

**The Validity of the Core Element of the Northern Ireland Single
Assessment Tool (NISAT) for the Health and Social Care of Older People**

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INTRODUCTION

In 2001 the National Service Framework for Older People was launched. One of the key principles of this governmental document was the development of person-centred care regarding older people and a particular focus on the assessment of older people. Part of the assessment process was the development and testing of an appropriate assessment instrument that places the older person at the centre of the assessment process. In Northern Ireland an instrument is currently being developed that is based on an extensive review of existing international and national literature pertaining to assessment, a review of existing instruments, analysis of the local assessment documentation currently in use and engagement with professionals with expert experience in the assessment process.

Literature relating to the assessment of older people (Steward et al 1999) and governmental guidelines regarding the development of instruments used to assess older people according to the National Service Framework for Older People stipulate that developed instruments must be both reliable and valid. Both measures are essential components for any assessment instrument (Dyer 1996). Reliability of an instrument is the degree of consistency with which an instrument measures an attribute (Polit and Hungler 1993). Validity refers to the degree to which an instrument measures what it is supposed to measure (Polit and Hungler 1993).

The review of the literature and existing assessment documents indicates that in order to address the objectives as outlined in the National Service Framework a combination of both quantitative and qualitative forms of measurement is required. Quantitative data is numeric in nature and provides statistical quantifiable information. Qualitative data is information collected in the course of a study that is in narrative (non-numeric) form. In Northern Ireland the developed instrument consists of three components to enable an assessor to capture an appropriate depth of information according to the needs of the individual. The three components are: the Contact Screening; the Core Assessment; and the Complex Assessment. The Contact Screening form consists of demographic details, identifies the rationale for contact with health and social care services and lists any individual, professional or service currently involved in providing care or support for the individual. Where the individual's health and social care needs cannot be met as a result of contact screening, a more in depth assessment using the core Assessment may be required. Information at this level is gathered within eight domains to create a

holistic picture of the individual in relation to past and present health and social care needs and their future goals and wishes. This component is multi-disciplinary in nature and as such does not impinge on specialist assessment. It contains a combination of qualitative and quantitative measures in order to capture the older person's perspective on their health and social care needs and the views and observation of health care professionals and others who provide care or support for the individual. The complex assessment is principally a qualitative instrument and will be completed by professionals trained in the management or co-ordination of care for individuals who have health or social care needs substantially affecting their ability to remain independent. Completion of this component is reliant on interpretation of information gathered on contact and core assessment and additional summaries provided following specialist assessment where necessary. Of particular concern in this study is the Core Assessment.

The Core assessment consists of eight domains covering all areas of the older people's life. The questions contained in each domain are based on a set of theoretical principles, such as person-centredness and personal ability, balanced with a necessity to maintain the brevity of the instrument. Each domain is measured using a varying combination of qualitative and quantitative research measures, concurrently applied, which compliment each other to provide a comprehensive and holistic assessment of the individual.

The aim of this study was to develop and test a measure of validity that incorporates both quantitative and qualitative methods. This was achieved through method triangulation. Methodological triangulation involves the use of different methodologies (in this study survey methods and narrative data) to explore the same issues. Method Triangulation is usually reserved for having two (or more) distinct methods, such as a survey or interview, delivered as two separate methods addressing the same topic. Few studies have reported methods and findings of validity for assessment instruments that contain a combination of qualitative and quantitative methods exploring the same topic. This study aimed to address this dearth.

Procedure

This was achieved through a three point process of engagement with the assessors:

- A sample consisting of expert assessors of older people was invited to rate and comment on how representative a theoretical “standard” reflects their opinions and knowledge on each topic. This standard reflected what the instrument developers saw as guiding the generation of each core domain (See Figure 1, Strand A). Each assessor was asked to rate how well the standard reflected their view on a scale of 1 – 10.
- The assessors were asked to rate how well the standards are reflected in the level and content of questions asked in each of the core domains (See Figure 1, Strand B). Each assessor was asked to focus on the standard and the questions contained in each domain alone irrespective of previous knowledge. The assessors were asked to rate the strength of these relationships on a scale of 1 – 10.
- Lastly the assessors were asked to rate the contents of each of the domains contained in the core assessment of NISAT according to their opinions and knowledge on each domain topic (See Figure 1, Strand C). Each assessor was asked to rate how the domain reflects their view on a scale of 1-10.

Assessors had the opportunity to qualitatively elaborate on the three score provided and encouraged to provide information on how the instrument could be improved. Assessors who scored the statement below 7 had their comments recorded and subjected to content analysis in order to identify themes that would help improve and inform future development of the tool. The sample was asked to perform the tasks for each domain contained in the core element of the NISAT.

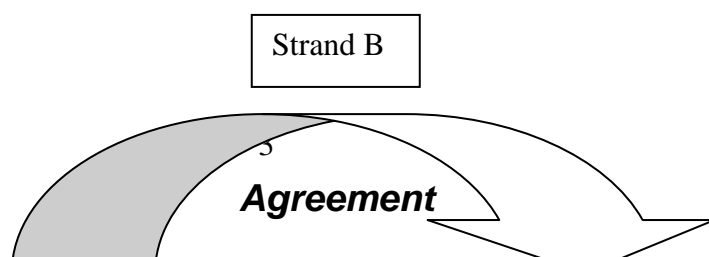


Figure 1. Data Extraction and Analysis

Four training days were scheduled in each of the study's five pilot sites. Part of this training involved each participant rating:

- (1) How well each core domain definition represented their professional opinion;
- (2) How well the corresponding section of the core strand of NISAT reflected the definition; and
- (3) How well the section of the core strand of NISAT reflected their professional opinion.

This generated three scores, all rated on a scale of 1 – 10. Higher scores indicated higher satisfaction with the respective statement. Low scores indicated areas within the domain that required further development. For example, if an assessor rated the definition as low then this would indicate a poor definition or poor understanding of the definition. Examination of other assessors' results will help determine which of these two opinions is correct. If the domain was scored high, with few low scores it would indicate an individual assessors' failure to understand the definition. Alternatively if the domain is scored low then it may be concluded that the definition is poor and requires modification. A percentage score for the overall validity of the domain was generated by summing the three scores and working out its percentage of the total possible score (of 30).

To avoid any ordering effect in the data collection process, the sample was split into two groups. Group one was asked to perform the tasks in sequence strand A, then B and finally C. Group two was asked to perform the task in reverse order. The data was examined to investigate the presence of any ordering effect.

Scoring System

Given the uniqueness of this process there was no standardized scoring range to compare findings against. Therefore a high criterion was set for the statement and overall score to be deemed valid and acceptable.

Scores above 7 were considered moderate and acceptable: scores of 8 considered as high: and scores of 9 – 10 very high.

Low scores (scores below 7) on each of the statements would indicate a disagreement with that relationship. Domains with low scores would be targeted for further development of the validity of the core element of NISAT.

For example, a low score on the definition (strand 1) with corresponding high score on strand two and a low score on strand three would indicate that the definition and the instrument require alteration. By this the assessor has indicated that the definition does not represent their views and opinion, that the instrument reflects this poor definition and finally that the instrument does not reflect their views and opinions. As a consequence the definition AND instrument must be changed to increase the validity of the domain.

Likewise a high scoring definition (strand 1), a low scoring rating of the instrument reflecting the definition (strand 2) and a low score for the instrument reflecting the assessors' views would indicate a good definition and a poor instrument design.

Assessors

Data Analysis

Data was entered into SPSS.11.5. Three scores were generated, and a further one score generated to represent overall validity. This provided three measures, a score between

0-10 for the three processes outlined above and one further percentage score generated from the three scores (See table 1). This provided a score out of 100 ($(A+B+C) * 3.33$).

Strand A	Strand B	Strand C	Overall Score
9	9	8	87%
8	7	9	80%
10	8	7	83%

Table 1. Examples of scores generated by the method triangulation for each domain

Overall percentage scores of 80% to 89% was considered high and scores over 90% considered very high. Neither classification requires modification. Scores of 70% or greater are acceptable and requiring only moderate modification. Score below 70% are considered low and require further examination for reasons for the low score.

Frequency scores on each of the statements on each of the domains will be presented in tables throughout the results section. The percentage scores generated will be tested for significant differences in scoring according to assessor site and profession. The results will be examined according to the site and profession of the assessors. This will provide information regarding the need to amend the tool or to consider additional training/clarification of the domain. Sites with scores below 7 to any of the three statements will have qualitative comments examined for feedback/improvement to the instrument.

RESULTS SECTION

The following results will examine the findings generated in the training days, first by examining overall scores for the eight domains. Further analysis of each of the domains

will highlight unique scores specific to the domain under investigation. Differences in overall mean score of each domain will be examined according to the location of the pilot site and the assessors' profession. Statistically significant difference will be highlighted where appropriate.

Total Sample

Table 1 shows the overall response rate. In total 73 assessors were trained in the use of the draft NISAT instrument. This number decreased over the training period. The overall number of assessors that could attend the training days fluctuated due to leave, holidays etc. Generally each of the training days was well attended and each of the five pilot sites was well represented on each of the four training days. There was a good spread of professional opinion gathered on each of the four training days. Overall the majority of the assessors were Social Workers or Nurses by profession. Assessors with roles such as assessment unit managers or dementia specialists were classified in the 'Others' category as they classified themselves on the score sheets as unique to the three other groups.

Data Time point	Total (n)	Pilot Sites					Assessors Profession			
		Site 1	Site 2	Site 3	Site 4	Site 5	Social Worker	Nurse	AHP	Other
Time 1	63	32%	16%	14%	21%	17%	39%	29%	16%	16%
Time 2	47	36%	11%	13%	15%	25%	51%	17%	21%	11%
Time 3	52	29%	21%	8%	27%	15%	39%	33%	20%	8%
Time 4	41	29%	20%	12%	17%	22%	43%	35%	19%	3%

Table 1. Demographic details of the sample of assessors

Overall Scores for the Domains

A percentage score was generated for each of the domains contained in the core strand of the NISAT. Overall the domains were scored highly. Six of the domains achieved scores above 80% and the highest of these was 'Communication and Sensory Functioning' with a score of 86%. The lowest scored domain was 'Awareness and Decision-Making' with a score of 76%.

