



NSW ATLAS Consumers And Their Prospects

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Centre for Health Service Development



March, 2003

Suggested citation

Eagar K, Gordon R and Green J (2003) ***NSW ATLAS Consumers and their Prospects***. Centre for Health Service Development, University of Wollongong.

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Background

The ATLAS Program

The goal of the Adult Training, Learning and Support (ATLAS) program is to provide pathways that help people with disabilities to access education and employment opportunities after leaving school. It includes helping school leavers to make the transition from school to adult life in the community. ATLAS aims to provide a graded range of post-school options including day programs, transition programs and vocational training. The target group is school leavers with disabilities who, without training and support, would not be able to make use of Commonwealth employment programs. The program is designed to remove the barriers that prevent people with disabilities from accessing the jobs, training and community access services they need and to increase flexibility in meeting the needs of individuals, their families and carers.

The ATLAS assessment project

In 2002, the Department of Ageing, Disability and Home Care trialed a new assessment system for the ATLAS program. Assessments of post-school leavers who were already in, or applying to join, the NSW ATLAS program were undertaken by the Commonwealth Rehabilitation Service (CRS) during 2002. Four ATLAS cohorts were assessed:

- 608 young people who left school at the end of 2002;
- 486 who left school in 2001;
- 215 who left school in 2000; and
- 264 who left school in 1999.

Of these 1573, assessment data are available for the 1556 consumers included in this analysis. In addition:

- DADHC provided data on the funding level allocated to each consumer in the 1999 to 2001 cohorts so that the relationship between functional need and funding level could be assessed and also provided disability data on those for whom it was available and
- Schools (Special Transition Teachers) completed the 9 item HACC Functional Screen on each 2002 school leaver so that the results achieved with a short functional screen and the results achieved with the full functional assessments undertaken by the CRS could be compared.

The Centre for Health Service Development (CHSD) at the University of Wollongong was commissioned by DADHC to provide technical assistance and to undertake the data analysis. The first report on the project was completed in September 2002. The first analysis covered the HACC screening results on 585 of the 2002 school leavers and assessment results on 371 school leavers from 2001. This is the second report on the project and it includes an analysis of all screening and assessment results. The final report will discuss the implications and propose a way forward.

The functional screening and assessment tools

An important component of the project was the testing of a functional screen and a set of functional assessment tools originally designed for the HACC program. The HACC functional screen and assessment tools are designed to measure key areas in which a person requires assistance with daily living and they quantify the extent to which the person has to rely on someone else to help them.

The focus is on normal activities of living in the person’s own home and in the community. They were incorporated into a broader CRS assessment in which the focus was on employability.

In all cases, a low score on the functional tools signifies low function. A high score signifies high function. Copies of the tools are included as Attachment 2.

In order to summarise the functional assessment results, the cohort was split into 3 groups – low, medium and high functioning - on each measure. The scores that fall into each group are shown in Table 1. These splits are somewhat arbitrary and, with different splits, the number in each category would vary. However, they have sufficient face validity for the current purpose.

Table 1 *Grouping of functional scores for analysis purposes*

Domain	Low	Medium	High
Self care	Score range 0-9	Score range 10-19	20 (perfect score)
Domestic	Score range 8-14	Score range 15-19	Score range 20-30
	Major problem	Minor problem	No problem
Behaviour	Score range 5-13	Score range 14-19	20 (perfect score)

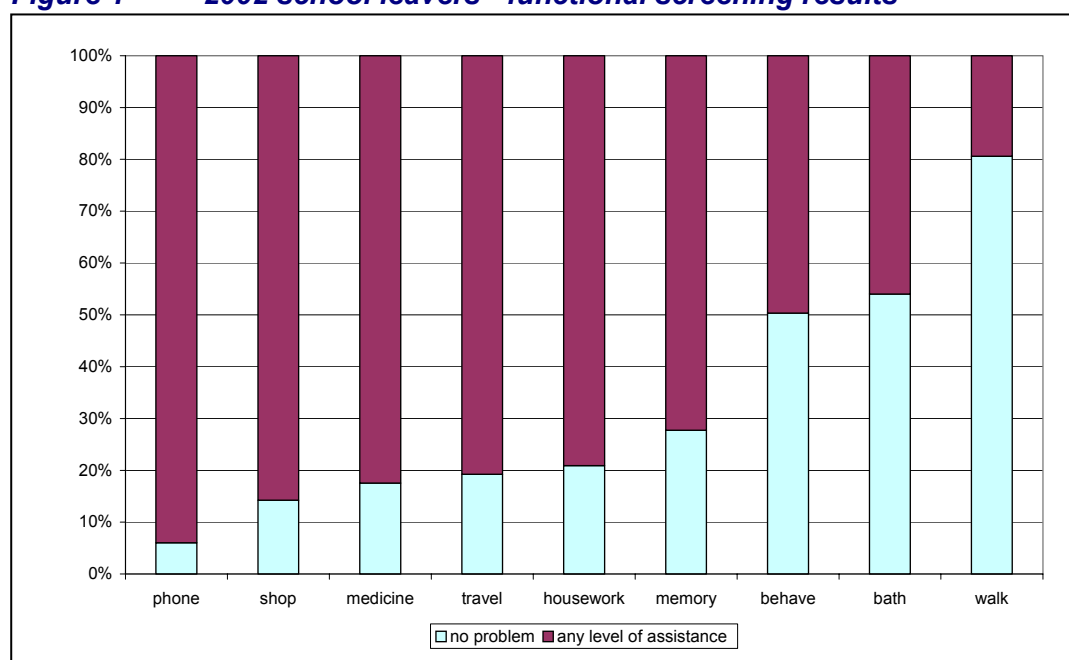
Relationship between screening and assessment results for 2002 school leavers

In this first section, we repeat key findings on the screening results from the first report. We then move on to compare these screening results with assessment results for the same cohort.

Summary of 2002 screening results

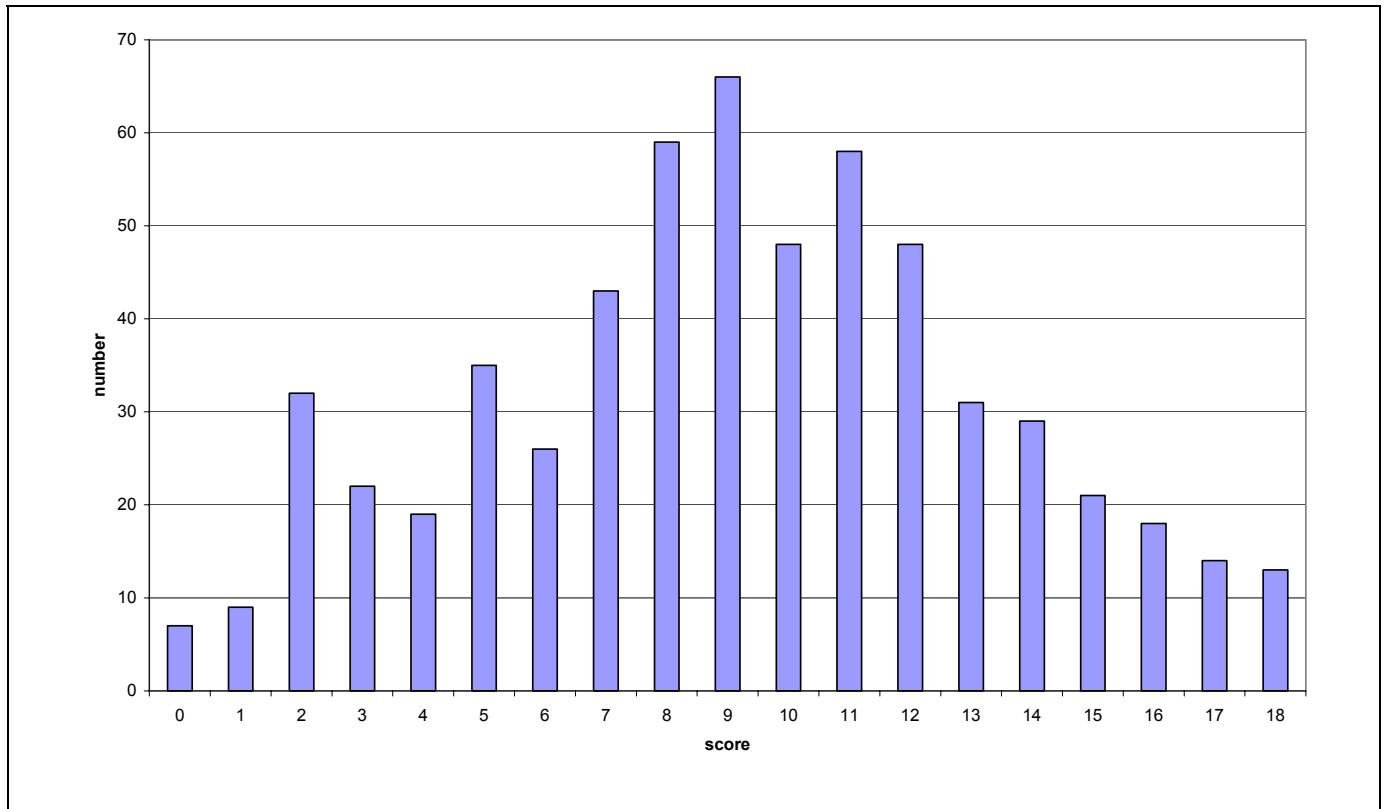
Figure 1 summarises the results of the 9 items used to screen for functional problems. There are significant differences between the items, from 20% requiring some level of assistance with walking through to 93% requiring some level of assistance with using the phone.

Figure 1 *2002 school leavers - functional screening results*



Total scores on the functional screen are shown in Figure 2. The lower the score, the more functional problems the client has. A score of 18 indicates no problem on any item.

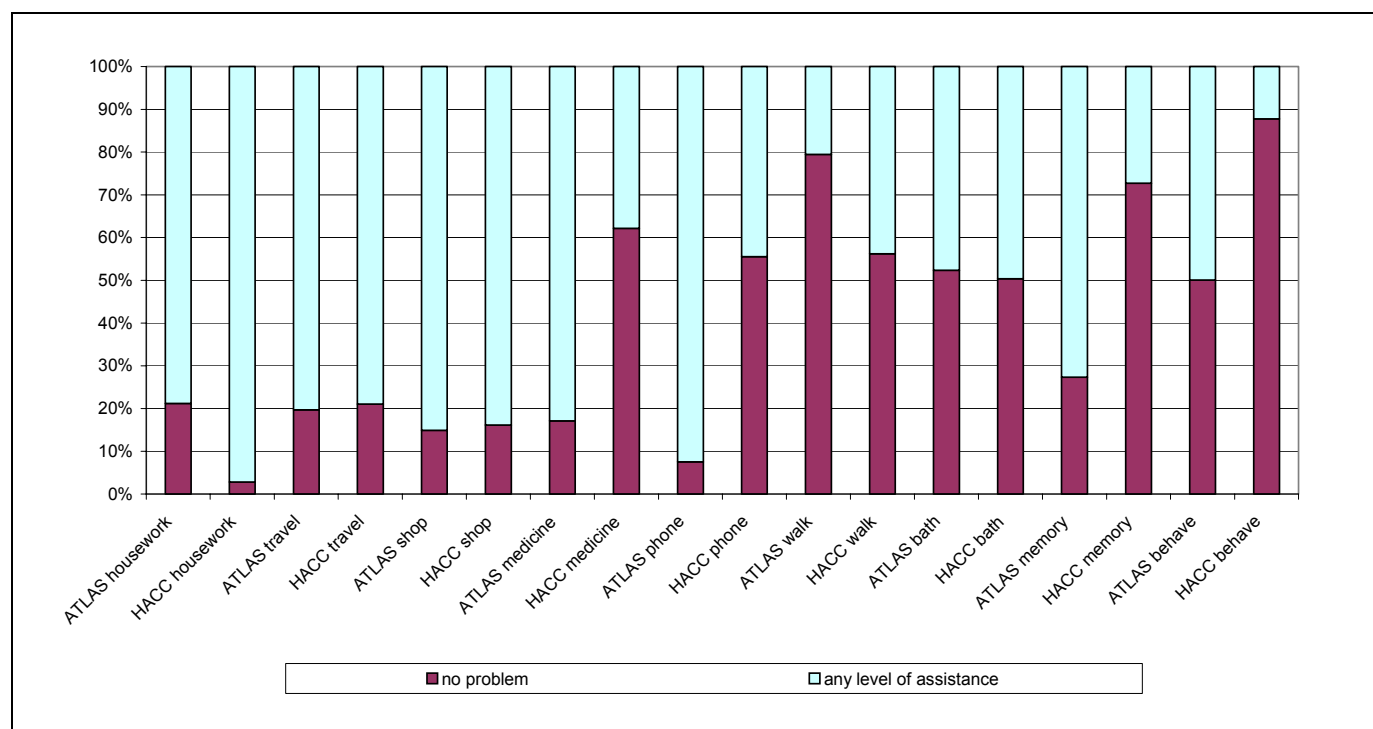
Figure 2 2002 school leavers - total functional screen score



Comparison of ATLAS and HACC consumers

The difference in the profile of ATLAS and HACC clients is shown in Figure 3. Relative to the HACC population, ATLAS clients have more functional ability with housework and walking, but they have less functional ability in relation to managing medicine, the phone, memory and behaviour. There are no differences with respect to getting to places out of walking distance, shopping and bathing.

Figure 3 HACC Functional Screening Results - ATLAS 2002 School Leavers vs HACC Clients



Correlation between functional screening and functional assessment results

The functional assessment results for the 2002 cohort are included in the next section. This section simply summarises the relationships between the brief screen undertaken by schools and the more detailed assessment undertaken by the CRS.

Table 2 Correlations between the functional screen and the functional assessments

Relationship	Correlation
Between the score on the self care items in the screen (questions 6-7) and the total score on the self care assessment	0.87
Between the total score on the screen and the total of the 3 functional assessments	0.83
Between the score on the domestic items in the screen (questions 1-5) and the total score on the domestic assessment	0.83
Between the total score on the screen and the total score on the domestic assessment	0.80
Between the total score on the screen and the total self care score	0.70
Between the score on the behaviour item in the screen (question 9) and the total score on the behaviour assessment	0.52
Between the total score on the screen and the total score on the behaviour assessment	0.41

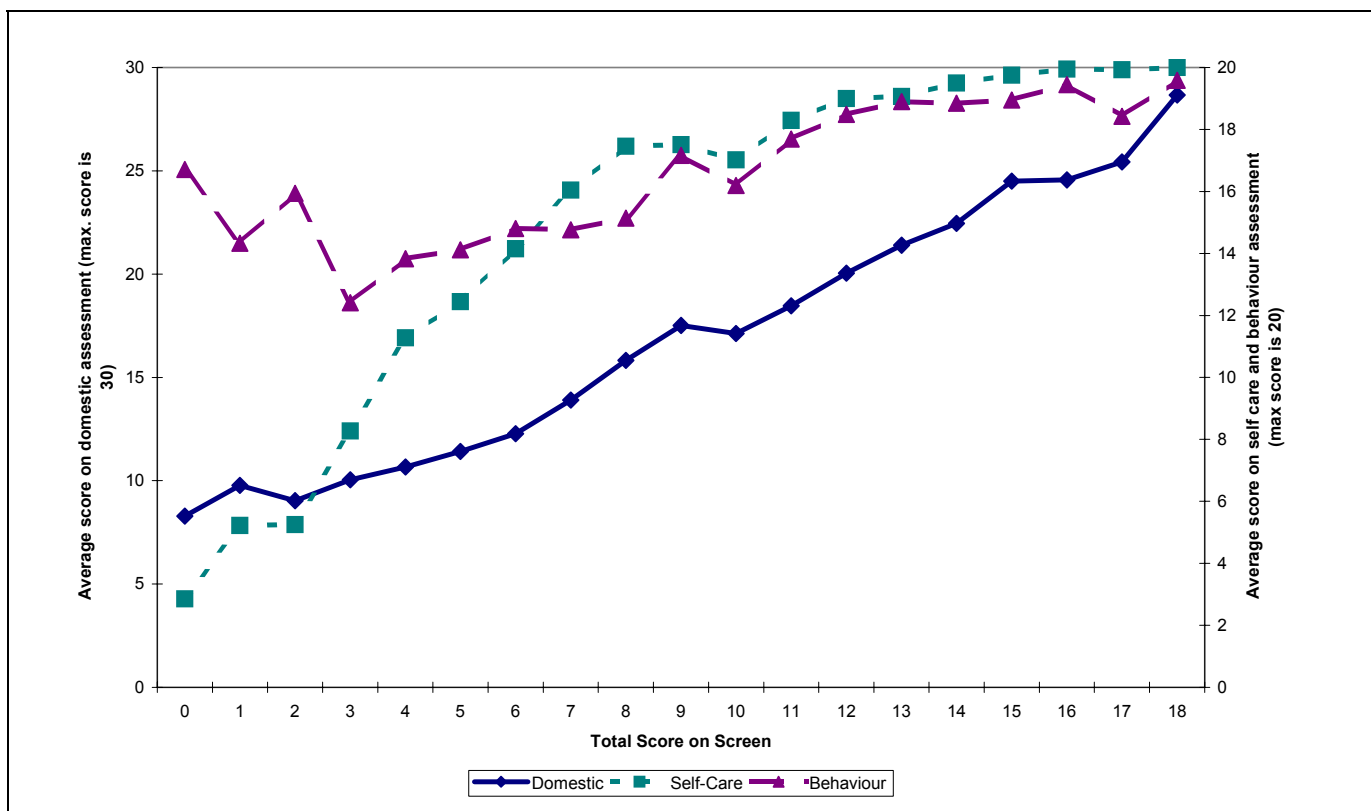
Table 2 above lists the correlations in order of strength. The higher the number, the stronger the relationship. The key finding is that, in general, the screen was a good predictor of subsequent assessment results.

