

South Island interRAI Summary Report: Home Care

Reporting Period: 2015/16 – Fiscal Quarter 1

Canterbury DHB

Nelson Marlborough DHB

South Canterbury DHB

Southern DHB

West Coast DHB

Report Purpose:

The purpose of this report is to provide basic summary data obtained from the completion of interRAI assessments across the five South Island DHBs. It includes the following information:

- **Total assessment volumes**
- **Reasons for completion of assessments**
- **Age of individuals receiving assessments**
- **Ethnicity of individuals receiving assessments**
- **Outcome Scores:**
 - o MAPLe – Method of Assigning Priority Level
 - o CHESS – Changes in Health, Ends Stage Disease, Signs and Symptoms
 - o CPS – Cognitive Performance Scale
 - o ADL Hierarchy Scale – Activities of Daily Living
- **Specific interRAI Questions:**
 - o Bladder Continence
 - o Bowel Continence

Reporting Period: Quarter 1 (1 July to 30 September) 2015/2016

Additional Notes:

- *All data should be interpreted in consideration of the model of care used in each DHB.*
- *This report uses data available from all interRAI Home Care (HC) and Contact (CA) assessments completed across the five South Island DHBs. There has been no attempt to separate out the various types of assessment available or location the assessments have been completed i.e. in the Community or Inpatient setting.*
- *The Community Health Assessment (CHA) is being updated and coming available as an assessment option post the November Momentum Upgrade. This has just been used in Canterbury DHB for research purposes (volume of n=112 assessments in CDHB office) so far. The CHA data may be included in future analyses if it is adopted for day to day use.*
- *The report does not include assessment data for clients who have since entered permanent residential care as these records are not currently available for analysis.*
- *The report was prepared for the South Island Health of Older People Service Level Alliance - HOPSLA.*
- *Speak to your local interRAI Lead Practitioner or Systems Clinician if you have any feedback about this report*

Assessment Volumes

The following volumes are based on all interRAI Home Care 9.1, Community Health Assessment 9.1 and Contact 9.2 assessments completed across the five DHBs. The MoH requires a comprehensive assessment to be completed for all persons over 65 (or close in age and interest) receiving publically funded supports in both the community and residential setting. The interRAI suite of assessments are used for comprehensive assessment.

Table 1 - 65+ Population Based on 2013 Census Data

DHB	Assessment Type	2015/16		Approx. DHB 65+ Population	% of 65+ Population with an assessment (full year)
		Q1	Past 12 months from 30 Sept 2015		
CDHB	CA 9.2	703	2557	72192	3.54%
	HC 9.1	552	2012		2.79%
NMDHB	CA 9.2	82	345	25476	1.35%
	HC 9.1	390	1448		5.68%
SCDHB	CA 9.2	179	501	11343	4.42%
	HC 9.1	141	637		5.62%
SDHB	CA 9.2	463	1717	46623	3.68%
	HC 9.1	525	1795		3.85%
WCDHB	CA 9.2	31	112	5181	2.16%
	HC 9.1	82	268		5.17%
All	Contact Assessment	1458	5232	160815	3.25%
All	Home Care 9.1	1690	6160		3.83%

Figure: 1

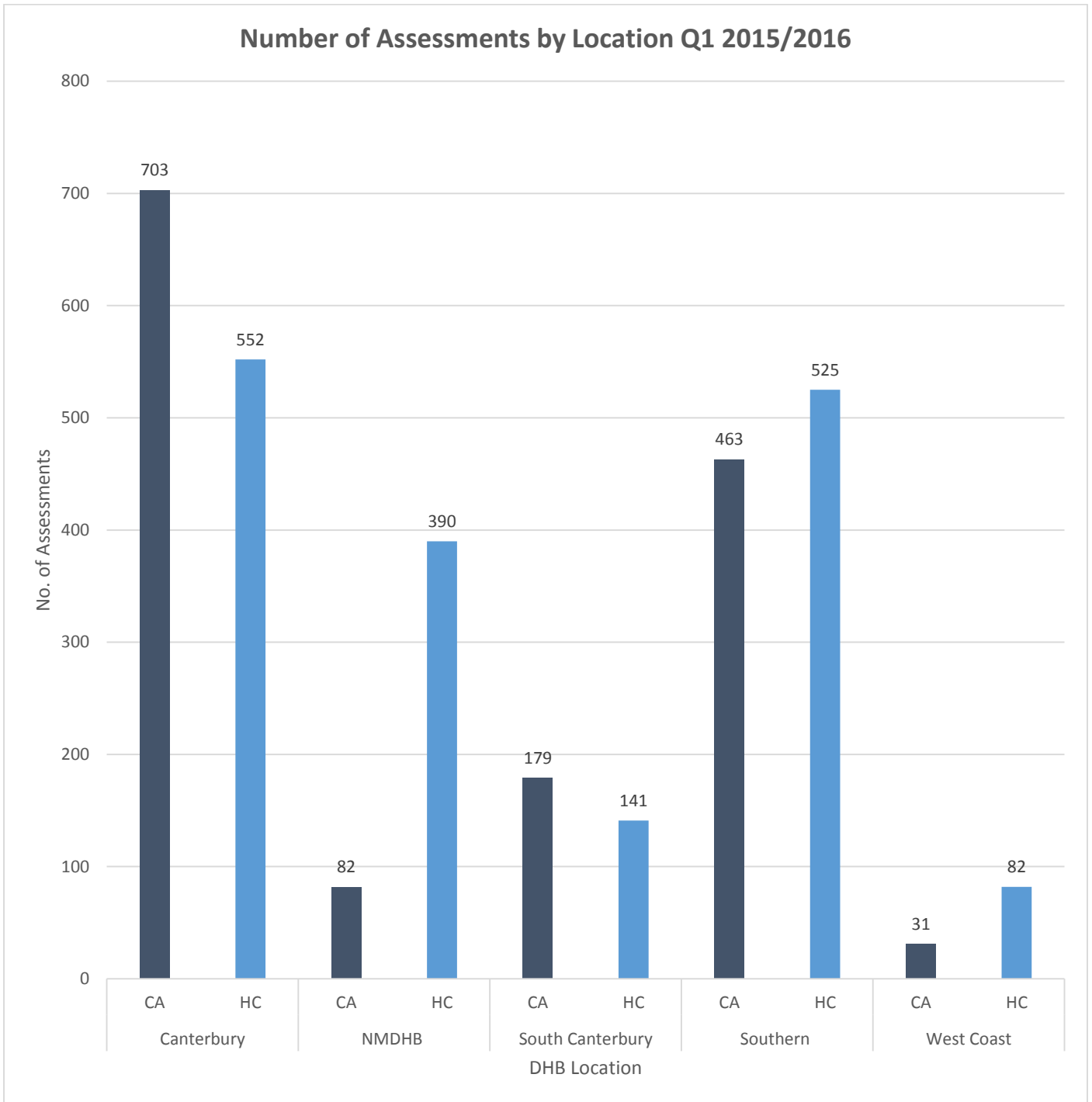
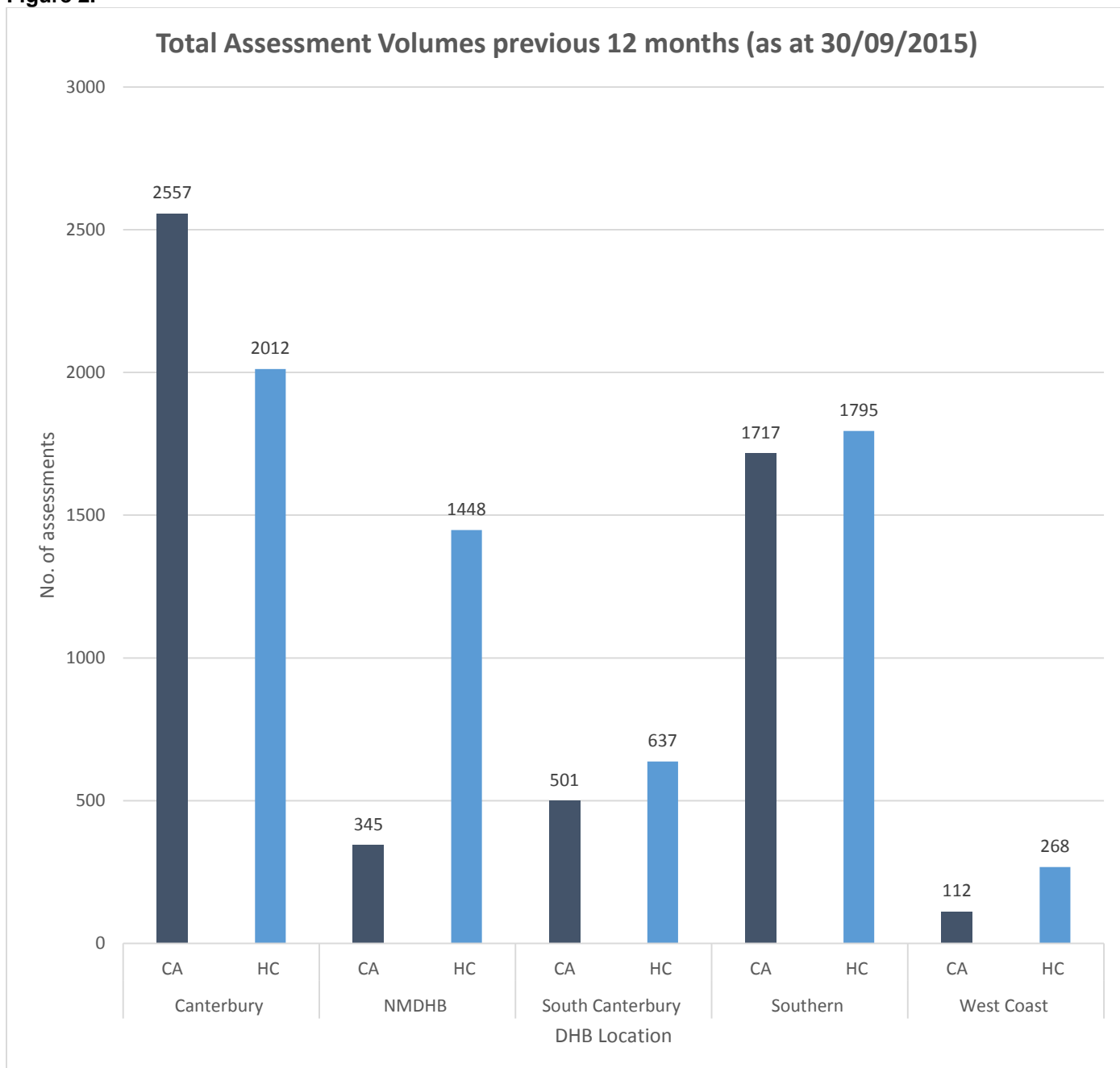


Figure 2.