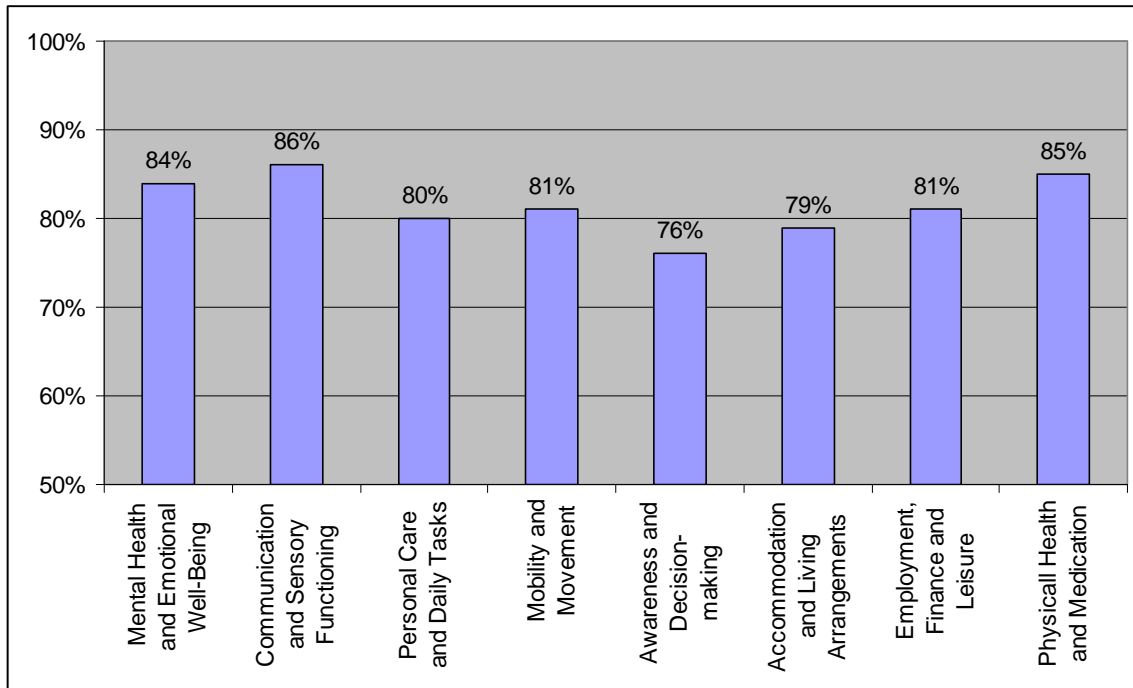


Figure 1. Percentage Scores for the Domains of the Core NISAT

Mental Health and Emotional Well-Being

Assessors rated the theoretical definition as being representative of their views concerning that particular domain. More than 93% of the assessors scored the definition as 7 or above, and almost two thirds (58.8%) of the assessors scored it as a 9 or 10.

Likewise 95.2% (n = 59) of the sample felt that the corresponding section of the instrument reflected the theme of the definition. Only 4.8% (n = 3) scored the relationship as less than 7. All of the assessors felt that the contents of the NISAT instrument was reflective of their professional views and opinions, with no assessors rating this relationship below 7.

Validity Question and Scores	<7	7	8	9	10	Mean
How well each domain definition represents their professional opinion	6.3%	12.7%	22.2%	41.3%	17.5%	8.4
How well the corresponding section of the core strand of NISAT reflects the definition	4.8%	19%	27%	30.2%	19%	8.4
How well the section of the core strand of NISAT reflects their professional opinion.	0%	12.1%	33.3%	33.3%	21.2%	8.6

Table 3. Scores for the domain Mental Health and Emotional Well-Being

The mean scores on each of the statements show each statement to be positively scored (see table 3). Examination of the percentage score was high (84%) and a significant difference in mean scoring was reported across the five pilot sites (See figure 2). Examination of the mean scores shows that site 2 had a lower score than the other four sites ($f=2.653, p=0.042$).

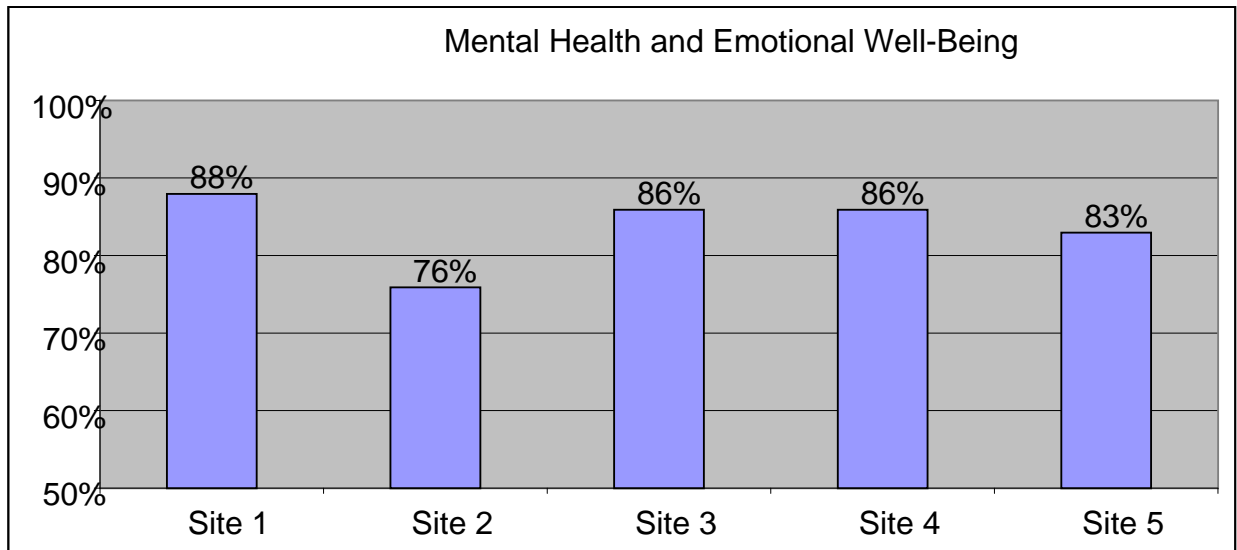


Figure 2. Percentage scores for Mental Health and Emotional Well-Being across the five sites

There were differences in scoring across the four professional categories (see figure 3) however this difference was not at a level of statistical significance.

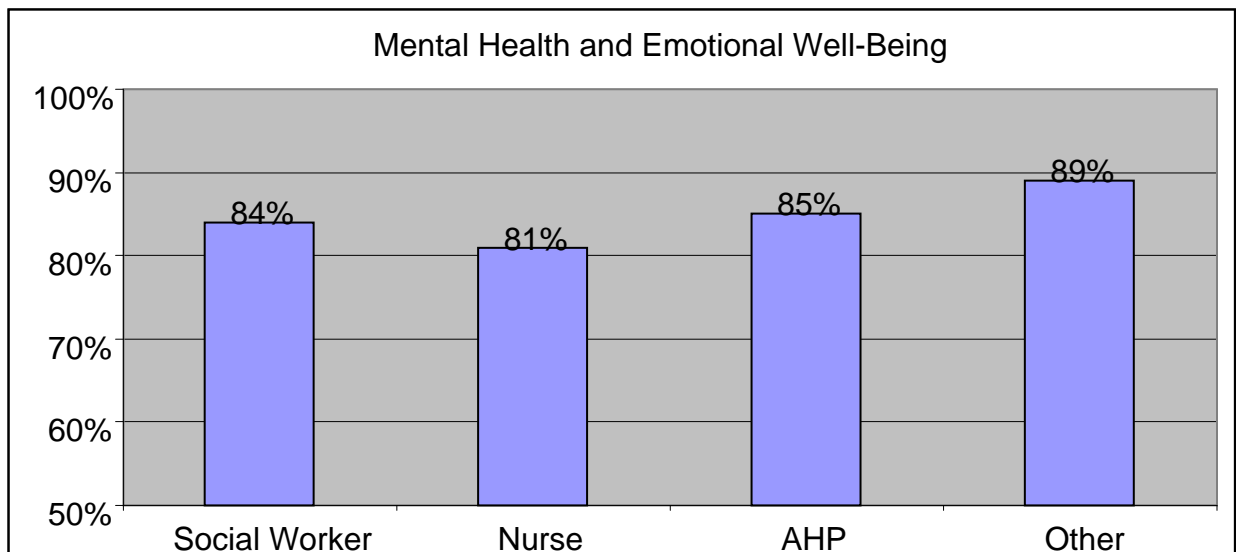


Figure 3. Percentage scores for Mental Health and Emotional Well-Being across the four professions

No site scored the three statements below seven and no further analysis of qualitative data was required.

Communication and Sensory Functioning

All three statements were positively scored, all with a mean score close to 9. Two thirds of the assessors scored the definition as very high (9 or 10). Only 3.3% of the assessors rated the definition relating to ‘Communication and Sensory Functioning’ below 7.

Almost all of the assessors scored the NISAT instrument as reflecting the definition. Over 95% rated the similarities of the definition and the core strand content above 7. Almost a quarter (21.7%) rated the relationship at the highest possible score.

Similarly almost all the sample scored the content of the NISAT instrument as being reflective of their experience and opinion. More than half (56.8%) scored the statement at a very high level (9 or 10).

Validity Question and scores	<7	7	8	9	10	Mean
How well each domain definition represents their professional opinion;	3.3%	9.8%	19.7%	50.8%	16.4%	8.7
How well the corresponding section of the core strand of NISAT reflects the definition; and	3.3%	6.7%	28.3%	40%	21.7%	8.7
How well the section of the core strand of NISAT reflects their professional opinion.	3.1%	18.8%	21.9%	31.3%	25%	8.5

Table 4. Scores for the domain Communication and Sensory Well-Being

There were no statistically significant differences in mean scores across all five sites, with the highest scoring sites having an average of 89% and the lowest 82% (see Figure 4).