The screen has 9 items, 2 of which (Items 6 and 7) screen for self-care ability. The correlation between these 2 items and the subsequent self care assessment score was 0.87, which indicates a strong relationship between the screen items and the assessment score.

Likewise, the 5 items in the screen that cover domestic functioning were highly correlated with the subsequent domestic functioning assessment results (0.83). However, with a correlation of only 0.52, the screen was not found to be a good predictor of behavioural problems.

Figure 4 shows the relationship between the total score on the screen and subsequent assessment results on the three domains – self-care, domestic and behavioural functioning. As shown by the correlations above, self care and domestic results were strongly related – most people who had a low score on the screen also had a low score on the assessment. A weaker relationship was found between the screen scores and subsequent behavioural assessments.

Figure 4 Relationship between Functional Screen and Functional Assessment Results



Correlation between functional ability and current and future capacity to work

At the completion of each assessment, the CRS assessor rated the person’s current capacity to work. They also rated their future capacity to work after receiving required assistance. Five ‘Capacity to Work’ levels were used:

- CFW1 (< 8 hours);
- CFW2 (8-14 hours);
- CFW3 (15-29 hours);
- CFW4 (30+ hours); and
- CFW5 (full time).

Table 3 shows the relationship between the functional screening results and assessments of current and future capacity to work. Only a very weak relationship was found between the functional screening results and current work capacity. However, a moderately strong relationship was found between the functional screening results and future work capacity, with both the total

screening score and the score on the domestic items being reasonably predictive of future work capacity.

Table 3 *Correlations between functional screening results and capacity to work– 2002 school leavers*

Relationship:	Correlation
Between the score on the domestic items in the screen (questions 1-5) and future capacity to work	0.61
Between the total score on the screen and future capacity to work	0.58
Between the score on the self care items in the screen (questions 6-7) and future capacity to work	0.42
Between the score on the domestic items in the screen (questions 1-5) and current capacity to work	0.27
Between the total score on the screen and current capacity to work	0.25
Between the score on behaviour item and future capacity to work	0.25
Between the score on the self care items in the screen (questions 6-7) and current capacity to work	0.15
Between the score on behaviour item and current capacity to work	0.10

Correlation between functional ability and the type of assistance (program) recommended

At the completion of each assessment, the CRS assessor made a recommendation on the type of assistance required. Seven programs were available as options:

- 01 NSW Day Program Support
- 02 NSW Community Access Support
- 03A Short to Moderate Term Transitional Support
- 03B Moderate to Long Term Transitional Support
- 04 Commonwealth Disability Employment Services
- 05A Commonwealth Vocational Rehabilitation Service (Type A)
- 05B Commonwealth Vocational Rehabilitation Service (Type B)

These 7 programs group into 3 assistance levels:

- Programs 1 and 2 are for people with little or no potential to undertake open or supported employment in the foreseeable future. This group was anticipated to have the lowest functional ability.
- Programs 3a and 3b are for those in transition. Some may have potential to move in time to Commonwealth programs but some may later move to Programs 1 or 2.
- Programs 4 and 5 are for those assessed to have the potential to move to open or supported employment. These are Commonwealth programs.

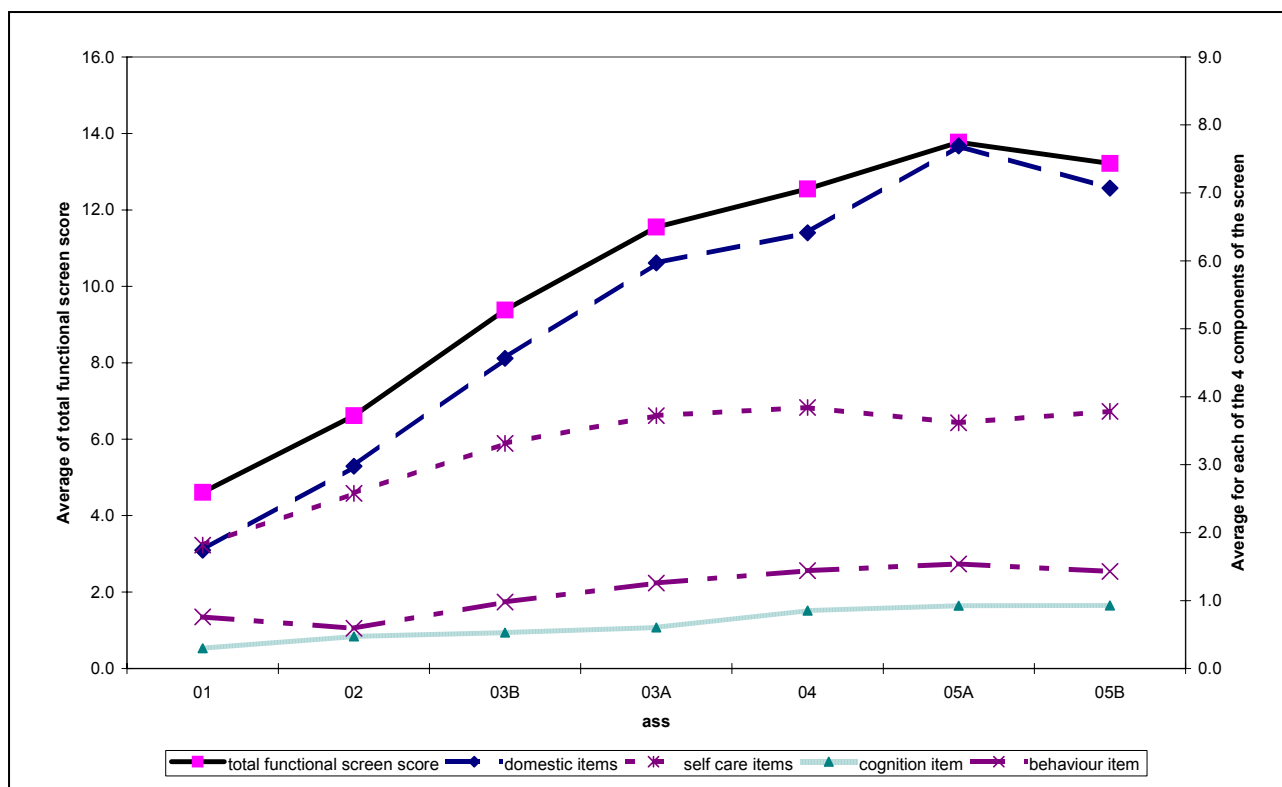
Table 2 shows the relationship between the functional screening results and the type of assistance recommended. As with work capacity, both the domestic items and the total score on the screen were related to assistance type. Surprisingly, behavioural functioning was only weakly correlated with assistance type.

Table 4 *Correlations between functional results and the type of assistance (program) recommended – 2002 school leavers*

Relationship:	Correlation
Between the score on the domestic items in the screen (questions 1-5) and which of the 7 programs is recommended	0.67
Between the total score on the screen and which of the 7 programs is recommended	0.66
Between the total score on the screen and which of the 3 assistance levels is recommended	0.65
Between the score on the self care items in the screen (questions 6-7) and which of the 7 programs is recommended	0.54
Between the score on the behaviour item and which of the 3 assistance levels is recommended	0.27

Figure 5 shows the average scores on the functional screen by the type of recommended assistance. The left axis shows the total screening score. The right axis shows the average scores on the 4 components – domestic, self care, cognition and behaviour. The pattern is consistent. Consumers recommended to day programs had the lowest function; Program 1 consumers had the very lowest. Program 3B consumers had lower functional ability than those recommended to 3A programs. Those recommended to Commonwealth programs had the best function.

Figure 5 *Relationship between functional screening scores and type of recommended assistance – 2002 school leavers*



The profile of 1999 to 2002 School Leavers

The CRS data set available for analysis is shown in Attachment 1. Table 5 shows the age profile of the 1573 ATLAS participants included in the total data set. Not surprisingly, the earlier the cohort left school, the older their age.

Age and sex

Table 5 Age profile of ATLAS school leavers

Age on date of assessment	Year leaving school				Total
	1999	2000	2001	2002	
17		1	2	14	17
18			25	331	356
19	1	2	231	203	437
20	4	117	177	48	346
21	152	74	45	12	283
22	92	15	3		110
23	13	4	3		20
24	2	2			4
Total	264	215	486	608	1573

Table 6 shows the sex profile. Males were over-represented, comprising about 55% of the total group.

Table 6 Sex profile of ATLAS school leavers

School Leaving Year	Number			Percentage		
	F	M	Total	Female	Male	Total
1999	108	156	264	40.9%	59.1%	100.0%
2000	92	123	215	42.8%	57.2%	100.0%
2001	216	270	486	44.4%	55.6%	100.0%
2002	286	322	608	47.0%	53.0%	100.0%
Grand Total	702	871	1573	44.6%	55.4%	100.0%

Disability

Of the 1573 in the total data set, disability data were available for 527 consumers. The disability data were most complete for the earlier cohorts (453 of 479 consumers in 1999 and 2000 had disability data). Very little disability data were available for later consumers and those yet to join the ATLAS program.

For those with data, up to 3 disabilities could be recorded for each person. The results are shown in Table 7. Nearly 40% of consumers had an intellectual disability, with speech and physical disabilities accounting for another 30%. Autism made up 8% and neurological disorders a further 6% of the data set.

Table 7 **Disability profile of ATLAS consumers**

Disability Code	Disability Description	Disability 1	Disability 2	Disability 3	Total	% of total
D1	Intellectual (including Down Syndrome)	358	62		420	38.3%
D10	Speech	2	164	7	173	15.8%
D4	Physical	73	33	57	163	14.9%
D3	Autism (including Asperger's Syndrome & Pervasive Developmental Delay)	45	12	27	84	7.7%
D6	Neurological (including Epilepsy & Alzheimer's Disease)	9	23	28	60	5.5%
D2	Specific Learning / Attention Deficit Disorder	14	25	15	54	4.9%
D8	Vision (sensory)	6	19	22	47	4.3%
D11	Psychiatric		29	14	43	3.9%
D9	Hearing (sensory)	5	7	15	27	2.5%
D5	Acquired Brain Injury	14	5	4	23	2.1%
D7	Deaf & Blind (dual sensory)	1	1	1	3	0.3%
Total		527	380	190	1097	100.0%

Self care functioning

Figure 6 profiles the self-care ability of the 4 ATLAS cohorts. As with the previous screening results, there was significant variation at the item level, ranging from about 25% needing assistance with transferring (eg, from a bed to chair) to about 50% requiring assistance with grooming.

The pattern was remarkably consistent over the 4 cohorts. However, the earlier the cohort, the greater the proportion who were dependent. This is not surprising. Many of the high functioning among the earlier cohorts have already left the program, leaving behind a residual group with lower functional ability. This has important implications for projecting future resource requirements for the ATLAS program.

Figure 6 Self care profile by item for each of 4 cohorts



1999

2000

2001

2002

Figure 7 profiles self-care functioning over the 4 years. Overall, about 35% were independent in self-care but, as already noted, the earlier the cohort, the greater the proportion who were dependent.

Figure 7 Self Care Functioning Profile of each Cohort

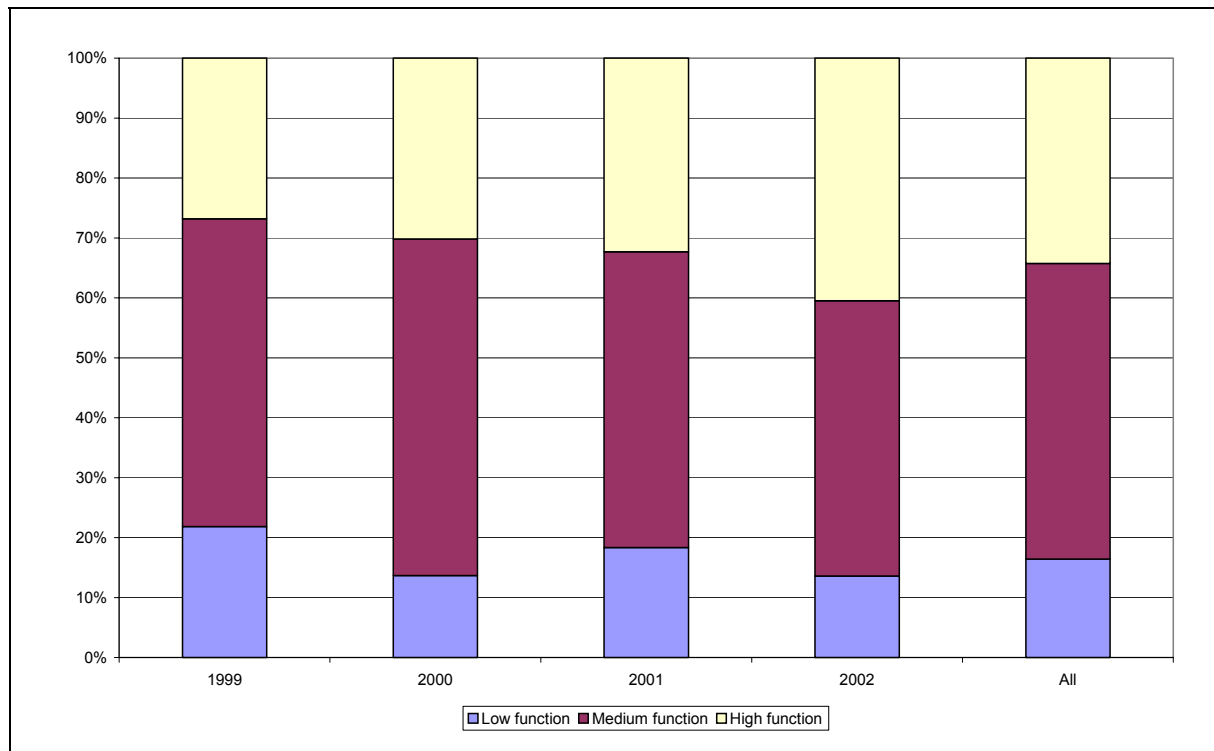
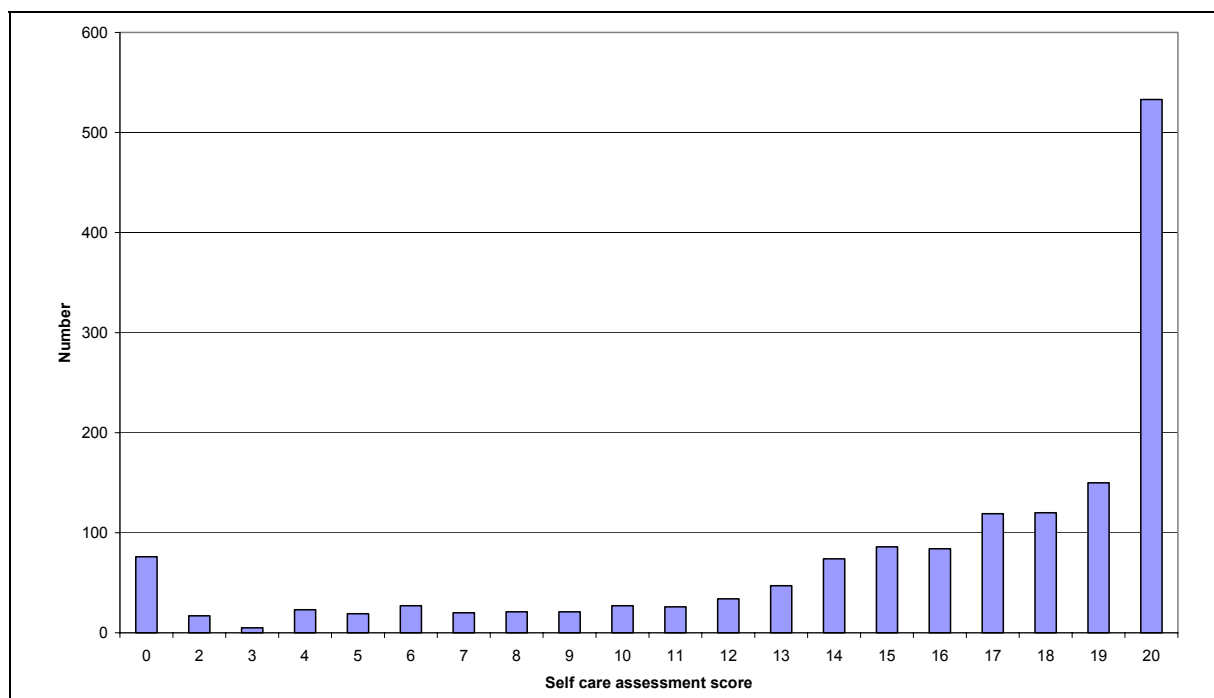


Figure 8 shows total scores on the self care measure, with a lower score indicating a higher level of dependency. A score of 20 suggests no self-care problems. About a third of the group were found to be independent in self-care.

Figure 8 Self care functioning scores of ATLAS population 1999-2002



Domestic functioning

Figure 9 profiles the domestic ability of the 4 ATLAS cohorts. There was less variation in domestic ability, with more than 75% of the cohort being dependent on each item. The rate of dependency ranged from 96% for food preparation to 75% for the ability to use the telephone. Again, the pattern was remarkably consistent over the 4 cohorts. It was also noted that, the earlier the cohort, the greater the proportion who were dependent.

The contrast between the self care and domestic profiles was expected as there is a natural hierarchy between the two. Self-care skills are those first learned (and, at the other end of the life cycle, are last lost). Having mastered self-care, the next development step is to master domestic skills. If a person cannot master self-care skills, it is unlikely that they will be able to master domestic skills. While a third have completely mastered self-care, only 17 of 1556 consumers have completely mastered domestic functioning.

Figure 10 profiles domestic functioning over the 4 years. The 1999 cohort had noticeably lower function than the other cohorts.