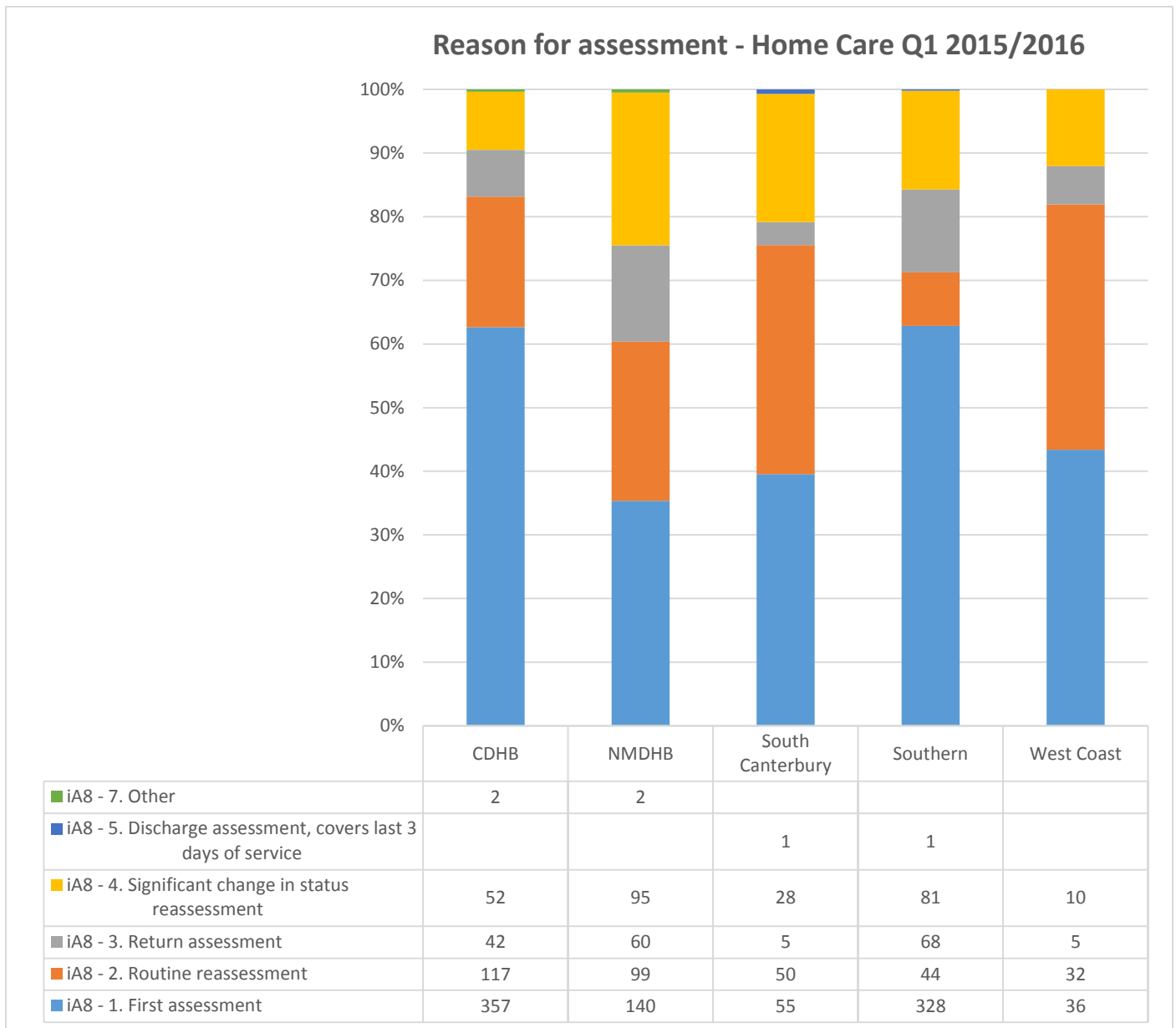


The reasons for differences in volume between regions are untested, but different models of care implemented may account for some of the variance. CDHB and SDHB use case mix models which involve a greater use of contact assessment. West Coast has recently moved to a case mix model. NMDHB and SCDHB have a non-case mix model.

Reason for Assessment

The interRAI Home Care assessment will be conducted for a variety of reasons including:

Figure: 3

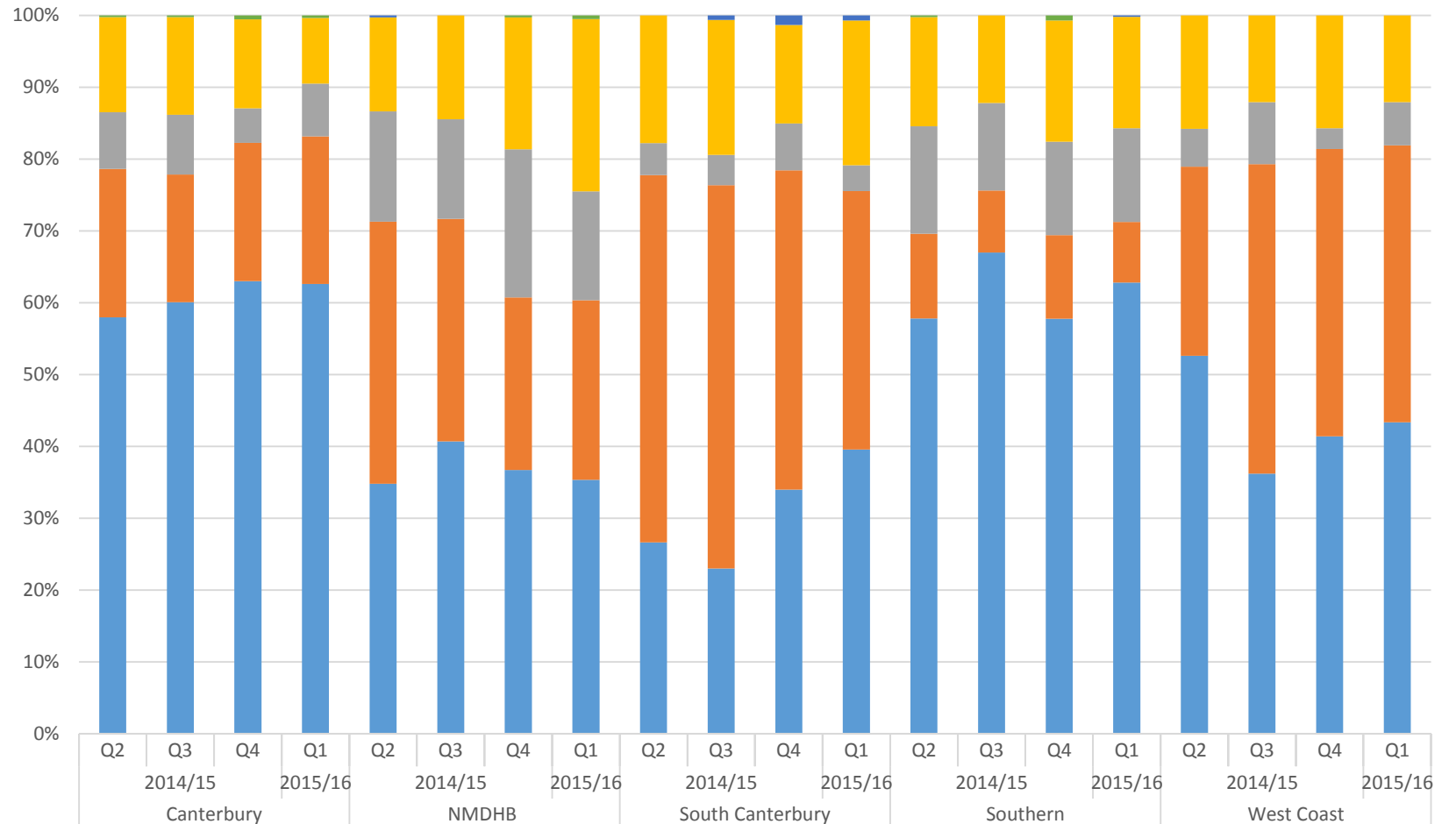


Assessment Type	Description
First Assessment	Completed at the time of entry into or determination of eligibility for a home care system
Routine Reassessment	An assessment conducted at regularly scheduled intervals
Return Assessment	An assessment conducted following a return to a home care program i.e. following an admission to hospital
Significant Change in status Reassessment	A reassessment conducted at any time during an uninterrupted course of care because the person's status or condition has changed significantly
Discharge Assessment	Completed on discharge from a Home Care Program
Discharge Tracking Only	Used when discharged from Home Care Program without a full interRAI assessment being completed
Other	i.e. Research

Note: Variances between DHB's may be due to differences in their model of care.

