. Not individualised
20	Nurse	A common system of Ax used for the standardised care
21	Nurse	A complete general Ax
22	Nurse	Is using a common and general method to assess or evaluate patient care needs between/in all health care settings.
23	Nurse	General Ax of all aspects of patient
24	Nurse	General Ax
25	Nurse	Assessing a patient in relation to their ADls
26	Nurse	One commonly used Ax tool
27	MSW	Same Ax for all patients
28	MSW	Common Ax template to be used by all hospitals
29	MSW	That same relevant information is completed for all patients
30	MSW	That there is an Ax transfer form that is used for all patients. A standardised Ax means that all patients are assessed by the same criteria and is a more equitable and fair way of assessing patients.
31	MSW	Form for everyone

32	MSW	Ax completed by many professionals or professionals that can carry all necessary information on a patient accessible to all care professionals involved in their care
33	MSW	A routine set of questions/information to be applied to all involved
34	MSW	An Ax that is carried out in a consistent way for each patient looking at function and care needs
35	CNM	Standard form
36	Nurse	The first time Ax done when the patient first comes to the hospital as per the standard care plan or forms is standardised; stating their referral physical or physiological function.
37	Nurse	Routine Ax of a number of questions that are completed routine to everyone.
38	Nurse	General Ax of a patient
39	Doctor	Multi-disciplinary agreed measure of Ax of patient's functional and medical Dx
40	Doctor	One that is valid, reliable and fit for purpose
41	OT	Formal Ax with proven validity and reliability. Usually have instructions and also what client groups with whom it is recommended
42	OT	It is a way of uniformly presenting information in order to attempt to replicate information between assessments/people to ensure all relevant information included in a consistent way.
43	OT	Is an Ax that has standardised instructions for completion and usually has information re. validity, reliability and responsiveness
44	OT	Ax which has normative data and has a standardised method of administration
45	OT	Are Evaluation procedures that include instructions for administration and scoring. Some would have established norms. They would generally have evidence of validity and reliability
46	OT	---
47	OT	An Ax that is designed so that it is completed in the same way no matter what therapist uses it – it gives a result that is reliable and valid. Can be interpreted in a standard way
48	CNM	Don't know – one tool used for all patients
49	Nurse	---
50	Nurse	One for all assessment tool
51	Nurse	None
52	Nurse	An assessment that can be used in all areas and is suitable to gain info on all types of patients
53	Nurse	An assessment of each of the activities of daily living

SAMPLE B

1	DON	---
2	CNM	Ax tool that is used in all healthcare settings leading to standardised information
3	N	An Ax tool, ie. MDS that is used whether the patient is admitted to an acute hospital or a long term care setting initially.
4	CNS	Every institution using the same Ax –shared documentation
5	CNM	Pre prepared recognised standards
6	CNM	A generic Ax of care used by healthcare professionals
7	CNM	All facilities use same Ax tools e.g. MDS
8	DOC	We have a HSE standard Ax form that we used when assessing a

		patient for our NH
9	DON	Universal Ax used regardless of clinical setting
10	N	Everyone gets asked the same Qs. One form to suit all. All information gathered is of relevance and can be used for everyone to gain a proper Ax information.
11	DON	Ax carried out capturing all relevant information pertaining to the resident, condition, likes, dislikes, medications, abilities etc
12	DON	An Ax sheet which would be used by both hospitals and nursing homes so that each facility would be working in unison.
13	CNM	I am very familiar with MDS Ax tool and plan to implement same
14	DON	--
15	DON	Everyone using the same Ax tool
16	CNM	An Ax of a person that is used in all care settings
17	DON	---
18	DON	---
19	CNM	Ax which information on all Adls, - set as standard in all areas
20	NM	Ax tool used to determine the needs and abilities of all patients
21	DON	Recognised and agreed medical or nursing tool
22	CNM	Generic Ax, tick box system, universally recognised
23	CNM	--
24	CNM	It would be available to anyone who required such information for the benefit of the patient and same assessment tool used by all
25	CNM	Would love to see the Minimum Data set system in use throughout care facilities – public, private and voluntary
26	DON	Standard nursing Ax would refer to ADL Ax
27	DON	One standard form which would be commonly used among all health care settings and should include a vast amount of information required to care for that person.
28	DON	Same Ax used by everyone
29	DON	An Ax that has been developed for use and which is common to all settings. Validated and research based – means that some information can be transferred no matter what the setting.
30	?	It would be a universal Ax – same Qs answered and core needs Ax through a common document
31	M	Including the above plus specific/special needs covering all ADLs
32	DON	Complete and accurate Ax of patient, providing background information and considering it with current status, thus enabling staff to cater for resident's needs and provide a patient sensitive care plan. Promoting quality care through evaluation.
33	CNM	Each individual will receive a set assessment which is standard across all the healthcare disciplines
34	DON	It is a comprehensive overview of an individual's medical, physical, psychological and emotional status so as to allow you to put in place best practice nursing care.
35	DON	One type of assessment form across the board
36	DON	That all facilities should be doing the same paper work
37	CNM	--
38	CNM	It one assessment that is used everywhere