Figure 11 shows total scores on the domestic measure. As already noted, only 17 (1.1%) scored the maximum score of 30. The majority of the cohort scored less than 16, indicating a high level of dependency for domestic activities.

Figure 9 Domestic functioning profile by item for each of 4 cohorts

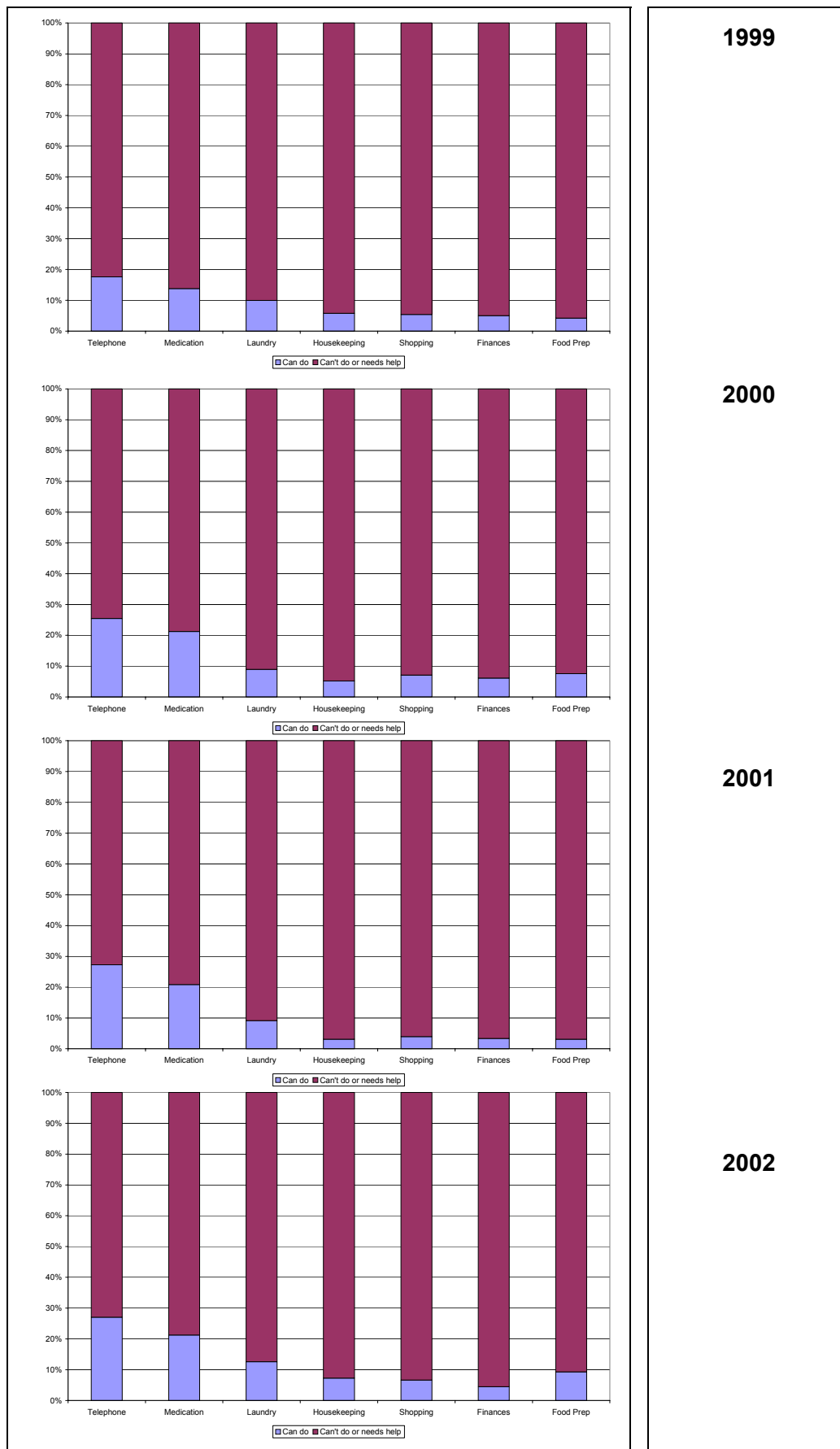


Figure 10 Domestic Functioning Profile of each Cohort

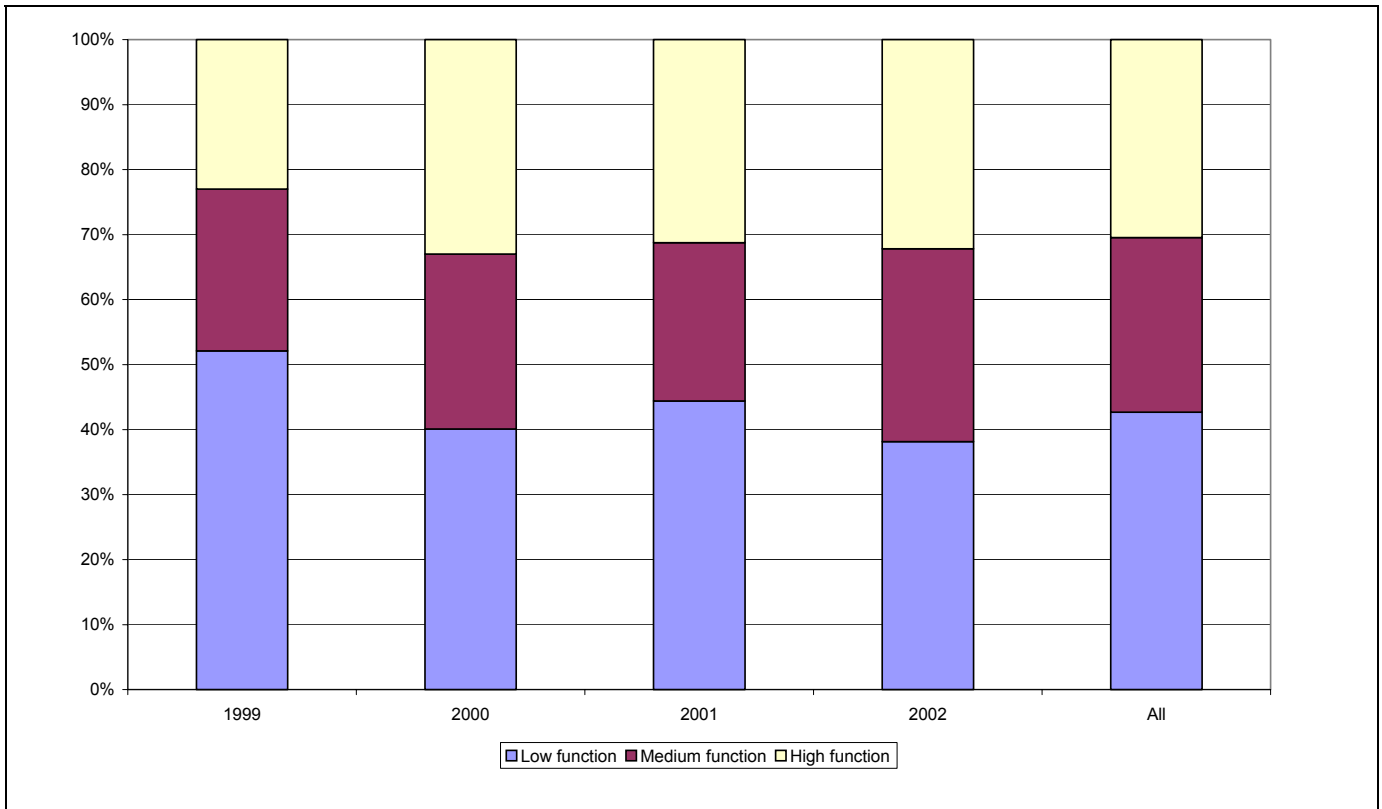
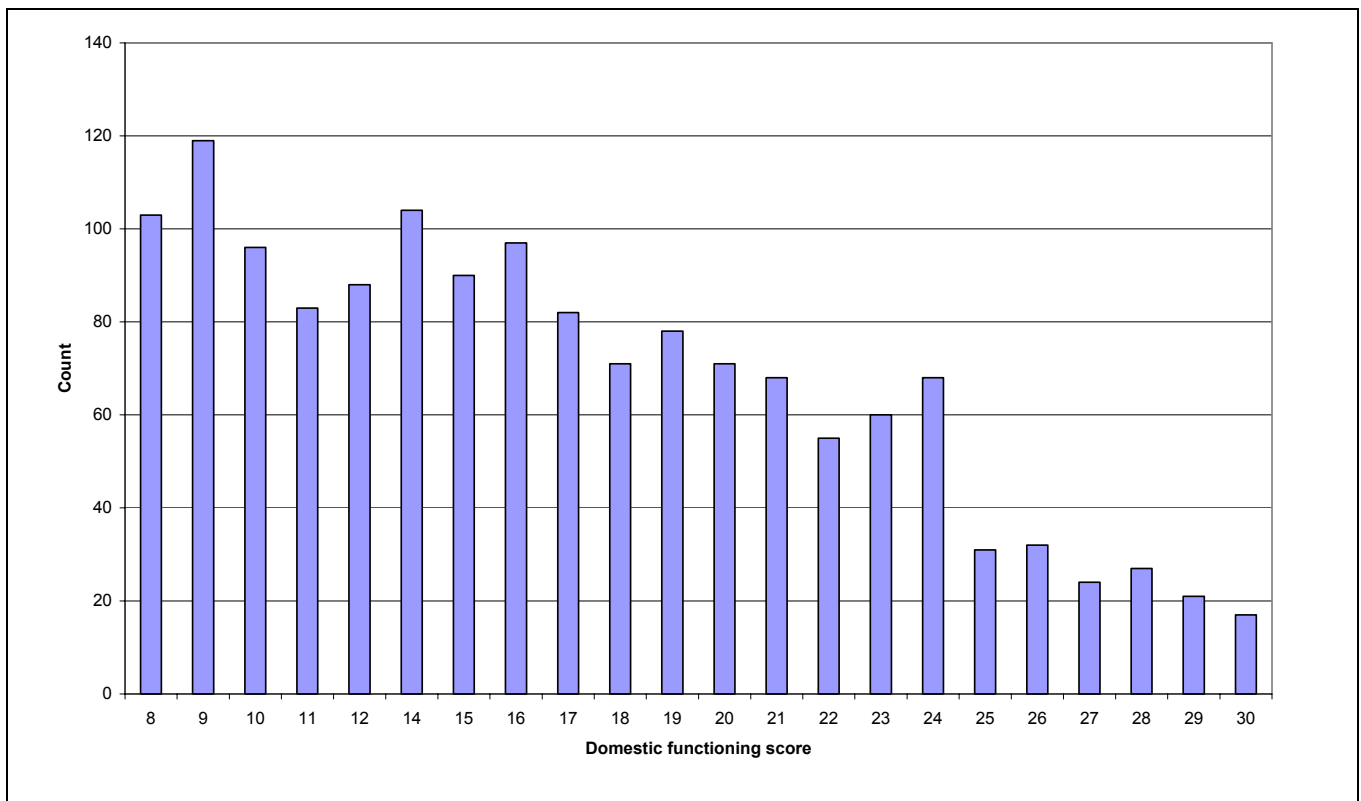


Figure 11 Domestic functioning scores of ATLAS population 1999-2002



Behavioural profile

Figure 12 profiles behavioural functioning by item over the four years. The pattern for behaviour was different to that of self-care and domestic functioning. Four of the five items showed little difference over the four years. The one exception is the item that rates whether the person is a danger to themselves and others (whether intentional or unintentional). Of the 1999 and 2000 cohorts, 40% had a problem on this item compared to 33% in 2001 and 32% in 2002. Ratings on this item indicate that a high level of supervision is required. Over half of each cohort displayed behaviours associated with emotional dependency, which is an indication of the respite need of carers.

Figure 13 summarises behavioural functioning over the four years. The differences were mostly due to the differences discussed above with respect to the 'dangerous to self or others' item. Again, this has implications for future resource requirements for the ATLAS program.

Figure 14 shows total scores on the behaviour measure. 30% of the cohort had no behavioural problems, while 70% had one or more behavioural problems.