Figure: 4

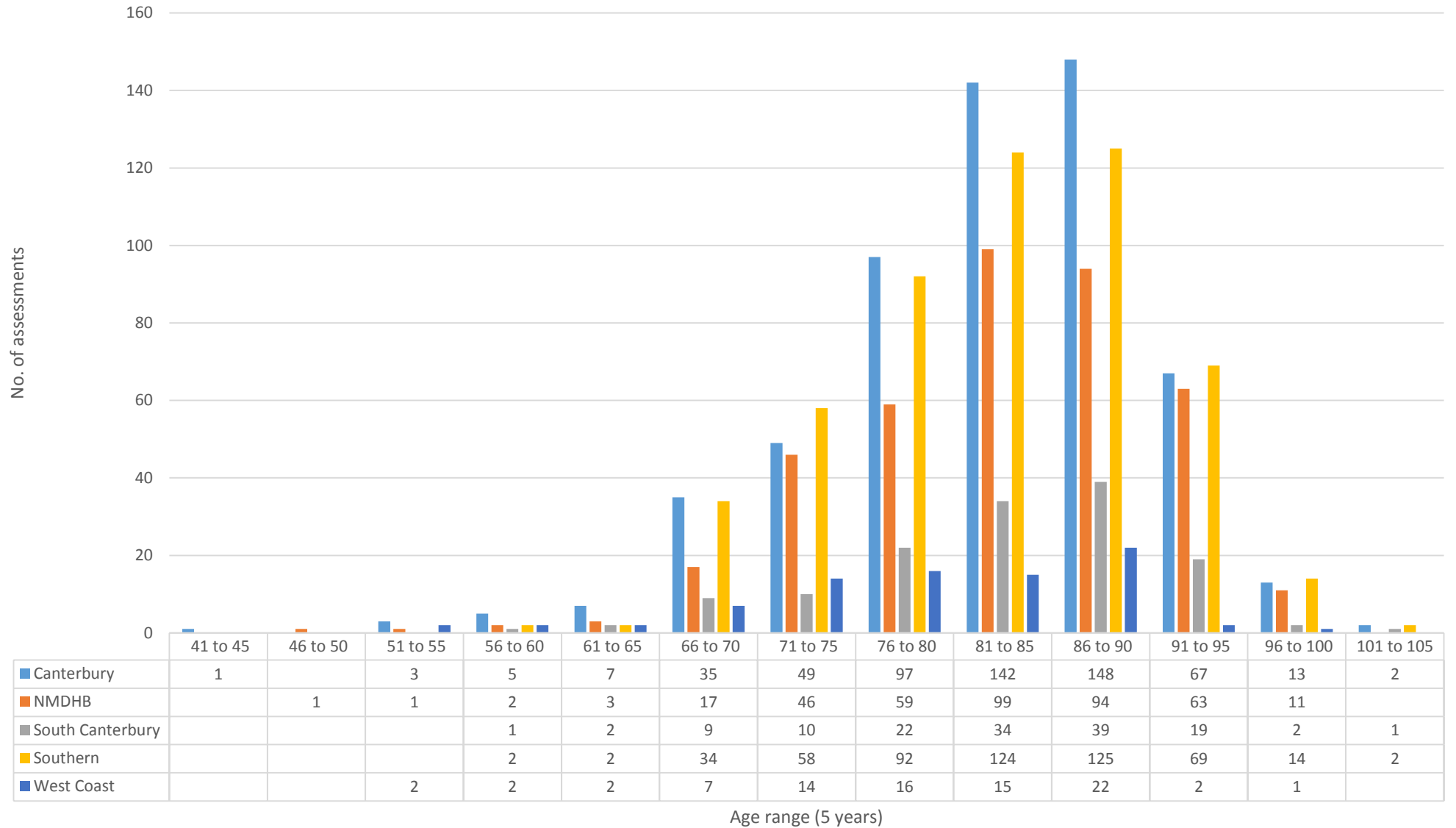
Reason for assessment - Home Care (previous 12 months as at 30/09/15)



	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	Canterbury				NMDHB				South Canterbury				Southern				West Coast			
Other	1	1	3	2			1	2					1		3					
Discharge assessment					1					1	2	1				1				
Significant change in status reassessment	59	62	67	52	47	49	65	95	32	31	21	28	67	48	74	81	9	7	11	10
Return assessment	35	38	26	42	55	47	73	60	8	7	10	5	66	48	57	68	3	5	2	5
Routine reassessment	92	81	104	117	131	105	85	99	92	88	68	50	52	34	51	44	15	25	28	32
First assessment	258	274	341	357	125	138	130	140	48	38	52	55	255	264	253	328	30	21	29	36

Figure: 5

Home Care assessments by Age Q1 2015/2016



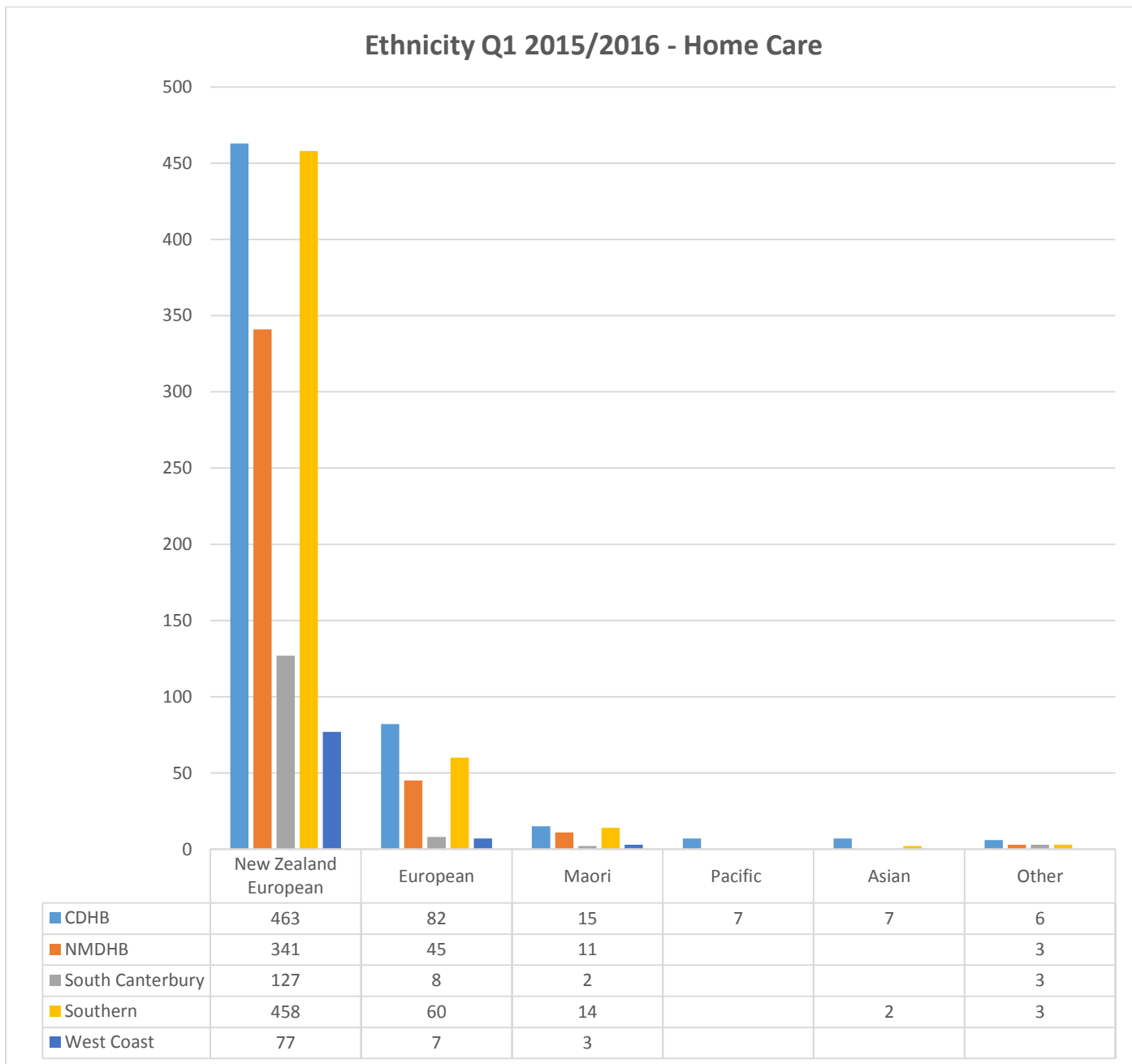
Ethnicity

The following tables indicate the ethnicity of those assessed using the interRAI Home Care 9.1 and Contact Assessment 9.2. Population Demographics based on 2013 Census are available in Appendix 1. The data is separated into total assessment volumes and then percentage of total assessment completed in the individual DHBs.

Note: Individuals may be represented more than once in following Figures as individuals can select more than one ethnicity if required.