7.3   Question 11   SAMPLE A

1	Dietician	It's a standard form: all will be used to seeing it
2	Nurse	No advantages – see disadvantages
3	CNM	Nil – see disadvantages
4	Nurse	Everyone knows the patient information
5	Nurse	All multidisciplinary sections are completed
6	Nurse	---
7	Nurse	If you go through your ADLs you have less chance of missing out details
8	Nurse	---
9	Nurse	---
10	Nurse	None
11	Nurse	Written information as legal document
12	Nurse	Provides full overview of patient
13	Nurse	---
14	MSW	Current system is more the responsibility of nursing/medical team
15	Nurse	Information to the nurses who's gone to provide successive care to patient's transferred
16	Nurse	It's in pack form
17	CNM	---
18	Nurse	One page that you can complete with relevant patient information
19	CNM	Don't know
20	Nurse	Gets overall view of the patient. Easy access of complete information in confidential manner
21	Nurse	A complete system, which includes all patient's information. Easy access
22	Nurse	Cheap. Less time consuming. Easy to use, stored and accessed
23	Nurse	Easily understandable
24	Nurse	Easy access of Ax on patient information as need as MDT with family
25	Nurse	---
26	Nurse	Simple, straightforward
27	MSW	Not sure what system you are referring to – do you mean ECTF?
28	MSW	Fax is fast
29	MSW	---
30	MSW	Standardised form which means that similar amount of information documented about each patient
31	MSW	---
32	MSW	Uniform appearance
33	MSW	Perhaps more secure in comparison to electronic transfer of confidential information
34	MSW	Standardised system. CSAR is to be made available to patients
35	CNM	One form – can take your time with it
36	Nurse	Currently as a nurse we are giving nursing transfer letter which include the different aspects of the patient. Will be beneficial for continuity of care
37	Nurse	---

38	Nurse	Up to date information of the patient and their needs
39	Doctor	Fast and efficient. Reasonably comprehensive transfer information
40	Doctor	Relatively standardised
41	OT	Information is centred on one sheet, ensures adequate amount of information is transferred.
42	OT	One form and quick to complete. Centrally located
43	OT	None
44	OT	MDT input in general
45	OT	Multi-disciplinary
46	OT	--
47	OT	Information is tailored to the patient i.e. appropriate and applicable to their individual situation
48	CNM	I am unsure what system is currently in use
49	Nurse	---
50	Nurse	With patients on transfer but if unusual problem/need always phone ahead to explain; good preparation for receiving facility
51	Nurse	---
52	Nurse	---
53	Nurse	It gives a full account of the patient's inpatient activities i.e. ADLs, medications etc

SAMPLE B

1	DON	Continuity of care may be provided
2	CNM	Comprehensive written documentation completed for hospital
3	N	None
4	CNS	Getting info. On patient prior to admission to LTC – know equipment needs etc., aware of risks falls, including pressure sore risk
5	CNM	Usually adequate if there is need for clarification we phone the ward issuing it
6	CNM	--
7	CNM	None
8	DOC	It facilitates the degree of nursing care required and the general background of the patient
9	DON	Information up to date
10	N	On one form (Transfer letter)
11	DON	Detailed information pertaining to resident, including picture. Reason for transfer is the only thing that needs to be updated on system prior to transfer
12	DON	--
13	CNM	None really. We network with colleagues verbally re residents; build relationships that way informative is given mostly by staff who know the resident
14	DON	--
15	DON	None mentioned- see disadvantages
16	CNM	None – see disadvantages
17	DON	The pre-assessment of patient prior to admission gives you a chance to prepare for the admission
18	DON	No advantages

19	CNM	It goes with patient. It is patient-specific. It can be very detailed and be augmented by verbal reports
20	NM	Information contained to very good, does not state weight or last bowel movement at times
21	DON	Based on Roper, Logan, Tierney model of nursing
22	CNM	None mentioned – see disadvantages
23	CNM	---
24	CNM	---
25	CNM	No advantage – see disadvantages
26	DON	Personal and accurate as staff are very familiar with all residents
27	DON	Written on transfer – most current information available; if computerised could be not updated..
28	DON	We use a standardised form (designed by us for our own use) to transfer patients to hospital
29	DON	Meeting the patient and. or family. Visit pre-admission to nursing home means they are familiar with environment; more likely to accept placement if they have an opportunity to discuss issues/fears etc
30	?	Very few if any – it's familiar at this point
31	M	Only basic information given from hospitals
32	DON	Face to face meeting with patients, establish communication, observations
33	CNM	Information received from acute settings generally poor and does not reflect all patient issues. A full pre-admission visit and pre-Ax required
34	DON	We would find current transfer system when receiving a patient to be very unsatisfactory when dealing with acute hospitals
35	DON	Attention to detail
36	DON	We expect that the hospital should have all necessary information to treat and care for our patient. Although on many occasions A & E have phoned saying we didn't send a transfer letter – very annoying!
37	CNM	---
38	CNM	---