Figure 12 Behavioural profile by item for each of 4 cohorts



Figure 13 Behaviour Profile of each Cohort

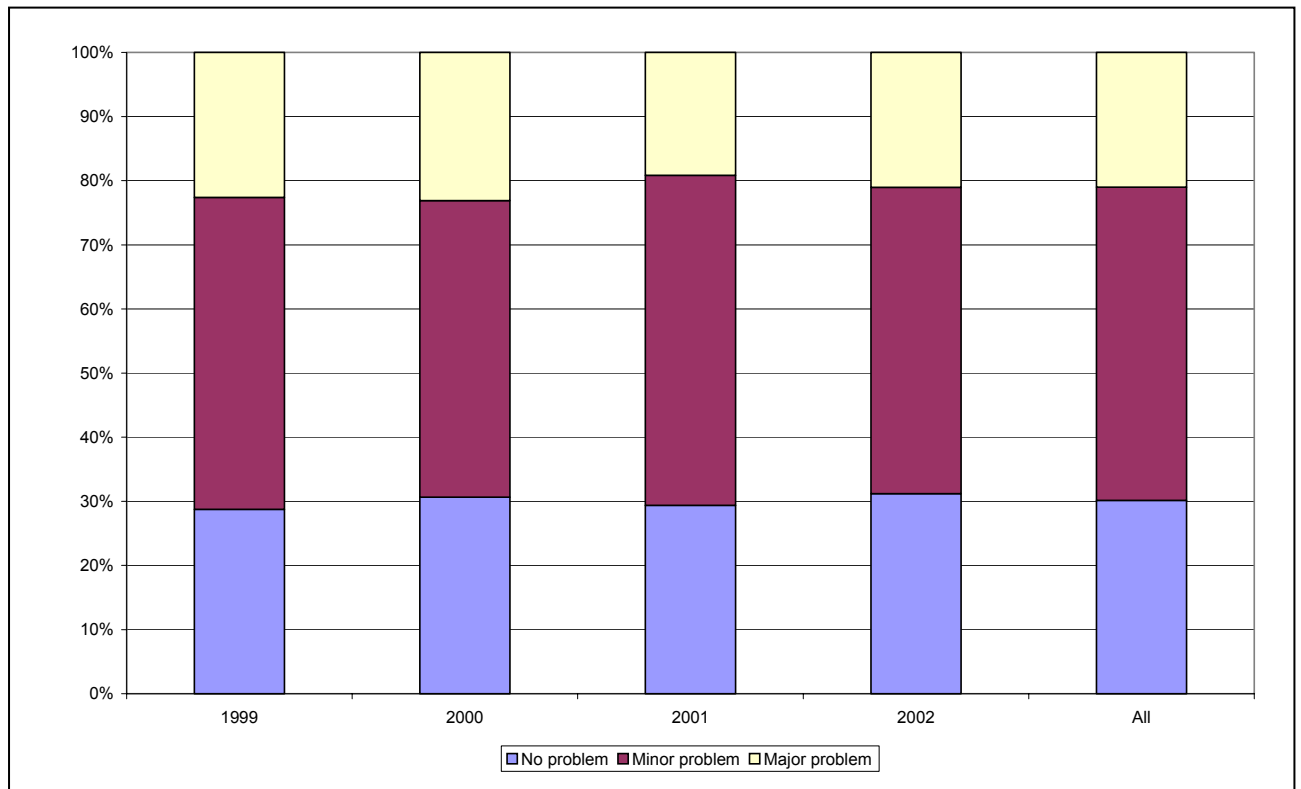


Figure 14 Behaviour functioning scores of ATLAS population 1999-2002

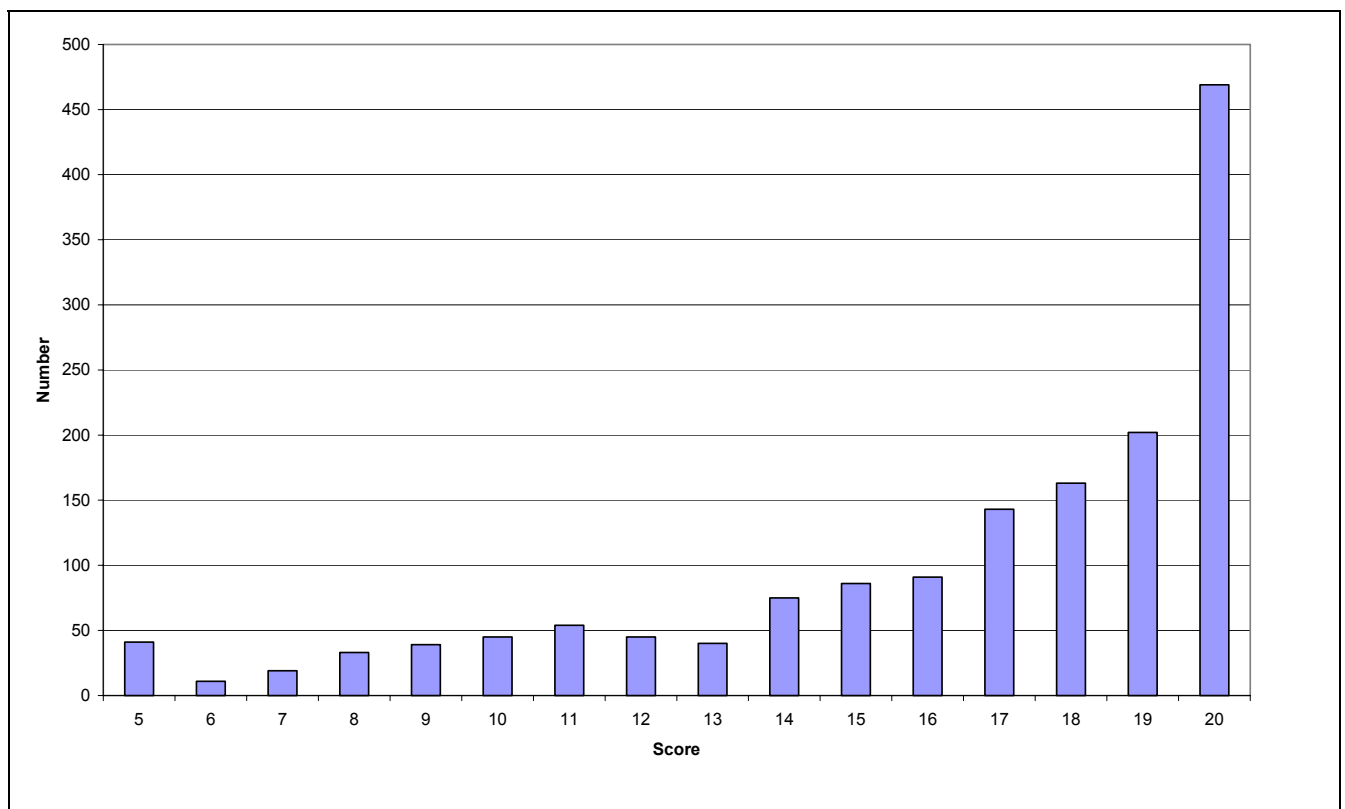
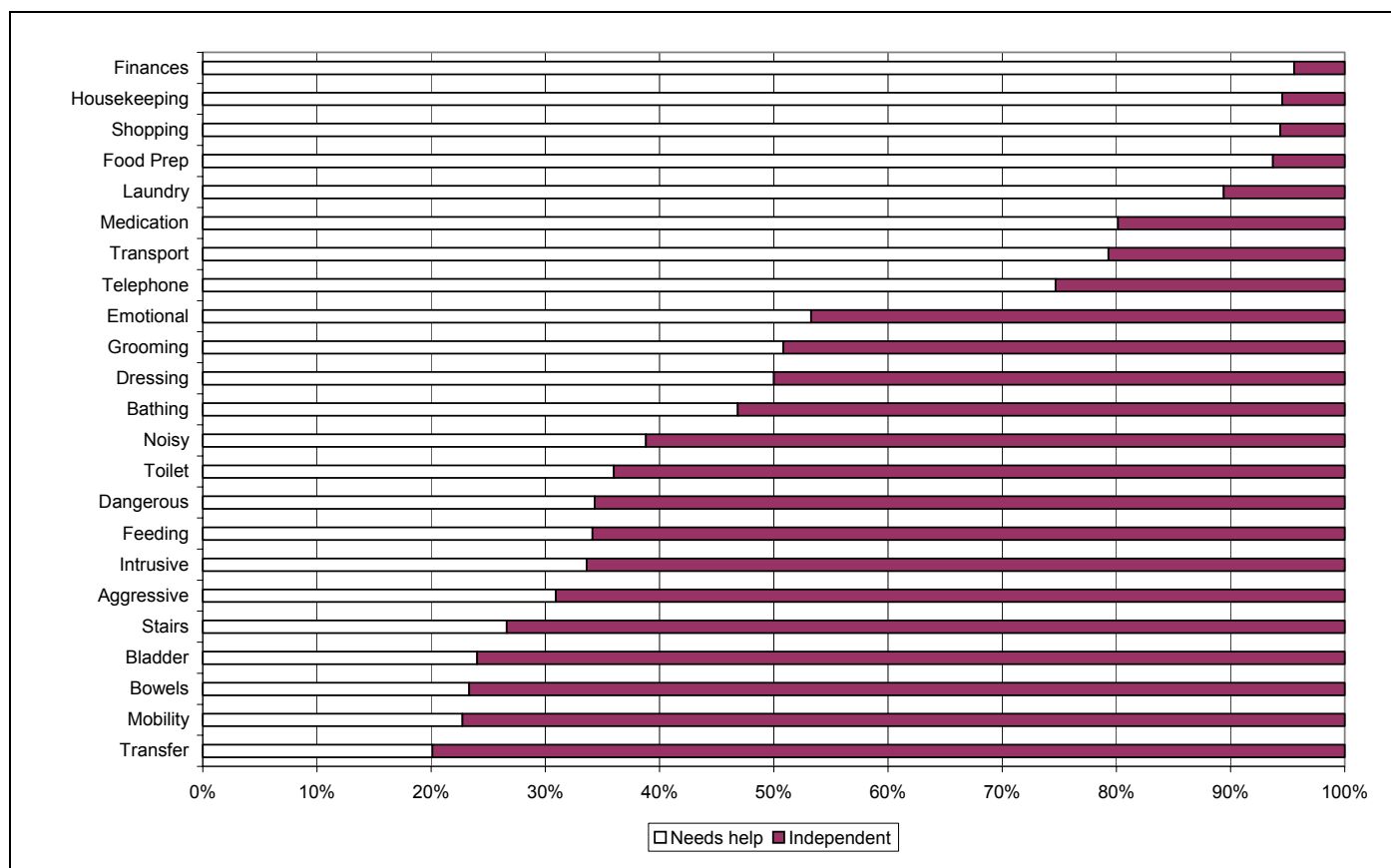


Figure 15 summarises the results of the three domains – self care, domestic, and behavioural – included in the functional assessment. This figure suggests the functional hierarchy for this population which ranges from the ability to transfer (79.9% can do) to the ability to manage money (4.4% can do). Note that, while behavioural functioning has been included in this profile, behavioural functioning is not part of the functional hierarchy.

Figure 15 Summary functional profile of the ATLAS population



Relationship between the functional domains

Table 8 shows the relationship between domestic functioning and self-care functioning. Just under 55% of the cohort fell into the same group on both measures (for example, if domestic functioning was low, self-care functioning was also low). Another 27% had low domestic functioning but medium self-care ability. Almost 24% were high on both measures (relatively speaking, the ‘low need’ group). Nearly 15% were low on both measures (relatively speaking, the ‘very high need’ group). As noted previously, the splits used in this analysis affect the overall result.

Table 8 Relationship between domestic and self-care functioning

Self care function	Domestic function							
	high	medium	low	total	high	medium	low	total
high	370	139	24	533	23.8%	8.9%	1.5%	34.3%
medium	100	253	414	767	6.4%	16.3%	26.6%	49.3%
low	4	26	226	256	0.3%	1.7%	14.5%	16.5%
Total	474	418	664	1556	30.5%	26.9%	42.7%	100.0%

Table 9 brings all 3 functional domains together and shows the results both as raw numbers and as percentages. For example, the first cell shows that 56 individuals (3.6% of the total) had major behavioural problems, low self-care and low domestic functioning. This group is the extremely high needs group. Of these 56 individuals, 12 left school in 1999, 7 in 2000, 15 in 2001 and 22 in 2002.

Of the 327 with major behavioural problems, 239 (78%) had low domestic ability and 56 (17%) had low self-care. None of this group rated high on both domestic and self care measures.

At the other end of the spectrum, 180 individuals had no behavioural problems and achieved high ratings on both self-care and domestic functioning. These 180 individuals are the 'low needs' group (relatively speaking) and represented 11.6% of the total cohort.

Of the 664 with low domestic ability, 239 (36%) had major behavioural problems, 310 (47%) had minor and only 115 (17%) had no behaviour problems.

Of the 256 with low self-care ability, 56 (22%) had major behaviour problems, 107 (42%) had minor behaviour problems and 93 (36%) had no behaviour problems. All but 30 had low domestic ability.

Table 9 Relationship between all 3 functional profiles

Behavioural function	Self care function	Domestic function			All
		low	medium	high	
Major behavioural problem	Low self care	56	0	0	56
Major behavioural problem	Medium self care	173	45	5	223
Major behavioural problem	High self care	10	21	17	48
Major problem total		239	66	22	327
Minor behavioural problem	Low self care	100	6	1	107
Minor behavioural problem	Medium self care	201	142	41	384
Minor behavioural problem	High self care	9	87	173	269
Minor problem total		310	235	215	760
No behavioural problem	Low self care	70	20	3	93
No behavioural problem	Medium self care	40	66	54	160
No behavioural problem	High self care	5	31	180	216
No Problem Total		115	117	237	469
Grand Total		664	418	474	1556
Percentages					
Behavioural function	Self care function	Domestic function			All
		low	medium	high	
Major behavioural problem	Low self care	3.6%	0.0%	0.0%	3.6%
Major behavioural problem	Medium self care	11.1%	2.9%	0.3%	14.3%
Major behavioural problem	High self care	0.6%	1.3%	1.1%	3.1%
Major problem Total		15.4%	4.2%	1.4%	21.0%
Minor behavioural problem	Low self care	6.4%	0.4%	0.1%	6.9%
Minor behavioural problem	Medium self care	12.9%	9.1%	2.6%	24.7%
Minor behavioural problem	High self care	0.6%	5.6%	11.1%	17.3%

Behavioural function	Self care function	Domestic function			All
		low	medium	high	
Minor problem Total		19.9%	15.1%	13.8%	48.8%
No behavioural problem	Low self care	4.5%	1.3%	0.2%	6.0%
No behavioural problem	Medium self care	2.6%	4.2%	3.5%	10.3%
No behavioural problem	High self care	0.3%	2.0%	11.6%	13.9%
No Problem Total		7.4%	7.5%	15.2%	30.1%
Grand Total		42.7%	26.9%	30.5%	100.0%

In summary, there was a relationship between the three domains. Consumers who had a problem with one domain generally had a problem with the others. But each domain is measuring a different aspect of a person's life skills. As subsequent analysis will show, each of those life skills influences employability.

Relationship between function and gender

Table 10 - Table 12 show the gender profile of the cohort and the functional profile of each gender. Interestingly, there appears to be no marked difference between men and women in the cohort with respect to behavioural, self-care or domestic function.

Table 10 *Gender and behavioural function*

Gender (number)	Behavioural function			
	Major problem	Minor problem	No problem	Total
Male	134	346	217	697
Female	193	414	252	859
Grand Total	327	760	469	1556
Gender (percentage)	Behavioural function			
	Major problem	Minor problem	No problem	Total
Male	19.2%	49.6%	31.1%	100.0%
Female	22.5%	48.2%	29.3%	100.0%

Table 11 *Gender and self-care function*

Gender (number)	Self Care function			
	High	Medium	Low	Total
Male	251	327	119	697
Female	282	440	137	859
Grand Total	533	767	256	1556
Gender (percentage)	Self Care function			
	High	Medium	Low	Total
Male	36.0%	46.9%	17.1%	100.0%
Female	32.8%	51.2%	15.9%	100.0%

Table 12 Gender and domestic function

Gender (number)	Domestic function			
	High	Medium	Low	Total
Male	231	188	278	697
Female	243	230	386	859
Grand Total	474	418	664	1556
Gender (percentage)	Domestic function			
	High	Medium	Low	Total
Male	33.1%	27.0%	39.9%	100.0%
Female	28.3%	26.8%	44.9%	100.0%

Relationship between function and disability

As already described (see page 8), disability data were available for 527 consumers. Up to 3 disabilities could be recorded for each person. The relationship between the first disability listed and self care functioning is shown in Table 13. Only 3 disability groups were large enough to warrant analysis – intellectual disability, physical disability and autism.

Nearly 40% of consumers had an intellectual disability and, in this group, 35% had high self care ability, 53% had medium and only 12% had low self-care ability. The picture was reversed for people with physical disabilities, with only 8% having high self care ability. The autism cohort fell somewhere in between.

Table 13 Self care functioning by disability

Disability 1		Self care functioning (number)				Self care functioning (%)			
Code	Disability Description	Low	Medium	High	Total	Low	Medium	High	Total
D1	Intellectual (including Down Syndrome)	43	189	126	358	12.0%	52.8%	35.2%	100.0%
D10	Speech		1	1	2	0.0%	50.0%	50.0%	100.0%
D2	Specific Learning / Attention Deficit Disorder		6	8	14	0.0%	42.9%	57.1%	100.0%
D3	Autism (including Asperger's Syndrome & Pervasive Developmental Delay)	3	29	13	45	6.7%	64.4%	28.9%	100.0%
D4	Physical	35	32	6	73	47.9%	43.8%	8.2%	100.0%
D5	Acquired Brain Injury	3	7	4	14	21.4%	50.0%	28.6%	100.0%
D6	Neurological (including Epilepsy & Alzheimer's Disease)		8	1	9	0.0%	88.9%	11.1%	100.0%
D7	Deaf & Blind (dual sensory)		1		1	0.0%	100.0%	0.0%	100.0%
D8	Vision (sensory)		3	3	6	0.0%	50.0%	50.0%	100.0%
D9	Hearing (sensory)			5	5	0.0%	0.0%	100.0%	100.0%
Grand Total		84	276	167	527	15.9%	52.4%	31.7%	100.0%

In total, only 147 (28%) of the 527 consumers with disability data had only one disability. In Table 14, self-care ability is shown by the number of disabilities recorded for each person. There is a clear pattern - the more disabilities, the lower the functional ability to manage self-care tasks.

Table 14 Self care functioning by number of disabilities

Number of disabilities	Self care functioning (number)				Self care functioning (%)			
	Low	Medium	High	Total	Low	Medium	High	Total
1	10	63	74	147	6.8%	42.9%	50.3%	100.0%
2	18	118	54	190	9.5%	62.1%	28.4%	100.0%
3	56	95	39	190	29.5%	50.0%	20.5%	100.0%
All	84	276	167	527	15.9%	52.4%	31.7%	100.0%

The relationship between the first disability listed and domestic functioning is shown in Table 15. The pattern is different from that of self-care. There were no major differences between the three disability groups large enough to warrant analysis – intellectual disability, physical disability and autism.

Table 15 Domestic functioning by disability

Disability 1		Domestic functioning (number)				Domestic functioning (%)			
Code	Disability Description	Low	Medium	High	Total	Low	Medium	High	Total
D1	Intellectual (including Down Syndrome)	159	101	98	358	44.4%	28.2%	27.4%	100.0%
D10	Speech	1		1	2	50.0%	0.0%	50.0%	100.0%
D2	Specific Learning / Attention Deficit Disorder		4	10	14	0.0%	28.6%	71.4%	100.0%
D3	Autism (including Asperger's Syndrome & Pervasive Developmental Delay)	26	6	13	45	57.8%	13.3%	28.9%	100.0%
D4	Physical	31	16	26	73	42.5%	21.9%	35.6%	100.0%
D5	Acquired Brain Injury	4	6	4	14	28.6%	42.9%	28.6%	100.0%
D6	Neurological (including Epilepsy & Alzheimer's Disease)	2	2	5	9	22.2%	22.2%	55.6%	100.0%
D7	Deaf & Blind (dual sensory)	1			1	100.0%	0.0%	0.0%	100.0%
D8	Vision (sensory)	2	3	1	6	33.3%	50.0%	16.7%	100.0%
D9	Hearing (sensory)		1	4	5	0.0%	20.0%	80.0%	100.0%
Grand Total		226	139	162	527	42.9%	26.4%	30.7%	100.0%

Table 16 replicates the analysis in Table 14 but, this time, shows domestic ability by the number of disabilities recorded for each person. The pattern is repeated -the more disabilities, the lower the functional ability to manage domestic tasks.

Table 16 Domestic functioning by number of disabilities

Number of disabilities	Domestic functioning (number)				Domestic functioning (%)			
	Low	Medium	High	Total	Low	Medium	High	Total
1	33	39	75	147	22.4%	26.5%	51.0%	100.0%
2	74	61	55	190	38.9%	32.1%	28.9%	100.0%
3	119	39	32	190	62.6%	20.5%	16.8%	100.0%
All	226	139	162	527	42.9%	26.4%	30.7%	100.0%

The relationship between the first disability listed and behavioural functioning is shown in Table 17. Only 2 (4%) of the consumers with autism had no behavioural problems. The picture was reversed for people with physical disabilities, with only 7% having any behavioural problems. The intellectual disability cohort fell somewhere in between.

Table 17 Behavioural functioning by disability

Disability 1		Behavioural functioning (number)				Behavioural functioning (%)			
Code	Disability Description	Major problem	Minor problem	No problem	Total	Major problem	Minor problem	No problem	Total
D1	Intellectual (including Down Syndrome)	88	175	95	358	24.6%	48.9%	26.5%	100.0%
D10	Speech	1	1		2	50.0%	50.0%	0.0%	100.0%
D2	Specific Learning / Attention Deficit Disorder		8	6	14	0.0%	57.1%	42.9%	100.0%
D3	Autism (including Asperger's Syndrome & Pervasive Developmental Delay)	22	21	2	45	48.9%	46.7%	4.4%	100.0%
D4	Physical	5	27	41	73	6.8%	37.0%	56.2%	100.0%
D5	Acquired Brain Injury	2	9	3	14	14.3%	64.3%	21.4%	100.0%
D6	Neurological (including Epilepsy & Alzheimer's Disease)		2	7	9	0.0%	22.2%	77.8%	100.0%
D7	Deaf & Blind (dual sensory)		1		1	0.0%	100.0%	0.0%	100.0%
D8	Vision (sensory)		3	3	6	0.0%	50.0%	50.0%	100.0%
D9	Hearing (sensory)			5	5	0.0%	0.0%	100.0%	100.0%
Grand Total		118	247	162	527	22.4%	46.9%	30.7%	100.0%

Table 18 replicates the previous analysis on number of disabilities but this time shows behavioural functioning by the number of disabilities recorded for each person. The pattern was repeated, although it is not quite as strong - the more disabilities, the more behavioural problems.