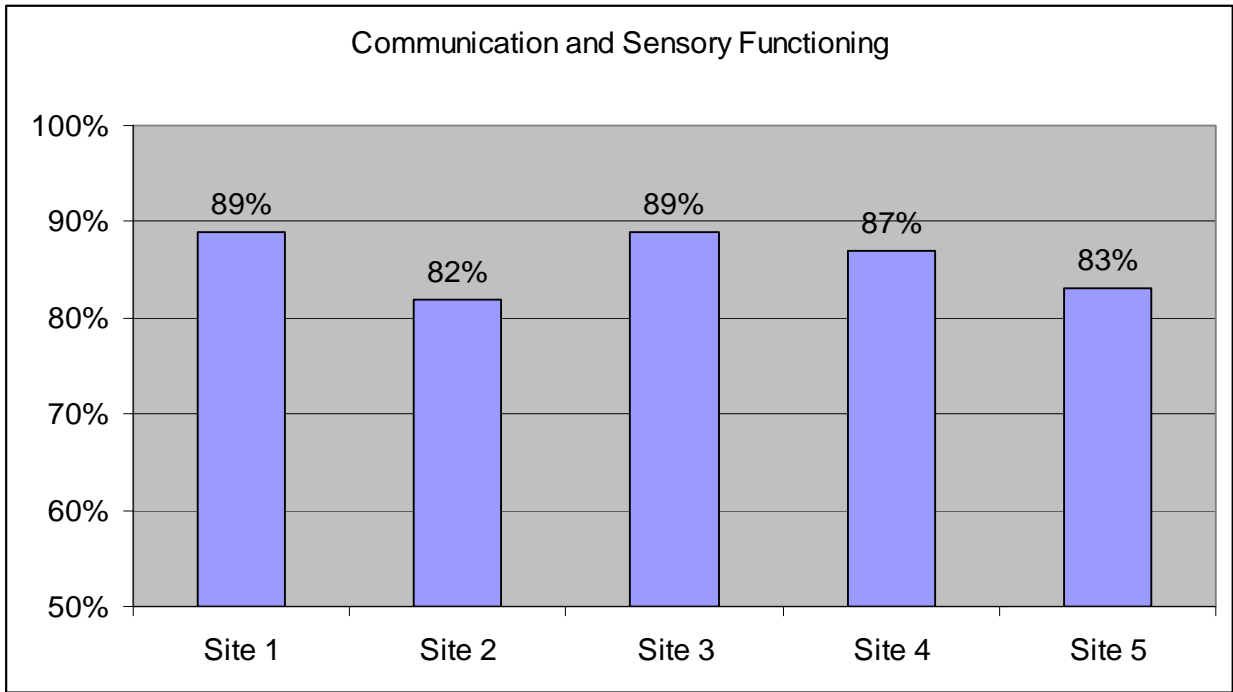


Figure 4. Percentage scores for Communication and Sensory Well-Being across the five sites

Allied Health Professionals felt most favorable regarding the information contained in the domain concerning communication and sensory functioning (see figure 5). There were no statistically significant differences across the mean scores according to profession.

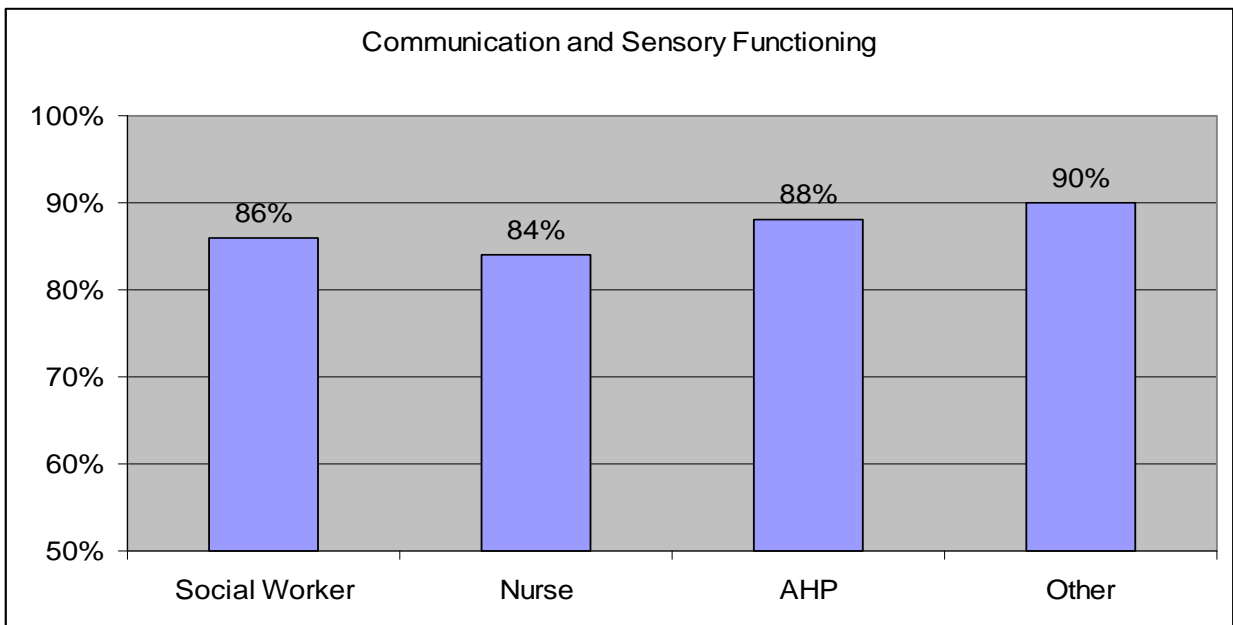


Figure 5. Percentage scores for Communication and Sensory Well-Being across the four professions

No Site scored the three statements below seven and no further analysis of qualitative data was required.

Personal Care and Daily Tasks

Table 5 shows that the majority of the sample viewed all three statements in a positive light. The lowest scoring mean score for the three statements was 7.8 indicating a very favourable view of the statement. Interestingly most of the assessors agreed with the definition of Personal Care and Daily Tasks with only 6.5% rating the definition below 7. However twice as many assessors felt that the instrument failed to accurately represent the definition and this is confirmed by a similar percentage believing that the instrument did not reflect their professional views and opinions. The sub-sample of low scoring assessors may necessitate the amendment of the instrument to more accurately represent the definition and consequently the assessor’s views. Analysis of comments collected from all assessors who rated any of the three statements at 7 or below would facilitate this review process.

Validity Question and Scores	<7	7	8	9	10	Mean
How well each domain definition represents their professional opinion	6.5%	13%	37%	34.8%	8.7%	8.2
How well the corresponding section of the core strand of NISAT reflects the definition	14.9%	19%	19.1%	38.3%	8.5%	8.0
How well the section of the core strand of NISAT reflects their professional opinion	17.8%	13.3%	28.9%	33.3%	6.7%	7.8

Table 5. Scores for the domain Personal Care and Daily Tasks

While all five sites scored the domain highly there was a difference in mean scores across all the sites. Sites 2 and 5 felt less at ease with the domain Personal Care and Daily Tasks, when compared to the other three sites. This difference was at a statistically significant level (df = 4, f = 3.628, p = 0.013).

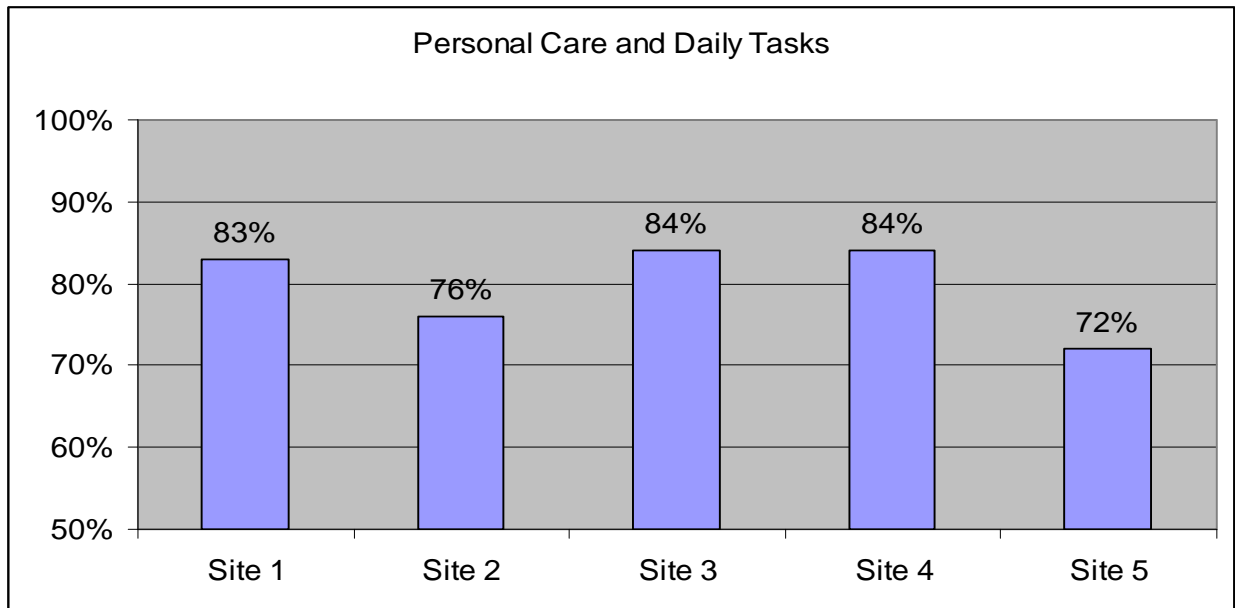


Figure 6. Percentage scores for Personal Care and Daily Tasks across the five sites

There were no statistically differences in mean scores across the four different categories of professions.

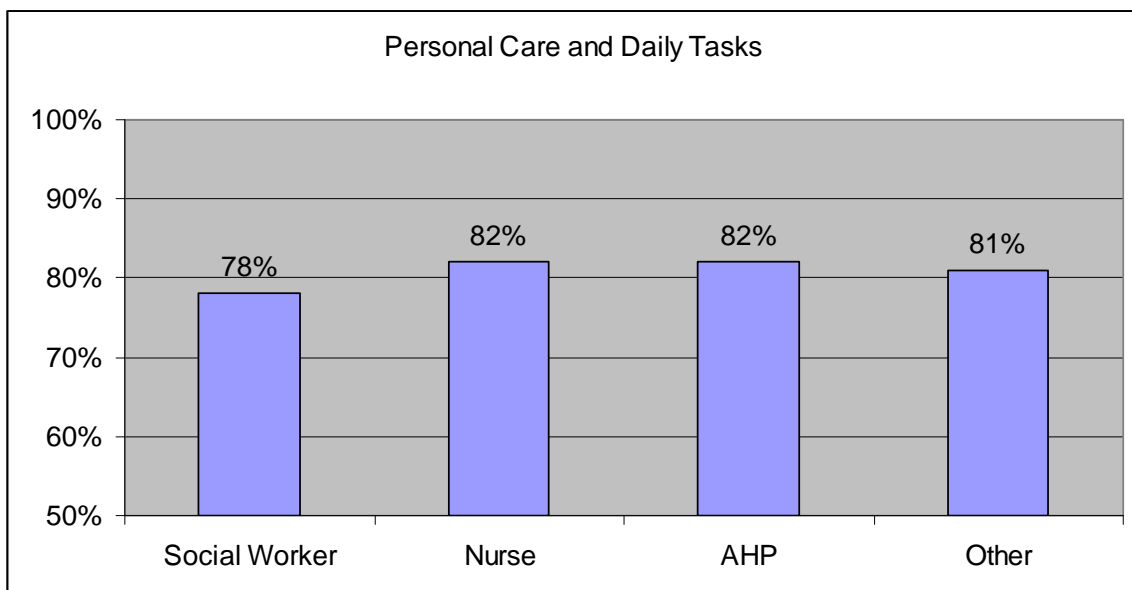


Figure 7. Percentage scores for Personal Care and Daily Tasks across the four professions

Qualitative Comments

One site scored Statement 3 below 7. Examination of the qualitative comments indicates the wording of the domain could be better phrased. Suggestions for modification include the replacement of the word 'impaired' with the word 'difficulty' and the fact that older people may be confused by the word 'goal'. Other suggested

changes include the provision of opportunities to capture information regarding daily tasks that are carried out by family members or carers.