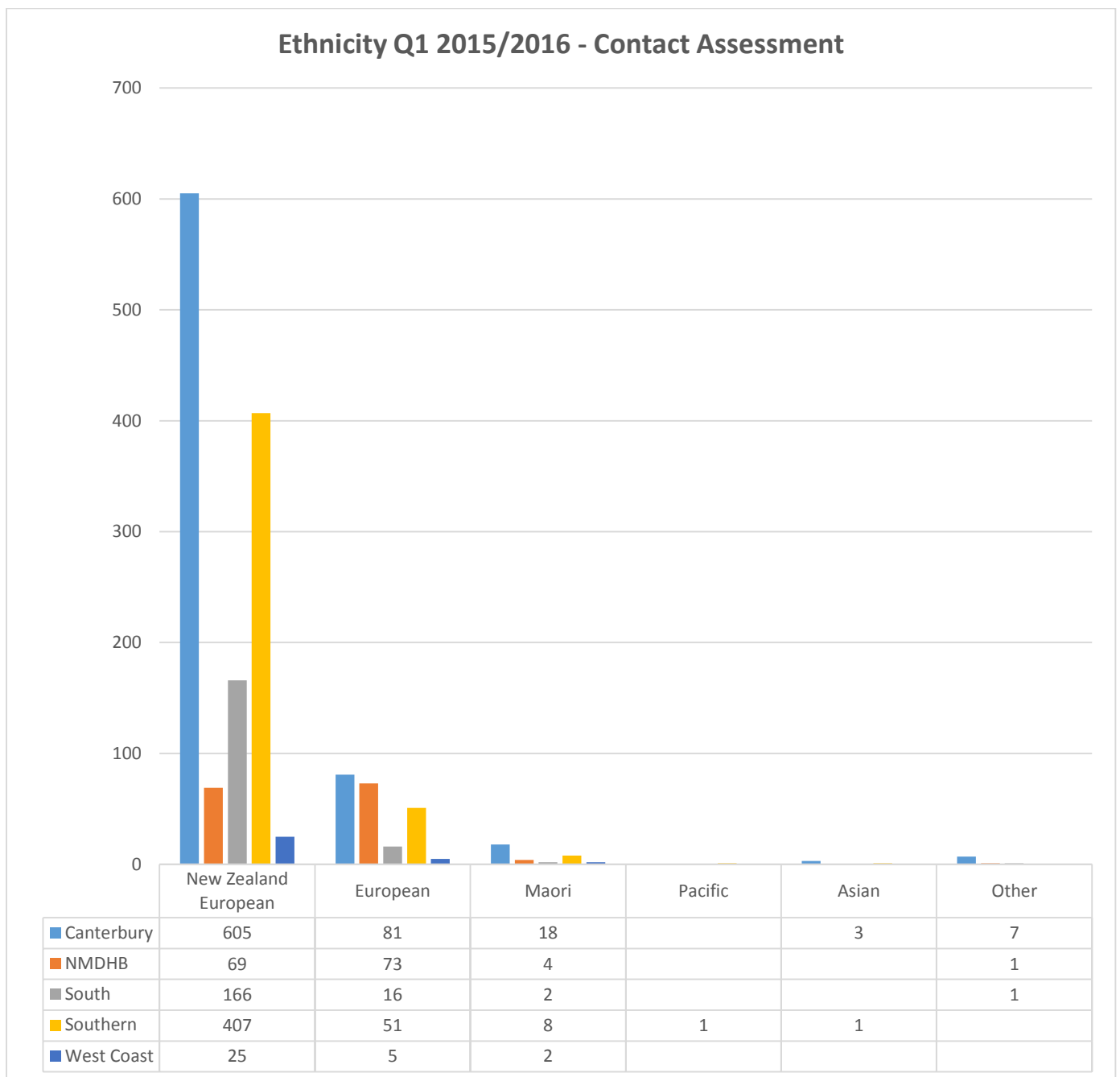
Home Care Assessment Ethnicity

Figure: 6



Contact Assessment Ethnicity

Figure: 7



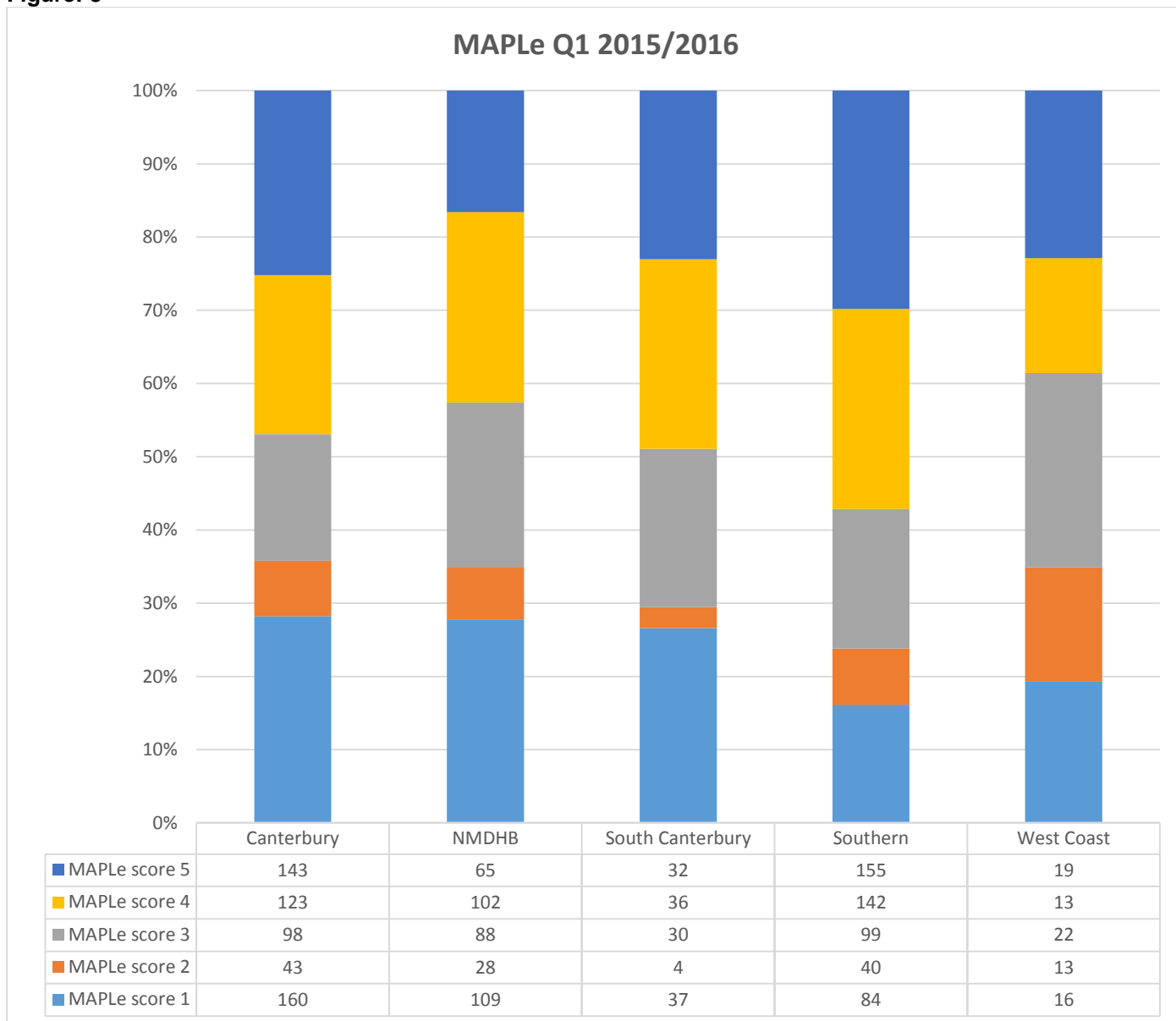
Outcome Scores

MAPLe - Method of Assigning Priority Level

The MAPLe score is a priority indicator. Higher scores are based on the presence of ADL impairment, cognitive impairment, wandering, and behaviour problems. The MAPLe is also a predictor of carer stress. The higher the score the higher the priority for services to be commenced or increased in the community, to prevent hospitalisation or admission into residential care.

International Research provided by interRAI has shown an individual with the highest score are nine times more likely to enter a long term care facility than an individual with the lowest score.

Figure: 8

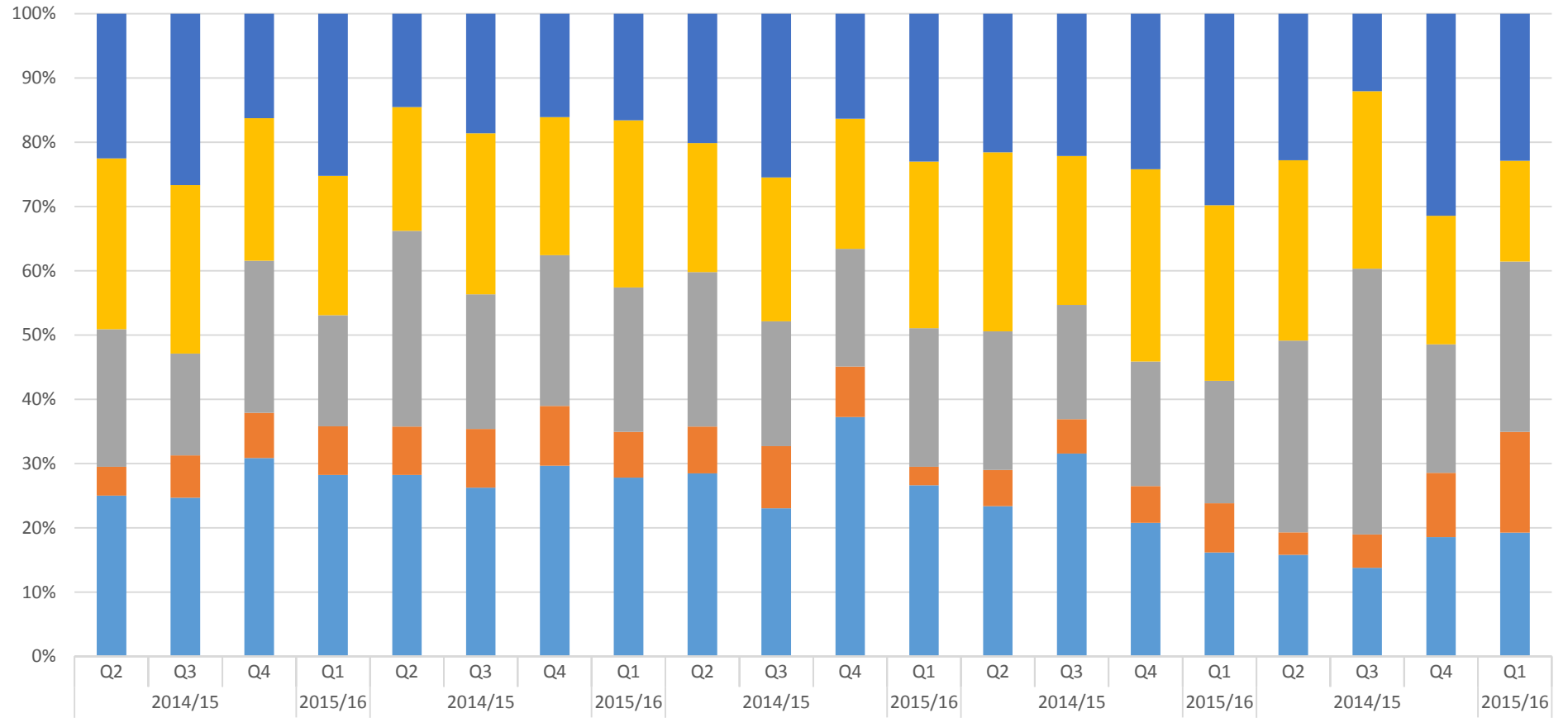


Score Description

- 0 No services required.
- 1 Low priority, light home care services.
- 2 Mild priority, personal care and home care.
- 3 Moderate priority, range of home care services.
- 4 High priority, risk of adverse outcomes, may need residential support.
- 5 Very high, may need residential support, in community with support, may require 24 hour supervision.