Table 18 Behavioural functioning by number of disabilities

Number of disabilities	Behavioural functioning (number)				Behavioural functioning (%)			
	Major problem	Minor problem	No problem	Total	Major problem	Minor problem	No problem	Total
1	20	64	63	147	13.6%	43.5%	42.9%	100.0%
2	39	98	53	190	20.5%	51.6%	27.9%	100.0%
3	59	85	46	190	31.1%	44.7%	24.2%	100.0%
All	118	247	162	527	22.4%	46.9%	30.7%	100.0%

Capacity to work

Table 19 shows the capacity to work in the open market, with and without intervention. Of the 1556, only 11 (0.7%) people were assessed as being capable of participating in full time employment without intervention. After an intervention, 126 (8.1%) were expected to be able to participate in full time work. The shaded cells indicate the number whose capacity for work was not expected to change after intervention. This group represented 66% of the cohort.

Table 19 Capacity to Work (disability specific and general) in open market with no intervention by Capacity to Work (disability specific and general) in open market with intervention

Capacity to Work (disability specific and general) in open market with intervention	Capacity to Work (disability specific and general) in open market with no intervention					
	CFW1	CFW2	CFW3	CFW4	CFW5	Total
CFW1 (< 8 hours)	996	1		1		998
CFW2 (8-14 hours)	88	2		1		91
CFW3 (15-29 hours)	134	8	2			144
CFW4 (30+ hours)	164	21	4	8		197
CFW5 (Full time)	82	17	10	6	11	126
Grand Total	1464	49	16	16	11	1556

Type of assistance required

Table 20 shows the type of assistance required based on the CRS assessment. Assistance categories 01-03B are State funded programs, whilst 04-05B are Commonwealth funded. In total, 1283 (82%) of the total cohort were recommended to State funded programs and 273 (18%) to Commonwealth funded programs. As with their functional profiles, a greater proportion of the 1999 cohort was recommended to support programs and less to transitional and vocational programs. Note that all consumers in this table are in State funded programs at present.

Table 20 Type of assistance required

Assistance	1999		2000		2001		2002		All	
	No	%	No	%	No	%	No	%	No	%
01 Day program	72	27.6%	39	18.4%	98	20.4%	110	18.2%	319	20.5%
02 Comm. Access	56	21.5%	42	19.8%	72	15.0%	85	14.1%	255	16.4%
03A Transitional	33	12.6%	23	10.8%	47	9.8%	94	15.6%	197	12.7%
03B Transitional	73	28.0%	77	36.3%	168	35.0%	194	32.2%	512	32.9%
04 Dis. Empl. Svcs.	18	6.9%	24	11.3%	70	14.6%	78	12.9%	190	12.2%
05A Voc. Rehab. Svcs	3	1.1%	2	0.9%	5	1.0%	13	2.2%	23	1.5%
05B Voc. Rehab. Svcs	6	2.3%	5	2.4%	20	4.2%	29	4.8%	60	3.9%
Grand Total	261	100.0%	212	100.0%	480	100.0%	603	100.0%	1556	100.0%

Relationship between capacity to work and type of required assistance

Table 21 shows the expected change in capacity to work, with and without intervention, by type of assistance required. Of the 1464 in CFW1, 998 (68%) were expected to remain in CFW1 after intervention. Of the 709 referred to transition programs, 379 (54%) were expected to remain in CFW1 after intervention. Given this expected outcome, it is unclear why this group were recommended to transition programs.

Table 21 Change in Capacity to Work by Assistance Type

Assistance	Capacity to Work (disability specific and general) in open market with no intervention					
	CFW1	CFW2	CFW3	CFW4	CFW5	Grand Total
01 Day program	319					319
02 Comm. Access	255					255
03A Transitional	181	11	3	2		197
03B Transitional	502	8		1	1	512
04 Dis. Empl. Svcs.	156	21	6	4	3	190
05A Voc. Rehab. Svcs	12	1	2	5	3	23
05B Voc. Rehab. Svcs	39	8	5	4	4	60
Grand Total	1464	49	16	16	11	1556
Assistance	Capacity to Work (disability specific and general) in open market with intervention					
	CFW1	CFW2	CFW3	CFW4	CFW5	Grand Total
01 Day program	316	1	1	1		319
02 Comm. Access	246	7	1	1		255
03A Transitional	52	12	33	69	31	197
03B Transitional	327	54	69	49	13	512
04 Dis. Empl. Svcs	53	12	30	51	44	190
05A Voc. Rehab. Svcs		2	1	6	14	23
05B Voc. Rehab. Svcs	4	3	9	20	24	60
Grand Total	998	91	144	197	126	1556

Table 22 summarises the above results based on whether the recommended assistance is a State or Commonwealth funded program. Assistance categories 01-03B are State funded programs, whilst 04-05B are Commonwealth funded. In total, 83% of the 2001 cohort were recommended to State funded programs, and 17% (273 in total) to Commonwealth funded programs.

Of the 1257 in CFW1 recommended for State programs, 941 (75%) were expected to remain in CFW1. Of the 207 in CFW1 recommended for Commonwealth programs, only 57 (28%) were expected to remain in CFW1.

Table 22 *Types of assistance recommended – capacity to work*

Assistance Type	Capacity to Work (disability specific and general) in open market with no intervention					
	CFW1	CFW2	CFW3	CFW4	CFW5	Total
State	1257	19	3	3	1	1283
Commonwealth	207	30	13	13	10	273
Total	1464	49	16	16	11	1556
% of State	98.0%	1.5%	0.2%	0.2%	0.1%	100.0%
% of Commonwealth	75.8%	11.0%	4.8%	4.8%	3.7%	100.0%

Assistance Type	Capacity to Work (disability specific and general) in open market with intervention					
	CFW1	CFW2	CFW3	CFW4	CFW5	Total
State	941	74	104	120	44	1283
Commonwealth	57	17	40	77	82	273
Total	998	91	144	197	126	1556
% of State	73.3%	5.8%	8.1%	9.4%	3.4%	100.0%
% of Commonwealth	20.9%	6.2%	14.7%	28.2%	30.0%	100.0%

Table 23 summarises the expected profile of those ATLAS participants recommended by the CRS assessment to State programs after they have received the interventions planned for them. The significant finding is that almost three quarters will have the capacity to work less than 8 hours after intervention. Only 13% are expected to be capable of working more than 30 hours. These results have significant implications for the planning of future ATLAS services.

Table 23 *Expected capacity to work (after intervention) of those in State programs*

CFW Category	Number	Percentage
CFW1 (< 8 hours)	941	73.3%
CFW2 (8-14 hours)	74	5.8%
CFW3 (15-29 hours)	104	8.1%
CFW4 (30+ hours)	120	9.4%
CFW5 (Full time)	44	3.4%
Total	1283	100.0%

Table 28 shows the relationships between work capacity and the type of recommended assistance. Future work capacity showed a moderately strong relationship with the type and level of assistance required while current work capacity was not strongly related.

Table 24 *Correlations between type of assistance required and capacity to work*

Relationship:	Correlation
Between the assistance level (3 levels) and future capacity to work	0.59
Between the assistance required (7 programs) and future capacity to work	0.58
Between the assistance required (7 programs) and current capacity to work	0.31
Between the assistance level (3 levels) and current capacity to work	0.30

Relationship between functional ability and capacity to work

Table 25 shows the relationship between current and future capacity to work and domestic functioning. These data suggest two findings.

First, domestic functioning appears to be closely related to current employment capacity. Of the 1464 in CFW1, 663 (45%) had low and a further 404 (28%) had medium domestic functioning, while 397 (27%) had high domestic functioning.

Second, domestic functioning is also associated with capacity to change employment category after intervention. Of the 397 who were high functioning but currently able to work less than 8 hours (CFW1), all but 108 were expected to have improved work capacity after intervention. 289 (73%) were expected to have improved work capacity. In contrast, only 32 (5%) of the 663 low functioning group currently able to work <8 hours were expected to have improved work capacity.

Again, the shaded cells indicate the number whose capacity for work was not expected to change after intervention.

Table 25 Relationship between current and future capacity to work and domestic functioning

Domestic function	Capacity to Work (disability specific and general) in open market with intervention	Capacity to Work (disability specific and general) in open market with no intervention					Total
		CFW1	CFW2	CFW 3	CFW4	CFW5	
High	CFW1 (< 8 hours)	108					108
	CFW2 (8-14 hours)	29	2				31
	CFW3 (15-29 hours)	70	5	2			77
	CFW4 (30+ hours)	120	15	4	7		146
	CFW5 (Full time)	70	17	9	5	11	112
High Total		397	39	15	12	11	474
Medium	CFW1 (< 8 hours)	257			1		258
	CFW2 (8-14 hours)	43			1		44
	CFW3 (15-29 hours)	56	3				59
	CFW4 (30+ hours)	37	6		1		44
	CFW5 (Full time)	11		1	1		13
Medium Total		404	9	1	4		418
Low	CFW1 (< 8 hours)	631	1				632
	CFW2 (8-14 hours)	16					16
	CFW3 (15-29 hours)	8					8
	CFW4 (30+ hours)	7					7
	CFW5 (Full time)	1					1
Low Total		663	1				664
Grand Total		1464	49	16	16	11	1556

Table 26 repeats the analysis shown in Table 25 but this time for self-care functioning. These data suggest a similar pattern for self care. Like domestic functioning, self care functioning was related to current employment capacity although the relationship was not as strong. Of the 1464 in CFW1, 256 (18%) had low and a further 767 (52%) had medium self care functioning, while 533 (36%) had high domestic functioning.

Self care functioning was also associated with capacity to change employment category after intervention. Of the 468 who are high functioning but currently able to work <8 hours (CFW1), all but 172 were expected to have improved work capacity after intervention - 296 (63%) were expected to have improved work capacity. In contrast, only 19 (8%) of the 255 low functioning group currently able to work <8 hours were expected to have improved work capacity.

As before, the shaded cells indicate number whose capacity for work was not expected to change after intervention. This group represented two thirds of the cohort.

Table 26 Relationship between current and future capacity to work and self care functioning

Self Care function	Capacity to Work (disability specific and general) in open market with intervention	Capacity to Work (disability specific and general) in open market with no intervention					Total
		CFW1	CFW2	CFW 3	CFW4	CFW5	
High	CFW1 (< 8 hours)	172	1				173
	CFW2 (8-14 hours)	39	2				41
	CFW3 (15-29 hours)	78	4	2			84
	CFW4 (30+ hours)	108	15	1	4		128
	CFW5 (Full time)	71	13	9	4	10	107
High Total		468	35	12	8	10	533
Medium	CFW1 (< 8 hours)	591			1		592
	CFW2 (8-14 hours)	44			1		45
	CFW3 (15-29 hours)	48	4				52
	CFW4 (30+ hours)	47	6	3	3		59
	CFW5 (Full time)	11	4	1	2	1	19
Medium Total		741	14	4	7	1	767
Low	CFW1 (< 8 hours)	233					233
	CFW2 (8-14 hours)	5					5
	CFW3 (15-29 hours)	8					8
	CFW4 (30+ hours)	9			1		10
	CFW5 (Full time)						
Low Total		255			1		256
Grand Total		1464	49	16	16	11	1556

Table 27 repeats the analysis but this time for behavioural functioning. The pattern was similar. Of specific interest is the group with major behavioural problems. Only 27 of the 325 (8.3%) in this group were expected to have improved employment prospects. All but two were rated CFW1. Again, the shaded cells indicate number whose capacity for work was not expected to change after intervention.

Table 27 Relationship between current and future capacity to work and behavioural functioning

Behaviour function	Capacity to Work (disability specific and general) in open market with intervention	Capacity to Work (disability specific and general) in open market with no intervention					Total
		CFW1	CFW2	CFW 3	CFW4	CFW5	
No problem	CFW1 (< 8 hours)	212					212
	CFW2 (8-14 hours)	24	2		1		27
	CFW3 (15-29 hours)	45	4				49
	CFW4 (30+ hours)	81	9	2	6		98
	CFW5 (Full time)	47	14	7	5	10	83
No Problem Total		409	29	9	12	10	469
Minor problem	CFW1 (< 8 hours)	486			1		487
	CFW2 (8-14 hours)	51					51
	CFW3 (15-29 hours)	84	4	2			90
	CFW4 (30+ hours)	77	11	2	2		92
	CFW5 (Full time)	32	3	3	1	1	40
Minor Problem Total		730	18	7	4	1	760
Major problem	CFW1 (< 8 hours)	298	1				299
	CFW2 (8-14 hours)	13					13
	CFW3 (15-29 hours)	5					5
	CFW4 (30+ hours)	6	1				7
	CFW5 (Full time)	3					3
Major Problem Total		325	2				327
Grand Total		1464	49	16	16	11	1556

Table 28 shows the strength of the relationships between function and capacity to work. The strongest relationship was between the total score on the domestic assessment and future capacity to work. With a correlation of 0.67, this was a stronger relationship than that found between the functional screening results of the 2002 school leavers and their future capacity to work (0.61 correlation on the screen).

Table 28 Correlations between functional assessment results and capacity to work

Relationship:	Correlation
Between the total score on the domestic assessment and future capacity to work	0.67
Between the total self care assessment score and future capacity to work	0.39
Between the total score on the behaviour assessment and future capacity to work	0.37
Between the total score on the domestic assessment and current capacity to work	0.30
Between the total self care assessment score and current capacity to work	0.13
Between the total score on the behaviour assessment and current capacity to work	0.15

Relationship between functional ability and type of recommended assistance

Table 29 to Table 31 show the type of assistance recommended by functional profile. Table 29 shows the self-care ability of those recommended to different programs. Of the group with low self-care function, 90% were recommended to State programs and 10% to Commonwealth programs. Over two thirds of those recommended to Commonwealth programs had high self care function compared to 27% of those recommended to State funded programs.

Table 29 Type of assistance recommended – self care functioning

Assistance	Self care function			
	high	medium	low	Grand Total
01	5	164	150	319
02	25	50	180	255
03A	123	5	69	197
03B	196	25	291	512
04	128	7	55	190
05A	17	1	5	23
05B	39	4	17	60
Grand Total	533	256	767	1556
State	349	244	690	1283
Commonwealth	184	12	77	273
Total	533	256	767	1556
State	65.5%	95.3%	90.0%	82.5%
Commonwealth	34.5%	4.7%	10.0%	17.5%
Total	100.0%	100.0%	100.0%	100.0%
% of State	27.2%	19.0%	53.8%	100.0%
% of Commonwealth	67.4%	4.4%	28.2%	100.0%

Table 30 shows the domestic ability of those recommended to different programs. Of the group with low domestic function, 97% were recommended to State programs and 3% to Commonwealth programs. Of those recommended to Commonwealth programs, 71% had high domestic function compared to 22% of those recommended to State funded programs.

Table 30 Types of assistance recommended – domestic functioning

Assistance	Domestic function			
	high	medium	low	Grand Total
01	0	12	307	319
02	15	52	188	255
03A	124	58	15	197
03B	139	238	135	512
04	126	47	17	190

Assistance	Domestic function			Grand Total
	high	medium	low	
05A	20	3	0	23
05B	50	8	2	60
Grand Total	474	418	664	1556
State	278	360	645	1283
Commonwealth	196	58	19	273
Total	474	418	664	1556
State	58.6%	86.1%	97.1%	82.5%
Commonwealth	41.4%	13.9%	2.9%	17.5%
Total	100.0%	100.0%	100.0%	100.0%
% of State	21.7%	50.3%	28.1%	100.0%
% of Commonwealth	71.8%	7.0%	21.2%	100.0%

Table 31 shows the behavioural ability of those recommended to different programs. Of the group with major behavioural problems, 98% were recommended to State programs and 2% to Commonwealth programs. Of those recommended to Commonwealth programs, 59% had no behavioural problems compared to 24% of those recommended to State funded programs.

Table 31 *Types of assistance recommended – behavioural function*

Assistance	Behavioural function			Grand Total
	Major problem	Minor problem	No problem	
01	127	130	62	319
02	98	125	32	255
03A	15	104	78	197
03B	80	295	137	512
04	7	83	100	190
05A		2	21	23
05B		21	39	60
Grand Total	327	760	469	1556
State	320	654	309	1283
Commonwealth	7	106	160	273
Total	327	760	469	1556
State	97.9%	86.1%	65.9%	82.5%
Commonwealth	2.1%	13.9%	34.1%	17.5%
Total	100.0%	100.0%	100.0%	100.0%
% of State	24.9%	51.0%	24.1%	100.0%

Assistance	Behavioural function			Grand Total
	Major problem	Minor problem	No problem	
% of Commonwealth	2.6%	38.8%	58.6%	100.0%

Table 32 is an interesting finding. Consumers with low levels of domestic and self-care functioning were recommended for less intervention than those with medium or high functional ability. Those with the best functional ability were recommended to have the most interventions. Presumably, the low group had been assessed as having less capacity to benefit than the other groups. This also applied to consumers with major behavioural problems.

Table 32 *Count of interventions by level of functioning*

Domain	Level	Average number of interventions recommended
Domestic	Low	5.4
	Medium	7.4
	High	8.0
Self Care	Low	5.2
	Medium	6.5
	High	7.9
Behaviour	Major problem	6.0
	Minor problem	7.0
	No problem	6.8
Average of all ATLAS consumers		6.8

The correlations between functional assessment results and the type of assistance recommended are shown in Table 33. As with work capacity, the domestic assessment score was quite strongly correlated with the type of assistance required. This is an important finding – the domestic assessment can be used with a reasonable level of accuracy to predict the type of program that the consumer will require.

Again, self-care was not as useful as domestic functioning in predicting type of assistance required and behavioural functioning was only weakly correlated with assistance type.

Table 33 *Correlations between functional assessment results and the type of assistance (program) recommended*

Relationship:	Correlation
Between the domestic assessment score and which of the 7 programs is recommended	0.74
Between the domestic assessment score and which of the 3 assistance levels is recommended	0.71
Between the self care assessment score and which of the 7 programs is recommended	0.60
Between the self care assessment score and which of the 3 assistance levels is recommended	0.54
Between the behavioural assessment score on the screen and which of the 3 assistance levels is recommended	0.42
Between the behavioural assessment score on the screen and which of the 7 programs is recommended	0.41

Relationship between type of recommended assistance and type of disability

Table 34 shows the type of assistance recommended for each disability group. There were no significant different differences between two of the three groups large enough for analysis – intellectual and physical. Although people in these groups were very different from each other, they were referred to day programs at about the same rate. People with physical disabilities were more often referred to Commonwealth programs, but the difference was not significant.