7.4   Question 12   SAMPLE A

1	Dietician	It's not a very complete form; i.e. no section for certain specialities to complete. Therefore need to send a separate form and also be sure this form is seen by those who require the information – i.e. therapy staff not just admin
2	Nurse	We have to ensure everybody has given their information (members of MDT). End up chasing Drs to make sure they have their discharge letters filled out. We end up documenting physios and probably OTs input
3	CNM	Nil/documents missing/fax machine no paper/toner
4	Nurse	Depends on who fills it in how good it is
5	Nurse	Getting all MDTs to complete the forms!
6	Nurse	It takes a lot of time; all hand written information. Some hand writing tends to be illegible information; may get lost/overlooked

7	Nurse	Not everyone on the day knows the patient so information should be collected over a few days
8	Nurse	---
9	Nurse	---
10	Nurse	---
11	Nurse	---
12	Nurse	Not specific to patient
13	Nurse	--
14	MSW	N/A to my role
15	Nurse	Since it's not a standardised form, there is some information absent with regard to patient assessment post transferred
16	Nurse	It's1 left to nurses to bleep and contact each discipline
17	CNM	Nurses spend a lot of their time trying to contact doctors to have paperwork completed
18	Nurse	Need proper section relaying the medication administered prior to transfer
19	CNM	Don't know
20	Nurse	--
21	Nurse	Nil
22	Nurse	Overtime, bulky storage from accumulation. Interdisciplinary intercommunication time wasting. Illegibility sometimes
23	Nurse	--
24	Nurse	Nil
25	Nurse	Information being omitted
26	Nurse	Limited information can be given
27	MSW	It is always done in a rush and you have to chase the staff members to complete their section of the form
28	MSW	Quality is poor of faxes, confidentiality cannot be ensured
29	MSW	---
30	MSW	Current form is poorly designed and form is not divided into specific sections for specific professions – leads to confusion about who should complete what. Also leaves little room for documenting more complex cases
31	MSW	Information can be omitted
32	MSW	Unclear which sections relate to which profession so tendency for blanks to be left
33	MSW	Difficult to get each discipline to complete relevant sections. Time consuming. Limited information transferred. Little consideration given to how patients feel about information being transferred
34	MSW	Design of form could be improved – some information not captured/clearly visible. Unclear for professionals when additional reports should be attached.
35	CNM	All done by one person
36	Nurse	--
37	Nurse	Information getting misplaces; the person on duty that day may not know the patient well enough to assess them for transfer
38	Nurse	Information can be mislaid
39	Doctor	Not easily accessible record if queried
40	Doctor	Little chance of audit

41	OT	Poor structure, does not give adequate space for details. Poor design. Paper based
42	OT	Little space for detailed information on seating or pressure care needs or details of functional status. Also, no space to sign – which can lead to sections being inaccurately filled in
43	OT	Current system does not capture all information needed; i.e. equipment needs
44	OT	New form – not clear where OT to input info → kind of merges with SW and nursing
45	OT	Delay of information transfer
46	OT	The correct person receiving the information and having to re-send information again
47	OT	Ad hoc. Do all LTC staff see/hear the information? Different therapists may give different information?
48	CNM	Don't know the system
49	Nurse	--
50	Nurse	Conditions can change daily/hourly – this information can be slightly inaccurate. Subjective opinions of assessments of patients
51	Nurse	--
52	Nurse	Time consuming; can take numerous phone calls to ensure all information is transferred. Letters get mislaid
53	Nurse	There is no record kept of the transfer letter; It may be misplaced/lost in the transfer. It can be used inefficiently i.e questions could be more specific

SAMPLE B

1	DON	--
2	CNM	Time consuming – multiple phone calls to nursing home from acute hospitals requesting information that is already written
3	Nurse	It is very difficult sometimes to identify a new patient's immediate needs, as well generally do our initial assessment over a 72 hour period (it is a model developed from the MDS to suit our facility)
4	CNS	None
5	CNM	If filled in properly adequate
6	CNM	Medication discontinued on day client leaves acute setting. The Common summary Ax record is not always complete and does not capture dependency levels in dementia care – behaviours that challenge. The information can be misleading due to the fact that the assessment can be a month- 6 weeks old
7	CNM	Not standardised
8	DOC	Hospital staff often omit important relevant information
9	DON	Information can get lost during patient transfer
10	Nurse	Information is lost, not signed/dated. Missing important information i.e. allergies, telephone Nos. Not much details given – only space to write one or two things re. patient.
11	DON	Nil from this nursing home
12	DON	--
13	CNM	Information can slip through "checks". Time consuming. Ad hoc. Useful information doesn't go with resident. Double work possible in re-testing