Figure: 9

MAPLe Scores previous 12 months (as at 30/09/2015)

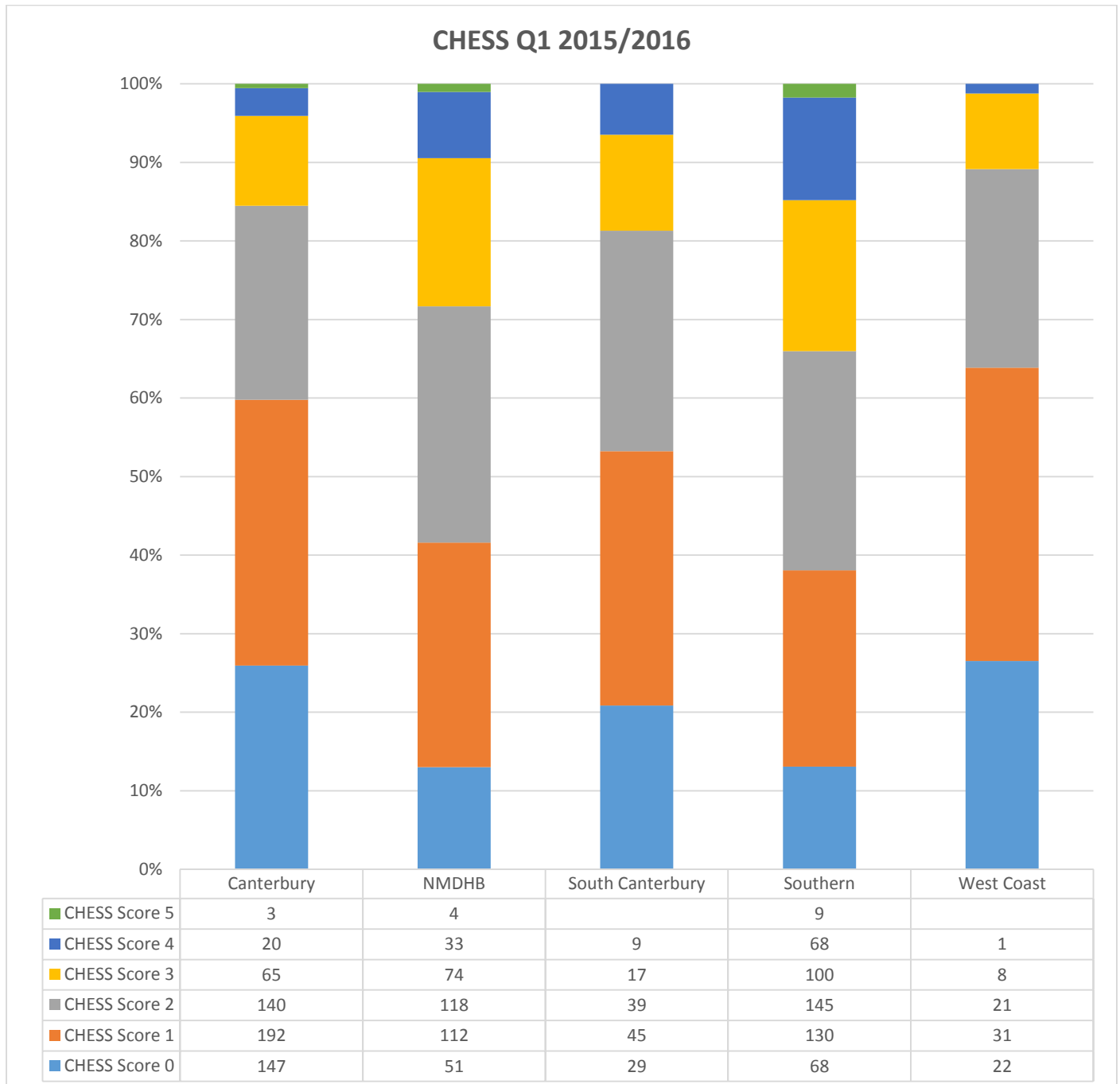


	Canterbury				NMDHB				South Canterbury				Southern				West Coast			
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
MAPLe score 5	100	121	88	143	52	63	57	65	36	42	25	32	95	87	106	155	13	7	22	19
MAPLe score 4	118	119	120	123	69	85	76	102	36	37	31	36	123	91	131	142	16	16	14	13
MAPLe score 3	95	72	128	98	109	71	83	88	43	32	28	30	95	70	85	99	17	24	14	22
MAPLe score 2	20	30	38	43	27	31	33	28	13	16	12	4	25	21	25	40	2	3	7	13
MAPLe score 1	111	112	167	160	101	89	105	109	51	38	57	37	103	124	91	84	9	8	13	16

CHES - Changes in Health, End-Stage Disease, Signs, and Symptoms

This scale detects frailty and health instability and was designed to identify clients at risk of serious decline. International research completed by interRAI indicates higher scores are associated with adverse outcomes such as increased mortality; hospitalisation; pain; caregiver stress and poor self-rated health

Figure: 10



Score Description

0 No health instability

1 Minimal health instability

2 Low health instability

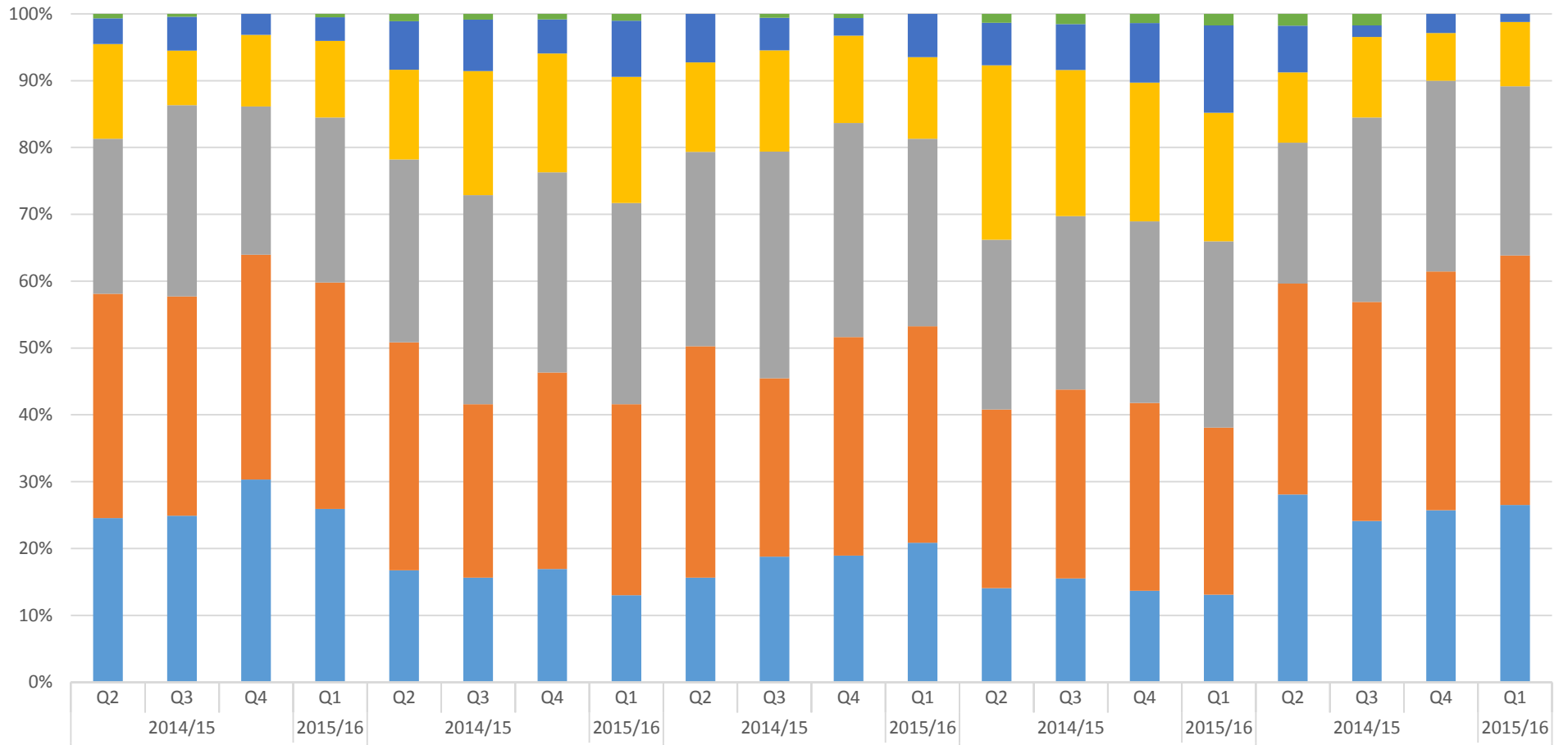
3 Moderate health instability

4 High health instability

5 Very high health instability

Figure: 11

CHES Scores previous 12 months (as at 30/09/2015)