Table 34 *Type of disability by type of assistance recommended*

Disability 1		Day program		Transition		Commonwealth		All	
		no	%	no	%	no	%	no	%
D1	Intellectual (including Down Syndrome)	142	39.7%	167	46.6%	49	13.7%	358	100.0%
D10	Speech	1	50.0%	1	50.0%		0.0%	2	100.0%
D2	Specific Learning / Attention Deficit Disorder	2	14.3%	8	57.1%	4	28.6%	14	100.0%
D3	Autism (including Asperger's Syndrome & Pervasive Developmental Delay)	25	55.6%	16	35.6%	4	8.9%	45	100.0%
D4	Physical	29	39.7%	29	39.7%	15	20.5%	73	100.0%
D5	Acquired Brain Injury	6	42.9%	5	35.7%	3	21.4%	14	100.0%
D6	Neurological (including Epilepsy & Alzheimer's Disease)	2	22.2%	4	44.4%	3	33.3%	9	100.0%
D7	Deaf & Blind (dual sensory)	1	100.0%		0.0%		0.0%	1	100.0%
D8	Vision (sensory)	1	16.7%	5	83.3%		0.0%	6	100.0%
D9	Hearing (sensory)		0.0%	3	60.0%	2	40.0%	5	100.0%
<i>All</i>		209	39.7%	238	45.2%	80	15.2%	527	100.0%

The conclusion is that disability type is not a good predictor of whether a consumer will require a day program, a transition program or a Commonwealth program.

Regional analysis

Table 35 shows the number of ATLAS consumers by year for each of the new DADHC regions.

Table 35 *ATLAS consumers by region by year*

Region	1999	2000	2001	2002	All
Hunter	37	25	82	100	244
Metro North	11	6	24	30	71
Metro South East	27	24	38	50	139
Metro South West	82	53	109	115	359
Metro West	21	19	66	83	189
Northern	34	49	64	91	238
Southern	14	19	37	62	132
Western	35	17	60	72	184
Grand Total	261	212	480	603	1556

This same information is shown graphically in Figure 16 as a percentage of ATLAS consumers each year. As this figure shows, consumers in the Metropolitan South West region have been representing a smaller proportion of ATLAS consumers each year. Southern and Metropolitan West have both been increasing as a percentage of all consumers.

Figure 16 *ATLAS consumers by DADHC region by year*

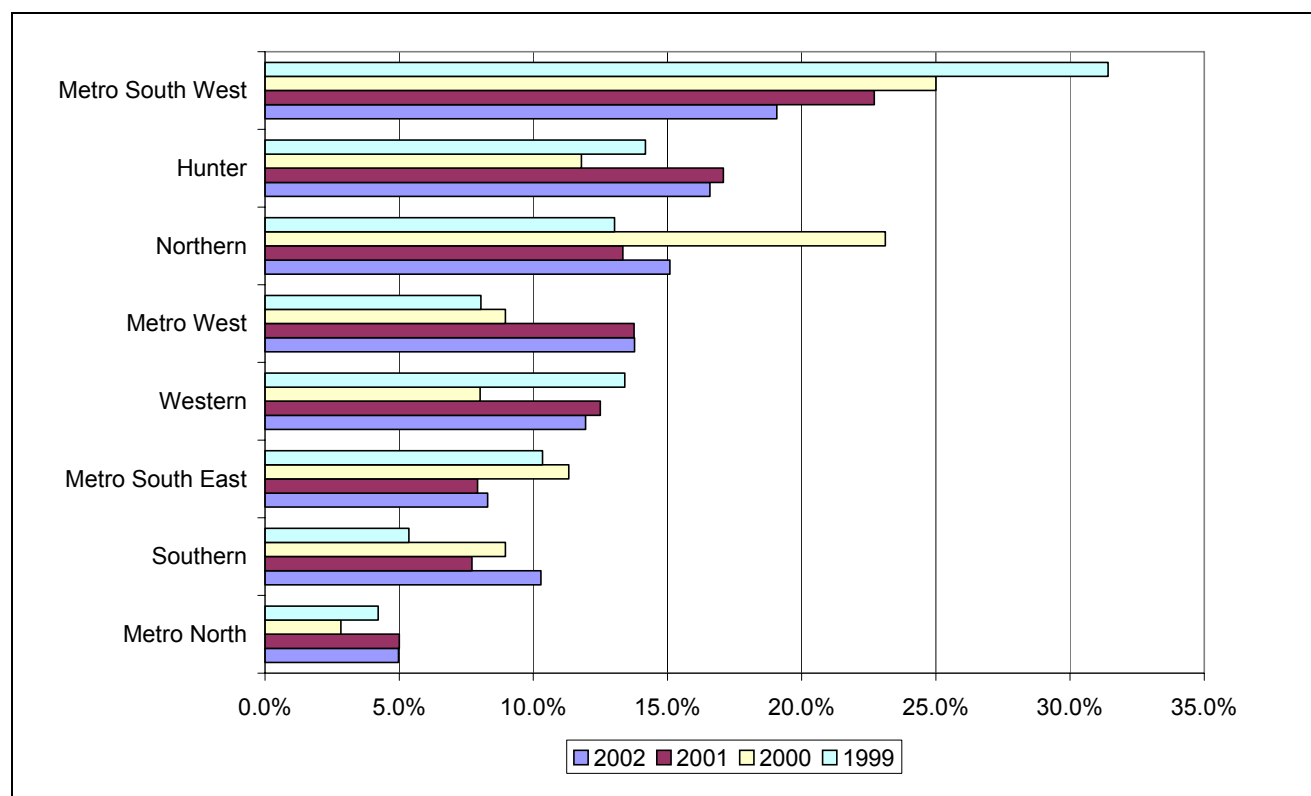
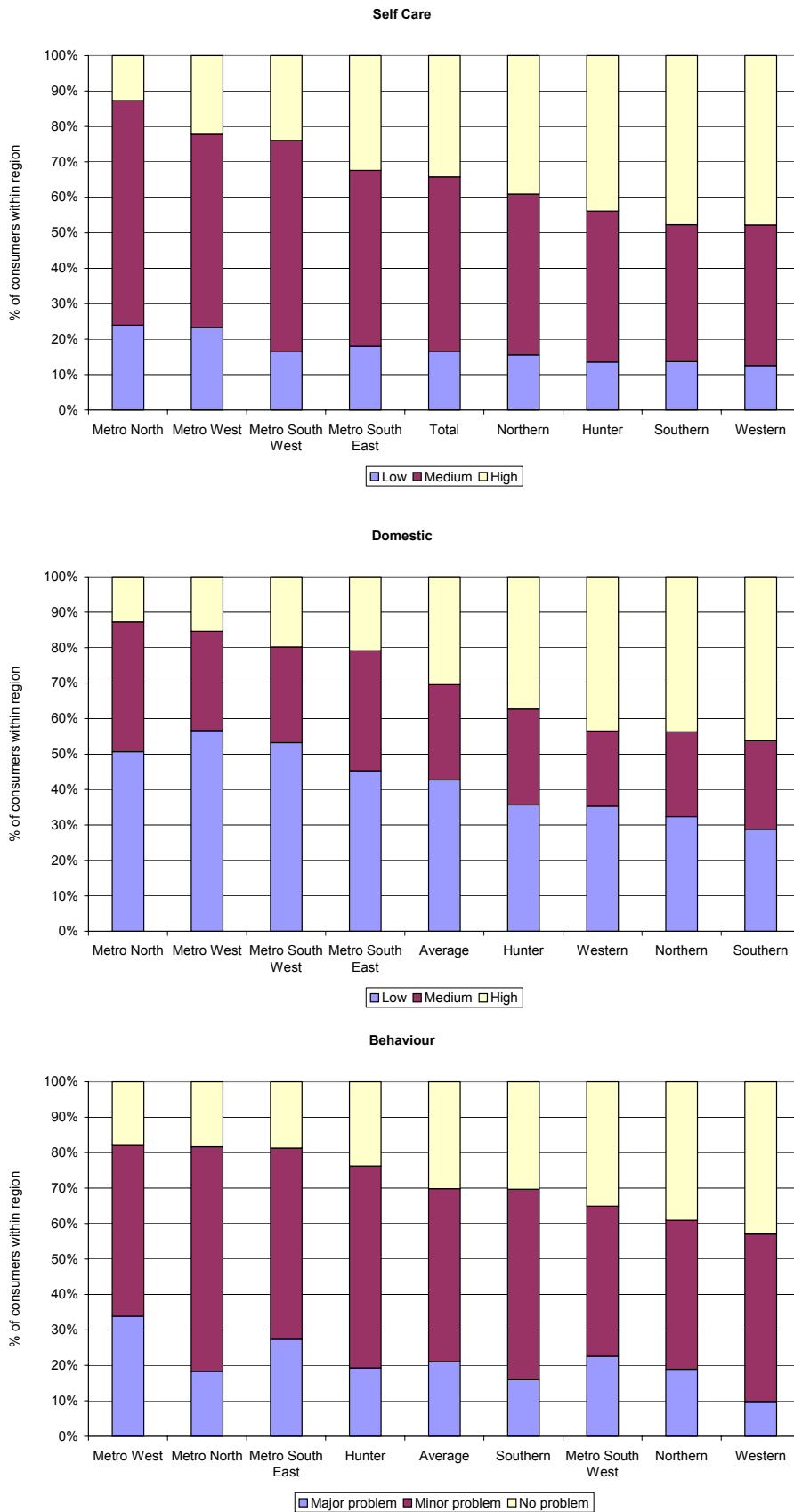


Figure 17 Functional profile by DADHC region



The functional profile of consumers from each region is shown in Figure 17. Consumers living in the Metropolitan West and Metropolitan North had the poorest profile on all three domains. Consumers in the Hunter, Southern and Western regions had the best self care functioning. Consumers in the Western, Northern and Southern regions had the best domestic functioning. Consumers living in the Northern and Western regions had the fewest behavioural problems.

The average score on each measure is shown in Table 36. The significant finding is that consumers living in country regions consistently rated higher (did better) than consumers living in the metropolitan regions.

Table 36 *Average assessment scores by region*

Region	Self-Care Score	Domestic	Behaviour
Metro West	13.7	14.2	14.7
Metro North	13.6	14.3	16.3
Metro South West	14.6	14.8	16.5
Metro South East	14.9	15.5	15.3
Hunter	16.4	17.1	16.5
Western	16.5	18.2	17.7
Southern	16.2	18.2	16.9
Northern	16.0	18.3	16.7
All	15.3	16.4	16.4

These results are consistent with the type of assistance recommended by region as shown in Table 37. Metropolitan consumers were more likely to require day programs (01 and 02) than those living outside Sydney.

Table 37 *Assistance level recommended by DADHC region*

Region	Day support	Transition	Commonwealth	All
Metro West	52.9%	36.5%	10.6%	100.0%
Metro North	47.9%	50.7%	1.4%	100.0%
Metro South West	42.1%	45.1%	12.8%	100.0%
Metro South East	41.7%	38.1%	20.1%	100.0%
Hunter	32.4%	59.0%	8.6%	100.0%
Western	28.8%	43.5%	27.7%	100.0%
Northern	27.3%	44.1%	28.6%	100.0%
Southern	25.8%	45.5%	28.8%	100.0%
All	36.9%	45.6%	17.5%	100.0%

Table 38 shows the profile of each region in relationship to work capacity. The columns show the numbers by current capacity to work. The rows show potential capacity to work. As before, the shaded cells are those whose capacity to work was not expected to change.

Table 38 Capacity to work by DADHC region (numbers)

DADHC region	Capacity to Work (disability specific and general) in open market with intervention	Capacity to Work (disability specific and general) in open market with no intervention					Total
		CFW1	CFW2	CFW3	CFW4	CFW5	
Hunter	CFW1	142					142
	CFW2	23	1				24
	CFW3	25	1	1			27
	CFW4	28			1		29
	CFW5	20			2		22
Hunter Total		238	2	1	3		244
Metro North	CFW1	49					49
	CFW2	4					4
	CFW3	7					7
	CFW4	8			1		9
	CFW5	2					2
Metro North Total		70			1		71
Metro South East	CFW1	87			1		88
	CFW2	8					8
	CFW3	12					12
	CFW4	20	5				25
	CFW5	3	3				6
Metro South East Total		130	8		1		139
Metro South West	CFW1	264					264
	CFW2	17					17
	CFW3	31	3	1			35
	CFW4	19	5		3		27
	CFW5	7	3	2	2	2	16
Metro South West Total		338	11	3	5	2	359
Metro West	CFW1	146	1				147
	CFW2	10					10
	CFW3	12					12
	CFW4	11		1	1		13
	CFW5	4	2	1			7
Metro West Total		183	3	2	1		189
Northern	CFW1	133					133
	CFW2	6			1		7
	CFW3	29	2				31
	CFW4	32	4	2	1		39
	CFW5	13	6	3	1	5	28
Northern Total		213	12	5	3	5	238
Southern	CFW1	67					67
	CFW2	11					11

DADHC region	Capacity to Work (disability specific and general) in open market with intervention	Capacity to Work (disability specific and general) in open market with no intervention					Total
		CFW1	CFW2	CFW3	CFW4	CFW5	
	CFW3	6	2				8
	CFW4	18	5				23
	CFW5	20			1	2	23
Southern Total		122	7		1	2	132
Western	CFW1	108					108
	CFW2	9	1				10
	CFW3	12					12
	CFW4	28	2	1	1		32
	CFW5	13	3	4		2	22
Western Total		170	6	5	1	2	184
Grand Total		1464	49	16	16	11	1556

This same information is shown as a percentage of each region in Table 39. There were significant differences between the regions. The most important of these are the percentages of consumers in each region who were not expected to move from CFW 1. These percentages are summarised in Table 40. The rates varied from 77.2% in Metropolitan West to 50.8% in the Southern Region.

Table 39 Capacity to work by DADHC region (percentages)

DADHC region	Capacity to Work (disability specific and general) in open market with intervention	Capacity to Work (disability specific and general) in open market with no intervention					Total
		CFW1	CFW2	CFW3	CFW4	CFW5	
Hunter	CFW1	58.2%	0.0%	0.0%	0.0%	0.0%	58.2%
	CFW2	9.4%	0.4%	0.0%	0.0%	0.0%	9.8%
	CFW3	10.2%	0.4%	0.4%	0.0%	0.0%	11.1%
	CFW4	11.5%	0.0%	0.0%	0.4%	0.0%	11.9%
	CFW5	8.2%	0.0%	0.0%	0.8%	0.0%	9.0%
Hunter Total		97.5%	0.8%	0.4%	1.2%	0.0%	100.0%
Metro North	CFW1	69.0%	0.0%	0.0%	0.0%	0.0%	69.0%
	CFW2	5.6%	0.0%	0.0%	0.0%	0.0%	5.6%
	CFW3	9.9%	0.0%	0.0%	0.0%	0.0%	9.9%
	CFW4	11.3%	0.0%	0.0%	1.4%	0.0%	12.7%
	CFW5	2.8%	0.0%	0.0%	0.0%	0.0%	2.8%
Metro North Total		98.6%	0.0%	0.0%	1.4%	0.0%	100.0%
Metro South East	CFW1	62.6%	0.0%	0.0%	0.7%	0.0%	63.3%
	CFW2	5.8%	0.0%	0.0%	0.0%	0.0%	5.8%
	CFW3	8.6%	0.0%	0.0%	0.0%	0.0%	8.6%
	CFW4	14.4%	3.6%	0.0%	0.0%	0.0%	18.0%
	CFW5	2.2%	2.2%	0.0%	0.0%	0.0%	4.3%
Metro South East Total		93.5%	5.8%	0.0%	0.7%	0.0%	100.0%

DADHC region	Capacity to Work (disability specific and general) in open market with intervention	Capacity to Work (disability specific and general) in open market with no intervention					Total
		CFW1	CFW2	CFW3	CFW4	CFW5	
Metro South West	CFW1	73.5%	0.0%	0.0%	0.0%	0.0%	73.5%
	CFW2	4.7%	0.0%	0.0%	0.0%	0.0%	4.7%
	CFW3	8.6%	0.8%	0.3%	0.0%	0.0%	9.7%
	CFW4	5.3%	1.4%	0.0%	0.8%	0.0%	7.5%
	CFW5	1.9%	0.8%	0.6%	0.6%	0.6%	4.5%
Metro South West Total		94.2%	3.1%	0.8%	1.4%	0.6%	100.0%
Metro West	CFW1	77.2%	0.5%	0.0%	0.0%	0.0%	77.8%
	CFW2	5.3%	0.0%	0.0%	0.0%	0.0%	5.3%
	CFW3	6.3%	0.0%	0.0%	0.0%	0.0%	6.3%
	CFW4	5.8%	0.0%	0.5%	0.5%	0.0%	6.9%
	CFW5	2.1%	1.1%	0.5%	0.0%	0.0%	3.7%
Metro West Total		96.8%	1.6%	1.1%	0.5%	0.0%	100.0%
Northern	CFW1	55.9%	0.0%	0.0%	0.0%	0.0%	55.9%
	CFW2	2.5%	0.0%	0.0%	0.4%	0.0%	2.9%
	CFW3	12.2%	0.8%	0.0%	0.0%	0.0%	13.0%
	CFW4	13.4%	1.7%	0.8%	0.4%	0.0%	16.4%
	CFW5	5.5%	2.5%	1.3%	0.4%	2.1%	11.8%
Northern Total		89.5%	5.0%	2.1%	1.3%	2.1%	100.0%
Southern	CFW1	50.8%	0.0%	0.0%	0.0%	0.0%	50.8%
	CFW2	8.3%	0.0%	0.0%	0.0%	0.0%	8.3%
	CFW3	4.5%	1.5%	0.0%	0.0%	0.0%	6.1%
	CFW4	13.6%	3.8%	0.0%	0.0%	0.0%	17.4%
	CFW5	15.2%	0.0%	0.0%	0.8%	1.5%	17.4%
Southern Total		92.4%	5.3%	0.0%	0.8%	1.5%	100.0%
Western	CFW1	58.7%	0.0%	0.0%	0.0%	0.0%	58.7%
	CFW2	4.9%	0.5%	0.0%	0.0%	0.0%	5.4%
	CFW3	6.5%	0.0%	0.0%	0.0%	0.0%	6.5%
	CFW4	15.2%	1.1%	0.5%	0.5%	0.0%	17.4%
	CFW5	7.1%	1.6%	2.2%	0.0%	1.1%	12.0%
Western Total		92.4%	3.3%	2.7%	0.5%	1.1%	100.0%
Grand Total		94.1%	3.1%	1.0%	1.0%	0.7%	100.0%

Table 40 *Percentage of each region expected to remain in CTW 1*

Region	% not expected to move from CTW 1
Metro West	77.2%
Metro South West	73.5%
Metro North	69.0%
Metro South East	62.6%
Western	58.7%
Hunter	58.2%
Northern	55.9%
Southern	50.8%

Relationship between need and cost – 1999 to 2001 cohorts

DADHC provided data on the funding level allocated to each consumer in the 1999 to 2001 cohorts so that the relationship between functional need and funding level could be assessed. The number of consumers, and the average ATLAS funding allocation for each year, is shown in Table 41.