14	DON	--
15	DON	Generally very poor. It takes many phone calls to get information. I must request blood reports. No medication given on transfer even if patient arrives at 6 o'clock

16	CNM	A & E don't always read and it never goes with patient to the ward
17	DON	Inaccurate, incomplete information from wards and incomplete prescriptions. Difficult to track down staff in hospitals once patient has been discharged. Sometimes patient arrives without transfer letter and you waste time on phone chasing it up
18	DON	Inaccurate information which requires numerous phone calls and faxes following admission from hospital
19	CNM	It can get lost OR is reported as not arriving
20	NM	Poor print quality, writing difficult to understand all details
21	DON	Sometimes paper lost in transfer
22	CNM	Not a complete assessment. Multidisciplinary team need to complete separate documents. Very often documents are missing, not complete, not legible etc
23	CNM	Dealing mainly with SVUH; often we do not receive any information at all and have to make numerous phone calls to receive basic information
24	CNM	Lack of information – variety of standards in information given
25	CNM	No advantages – as we are always asked for verification by Dr. On duty and Registrar by phone at least once
26	DON	Potential for gaps in information
27	DON	Time consuming. Transcribing information can be problematic (errors in numbers etc)
28	DON	The hospitals do not have a standardised form for transfer and often send no transfer information
29	DON	Paperwork is often incomplete. Can rely overly on clinical judgement – not objective
30	?	It is individual perception and documentation – I normally need to telephone the ward for clarity. Not all information given; poor handwriting.
31	M	System is very ad hoc
32	DON	Time consuming and documentation could get mislaid
33	CNM	Too little information. Whole systems approach not addressed
34	DON	Poor collation of information. Omissions/errors. Little accountability
35	DON	Misunderstandings
36	DON	None known. Except Doctors won't read the transfer and phone later asking questions that are answered if he/she read the transfer letter
37	CNM	---
38	CNM	---

7.5 Question 13 SAMPLE A

1	Dietician	R/v the form – section for each discipline and have a forward on list for all therapies who would require the information in each setting
2	Nurse	All in one transfer letter
3	CNM	Standard document then send information by electronic fax – therefore Fax format legal
4	Nurse	Form that can be easily filled in with all relevant information

5	Nurse	For an over-haul of the current documents that are used to give a fully comprehensive picture.
6	Nurse	Should be all done electronically
7	Nurse	Via e-mail or intranet would be good with a proper form to fill in
8	Nurse	--
9	Nurse	There should be a standard form for assessing patient and for transfer and that MDT should be aware and are automatically involved
10	Nurse	--
11	Nurse	--
12	Nurse	--
13	Nurse	--
14	MSW	Electronically
15	Nurse	The form should be standardised and complete information details should be incorporated in the form
16	Nurse	Don't know
17	CNM	--
18	Nurse	--
19	CNM	Don't know
20	Nurse	Communication between multidisciplinary team – for proper return of forms, proper communication rather than simply writing down and leaving them. Should be legible
21	Nurse	Communication through all Multidisciplinary team
22	Nurse	--
23	Nurse	Better communication
24	Nurse	Communications to nursing staff for more easy job from all members of staff
25	Nurse	No
26	Nurse	--
27	MSW	Should be someone responsible for getting form completed. Adequate time/notice for form to be completed
28	MSW	Electronically
29	MSW	--
30	MSW	Information should be sent in a timely manner to allow for long term care facility to adequately prepare for arrival of patient
31	MSW	--
32	MSW	Electronic HSE-wide; patient into database
33	MSW	Where possible should be done in consultation with patient; nominated member of MDT go through a template of information required and same sent over. If possible electronically would be useful
34	MSW	Design of CSAR could be improved to capture more information and clarify which discipline should complete which section and when additional reports are required
35	CNM	--
36	Nurse	--
37	Nurse	--
38	Nurse	--
39	Doctor	Computerised record of transfer under patient protected I.D. i.e. part of electronic patient record