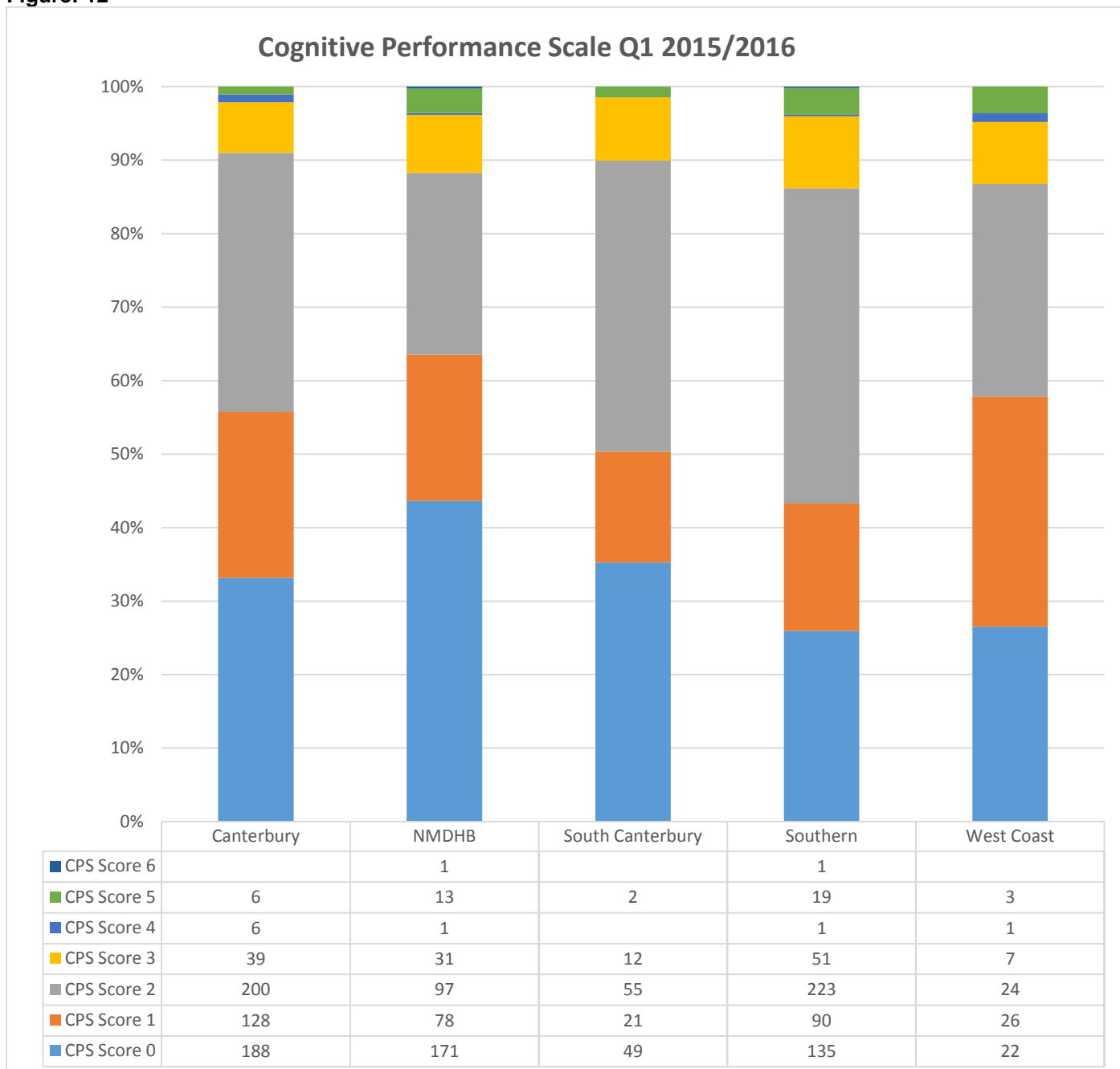


	Canterbury			NMDHB				South Canterbury				Southern				West Coast				
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
CHES Score 5	3	2		3	4	3	3	4		1	1		6	6	6	9	1	1		
CHES Score 4	17	23	17	20	26	26	18	33	13	8	4	9	28	27	39	68	4	1	2	1
CHES Score 3	63	37	58	65	48	63	63	74	24	25	20	17	115	86	91	100	6	7	5	8
CHES Score 2	103	130	120	140	98	106	106	118	52	56	49	39	112	102	119	145	12	16	20	21
CHES Score 1	149	149	182	192	122	88	104	112	62	44	50	45	118	111	123	130	18	19	25	31
CHES Score 0	109	113	164	147	60	53	60	51	28	31	29	29	62	61	60	68	16	14	18	22

CPS - Cognitive Performance Scale

Combines information on memory impairment, level of consciousness and executive functioning. Higher scores indicate more severe impairment.

Figure: 12

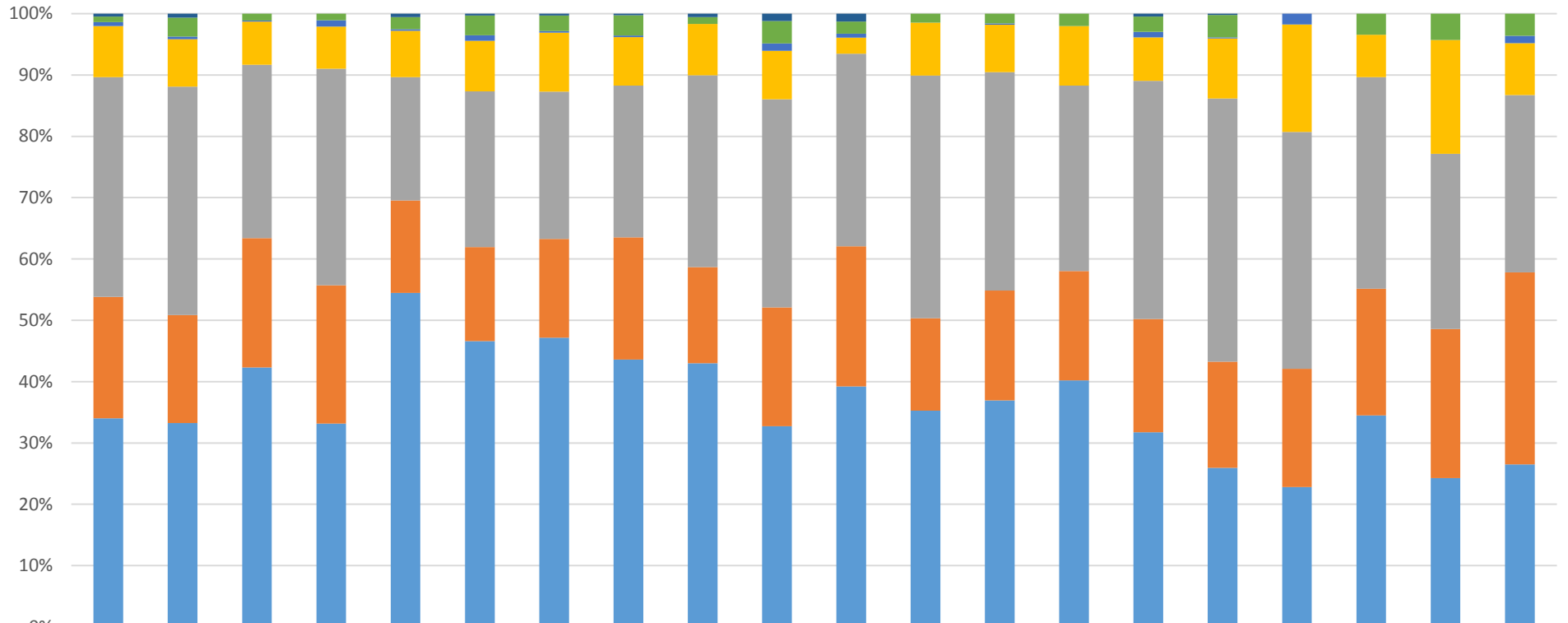


Score	Description	Approx. MMSE equivalent*
0	Intact	30-25
1	Borderline intact	22
2	Mild impairment	20
3	Moderate impairment	15
4	Moderate / severe impairment	7
5	Severe impairment	5
6	Very severe impairment	0.5

* MMSE Equivalent score based on interRAI International Research

Figure: 13

CPS Scores previous 12 months (as at 30/09/2015)