Table 41 *Average ATLAS funding per person per year*

Year	Number	Average funding per person per year
1999	256	\$18,043
2000	211	\$17,444
2001	479	\$17,441
All with funding data	946	\$17,605

Table 42 shows the per capita average by region by year. Most regions averaged about the same. However, Metropolitan North funding allocations were consistently higher.

Table 42 *Average ATLAS funding per region per year*

Region	1999	2000	2001	All
Hunter	\$17,657	\$16,339	\$17,554	\$17,371
Metro North	\$18,326	\$21,744	\$17,955	\$18,609
Metro South East	\$18,029	\$17,179	\$17,431	\$17,546
Metro South West	\$18,275	\$17,390	\$17,440	\$17,708
Metro West	\$17,731	\$17,845	\$17,661	\$17,708
Northern	\$18,361	\$17,446	\$17,217	\$17,555
Southern	\$18,368	\$17,212	\$17,262	\$17,470
Western	\$17,567	\$17,892	\$17,197	\$17,418
Average	\$18,043	\$17,444	\$17,441	\$17,605

Table 43 *Average per capita funding by disability group*

Code	Disability Description	Average funds per consumer
D5	Acquired Brain Injury	\$20,452
D7	Deaf & Blind (dual sensory)	\$19,307
D3	Autism (including Asperger's Syndrome & Pervasive Developmental Delay)	\$18,487
D6	Neurological (including Epilepsy & Alzheimer's Disease)	\$17,914
D8	Vision (sensory)	\$17,865
D4	Physical	\$17,758
D1	Intellectual (including Down Syndrome)	\$17,628
D10	Speech	\$17,401
D9	Hearing (sensory)	\$16,949
D2	Specific Learning / Attention Deficit Disorder	\$16,589
Average		\$17,605

As expected, the data showed only a weak relationship between the level of funding allocated and the level of need, irrespective of how ‘need’ is defined or measured. Table 43 above shows average allocations for each disability group. On average, consumers with acquired brain injury received the highest funding allocations and those with learning and attention deficit disorders received the least. However, the figures above need to be interpreted with caution because, as already noted, only three disability groups contained sufficient numbers to allow meaningful analysis. For these three groups – intellectual, physical and autism – there was little difference in the average annual allocation.

Figure 18 shows average annual allocations by the score on the domestic functioning assessment. These data do suggest a relationship, albeit weak, between funding and need. Consumers with poor domestic functioning tended to receive higher funding allocations than those with better domestic functioning. However, the correlation between domestic function and funding allocation was only -0.31.

Figure 18 Average annual funding by domestic functioning score

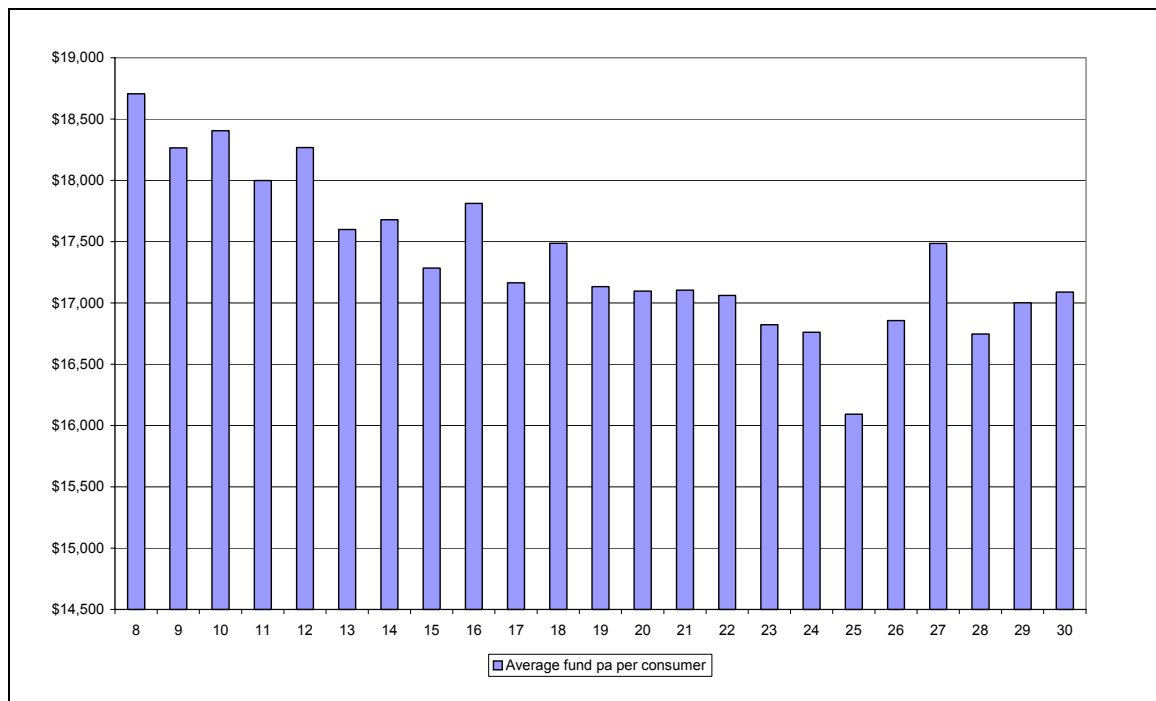


Figure 19 and Figure 20 present the same information for self-care and behavioural functioning respectively. Here the relationships between funding and function were still present, but they were weaker. Consumers with good self-care functioning tended to receive lower funding allocations than others. But there was no pattern for those with poor self-care functioning. The same finding applied to behavioural functioning. The correlation between self care function and funding allocation was only -0.27. For behaviour, the relationship was even weaker (-0.14).

In summary, the data suggest that there is only a weak (and non-significant) relationship between need and cost.

Figure 19 Average annual funding by self care score

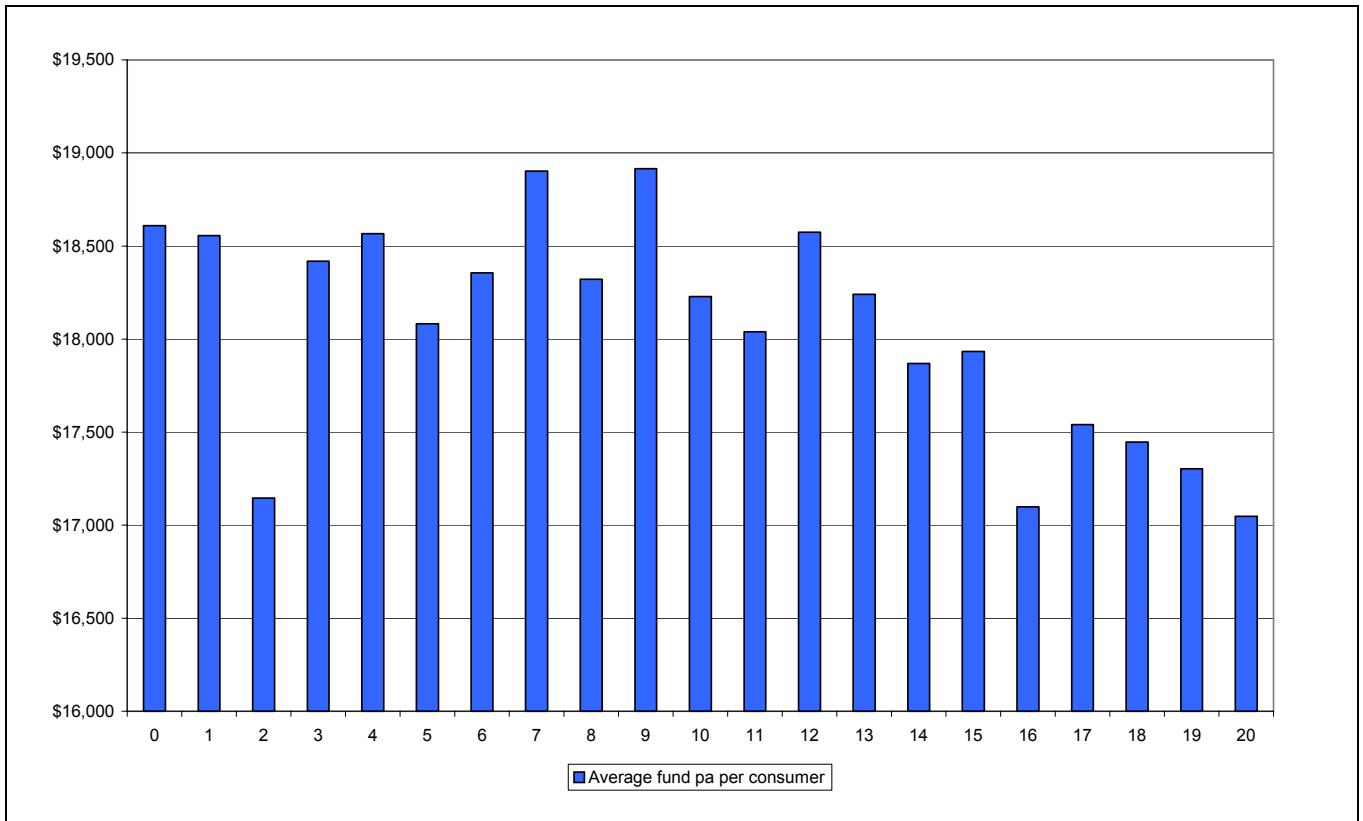
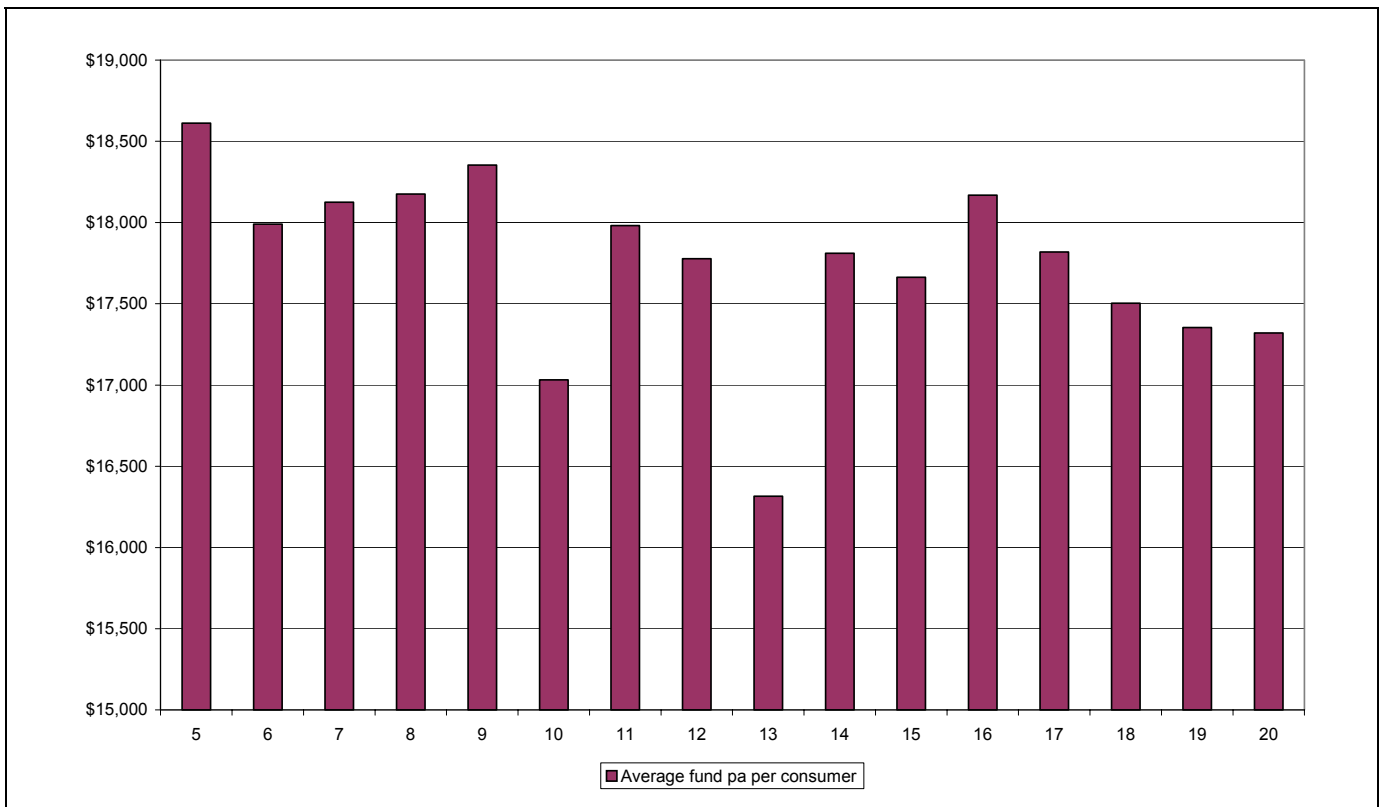


Figure 20 Average annual funding by behavioural functioning score



Summary and conclusions

Ideally, ATLAS funding should be distributed between regions and consumers in proportion to need. Indeed, this project was commissioned as a stepping stone which would allow DADHC to move towards such an approach over time. There are four essential prerequisites to the development and implementation of a needs based funding model for ATLAS services:

- Agreement on what constitutes 'need' for this population group;
- Adoption of an assessment model that routinely measures those 'needs';
- Understanding what drives costs in ATLAS service provision; and
- Measuring those costs in a consistent way across regions, services and consumers.

A needs based funding model flows logically out of these four steps.

This project has focussed on the first two of these steps and several conclusions can be drawn from it:

The ATLAS population

- The ATLAS population is a high need group. Only about a third have mastered self-care, only 1% have fully mastered domestic functioning and 70% have behavioural problems.
- Overall, the ATLAS population is a higher need group than the HACC population.
- 0.7% are capable of participating in full time employment without intervention.
- 94% have a current capacity to work less than 8 hours a week.
- Even after intervention, 67% of this group are still expected to be able to work less than 8 hours a week.
- 8.1% are expected to be able to participate in full time work after intervention.
- Among those recommended to State programs, those recommended to transitional programs had better functional capacity than those referred to other programs. However, even among the transitional group, 54% were expected to still be able to work less than 8 hours a week at the completion of their transition program. Given this expected outcome, it is unclear why this group were recommended to transition programs.
- In total, 82% are recommended to State funded programs and 18% to Commonwealth funded programs. Those referred to Commonwealth programs have significantly better functioning and more capacity for improvement than those referred to State programs.

The definition of 'need' and the usefulness of functional screening and assessment

The definition and measurement of 'need' for ATLAS services

- In this study, 'need' was defined and measured in a variety of ways. Potential measures of need included in the assessment included age, sex, disability, barriers to economic and social participation, current capacity to work, future capacity to work, self-care functioning, domestic functioning and behavioural functioning.
- Of these, the best predictors of the type of assistance required are (in order) domestic functioning, self-care functioning and future capacity to work. Both domestic and self care functioning are better predictors of the type and level of assistance required than any of the variables typically assumed to determine need for ATLAS services (disability type, capacity to work and so on).

- Surprisingly, behavioural problems are not strongly correlated with the type or level of required assistance although behaviour is more useful than current work capacity, disability type or the number of disabilities.
- The conclusion is that all 3 domains in the functional screen and the functional assessment originally designed for the HACCC population appear to be relevant for this target population. The fourth domain in the HACCC functional tool kit – cognitive functioning – was not included in the CRS assessment.
- All 3 domains are closely associated with current and future capacity for work.
- All 3 domains are associated with the type of assistance recommended and whether the person is recommended to a State or Commonwealth program.
- The domestic domain is the most relevant and, overall, domestic functioning is the single best predictor of need for ATLAS services.

The tools for measuring need

- The technical performance of both the screening tool and the 3 assessment tools appears to be satisfactory, with none suffering from floor or ceiling effects and all appearing to have adequate discriminatory ability.
- The screening tool works well and, with a correlation of 0.67, is a good predictor of the type and level of assistance required. In fact, the short 9 item screen is a better predictor than either type or number of disabilities or behavioural functioning.
- However, it does not perform as well as the more detailed functional assessments. In particular, the domestic assessment is better at predicting both type of assistance required and future work capacity.