The majority of assessors rated the three statements as favorable with high mean scores. More than four fifths of the assessors rated all three statements at a level above 7 or more. In all statements, Three quarters of the assessors rated the statement positively, and at least a third of the assessors rated each statement at a score of 9 or 10. A small sub-sample of assessors rated the domain at a level at less than seven. Examination of the scoring indicates no significant pattern in responding according to sites or profession.

Validity Question and Scores	<7	7	8	9	10	Mean
How well each domain definition represents their professional opinion	13%	8.7%	41.3%	21.7%	15.2%	8.2
How well the corresponding section of the core strand of NISAT reflects the definition	10.9%	13%	34.8%	26.1%	15.2%	8.2
How well the section of the core strand of NISAT reflects their professional opinion	17.5%	10%	37.5%	27.5%	7.5%	7.9

Table 6. Scores of the domain Mobility and Movement

There were strong differences in mean scores across the five sites and this difference was at a statistically significant level ($df = 4, 6.593, p = 0.00$). All sites scored the domain above 70%. Site 3 scored the domain at over 90% and site 5 had a score slightly above 70%.

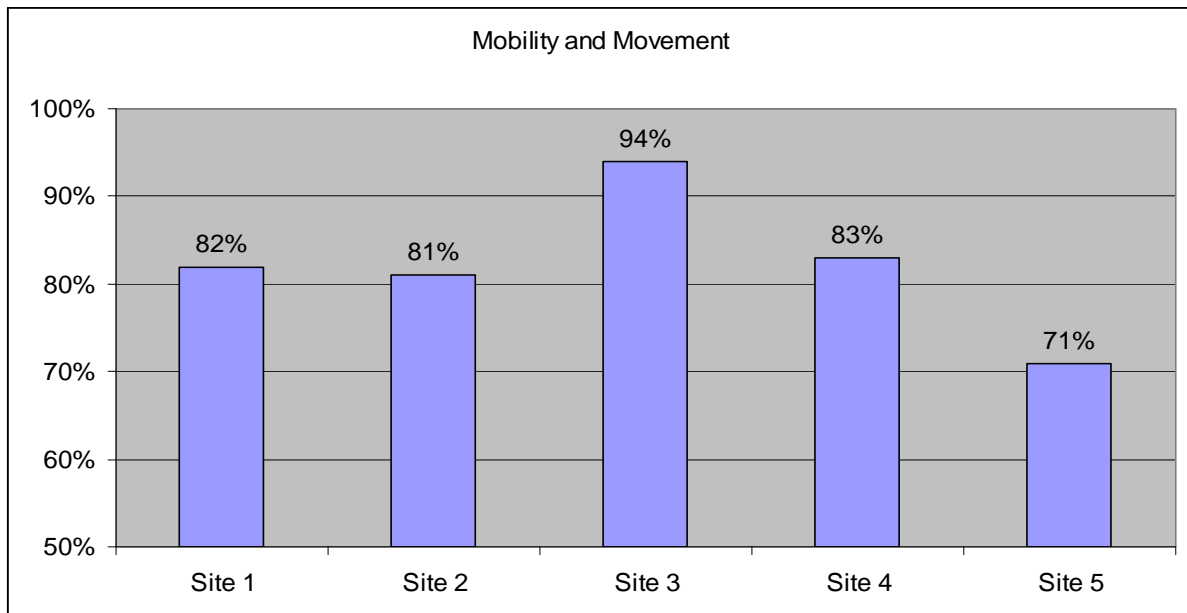


Figure 8. Percentage scores for Mobility and Movement across the five sites

There were differences in scoring across the four professions, with all four scoring the domain positively. However this difference was not at a statistically significant level.

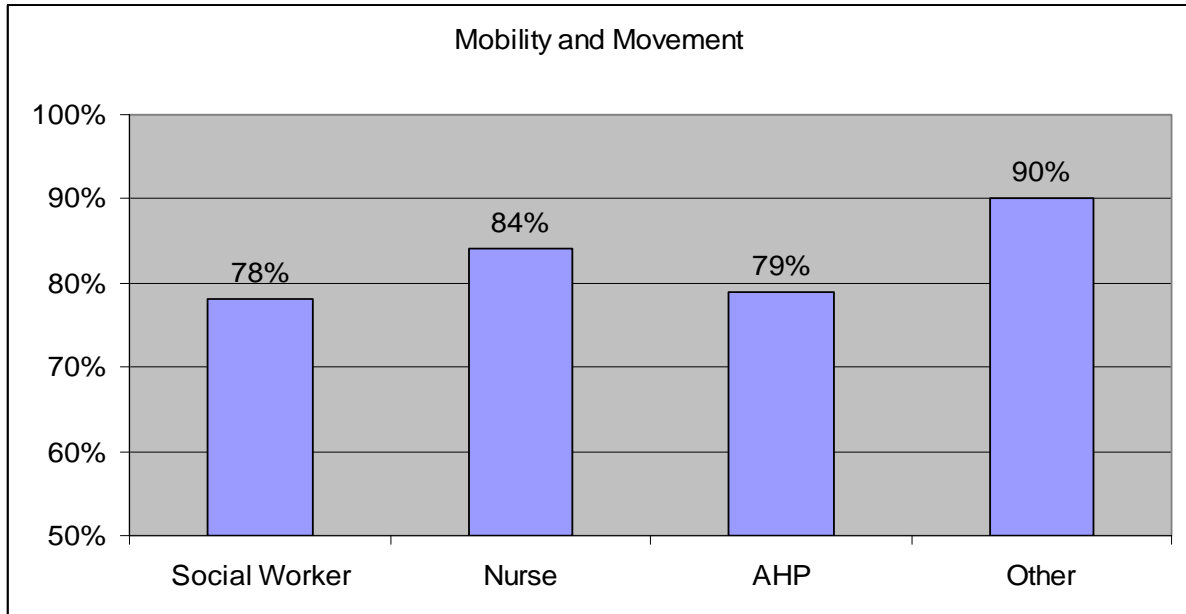


Figure 9. Percentage scores for Mobility and Movement across the four professions

No Site scored the three statements below 7 and no further analysis of qualitative data was required.

Awareness and Decision-Making

The findings concerning Awareness and Decision Making are mixed. The mean scores for the three statements indicate a general understanding and agreement with the definition and the corresponding strand within the core strand. Three quarters of the assessors rated all three statements above 7 but a quarter felt that the instrument did not represent the definition and likewise did not represent their views and opinions. Examination of the mean score differences show statistically significant differences across the sites. Figure 10 shows that this difference is principally with site 2 who scored the domain at 55%. The remaining four sites all scored close to 80%. Examination of scoring according to the assessor’s profession confirms that the pattern of responding was confined to site 2. No statistically significant differences in mean scores were located across the four professions. Potential actions would be to address the concerns raised by this site in their feedback sheets.

Validity Question and scores	<7	7	8	9	10	Mean
How well each domain definition represents their professional opinion	11.8%	15.7%	35.3%	23.5%	13.7%	7.9
How well the corresponding section of the core strand of NISAT reflects the definition	28%	12%	30%	28%	2%	7.4
How well the section of the core strand of NISAT reflects their professional opinion.	26.5%	10.2%	36.7%	20.4%	6.1%	7.6

Table 7. Scores of the domain Awareness and Decision-Making

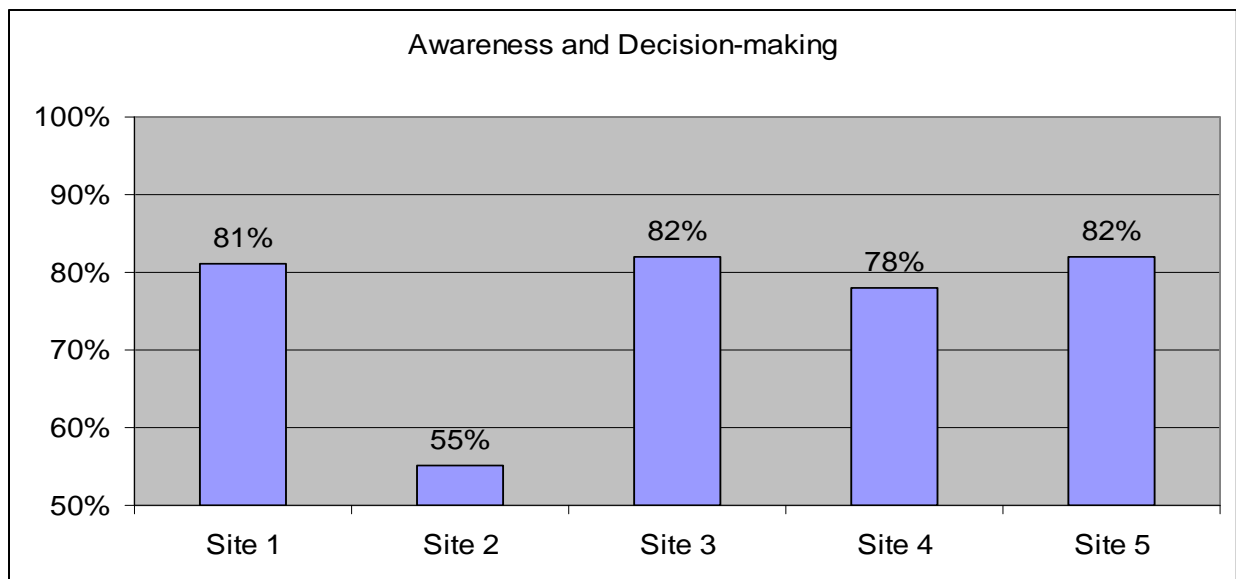


Figure 10. Percentage scores for Awareness and Decision-Making across the five sites