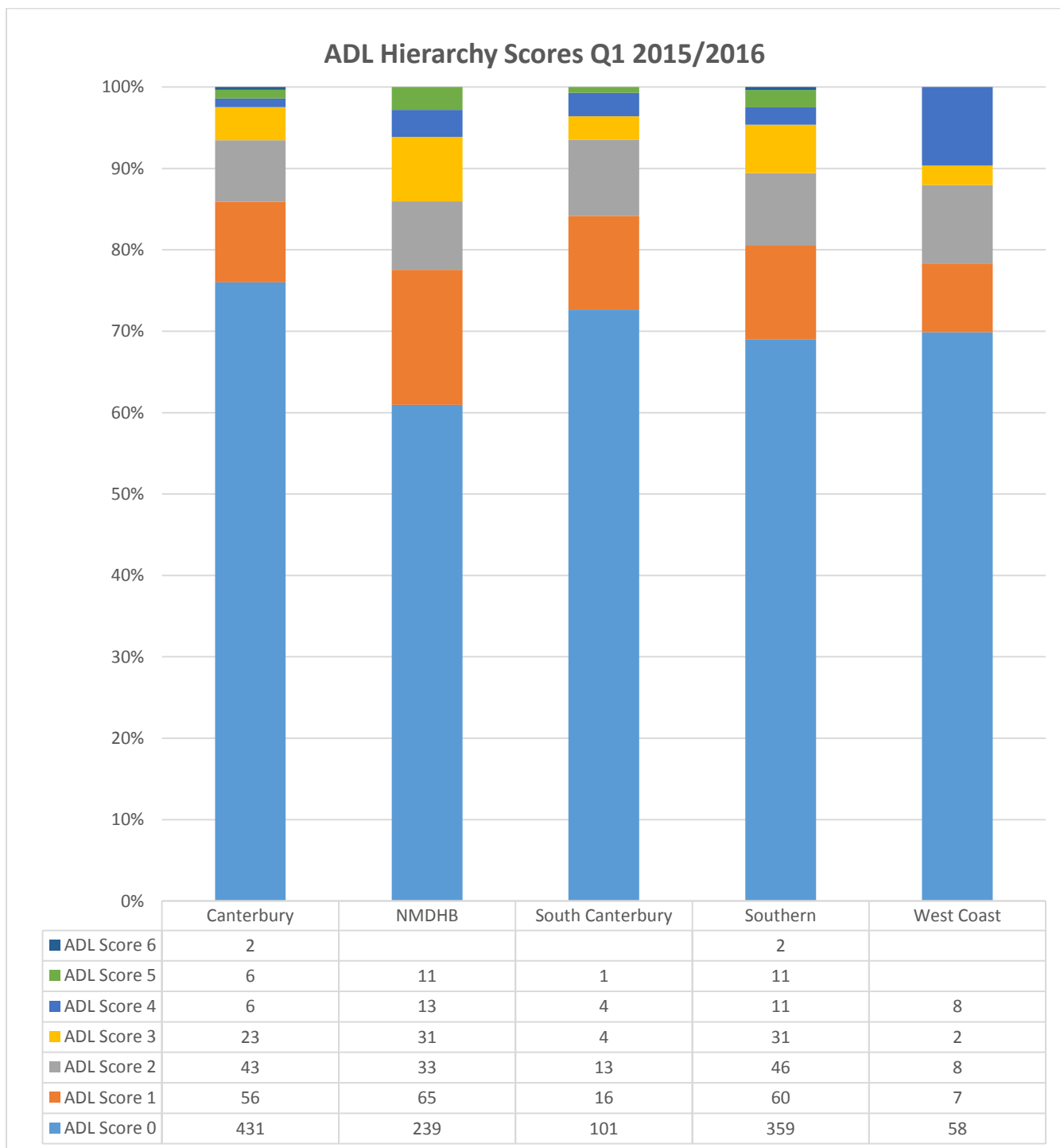


	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1																				
	2014/15				2015/16				2014/15				2015/16				2014/15				2015/16																			
	Canterbury								NMDHB								South Canterbury								Southern								West Coast							
■ CPS Score of 6	2	3			2	1	1	1	1	2	2					2	1																							
■ CPS Score of 5	4	14	6	6	7	11	9	13	2	6	3	2	7	8	11	19			2	3	3																			
■ CPS Score of 4	3	2	1	6	1	3	1	1		2	1		1		4	1	1				1																			
■ CPS Score of 3	37	35	38	39	27	28	34	31	15	13	4	12	34	38	31	51	10	4	13	7																				
■ CPS Score of 2	159	169	153	200	72	86	85	97	56	56	48	55	157	119	170	223	22	20	20	24																				
■ CPS Score of 1	88	80	114	128	54	52	57	78	28	32	35	21	79	70	81	90	11	12	17	26																				
■ CPS Score of 0	151	151	229	188	195	158	167	171	77	54	60	49	163	158	139	135	13	20	17	22																				

ADL Hierarchy

The ADL Hierarchy Scale is a measure of functional performance grouping activities of daily living according to the stage of the disablement process in which they occur. Early loss ADLs (e.g. dressing) are assigned lower scores than late loss ADLs (e.g. eating) as per interRAI international methodology.

Figure: 14



Score Description

0 Independent

1 Supervision required

2 Limited impairment

3 Extensive assistance required (1)

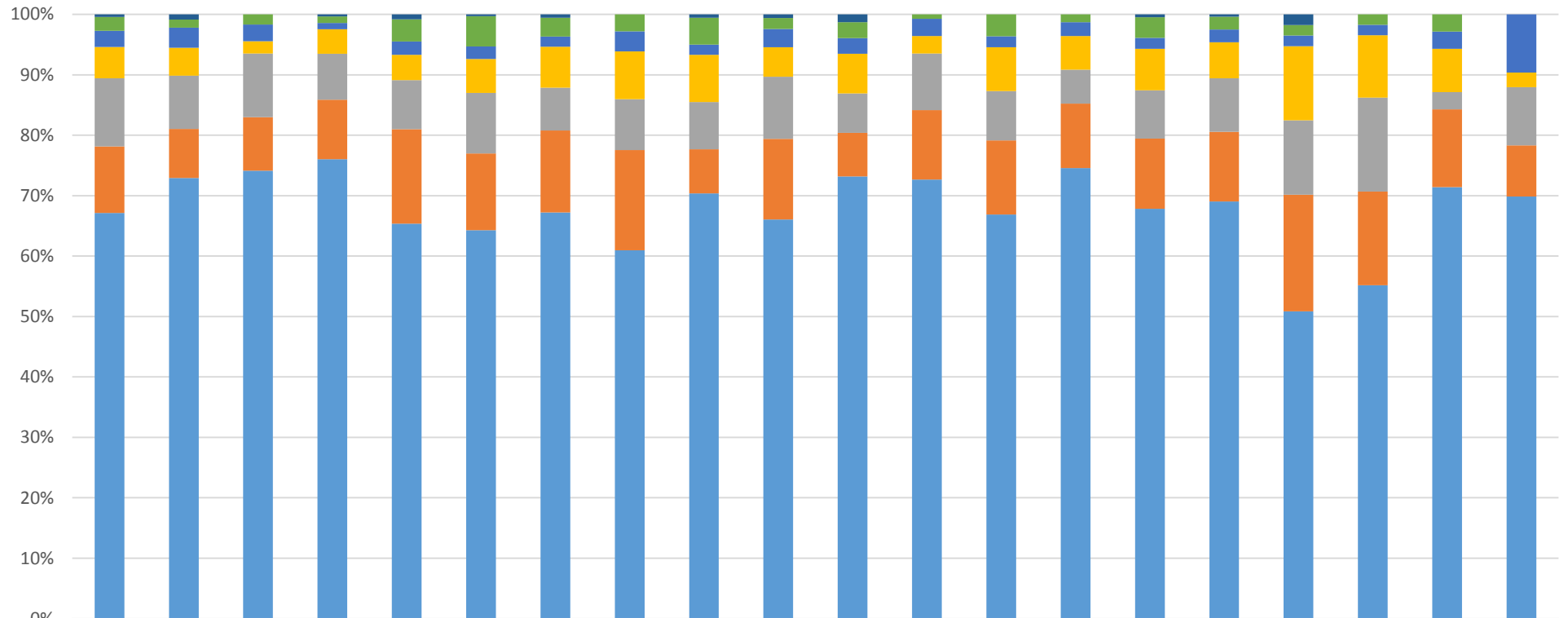
4 Extensive assistance required (2)

5 Very dependent

6 Total dependence

Figure: 15

ADL Hierarchy Scores previous 12 months (as at 30/09/2015)



	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1										
	2014/15			2015/16			2014/15			2015/16			2014/15			2015/16			2014/15			2015/16								
	Canterbury						NMDHB						South Canterbury						Southern						West Coast					
ADL Score 6	2	4		2	3	1	2		1	1	2				2	2	1													
ADL Score 5	10	6	9	6	13	17	11	11	8	3	4	1	16	5	15	11	1	1	2											
ADL Score 4	12	15	15	6	8	7	6	13	3	5	4	4	8	9	8	11	1	1	2	8										
ADL Score 3	23	21	11	23	15	19	24	31	14	8	10	4	32	22	30	31	7	6	5	2										
ADL Score 2	50	40	57	43	29	34	25	33	14	17	10	13	36	22	35	46	7	9	2	8										
ADL Score 1	49	37	48	56	56	43	48	65	13	22	11	16	54	42	51	60	11	9	9	7										
ADL Score 0	298	331	401	431	234	218	238	239	126	109	112	101	295	293	297	359	29	32	50	58										

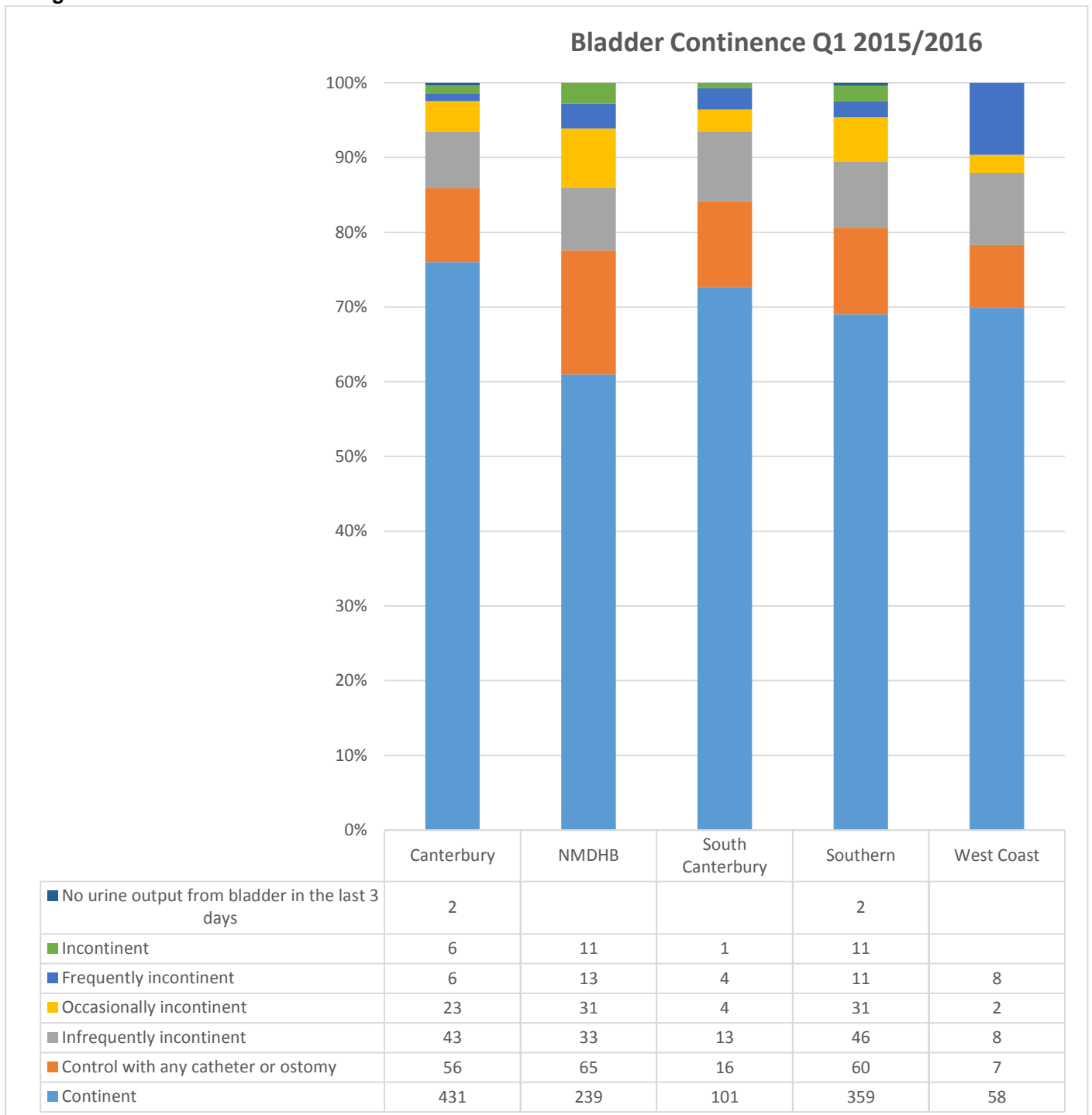
Specific Assessment Responses

Bladder Continence

Although it frequently increases with age, urinary incontinence is not a normal part of the biological process of aging. It causes many problems, including skin rashes, pressure ulcers, reduced mobility, falls and loss of socialisation. It is therefore in itself an indicator of potential decline in older persons.