Implications

- Given the high annual expenditure on each ALTAS consumer, both initial screening and then regular assessment (and re-assessment at periodic intervals) of ATLAS clients appears worthwhile.
- The results generated through the assessment process and reported in this analysis are important information for the planning of the future type and mix of ATLAS services and have significant policy implications.
- These results support the initiatives by DADHC to move to a common approach to assessment across target groups. One obvious implication relates to the future of disability-specific tools currently in use in the sector (such as the Vermont tool and the DADHC SNAP tools). The use of these existing measures needs to be reviewed.

The next step

This section began by suggesting that there are four essential prerequisites to the development and implementation of a needs based funding model for ATLAS services and that a needs based planning and funding model flows logically out of working through four steps:

- Agreement on what constitutes ‘need’ for this population group;
- Adoption of an assessment model that routinely measures those ‘needs’;
- Understanding what drives costs in ATLAS service provision; and
- Measuring those costs in a consistent way across regions, services and consumers.

This project has addressed the first two of these steps. It has identified various measures of 'need' for the ATLAS population and found that the best way to measure need is to measure domestic functioning. Consumers do not need ATLAS services because they have poor domestic function. Rather, domestic functioning is working as a proxy measure for a range of factors that, in combination, drive the need for ATLAS services.

The project has also tested assessment models that can be routinely used to measure needs. Both the functional screen and the functional assessments achieve good technical performance with the ATLAS population.

An important finding of the project is that current ATLAS costs are not being driven by consumer need. Further work will be required (outside the scope of the current project) on the third and fourth pre-requisites – the need to understand what drives costs in ATLAS service provision. This will require a costing study that measures costs in a consistent way across regions, services and consumers.

Our final report on the ATLAS project will outline how such a study might be undertaken.

Attachment 1 CRS data set

ATLAS ID	ASCO DS With Int 1
CRS ID	ASCO DS With Int 2
Gender	ASCO DS With Int 3
First Name	ASCO DS With Int 4
Last Name	ASCO DS With Int 5
DOB	CTW Cap DS&G No Int
Assessor	CTW Cap DS&G With Int
Location	ASCO DS&G With Int 1
Qualification	ASCO DS&G With Int 2
Assess Date	ASCO DS&G With Int 3
No Assess Rsn	ASCO DS&G With Int 4
End Date	ASCO DS&G With Int 5
Goal	Bowels
Strength 1	Bladder
Strength 2	Grooming
Strength 3	Toilet
Strength 4	Feeding
Strength 5	Transfer
Barrier 1	Mobility
Barrier 2	Dressing
Barrier 3	Stairs
Barrier 4	Bathing
Barrier 5	Self Care Total
Intervention 1	Telephone
Intervention 2	Shopping
Intervention 3	Food Prep
Intervention 4	Housekeeping
Intervention 5	Laundry
Intervention 6	Transport
Intervention 7	Medication
Intervention 8	Finances
Intervention 9	Domestic Total
Intervention 10	Intrusive
Intervention 11	Noisy
Intervention 12	Aggressive
Intervention 13	Emotional
Intervention 14	Dangerous
Intervention 15	Behaviour Score
Intervention 16	
Intervention 17	
Intervention 18	
Intervention 19	
Intervention 20	
Assistance	
CTW Cap DS No Int	
ASCO DS No Int 1	
ASCO DS no int 2	
ASCO DS No Int 3	
ASCO DS no int 4	
ASCO DS No Int 5	
CTW Cap DS With Int	

Attachment 2

The National HACCC Functional Screening and Assessment Tools

National HACC Functional Screening Instrument

Part One: Questions to ask the client (or the person who represents the client)¹:

Unique Client ID _____

Date screened _____

I would like to ask you about some of the activities of daily living, things that we all need to do as part of our daily lives. I would like to know if you can do these activities without any help at all, or if you need some help to do them, or if you can't do them at all. The questions refer to how you are managing at the moment.

Item	Question	Score	Record score
1	Can you do housework...		
	Without help (can clean floors etc)?	2	
	With some help (can do light housework but need help with heavy housework)?	1	
	Or are you completely unable to do housework?	0	
2	Can you get to places out of walking distance...		
	Without help (can drive your own car, or travel alone on buses or taxis)?	2	
	With some help (need someone to help you or go with you when travelling)?	1	
	Or are you completely unable to travel unless emergency arrangements are made for a specialised vehicle like an ambulance?	0	
3	Can you go out for shopping for groceries or clothes (assuming you have transportation)...		
	Without help (taking care of all shopping needs yourself)?	2	
	With some help (need someone to go with you on all shopping trips)?	1	
	Or are you completely unable to do any shopping?	0	
4	Can you take your own medicine...		
	Without help (in the right doses at the right time)?	2	
	With some help (able to take medication if someone prepares it for you and/or reminds you to take it)?	1	
	Or are you completely unable to take your own medicines?	0	
5	Can you handle your own money...		
	Without help (write cheques, pay bills etc)?	2	
	With some help (manage day-to-day buying but need help with managing your chequebook and paying your bills)?	1	
	Or are you completely unable to handle money?	0	
Do not ask the following 2 questions if the client scored 2 on all of the above 5 items (ie, can do all 5 activities without help). Instead, for clients who scored 2 on all of the above items, record a 9 on each of the following 2 items to indicate that you did not ask the question.			
6	Can you walk...		
	Without help (except for a cane or similar)?	2	
	With some help from a person or with the use of a walker, or crutches etc	1	
	Or are you completely unable to walk?	0	
7	Can you take a bath or shower...		
	Without help?	2	
	With some help (eg, need help getting into or out of the bath)?	1	
	Or are you completely unable to bathe yourself?	0	

NOTES:

- If unanswered, score X.
- Rate what the person is **currently capable** of doing rather than what they actually do. In assessing capability, take into account not only physical function but also cognition (such as problems caused by dementia or an intellectual disability) and behaviour (such as unpredictable challenging behaviour). Consumers able to complete a task with verbal prompting should not be rated as independent (and therefore should be rated as a 1). In rating an item that is irrelevant (for example, the person has no shops in the vicinity or does not use any medications), rate based on what the person would be capable of doing if the item was actually relevant to their situation.
- Item 6 (walking). Clients who are in a wheelchair should be rated as (1) if they are independent including corners etc or (0) if they are not wheelchair independent.

¹ Reproduced from the OARS/MFAQ. Copyright: the Center for the Study of Aging and Human Development, Duke University Medical Center, Durham, North Carolina. Used with permission. Questions 1, 6 and 7 have been modified.

Part Two: Questions for you to complete

Complete the following based on all information available to you – your judgement based on interviewing or observing the client, information contained in a referral letter, client notes or information provided by a proxy respondent, such as a friend, relative, carer or referring agency.

Note that the client should not be asked to answer these questions.

Item	Question	Record score
8	Does the person have any memory problems or get confused? No – score 2 Yes – score 0	
9	Does the person have behavioural problems for example, aggression, wandering or agitation? No – score 2 Yes – score 0	

Recommended functional assessments based on this functional screen

Domestic

Look solely at items 1 to 5. Count the number of these items that scored 2 (ie, count the number of activities that the person can do without help).

Refer for a domestic functional assessment if the person can do less than 3 activities without assistance – ie, the count is 2 or less (a count of 0, 1 or 2).

Self-care

Refer for a self-care functional assessment if the client SCORED LESS THAN 2 on either Item 6 (mobility) or Item 7 (bathing).

Cognition

Refer for a cognitive assessment if:

- the client scored LESS THAN 2 on either Item 4 (medicine) or Item 5 (financial management) AND you have determined that the client has no physical disabilities or problems with English literacy that may account for the client not being independent on these items OR
- the client scored 0 on Item 8.

Behaviour

Refer for a behavioural assessment if:

- the client scored LESS THAN 2 on either Item 4 (medicine) or Item 5 (financial management) AND you have determined that the client has no physical disabilities or problems with English literacy that may account for the client not being independent on these items OR
- the client scored 0 on Item 9.

National HACCF Functional Assessment Instrument

Part 1: Self Care Functional Assessment²

Unique Client ID _____

Date assessed _____

Item	Score	Item	Scoring instructions	Score
1: Bowels	0 1 2	Incontinent (or needs to be given enema) Occasional accident (once/week) Continent	Rate based on the last week. If needs enema from nurse, then incontinent. Occasional = once a week.	
2: Bladder	0 1 2	Incontinent, or catheterised and unable to manage Occasional accident (max. once per 24 hours) Continent (for over 7 days)	Rate based on the last week. Occasional = less than once a day. A person with a catheter who can completely manage the catheter alone is scored 'continent'.	
3: Grooming	0 1	Needs help with personal care Independent face/hair/teeth/shaving	Rate based on the last week. Refers to personal hygiene: doing teeth, fitting false teeth, doing hair, shaving, washing face. Implements can be provided by helper.	
4: Toilet use	0 1 2	Dependent Needs some help, but can do something alone. Independent (on and off, dressing, wiping). Should be able to reach toilet/commode, undress sufficiently, clean self, dress and leave.	With help = can wipe self and do some of the other listed activities.	
5: Feeding	0 1 2	Unable Needs help cutting, spreading butter etc. Independent (food provided in reach). Able to eat any normal food (not only soft food). Food cooked and served by others. But not cut up.	Help = food cut up, consumer feeds self.	
6: Transfer (from bed to chair and back)	0 1 2 3	Unable - no sitting balance Major help (one or two people, physical), can sit. Minor help (verbal or physical) Independent	Dependent = no sitting balance (unable to sit); two people to lift. Major help = one strong/skilled, or two normal people. Can sit up. Minor help = one person easily, OR needs any supervision for safety.	
7: Mobility	0 1 2 3	Immobile Wheelchair independent including corners etc. Walks with help of one person (verbal or physical) Independent (but may use any aid, eg. stick)	Refers to mobility about the house or ward, indoors. May use aid. If in wheelchair, must negotiate corners/doors unaided. Help = by one, untrained person, including supervision/moral support.	
8: Dressing	0 1 2	Dependent Needs help, but can do about half unaided Independent (including buttons, zips, laces, etc.)	Should be able to select and put on all clothes, which may be adapted. Half = help with buttons, zips, etc. (check!), but can put on some garments alone.	
9: Stairs	0 1 2	Unable Needs help (verbal, physical, carrying aid) Independent up and down	May carry any walking aid to be independent.	
10: Bathing (or showering)	0 1	Dependent Independent (or in shower)	Usually the most difficult activity. Must get in and out unsupervised, and wash self. Independent in shower = independent if unsupervised/unaided	
Total score (out of 20)				

2 The 20 point Modified Barthel Index (Collins scoring)

Part 2: Domestic Functioning Assessment in Activities of Daily Living³

Unique Client ID _____

Date assessed _____

Item number	Item	Score	Task	Score
1	Telephone	1	Cannot use telephone at all	
		2	Can answer telephone but cannot dial	
		3	Can dial a few well-known numbers. Includes dialling only numbers that can be speed dialled.	
		4	Can operate telephone on own initiative - looks up and dials numbers etc. Includes use of TTY machine if no other assistance required.	
2	Shopping (do not include transport here –rate at item 6)	1	Completely unable to shop	
		2	Needs to be accompanied on any shopping trip	
		3	Can shop independently for small purchases	
		4	Can take care of all shopping needs independently	
3	Food preparation	1	Needs to have meals prepared and served	
		2	Can heat and serve prepared meals, or can prepare meals but not does maintain adequate diet (see note below)	
		3	Can prepare adequate meals if supplied with ingredients	
		4	Can plan, prepare, serve adequate meals independently	
4	Housekeeping	1	Cannot participate in any housekeeping tasks	
		2	Can perform some light daily tasks but not at a level necessary to maintain an acceptable standards of cleanliness (see note below)	
		3	Can perform light daily tasks eg dishwashing, dusting	
		4	Can maintain house independently	
5	Laundry (excludes ironing)	1	All laundry must be done by others	
		2	Can launder small items - rinses socks, stockings etc	
		3	Can do personal laundry but needs help with heavier items such as bedding and towels	
		4	Can do personal laundry completely	
6	Mode of transportation	1	Requires manual assistance from more than 1 person or does not travel at all	
		2	Travel limited to taxi or automobile with assistance of one other person	
		3	Can travel on public transportation when assisted or accompanied by another	
		4	Can travel independently on public transportation or can drive own car. Includes arranging own travel via taxi but not otherwise using public transport.	
7	Responsibility for own medications	1	Is not capable of dispensing own medication	
		2	Can take responsibility if medication is prepared in advance in separate dosages	
		3	Can take responsibility for taking medications in correct dosage at correct time	
8	Ability to handle finances	1	Incapable of handling money	
		2	Can manage day-to-day purchases, but needs help with banking, major purchases etc	
		3	Can manage financial matters independently (budgets, writes cheques, pays rent, bills, goes to bank), collects and keeps track of income	
Total score (out of 30)				

General rating instructions

1. Rate what the person is currently capable of doing rather than what they actually do. In assessing capability, take into account not only physical function but also cognition (such as problems caused by dementia or an intellectual disability) and behaviour (such as unpredictable challenging behaviour). Consumers able to complete a task with verbal prompting should not be rated as independent (and therefore should be rated as a 2 or a 3).
2. In rating an item that is irrelevant (for example, the person does not have a phone or has no shops in the vicinity or does not use any medications), rate based on what the person would be capable of doing if the item was actually relevant to their situation.
3. When assessing issues such as whether diet is adequate or there are acceptable standards of cleanliness, take into account the person's social and cultural context. Rate based on what is adequate or acceptable in that context and not in your own.

³ Scale based on original Lawtons IADL scale, but modified by the CHSD specifically for use in the HACC program.

Part 3: Behavioural functioning assessment⁴

Number	Item	Score	Implications for carers and/or community service providers	Score
1	PROBLEM WANDERING OR INTRUSIVE BEHAVIOUR			
	Extensively	1	Requires monitoring for recurrence and supervision	
	Intermittently	2	Requires monitoring for recurrence and then supervision on less than a daily basis	
	Occasionally	3	Requires monitoring but not regular supervision	
	Not applicable	4	Does not require monitoring (consumer has not engaged in the behaviour in the past)	
2	VERBALLY DISRUPTIVE OR NOISY			
	Extensively	1	Requires monitoring for recurrence and supervision	
	Intermittently	2	Requires monitoring for recurrence and then supervision on less than a daily basis	
	Occasionally	3	Requires monitoring but not regular supervision	
	Not applicable	4	Does not require monitoring (consumer has not engaged in the behaviour in the past)	
3	PHYSICALLY AGGRESSIVE			
	Extensively	1	Requires monitoring for recurrence and supervision	
	Intermittently	2	Requires monitoring for recurrence and then supervision on less than a daily basis	
	Occasionally	3	Requires monitoring but not regular supervision	
	Not applicable	4	Does not require monitoring (consumer has not engaged in the behaviour in the past).	
4	EMOTIONAL DEPENDENCE			
	Extensively	1	Requires monitoring for recurrence and supervision	
	Intermittently	2	Requires monitoring for recurrence and then supervision on less than a daily basis	
	Occasionally	3	Requires monitoring but not regular supervision	
	Not applicable	4	Does not require monitoring (consumer has not engaged in the behaviour in the past)	
5	DANGER TO SELF OR OTHERS			
	Extensively	1	Requires monitoring for recurrence and supervision	
	Intermittently	2	Requires monitoring for recurrence and then supervision on less than a daily basis	
	Occasionally	3	Requires monitoring but not regular supervision	
	Not applicable	4	Does not require monitoring (consumer has not engaged in the behaviour in the past)	
Total score (out of 20)				

General rating instructions

1. Take into account all sources of information (discussion with the consumer and carers, staff etc as well as what you observe).
2. If you have insufficient information to make a rating, rate 4 'not applicable'.
3. **Not applicable** means that you learn of no circumstances in which the consumer has engaged in the behaviour in the past.
4. **Monitoring** means that you learn of circumstances in which the consumer has engaged in the behaviour in the past. Current and future service providers will need to observe the consumer, be aware when similar circumstances occur and take appropriate intervention to prevent the recurrence of the behaviour.
5. **Supervision** means that current or future service providers will need to ensure that specific situations or triggers which are likely to give rise to the behaviour do not occur, or are managed in ways to minimise the likelihood of occurrence.
6. **Daily** means during a twenty four hour period.
7. **Question 1** includes night wandering and also to the consumer wandering from home or, while wandering, interfering with other people or their belongings.
8. **Question 2** includes abusive language and verbalised threats directed at family, carers, neighbours or a member of staff. It also includes a consumer whose behaviour causes sufficient noise to disturb other people. That noise may be either (or a combination of) vocal, or non-vocal noises such as rattling furniture or other objects.
9. **Question 3** includes any physical conduct that is threatening and has the potential to harm a family member, a carer, a visitor or a member of staff. It includes, but is not limited to, hitting, pushing, kicking or biting.
10. **Question 4** is limited to the following behaviours: (a) active and passive resistance other than physical aggression (b) attention seeking (c) manipulative behaviour and/or (4) withdrawal.
11. **Question 5** refers only to high-risk behaviour. It includes behaviour requiring supervision or intervention and strategies to minimise the danger. Examples of such behaviour include unsafe smoking habits, walking without required aids, leaning out of windows, self-mutilation and suicidal tendencies. This question is about behaviour and does not apply where a consumer has a medical condition that might lead to injury, for example, through fitting or loss of consciousness. It does not apply to a range of behaviours which might in the longer term be considered as damaging or health reducing such as smoking generally or non-compliance with a specialised diet. It applies where there is an imminent risk of harm.

⁴ Items from the Australian RCS with instructions modified for use in a community setting