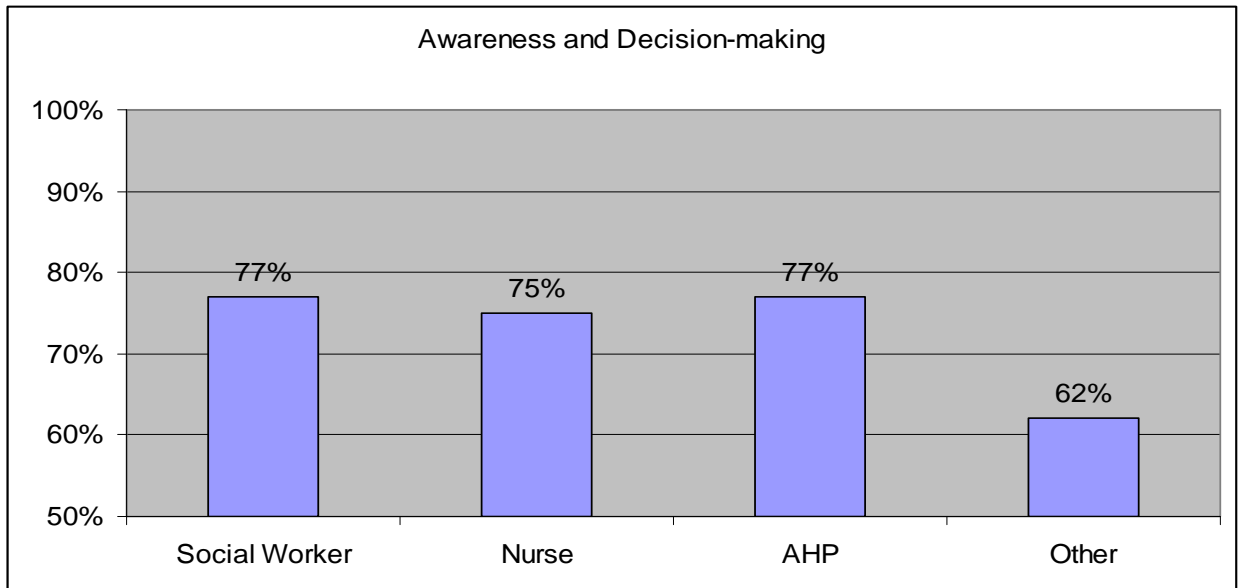


Figure 11. Percentage scores for Awareness and Decision-Making across the four professions

Qualitative Comments

Site 2 rated this domain low. Examination of the qualitative information deemed the definition to be too wordy and may go into too much detail. Clients with presenting problems (diagnosed or undiagnosed) may have problems in assisting the completion of this domain. This would cause problems in a real situation as “it would be very difficult to get clients to answer these questions”.

There is a need to make the domain more simplistic, both in wording and detail. Possible suggestions included moving much of this domain to a Specialist/Complex assessment. Possible changes to wording of questions include “Do you require anyone to make decisions for you?” to “Does anyone help you make decisions?” Also, “How does any change affect your quality of life”, to “How do you cope with change?”.

Accommodation and Living Arrangements

The mean scores for statement one concerning the definition of the domain was highly scored (8.3) and the remaining two statements were positively scored as 7.9 and 7.7 respectively. Examination of the trend in responding according to site show the lowest scoring site was site 2 with an average score of 73%. This compares to the average above 80% for three sites and a 76% for the remaining one site (See figure 12).

Validity Question and scores	<7	7	8	9	10	Mean
How well each domain definition represents their professional opinion	6.4%	18.9%	24.3%	37.8%	13.5%	8.3
How well the corresponding section of the core strand of NISAT reflects the definition	13.7%	17.6%	33.3%	29.4%	5.9%	7.9
How well the section of the core strand of NISAT reflects their professional opinion.	14%	26%	30%	26%	4%	7.7

Table 8. Scores of the domain Accommodation and Living Arrangement

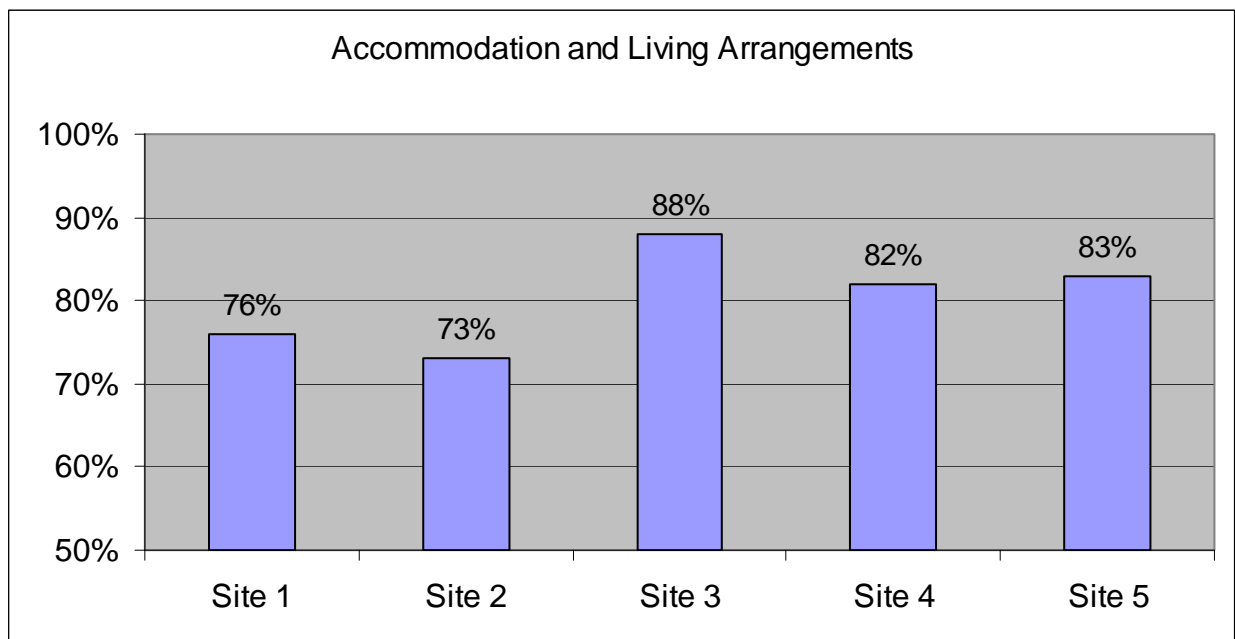


Figure 12. Percentage scores for Accommodation and Living Arrangements across the five sites

The low scoring was not limited to one single profession as all professions scored the domain at an acceptable level. There was no statistical difference in scoring according to profession.

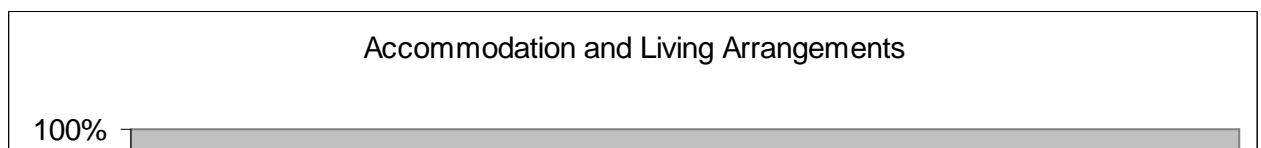


Figure 13. Percentage scores for Accommodation and Living Arrangements across the four professions

No Site scored the three statements below seven and no further analysis of qualitative data was required.

Employment, Finance and Employment

The mean scores for the three statements were high and acceptable and the frequency scores (table 9) confirm the acceptability of each statement. A sub-sample of the assessors did rate the statements as low. Examination of the pattern of responding indicates that site 5 scored the domain lower than the other four sites. Site 5 rated the overall score at 63%, two sites rated it between 75% and 85% and the remaining two sites had scores of 85% and 91%. This difference was at a statistically significant level ($df = f = 4, 6.203, p = 0.000$).

All professions scored the overall percentage above 80% or above. There was no statistical difference in scoring across all assessors according to their respective profession. The results indicate that site specific information is required to address the low score in site 5.

Qualitative Comments

Examination of the comments relating to site five indicate the necessity to include details regarding client benefits, both what the client is currently receiving and also what the client is entitled to receive. Other suggestions include the collection of clients' national insurance number and details of power of attorney and finance.

Validity Question and scores	<7	7	8	9	10	Mean
How well each domain definition represents their professional opinion	17.9%	12.8%	25.6%	23.1%	20.5%	8.1
How well the corresponding section of the core strand of NISAT reflects the definition	15.4%	17.9%	17.9%	33.3%	15.4%	8.1
How well the section of the core strand of NISAT reflects their professional opinion	11.8%	14.7%	17.6%	38.2%	17.6%	8.3

Table 9. Scores of the domain Employment, Finance and Employment

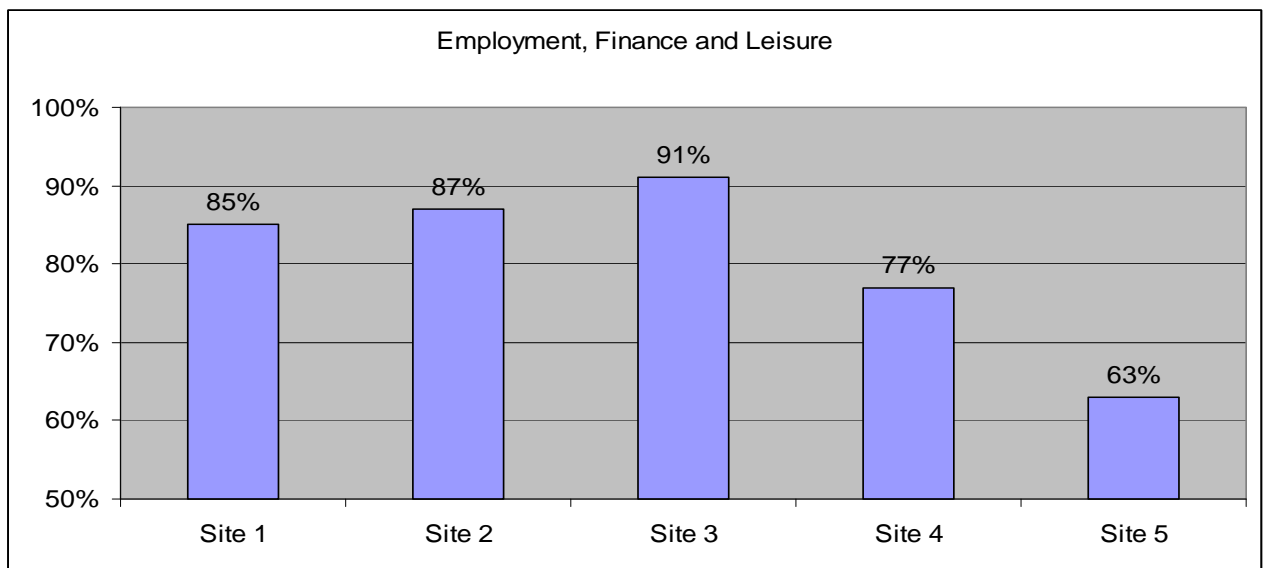


Figure 14. Percentage scores for Employment, Finance and Leisure across the five sites