40	Doctor	Use MDS. Computerise
41	OT	Electronic. Space for each team member
42	OT	Having a pro-forma that is specific to disciplines that can be sent with patient on day of transfer with up-to-date functional status
43	OT	Standardised form needed. More information re. pt's needs and implications for care needed
44	OT	If staff could update forms with relevant information – would need to sign later??
45	OT	Filling the form electronically, this will facilitate efficiency in filling form, transfer of information of all MDT members, and timely transfer of information to another institution
46	OT	--
47	OT	A standard format; staff members involved clearly identifiable and their specific transfer by computer system. Recipient identified also.
48	CNM	--
49	Nurse	--
50	Nurse	No
51	Nurse	That completion of documentation is not the duty of staff nurse. As getting all members of MDT to complete relevant sections is extremely time-consuming
52	Nurse	--
53	Nurse	To include a model (i.e. Roper Logan & Tierney) of Ax as part of the specific Qs

SAMPLE B

1	DON	It is important that there is verbal information as well as written information especially if there is specialised care
2	CNM	Electronically would improve time factor
3	Nurse	Yes a standardised tool needs to be used and a complete paper copy used for transfer
4	CNS	All hospitals and nursing homes have the same assessment documentation
5	CNM	If filled in properly is adequate
6	CNM	Minimum data set which is transferred between acute/LTC settings
7	CNM	Yes, standardise documentation e.g. MDS captures everything
8	DOC	We have to await the new HIQA transfer forms to evaluate their accuracy
9	DON	Computer
10	Nurse	A tick the box. New suggestions over each patient in the HSE to have one personal No. that is theirs forever – never changes.
11	DON	No. From acute hospitals information is usually sent via fax. We also assess patients from acute settings in the hospital and gather as much information as possible prior to admission. We liaise with MSW, family and staff on ward +-consultants
13	CNM	MDS inter-RAI validated system of assessment will lead to care planning that is focused on needs. Electronic transfer of all information belonging to the resident
14	DON	--
15	DON	Standardised information transfer. Blood report, X ray report,

16	CNM	mental health, meds given on day of transfer and time of same
16	CNM	---
17	DON	---
18	DON	You must visit the hospital to assess patient and thoroughly examine all records and speak to staff and prospective patient
19	CNM	Computer transfer might help?? But this can get lost/not arrive as well. It should be the way forward
20	NM	Information to be provided in print form 12 -24 hours prior to admission to nursing home
21	DON	E-mail
22	CNM	Tick box system. Remain in patient's medical notes until ALL MDT have signed and completed same with checklist on front of documented where it is clear who has and who has not completed their section. Typed/printed if possible. Hand writing is never clear!
23	CNM	A Standardised discharge letter including assessments of mobility/SW etc
24	CNM	A more standardised form of information
25	CNM	A standardised assessment
26	DON	Standard transfer for documentation
27	DON	Better communication between hospitals and long term care facilities especially in A & E where often they don't transfer the patient documentation to the ward or other hospitals if the person is transferred on. Computerised standard assessment forms → between all facilities.
28	DON	Standard form for use by all
29	DON	Validated assessment tools which are common to all settings (so we are all singing off the same hymn sheet!)
30	?	If a standardised assessment was formed and completed via computer – it would be a lot more efficient.
31	M	Standardised forms for all involved
32	DON	Possibly we are moving towards automation but the human aspects and relationships between nurse patient would be diminished
33	CNM	MDS – a standardised Minimum data set to be implemented across the country → communication? non...
34	DON	We would support the creation of a computerised transfer form, making mandatory requirements of information prior to it being sent on to another facility
35	DON	Better co-ordination between all services e.g. SALT, physio. Write on one document or different consultants write on one document
36	DON	Yes – ensure patient information is not just left lying around A & E and that all members of the MDT get to read it. Improve communication and knowledge by sharing documentation
37	CNM	Yes – accurate information of patient's consultation
38	CNM	One standard transfer letter for nursing home and the same for hospital

7.6　　　Question 18　SAMPLE A

1	Dietician	Yes	But there are issues with confidentiality and safety of the system – this is why we currently don't use in our dept
2	Nurse	Yes	Will we still be overlapping each other's information, trying to get everybody to fill out their section? If it keeps everybody's together – good idea
3	CNM	Yes	Secure. Logical/legible. Timely availability
4	Nurse	Yes	Easy transfer of information. Simple to read. Cant get lost
5	Nurse	Yes	All MDT sections could be viewed. ? Ability to update section if needed. Readily accessible to identify if/when has been completed
6	Nurse	Yes	Quicker transfer of information. Less time wasting and hand writing. Permanent record stored safely on computer
7	Nurse	Yes	Information less likely to be missed out if direct instructions in front of you. Quicker and safer
8	Nurse	Yes	Transfer letter. Standardised. Easy way
9	Nurse	Yes	Easier. Standardised. Everyone aware
10	Nurse	Yes	Efficient time-wise. Less paper work. Less likelihood of misplacing paper
11	Nurse	Yes	--
12	Nurse	Yes	Time efficient. Could provide more information
13	Nurse	---	--
14	MSW	Yes	Transparent to all involved – more legible than hand written forms. Accessible to all relevant profs. Safe – gets to the right personnel; doesn't get lost in the post or in transit with the patient
15	Nurse	No	Needs explanation of the said electronic transfer – no idea of electronic transfer
16	Nurse	Yes	Easy to read
17	CNM	----	--
18	Nurse	Yes /No	Time consuming. Query reliability re. confidentiality
19	CNM	Yes	--
20	Nurse	Yes	Quicker and easy. Confidential. Written document for future reference (not verbal)
21	Nurse	Yes	Easy and quick to reach. Standard for all units. Confidentiality
22	Nurse	Yes	--
23	Nurse	Yes	Speedier. Standard for all units. Easy to read.
24	Nurse	Yes	Standard for all units. Easy access. Helps to all number of staff
26	Nurse	----	--
27	MSW	No	Not necessarily confidential
28	MSW	Yes	Fast, able to integrate with hospital records on computer. Could ensure greater confidentiality as receiver would have their own unique address
29	MSW	Yes	Would ensure information got there. More efficient.