Because of the embarrassment that is often associated with incontinence accessing support to prevent decline or facilitate improvement can be difficult for many older persons.

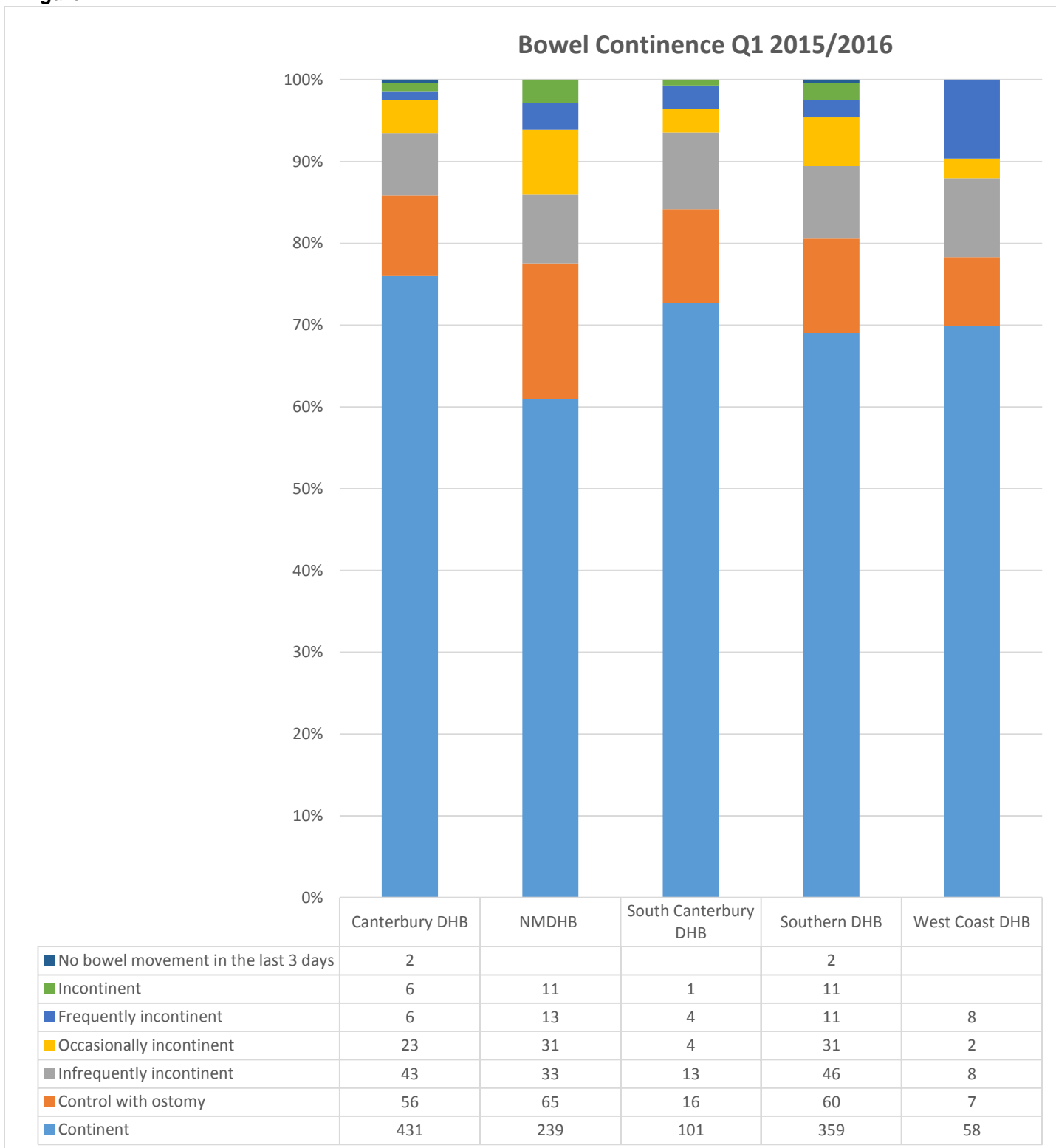
Figure: 16



Bowel Continence

Included for similar reasons as bladder incontinence.

Figure: 17



Appendix 1 – South Island Population Demographics - Population Data Based on 2013 Census

Age and ethnicity in the Canterbury District Health Board

Age group	Total people	Maori	Pacific Island	European	Asian	Maori %	Pacific %	European %	Asian%
55-59	30,645	1,416	384	26,094	1,542	4.6	1.3	85.1	5.0
60-64	27,453	1,116	291	23,850	1,083	4.1	1.1	86.9	3.9
65-69	22,680	702	189	20,295	594	3.1	0.8	89.5	2.6
70-74	17,319	459	138	15,666	447	2.7	0.8	90.5	2.6
75-79	12,630	264	60	11,661	279	2.1	0.5	92.3	2.2
80-84	10,203	138	30	9,516	147	1.4	0.3	93.3	1.4
85 and over	9,360	72	21	8,880	87	0.8	0.2	94.9	0.9

Cumulative number 65 and over	72,192	1,635	438	66,018	1,554
% of population over 65	18.1%				
Cumulative percentage 65 and over		2.3	0.6	91.4	2.2

Age and ethnicity in the West Coast District Health Board

Age group	Total people	Maori	Pacific Island	European	Asian	Maori %	Pacific %	European %	Asian%
55-59	2,418	141	15	2,106	21	4.1	0.6	87.1	0.9
60-64	2,106	99	9	1,845	15	3.7	0.4	87.6	0.7
65-69	1,779	78	6	1,572	6	3.2	0.3	88.4	0.3
70-74	1,311	57	3	1,179	6	2.7	0.2	89.9	0.5
75-79	900	36	0	810	3	1.7	0.0	90.0	0.3
80-84	663	15	0	615	6	0.5	0.0	92.8	0.9
85 and over	528	3	0	498	3	0.6	0.0	94.3	0.6

Cumulative number 65 and over	5,181	111	9	4,674	24
% of population over 65	18.9%				
Cumulative percentage 65 and over		2.1	0.2	90.2	0.5

Age and ethnicity in the Nelson Marlborough District Health Board

Age group	Total people	Maori	Pacific Island	European	Asian	Maori %	Pacific %	European %	Asian%
55-59	9,981	510	60	8,910	123	4.0	0.6	89.3	1.2
60-64	9,594	396	33	8,637	114	2.9	0.3	90.0	1.2
65-69	8,469	276	24	7,749	45	2.5	0.3	91.5	0.5
70-74	6,288	210	15	5,808	30	1.6	0.2	92.4	0.5
75-79	4,386	99	12	4,068	12	1.4	0.3	92.7	0.3
80-84	3,222	63	3	3,063	3	1.2	0.1	95.1	0.1
85 and over	3,111	39	3	2,946	3	1.3	0.1	94.7	0.1

Cumulative number 65 and over	25,476	411	57	23,634	93
% of population over 65	21.4%				
Cumulative percentage 65 and over		1.6	0.2	92.8	0.4

Age and ethnicity in the South Canterbury District Health Board

Age group	Total people	Maori	Pacific Island	European	Asian	Maori %	Pacific %	European %	Asian%
55-59	3,936	150	9	3,579	48	3.0	0.2	90.9	1.2

60-64	3,885	117	12	3,555	33	2.2	0.3	91.5	0.8
65-69	3,366	87	9	3,132	18	1.6	0.3	93.0	0.5
70-74	2,805	54	3	2,598	15	1.3	0.1	92.6	0.5
75-79	2,070	36	6	1,956	9	1.2	0.3	94.5	0.4
80-84	1,653	24	0	1,563	6	0.7	0.0	94.6	0.4
85 and over	1,449	12	0	1,371	3	0.8	0.0	94.6	0.2
Cumulative number 65 and over	11,343	126	18	10,620	51				
% of population over 65	23.0%								
Cumulative percentage 65 and over		1.1	0.2	93.6	0.4				

Age and ethnicity in the Southern District Health Board

Age group	Total people	Maori	Pacific Island	European	Asian	Maori %	Pacific %	European %	Asian%
55-59	19,362	984	168	17,022	402	3.9	0.9	87.9	2.1
60-64	17,274	750	120	15,489	249	2.9	0.7	89.7	1.4
65-69	14,589	507	90	13,272	147	2.8	0.6	91.0	1.0
70-74	11,370	402	57	10,353	108	2.0	0.5	91.1	0.9
75-79	8,322	228	42	7,719	72	1.4	0.5	92.8	0.9
80-84	6,489	120	12	6,072	45	1.0	0.2	93.6	0.7
85 and over	5,853	66	3	5,472	33	1.1	0.1	93.5	0.6
Cumulative number 65 and over	46,623	816	204	42,888	405				
% of population over 65	18.4%								
Cumulative percentage 65 and over		1.8	0.4	92.0	0.9				