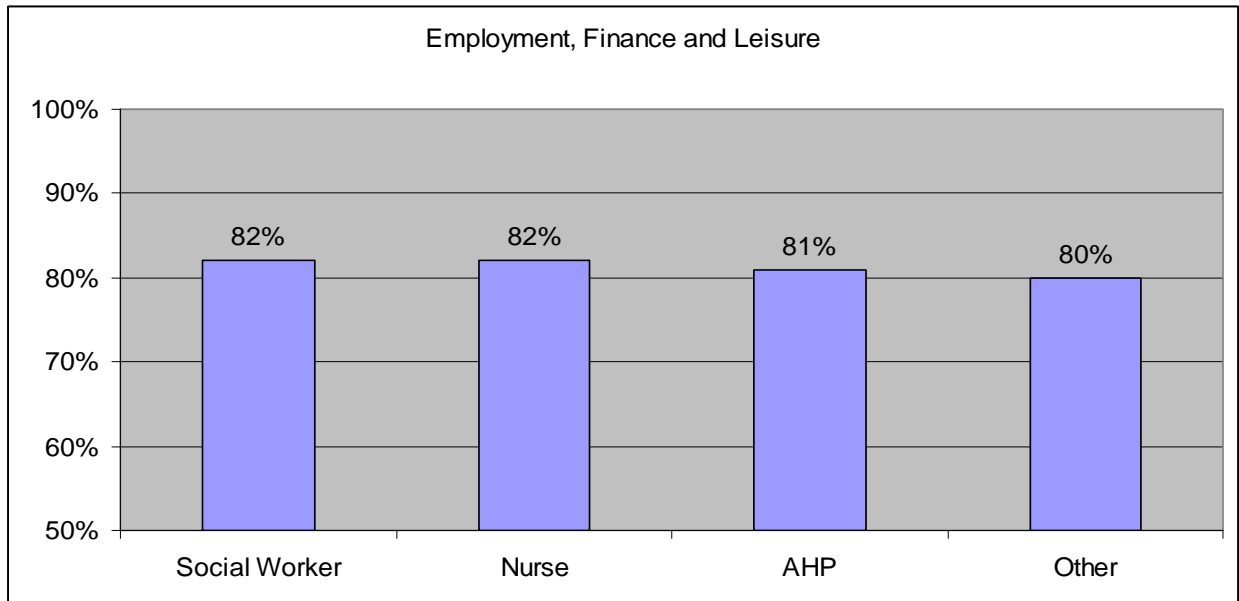


Figure 15. Percentage scores for Employment, Finance and Leisure across the four professions

Physical Health and Medication

Ninety percent of the assessors rated the statements above 7, and acceptable. This finding was confirmed by the mean scores for each statement. Almost 10% scored statements 1 and 3 below 7, and just over 7% scored statement 2 below 7.

Overall all sites scored the domain at an acceptable level. Scores across the five sites ranged from 70% (site 5) to 97% (site 3) and this difference was at a statistically significant level ($df = 4, f = 10.252, p = 0.00$).

Validity Question and scores	<7	7	8	9	10	Mean
How well each domain definition represents their professional opinion	9.8%	22%	14.6%	41.5%	12.2%	8.4
How well the corresponding section of the core strand of NISAT reflects the definition	7.3%	9.8%	12.2%	36.6%	34.1%	8.7
How well the section of the core strand of NISAT reflects their professional opinion	10.3%	5.1%	12.8%	38.5%	33.3%	8.7

Table 10. Scores of the domain Physical Health and Medication

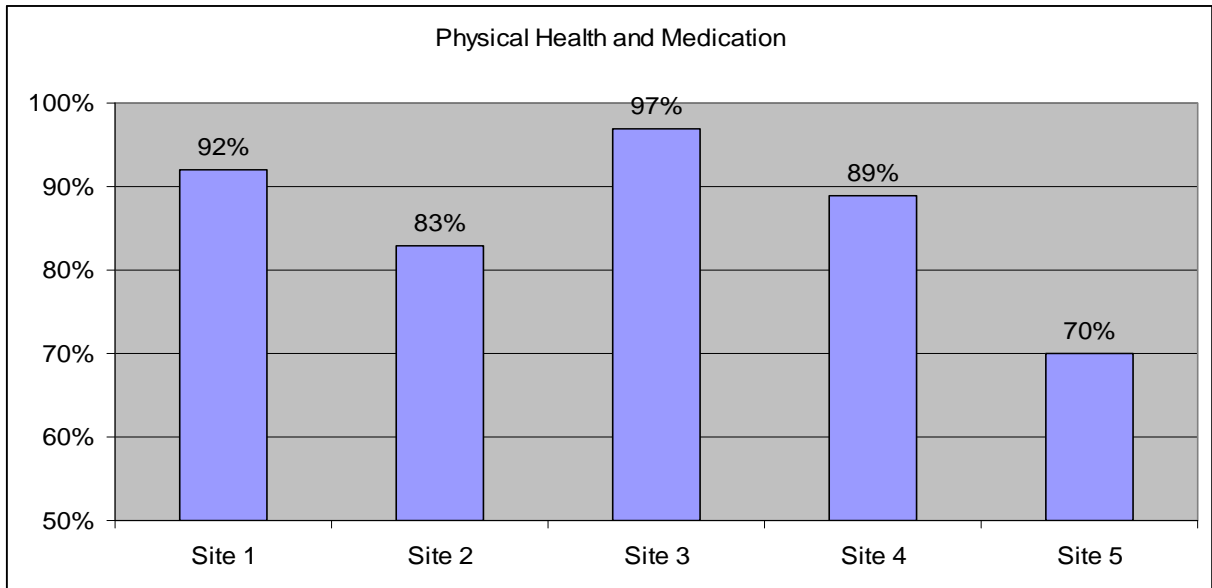


Figure 16. Percentage scores for Physical health and Medication across the five sites

No statistically significant differences in mean scores were reported across the different professions.

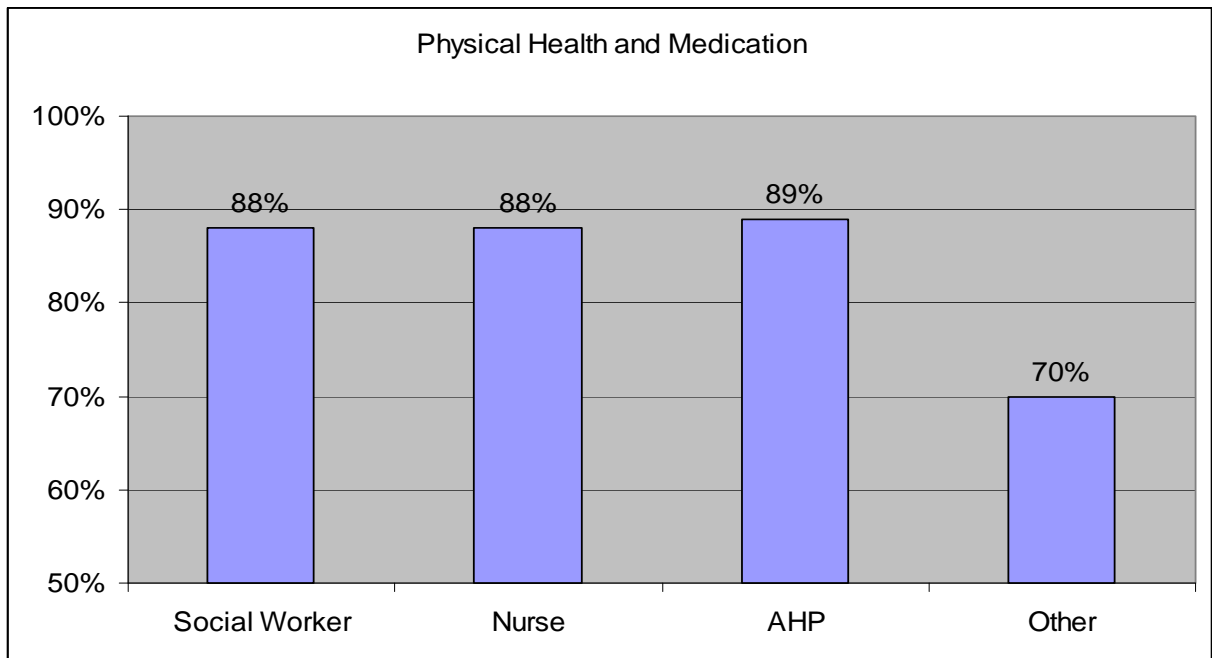


Figure 17. Percentage scores for Physical Health and Medication across the four professions

Qualitative Comments

Examination of the qualitative comments indicate that too much information was collected in the domain, relevant to a core assessment and that much of this information should be included in the complex element of the instrument.

Overall Scores

Overall the eight domains of the core strand of the NISAT were valid and acceptable. The results show that overall percentage scores were higher than 70%, indicating a high level of agreement with the contents of each domain. The key findings are reported in table 11. There were equal levels of agreement across all three strands, with no scores falling below 8 and no scores for the individual domains fell below a score of 7.

Summary of Key Results

Domain Title	Strand 1	Strand 2	Strand 3	Percentage Total Score
Mental Health	8.4	8.4	8.6	84%
Communication and Sensory Functioning	8.7	8.7	8.5	86%
Personal Care and Daily Tasks	8.2	8.0	7.8	80%
Mobility and Movement	8.2	8.2	7.9	81%
Awareness and Decision-making	7.9	7.4	7.6	76%
Accommodation and living arrangements	8.3	7.9	7.7	73%
Employment, Finance and Leisure	8.1	8.1	8.3	81%
Physical Health and Medication	8.4	8.7	8.7	85%
Total Mean Score	8.0	8.2	8.1	81%

Table 11. Summary of the key findings of all eight domains

Site Specific Findings

There was a need for site specific interventions on several domains to help improve either the contents of the instrument or the understanding of the domain. Scores on each of the domains according to pilot site were generally very encouraging with six of the domains having all site scores above 70. There was considerable variation in scores between sites even within the high scoring. Significant differences in scoring across the five pilot sites were observed in all but one of the domains total scores (see table 12), with six of the domains having a lower level range score of 70% or higher.