			Easily accessible if other staff need to use it
30	MSW	Yes	More efficient. More reliable. Less paper – save the trees!
31	MSW	Yes	Quicker
32	MSW	Yes	Only if necessary provisions were included in into being transferred
33	MSW	Yes	Quicker. More efficient. Saves on paper. Easily traced i.e. faxes can get 'lost' etc
34	MSW	No	Not convinced that currently are sufficient security systems to protect confidential patient information. Could result in increase in information being sent to a high number of facilities who will never take patient. No control over whether nursing homes will destroy information as appropriate of how they will store
35	CNM	No	--
36	Nurse	Yes	It saves time if you have an idea to use it. More clear. Reaching the nursing home in less time span. No risk of missing
37	Nurse	Yes	Information would not get lost/misplaced. Time. More efficient, less paperwork for nurses to complete
38	Nurse	No	I feel it is better to communicate verbally with the nursing home and give a general description of the patient
39	Doctor	Yes	Easily accessible record available if queried. Allows comparison of patient need if re-admitted to hospital. Can be completed faster, at the same time by disciplines
40	Doctor	Yes	Audit, efficiency, speed
41	OT	Yes	Quicker transfer. More secure. Proof of delivery
42	OT	Yes	Allows quick transfer on day if via e-mail. Can reduce delays due to posting documents or no-one available to answer phones. In line with HSE moving towards electronic records
43	OT	Yes	Consistent information recorded. Data collected could be used for stats/research. Record could include increased information
44	OT	Yes	More efficient as can be done from office. Don't like current forms. Won't get lost or not available on ward. Don't have to worry about getting copies etc
45	OT	Yes	Accurate information transfer that eliminates use of paper (environmentally friendly)
46	OT	Yes	Time – written very time consuming. Concerns re. confidentiality and written information being sent
47	OT	Yes	Quick process to fill in and send. Reliable. Specific (but feel that a back-up system is required in case of problem with electronic system)
48	CNM	Yes	Accuracy; Timely
49	Nurse	Yes	--
50	Nurse	Yes	Less paper work; Quicker Tool; Ability to standardise some
51	Nurse	Yes	Less time consuming; All members of MDT responsible for relevant section. Easy Track as don't get lost as easily as paperwork

52	Nurse	Yes	Less chance of material getting lost
53	Nurse	Yes	Opens lines of communication between both institutions; Information can be saved and more easily accessed for future reference; It may be quicker

SAMPLE B

1	DON	---	--
2	CNM	Yes	Less time consuming for both parties . Hard copy record as well as a paper record
3	Nurse	---	--
4	CNS	Yes	Time saving. Accurate information
5	CNM	Yes	If there are criteria to be filled in Who will be missed
6	CNM	Yes	Improved continuity of care for clients. Improved communication for multidisciplinary team
7	CNM	Yes	Quick – instant. Cuts down on paper work
8	DOC	No	I prefer hard copy transfers because not all staff are computer literate. Also it is easier accessed
9	DON	Yes	Less risk of information being lost. More confidential than paper work. Feel connection improved re. information between hospital/NH
10	Nurse	Yes	Paper goes missing/post slow. Faster information if sent before patient arrives. Easy to read – some handwriting is not legible
11	DON	Yes	Captures all information required. Clarity of information received. Efficient
12	DON	Yes	Information can be received prior to patient's arrival. Less chance of information being lost. Information can be forwarded on to patient's GP
13	CNM	Yes	Ease of transfer of clinical information. Full 'picture' of resident available. Reduces overlap and doubling up of lost or Ax done
14	DON	Yes	---
15	DON	Yes	More detailed info. Can be transferred. Less phone calls to hospital. Smoother information trail.
16	CNM	Yes	We already use electronic care planning so it would be very easy and it would not get lost
17	DON	Yes	Quick. Complete and accurate. Less time wasted on phone to follow up documents
18	DON	Yes	---
19	CNM	Yes	With reservations!! It will probably not arrive/not be sent and not meet the needs of patients. The traditional discharge letter with the patient was individualised/personal and usually arrives and could be faxed
20	NM	Yes	Speed of delivery. Clarity of information. Current system in place in my home to receive information
21	DON	Yes	Quickness
22	CNM	Yes	Clear, legible, accurate, current and up to date. Clear test results. Clear documentation of treatment and suggestions from medical team
23	CNM	Yes	Easy to read (compared with some handwriting. Easy to

			access. No risk of losing paperwork in the process and all input from different doctors/teams together
24	CNM	Yes	It would benefit patients – avoid duplication of work
25	CNM	Yes	--
26	DON	Yes	--
27	DON	Yes	Fast/Time saving. Less errors as only one input; no transcribing. We use Epic solutions and will be using MDS so it would be great for us!
28	DON	----	Small units such as this would be forced to computerise. Many errors on computer reports. Paper ++
29	DON	Yes	Visiting GPs would have access to investigations/making their assessment and workload easier. Less likelihood of loss of information. Nursing staff are familiar with electronic system and would 'buy in' quickly.
30	?	Yes	Improve communication though all relevant information would need to be covered. More efficient. Less ambiguity
31	M	NO	Needs to be in written format for use by multidisciplinary team e.g. accommodation, catering, pastoral care as well as nursing and medical
32	DON	----	Insufficient information
33	CNM	Yes	Timely handover. Traceability and less paperwork. Reduce error
34	DON	Yes	We already use a computer database to record electronic health record. We have experience of poor quality incomplete transfer information from acute hospital settings.
35	DON	Yes	Consistency. Clarity. Thorough
36	DON	Yes	Legally, it will cover us more instead of hard to read reports or being unable to understand someone on the phone. RGNs going off duty and another nurse unfamiliar with the patient
37	CNM	-----	--
38	CNM	Yes	--

7.7 Question 21 SAMPLE A

		ADVANTAGES	DISADVANTAGES
1	Dietician		
2	Nurse		
3	CNM		
4	Nurse		
5	Nurse		
6	Nurse		
7	Nurse		
8	Nurse		
9	Nurse		
10	Nurse		
11	Nurse		
12	Nurse		
13	Nurse		
14	MSW		

15	Nurse		
16	Nurse	Don't know	Don't know
17	CNM		
18	Nurse		
19	CNM	Don't know	
20	Nurse		
21	Nurse		
22	Nurse	Legible. If properly used safe for confidentiality	
23	Nurse		
24	Nurse		
25	Nurse		
26	Nurse		
27	MSW		
28	MSW		
29	MSW		
30	MSW		
31	MSW		
32	MSW		
33	MSW		
34	MSW		
35	CNM		
36	Nurse		
37	Nurse		
38	Nurse		
39	Dr	Internationally recognised & validated. Comprehensive & easy to use.	Paint by numbers approach to pt. Ax Mental health not fully assessed
40	Dr	Comprehensive; fits with ICF, ICD-10	HSE unwilling to invest time and money in Ax of frail older people
41	OT		
42	OT		
43	OT		
44	OT		
45	OT		
46	OT		
47	OT	Patient centred. Essential info captured & communicated	?updated regularly enough. ?security Info transfer
48	CNM		
49	Nurse		
50	Nurse		
51	Nurse		
52	Nurse		
53	Nurse		

SAMPLE B

		ADVANTAGES	DISADVANTAGES
1	DON	Person centred & very detailed	Too long & too time consuming
2	CNM	Standardised tool not	----------------------------------

		open to variations	
3	Nurse	While its a long tool its very comprehensive. It covers all aspects of the pt's Hx	-----------------------------------
4	CNS	Single Ax. Has community, acute & LTC sections	May need to be adapted to Irish setting
5	CNM	Informative. Helps one to know & relate to residents better	-----------------------------------
6	CNM	Accurate Ax without duplication of different agencies	Language culturally different
7	CNM	Standardised	All staff will need education on same
8	DOC	--------------------------	-----------------------------------
9	DON	Outlines physical & mental abilities of the patient	Paperwork
10	Nurse	--------------------------	-----------------------------------
11	DON	--------------------------	-----------------------------------
12	DON	--------------------------	-----------------------------------
13	CNM	Comprehensive Ax, Highlights deficit. Enables care planning (focused). Info gathered is usable	Software must be purchased. Training for staff. Financial resources, royalties paid
14	DON	--------------------------	-----------------------------------
15	DON	--------------------------	-----------------------------------
16	CNM	--------------------------	-----------------------------------
17	DON	--------------------------	-----------------------------------
18	DON	--------------------------	-----------------------------------
19	CNM	Should show logical system for identifying needs	Is American-jargonised. Confusing & will take me away from my patients.
20	NM	Rounded view of patient needs	Training required to carry out Ax accurately
21	DON	Holistic care model	-----------------------------------
22	CNM	--------------------------	-----------------------------------
23	CNM	--------------------------	-----------------------------------
24	CNM	--------------------------	-----------------------------------
25	CNM	--------------------------	-----------------------------------
26	DON	--------------------------	-----------------------------------
27	DON	Very comprehensive. Great deal of info. about a person	Lots of questions. At least 3 monthly reviews
28	DON	Uniform assessment	-----------------------------------
29	DON	Comprehensive Ax that covers all domains of care. Points to further Ax if required	Huge! Staff would need training/education to ensure Ax are not just a paper exercise