Examination of the qualitative findings indicates the need to clarify the definition driving each domain. Opinion was split as to the domain being too comprehensive or not comprehensive enough.

The findings from the study highlight the need for properly tailored and individualized training programmes in the use of instrument. The main issues arising from the site specific analysis was that variability in how each site interpreted the definition and instrument.

Domain Title	Strand 1	Strand 2	Strand 3	Percentage Total Score
Mental Health	NS	*	NS	*
Communication and Sensory Functioning	NS	NS	NS	NS
Personal Care and Daily Tasks	*	NS	**	**
Mobility and Movement	**	**	NS	**
Awareness and Decision-making	**	**	**	**
Accommodation and living arrangements	**	NS	NS	**
Employment, Finance and Leisure	**	**	**	**
Physical Health and Medication	NS	**	**	**

Table 12. Significant differences in scoring of strands and overall scores according to location. * = p<0.05, ** p < 0.01, NS = Not significant.

Profession Specific Findings

All professional groups felt that the core strand of NISAT was valid. The assessors scored six of the domains above 70%, with three of the domains lower level range score above 80%. There were no significant differences in scoring according to the profession of the assessor (see table 13).

Domain Title	Strand 1	Strand 2	Strand 3	Percentage Total Score
Mental Health	NS	NS	NS	NS
Communication and Sensory Functioning	NS	NS	NS	NS
Personal Care and Daily Tasks	NS	NS	NS	NS
Mobility and Movement	NS	NS	NS	NS
Awareness and Decision-making	NS	NS	NS	NS
Accommodation and living arrangements	NS	NS	NS	NS
Employment, Finance and Leisure	NS	NS	NS	NS
Physical Health and Medication	NS	NS	NS	NS

Table 13. Significant differences in scoring of strands and overall scores according to profession. * = $p < 0.05$, ** $p < 0.01$, NS = Not significant.

Conclusions

The method of quantifying the validity of the instrument proves to be effective. The findings reported here confirm the validity of the eight domains of the core element of the NISAT instrument. It also provides a useful method of identifying potential areas for improving the instrument's validity. Minor amendments were conducted to each of the domains based on the amalgamation of quantitative and qualitative information. Qualitative comments provided by assessors helped provide feedback on the instrument and help to address issues regarding the validity of the instrument.

The findings from the site specific and profession specific analysis of the data highlight variability in views across each pilot site and that this variability is not simply limited to professional groupings, but across all professions within each pilot site.

REFERENCES

Department of Health (2001) *National Service Framework for Older People*, London: Department of Health

Dyer, C. (1996). *Beginning Research in Psychology: A Practical Guide to Research methods and Statistics*. Blackwell Publishers Ltd. Oxford.

Polit D., and Hungler B. (1993). *Essentials of Nursing Research: Method, Appraisal and Utilization*. Lippinott Company, Philadelphia.

Steward, k., Challis, D., Carpenter, I., and Dickinson, E. (1999). *Assessment Approaches for Older People Receiving Social Care – Content and Coverage*. *International Journal of Geriatric Psychiatry* 14, (2) 147 - 156

Appendix 1.

Sample Instructions and Scoring Sheets for Two Domains

PILOT SITE:

PROFESSION:

ALLOCATED NUMBER / LETTER:

SEQUENCE:

PART 1.

In the following section a summary of two domains (Mobility and Movement and Personal Care & Daily Living) contained NISAT is provided. You are:

- Asked to read the summary and rate the contents in accordance to your own professional views.
- Please bear in mind the necessity for to maintain a balance of brevity and contents in the Core assessment.
- Indicate your level of agreement or disagreement by placing circling the number (ranging from 1 – 10) that best represents your views.
- Please support your decision by providing a commentary of how you reached your decision.

DOMAIN I

MOBILITY & MOVEMENT

Core assessment is designed to be undertaken by any health and social care professional, within their competence and job role. No questions require a level of specialist knowledge or skills particular to that domain

Assessment of mobility and movement often requires a multi-disciplinary approach and requires identification of the wide ranging influences on the individual's ability within this domain. It captures extrinsic factors affecting ability to maintain independence such as home environment, level of assistance or supervision required and use of equipment and also intrinsic factors such as disease processes, including deterioration in ability, individual characteristics and level of motivation. Assessment should emphasize the individual's abilities, potential for rehabilitation and goals and wishes for the future.

Assessment in mobility and movement captures potential risks and associated effects of poor mobility and movement such as deterioration in physical health and potential to fall in order to identify preventative measures to be taken

Where ability is decreased, the individual's perception on effects on their quality of life, emotional health and mental well-being, ability to carry out activities of daily living, socialize and carry out hobbies or pastimes is also considered.

Topics covered include;

- Perceptions of current ability to mobilize and move
- Supervision, assistance and/or equipment to mobilize and move
- Ability to use transport and type of transport used
- Number of falls, circumstances of fall and treatment received
- Fear of falling
- Individual's goals for the future
- Perceived affects on quality of life
- Views of others

Domain 1, Part II

In this section you are presented with assessment details contained in NISAT. This information has been developed based on the standard's information. You are asked to read both the NISAT information and standard information.

- a. You are asked to rate, in your opinion, how well the NISAT assessment information relates to the standard information.
- b. Indicate on the scale how well the NISAT information reflects the principles contained in the statement information and please indicate why?

MOBILITY & MOVEMENT

Core assessment is designed to be undertaken by any health and social care professional, within their competence and job role. No questions require a level of specialist knowledge or skills particular to that domain

Assessment of mobility and movement often requires a multi-disciplinary approach and requires identification of the wide ranging influences on the individual's ability within this domain. It captures extrinsic factors affecting ability to maintain independence such as home environment, level of assistance or supervision required and use of equipment and also intrinsic factors such as disease processes, including deterioration in ability, individual characteristics and level of motivation. Assessment should emphasise the individual's abilities, potential for rehabilitation and goals and wishes for the future.

Assessment in mobility and movement captures potential risks and associated effects of poor mobility and movement such as deterioration in physical health and potential to fall in order to identify preventative measures to be taken

Where ability is decreased, the individual's perception on effects on their quality of life, emotional health and mental well-being, ability to carry out activities of daily living, socialise and carry out hobbies or pastimes is also considered.

Topics covered include;

1. Perceptions of current ability to mobilise and move
2. Supervision, assistance and/or equipment to mobilise and move
3. Ability to use transport and type of transport used
4. Number of falls, circumstances of fall and treatment received
5. Fear of falling
6. Individual's goals for the future
7. Perceived affects on quality of life
8. Views of others

MOBILITY & MOVEMENT

HOW WOULD YOU DESCRIBE YOUR ABILITY TO WALK

Not impaired Slightly impaired Severely impaired

Please consider

- Ability to walk indoors
- Ability to walk outdoors
- Changes in ability
- Other

Details

DO YOU REQUIRE SUPERVISION, ASSISTANCE OR EQUIPMENT TO WALK?

YES NO

If yes, please specify

HOW WOULD YOU DESCRIBE YOUR ABILITY TO MOVE OR TRANSFER FROM ONE PLACE TO ANOTHER?

Not impaired Slightly impaired Severely impaired

Please consider

- Ability to move from bed to chair
- Sit or stand,
- Change position
- Climb or descend stairs
- Changes in ability
- Other

DO YOU REQUIRE SUPERVISION, ASSISTANCE OR EQUIPMENT TO MOVE, SIT, STAND, CLIMB OR DESCEND STAIRS?

YES NO

If yes, please specify

WHAT TYPE OF TRANSPORT ARE YOU ABLE TO USE?

- Car - self-driven
- Car – driven by others
- Public transport
- other

PLEASE DESCRIBE ANY FALLS YOU HAVE HAD

NO FALLS

FALLS

- Number of falls
- Treatment received
- Circumstances of fall
- Fear of falling

Details

HAVE YOU GOALS YOU FEEL YOU COULD ACHIEVE IN RELATION TO YOUR ABILITY TO WALK OR MOVE?

If yes, please specify

HOW DOES YOUR LEVEL OF ABILITY TO WALK AND MOVE AFFECT YOUR QUALITY OF LIFE?

FURTHER COMMENTS;
(eg. observations, views of others, professional opinion, other)

PART I

PERSONAL CARE & DAILY TASKS

Core assessment is designed to be undertaken by any health and social care professional, within their competence and job role. No questions require a level of specialist knowledge or skills particular to that domain

Assessment of ability to carry out personal care and daily tasks centres around those deemed essential to independent living such as dressing, eating, going to the toilet and attending to personal hygiene and activities not necessary for fundamental self-care such as cooking, housework and shopping.

It captures extrinsic factors affecting ability to maintain independence such as home environment, level of assistance or supervision required and use of equipment. Intrinsic factors such as the effects of disease processes, including deterioration in ability, individual characteristics and level of motivation are also assessed. Assessment should emphasise the individual's abilities, potential for rehabilitation and goals and wishes for the future.

Where ability is decreased the individual's perceptions on quality of life are assessed regarding emotional and mental wellbeing, loss of independence and privacy and loss of autonomy and choice

Topics include;

- Perceptions of current ability to wash, use the toilet, dress and undress
- Supervision, assistance and/or equipment required to carry out personal care tasks
- Perceptions of ability to prepare, cook a meal and drinks
- Supervision, assistance and/or equipment required to carry out food preparation
- perceptions of current ability to carry out household tasks

PART II

PERSONAL CARE & DAILY TASKS

Core assessment is designed to be undertaken by any health and social care professional, within their competence and job role. No questions require a level of specialist knowledge or skills particular to that domain

Assessment of ability to carry out personal care and daily tasks centres around those deemed essential to independent living such as dressing, eating, going to the toilet and attending to personal hygiene and activities not necessary for fundamental self-care such as cooking, housework and shopping.

It captures extrinsic factors affecting ability to maintain independence such as home environment, level of assistance or supervision required and use of equipment. Intrinsic factors such as the effects of disease processes, including deterioration in ability, individual characteristics and level of motivation are also assessed. Assessment should emphasise the individual's abilities, potential for rehabilitation and goals and wishes for the future.

Where ability is decreased the individual's perceptions on quality of life are assessed regarding emotional and mental wellbeing, loss of independence and privacy and loss of autonomy and choice

Topics include;

9. Perceptions of current ability to wash, use the toilet, dress and undress
10. Supervision, assistance and/or equipment required to carry out personal care tasks
11. Perceptions of ability to prepare, cook a meal and drinks
12. Supervision, assistance and/or equipment required to carry out food preparation
13. perceptions of current ability to carry out household tasks

- 14. Assistance required and person who carries this out
- 15. Individual's goals for the future
- 16. Perceived affects on quality of life
- 17. Views of others

PERSONAL CARE & DAILY TASKS

HOW WOULD YOU DESCRIBE YOUR ABILITY TO WASH?