30	?	--------------------------	-----------------------------------
31	M	--------------------------	-----------------------------------
32	DON	---------------------------	-----------------------------------
33	CNM	Good clinical Ax tool. Validated for use. Provides a comprehensive Ax of pt's needs	Costly to implement. Nationally also everyone needs to buy into it
34	DON	Accurate capture of info	Possibly overly complex and detailed
35	DON	Thorough, clear, guidelines offered	Time consuming, computer based, complex initially
36	DON	------------------------	--------------------------------
37	CNM	------------------------	--------------------------------
38	CNM	-------------------------	--------------------------------

7.8   Question 25   SAMPLE A

1	Dietician	
2	Nurse	
3	CNM	
4	Nurse	
5	Nurse	
6	Nurse	
7	Nurse	
8	Nurse	
9	Nurse	
10	Nurse	
11	Nurse	
12	Nurse	
13	Nurse	
14	MSW	
15	Nurse	
16	Nurse	Don't know
17	CNM	
18	Nurse	
19	CNM	
20	Nurse	
21	Nurse	
22	Nurse	Firstly, have a common, nationwide, computerised/electronic health record system then information sharing inform. E.g. telehealth & telemedicine
23	Nurse	
24	Nurse	
25	Nurse	
26	Nurse	
27	MSW	
28	MSW	
29	MSW	

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30	MSW	
31	MSW	
32	MSW	
33	MSW	
34	MSW	
35	CNM	
36	Nurse	
37	Nurse	
38	Nurse	
39	Dr	Yes and should be
40	Dr	With potential will!
41	OT	
42	OT	
43	OT	
44	OT	
45	OT	
46	OT	
47	OT	I think it could be difficult due to different governance, current lack of integration on all levels (IT, structures etc). Funding may be a problem. Would need guarantee of security of confidential information.
48	CNM	
49	Nurse	
50	Nurse	
51	Nurse	
52	Nurse	
53	Nurse	

SAMPLE B

1	DON	Yes
2	CNM	Increase use of computerised information. Input in all healthcare settings
3	Nurse	It will require input from all sections of a multidisciplinary team, and there will need to be some sort of system put in place to achieve this
4	CNS	--
5	CNM	Not sure. Each organisation does their best
6	CNM	Yes. Needs language modification for Irish context
7	CNM	Pilot first; in house education
8	DOC	--
9	DON	MDS placed on CD rom
10	Nurse	--
11	DON	--
12	DON	--
13	CNM	With enough resources. Interlink with inter-RAI UK. Trial it

		in LTC setting and medicine for the elderly unit
14	DON	--
15	DON	--
16	CNM	--
17	DON	--
18	DON	It has been discussed for at least 2 years without progress. It will need much support and effort from the HSE. A core group of nursing homes have researched its use but progress is slow
19	CNM	Educate. Train all stake holders. Make it simple, non jargonised. Check to see if it is 'all singing and dancing'. Where it is now used or just another new fangled idea promised by academics that doesn't make sense and is made compulsory by HIQA!!
20	NM	--
21	DON	--
22	CNM	--
23	CNM	--
24	CNM	--
25	CNM	--
26	DON	--
27	DON	Slowly!
28	DON	With proper training and compliance by all successfully
29	DON	Cooperation and partnership between all settings. Possibly giving each resident a USB key if it was difficult to get computers linked. Training! Training! Training! Acute care staff reaching out to long term settings and vice versa – cross training.
30	?	--
31	M	--
32	DON	--
33	CNM	Leas cross report identified need for MDS. Nursing homes nursing projects currently in talks with consultants; plus there is no funding
34	DON	An agreed template could be produced with both mandatory and optional fields to be filled in. This could then be accessed by hospital/long term residential and GP/Consultant
35	DON	Due to financial constraints now, it will be very difficult for companies to afford the package. Education may also be costly.
36	DON	--
37	CNM	--
38	CNM	--