Not impaired Slightly impaired Severely impaired

Please consider;

- Ability to wash and dry body
- Ability to wash hair, teeth and feet
- Ability to reach washing facilities
- Preferences (eg. Bath / shower)
- Changes in ability
- Other

DO YOU REQUIRE SUPERVISION, ASSISTANCE OR EQUIPMENT / AIDS TO WASH?

YES NO

If yes, please specify

HOW WOULD YOU DESCRIBE YOUR ABILITY TO USE A TOILET?

Not impaired Slightly impaired Severely impaired

Please consider;

- Ability to reach the toilet
- Adjust clothing
- Cleaning
- other

DO YOU REQUIRE SUPERVISION, ASSISTANCE OR EQUIPMENT / AIDS TO USE THE TOILET? YES NO

If yes, please specify

HOW WOULD YOU DESCRIBE YOUR ABILITY TO DRESS AND UNDRESS YOURSELF?

Not impaired Slightly impaired Severely impaired

Please consider;

- Put on clothes - top half
- bottom half
- Ability to use buttons or zips
- Choose suitable clothes,
- Changes in ability
- Other

DO YOU REQUIRE SUPERVISION, ASSISTANCE OR EQUIPMENT / AIDS TO DRESS AND UNDRESS?

YES NO

If yes, please specify

HOW WOULD YOU DESCRIBE YOUR ABILITY TO MAKE A MEAL OR HOT DRINK?

Not impaired Slightly impaired Severely impaired

Please consider;

- Fill & use a kettle
- Ability to lift pots
- Carry dishes
- Prepare food
- Changes in ability
- Other

Details

DO YOU REQUIRE SUPERVISION, ASSISTANCE OR EQUIPMENT / AIDS TO MAKE A MEAL?

YES NO

If yes, please specify

HOW WOULD YOU DESCRIBE YOUR ABILITY TO CARRY OUT HOUSEHOLD TASKS?

Not impaired Slightly impaired Severely impaired

Please consider;

- Ability to clean and tidy house
- Wash and iron clothes
- Outdoor tasks
- Visit shops / banks
- Changes in ability
- Other

Details

IF IMPAIRED, WHO HELPS OR CARRIES OUT YOUR HOUSEHOLD TASKS?

HAVE YOU GOALS YOU FEEL YOU COULD ACHIEVE IN RELATION TO YOUR ABILITY TO CARRY OUT DAILY LIVING TASKS?

YES NO

If yes, please specify

HOW DO ANY DIFFICULTIES YOU HAVE WITH DAILY LIVING TASKS AFFECT YOUR QUALITY OF LIFE?

FURTHER COMMENTS

(eg. observations, views of others, professional opinion, other)

Appendix II

Definitions for each of the Eight Domains

Accommodation and Living Arrangements

Assessment in Accommodation & Living Arrangements captures the type and tenure of housing. It also records living arrangements to ascertain if the person lives alone or with others, their relationship to them and permanency of these arrangements.

Assessment in this domain will also capture the individual's concern or issues relating to their accommodation & living arrangements including perceptions on relationships, changes in circumstances and suitability of accommodation to meet needs, potential future living arrangements, safety of self and environment and ability to maintain the home.

Topics include;

- Tenure of property
- Type of property
- Individual living alone
- Individual living with others
- Relationship to others
- Permanency of arrangements
- Concerns & issues of individual
- Quality of relationships
- Change of circumstance
- Potential future living arrangements
- Safety of self and environment
- Ability to maintain home
- Adequacy of heating
- Perceptions of others

Awareness and Decision-making

Assessment in Awareness and Decision Making focuses on the individual's perception of variations in their ability to remember, make decisions and choices in their daily lives. Timescales of deterioration and frequency of occurrences should be captured. Intrinsic factors such as diagnosis of acute or chronic disease processes and level of insight into the same will also be recorded.

Assessment will also record the effects of any variation on the individual's quality of life, if assistance is required, who provides this and the nature of decisions or choices made on behalf of the individual.

Perceptions of others regarding the individual's ability in this domain and disparity of opinions will also be captured.

Topics include;

- The individual's perception of changes in ability to remember and make decisions and choices
- Diagnosis of disease process affecting memory and decision making
- Awareness of surroundings and insight into condition
- Assistance required to make decisions and choices by others on behalf of the older person
- Relationship of those providing assistance and nature of decisions and choices made
- Effects of changes on quality of life
- Perception and observations of others

Communication and Sensory Functioning

Assessment in communication and sensory functioning reflects current status and communication methods and interventions required to maintain interactions with others and carry out daily activities to a level satisfactory to the individual. It also captures effects on quality of life where functioning is impaired

Current status is assessed in ability to speak and understand others, hear, see, taste, touch and smell. Level of literacy is also considered.

Assessment captures diagnosed conditions and factors affecting communication & sensory functioning, visual and auditory devices, specialised treatment required and any deterioration experienced. Topics covered include;

2. Perceptions on ability to speak and understand others
3. Perceptions on ability to hear
4. Perceptions on ability to see
5. Perceptions on ability to taste, touch or smell
6. Equipment / devices used
7. Treatment given
8. Literacy skills
9. Effects on quality of life
10. Views of others

Employment, Finance and Leisure

Assessment in Employment, Finance and Leisure should describe the type of work carried out and include training or education undertaken.

The assessor should capture the older person's perspective on the adequacy of their income to buy necessities and pay household bills and their concerns regarding their financial status or ability to manage money. Assessment should also cover any change in circumstance or ability, need for information and any legal arrangements made with others relating to personal finances.

Assessment in this domain should capture the older person's description of leisure activities and hobbies they pursue or would like to pursue in the future.

Where difficulties are identified assessment should record effects of these on quality of life.

Topics include;

- Paid or unpaid work
- Voluntary or charitable work
- Training & education
- Adequacy of income
- Concerns regarding financial status and money management
- Changes in circumstance or ability to manage money
- Advice required
- Legal arrangements
- Leisure activities and hobbies
- Perceptions on quality of life
- Views of others

Mental health and Emotional Well-Being

Assessment in mental health and emotional wellbeing reflects the individual's ability to respond to changes or events in personal or social circumstances and effect on quality of life where this is impaired. It should indicate past recognised mental health disorders, treatment received or identify symptoms to indicate deterioration or need for referral for specialist assessment.

Assessment also captures perceptions and feelings regarding the individuals ability to cope, mood, levels of self-esteem, anxiety, fear or others or environment and within their social context captures quality of relationships with others and ability to maintain social networks and meet spiritual and cultural needs. Topics covered include:

1. Perceptions of current mental health
2. Significant recent life events and their effects on mental health & emotional well-being
3. Quality of relationships
4. Fear of others, Environment & Potential abuse
5. Ability to meet spiritual needs & Cultural needs
6. Treatment received for recognised Mental Health disorders
7. Affects on quality of life
8. Views of others

Mobility and Movement

Assessment of mobility and movement often requires a multi-disciplinary approach and requires identification of the wide ranging influences on the individual's ability within this domain. It captures extrinsic factors affecting ability to maintain independence such as home environment, level of assistance or supervision required and use of equipment and also intrinsic factors such as disease processes, including deterioration in ability, individual characteristics and level of motivation. Assessment should emphasise the individual's abilities, potential for rehabilitation and goals and wishes for the future.

Assessment in mobility and movement captures potential risks and associated effects of poor mobility and movement such as deterioration in physical health and potential to fall in order to identify preventative measures to be taken

Where ability is decreased, the individual's perception on effects on their quality of life, emotional health and mental well-being, ability to carry out activities of daily living, socialise and carry out hobbies or pastimes is also considered.

Topics covered include;

- Perceptions of current ability to mobilise and move
- Supervision, assistance and/or equipment to mobilise and move
- Ability to use transport and type of transport used
- Number of falls, circumstances of fall and treatment received
- Fear of falling
- Individual's goals for the future
- Perceived affects on quality of life
- Views of others

Personal Care and Daily Tasks

Assessment of ability to carry out personal care and daily tasks centres around those deemed essential to independent living such as dressing, eating, going to the toilet and attending to personal hygiene and activities not necessary for fundamental self-care such as cooking, housework and shopping.

It captures extrinsic factors affecting ability to maintain independence such as home environment, level of assistance or supervision required and use of equipment. Intrinsic factors such as the effects of disease processes, including deterioration in ability, individual characteristics and level of motivation are also assessed. Assessment should emphasise the individual's abilities, potential for rehabilitation and goals and wishes for the future.

Where ability is decreased the individual's perceptions on quality of life are assessed regarding emotional and mental wellbeing, loss of independence and privacy and loss of autonomy and choice

Topics include;

- Perceptions of current ability to wash, use the toilet, dress and undress
- Supervision, assistance and/or equipment required to carry out personal care tasks
- Perceptions of ability to prepare, cook a meal and drinks
- Supervision, assistance and/or equipment required to carry out food preparation
- perceptions of current ability to carry out household tasks
- Assistance required and person who carries this out
- Individual's goals for the future
- Perceived affects on quality of life
- Views of others

Physical Health and Medication

Assessment in Physical Health captures the individual's perceptions of their past and present physical health condition. It focuses on intrinsic factors affecting health in terms of disease processes and effects of these on physical functioning and on extrinsic lifestyle factors which identify an opportunity for health promotion and disease prevention.

Assessment in this domain should indicate past and present medical conditions and their effect on day to day living, hospitalizations and treatment received, ability to manage medication and identify symptoms to indicate deterioration or potential need for treatment or referral to specialist assessment. It should also capture lifestyle choices that influence well-being such as smoking, misuse of drugs and/ or alcohol, diet, exercise and history of vaccination.

The individual's views of effects of physical ill-health on their quality of life and their goals, abilities and wishes for the future along with the perceptions and opinions of others should also be recorded.

Topics include;

- Past & present medical history
- Treatment and hospitalizations
- Infections
- Allergies
- Ability to sleep
- Ability to breathe
- Skin integrity
- Bladder and bowel control and function
- Ability to eat and drink
- Quality of diet
- Weight loss / gain

- Condition of feet
- Smoking
- Alcohol / drug intake
- Screening and vaccination history
- Medicines management
- Effects of ill-health on quality of life
- Concerns, issues and wishes for the future
- Perceptions of others