

South Island interRAI Summary Report: Home Care

Reporting Period: 2014/15 – Fiscal Quarter 4

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**
- **Assessments completed in 5yr age bands**
- **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 4 (1 April to 30 June) 2014/2015

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 and Contact Assessment 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 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 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	2014/15		Approx. DHB 65+ Population	% of 65+ Population with an assessment (full year)
		Q4	Q1-Q4		
CDHB	CA 9.2	527	2443	72192	3.38%
	HC 9.1	611	2146		2.97%
NMDHB	CA 9.2	87	347	25476	1.36%
	HC 9.1	391	1638		6.43%
SCDHB	CA 9.2	123	405	11343	3.57%
	HC 9.1	172	770		6.79%
SDHB	CA 9.2	337	1807	46623	3.88%
	HC 9.1	511	1913		4.10%
WCDHB	CA 9.2	17	103	5181	1.99%
	HC 9.1	70	251		4.84%
All	Contact Assessment	1091	5105	160815	3.17%
All	Home Care 9.1	1755	6718		4.18%

Figure: 1

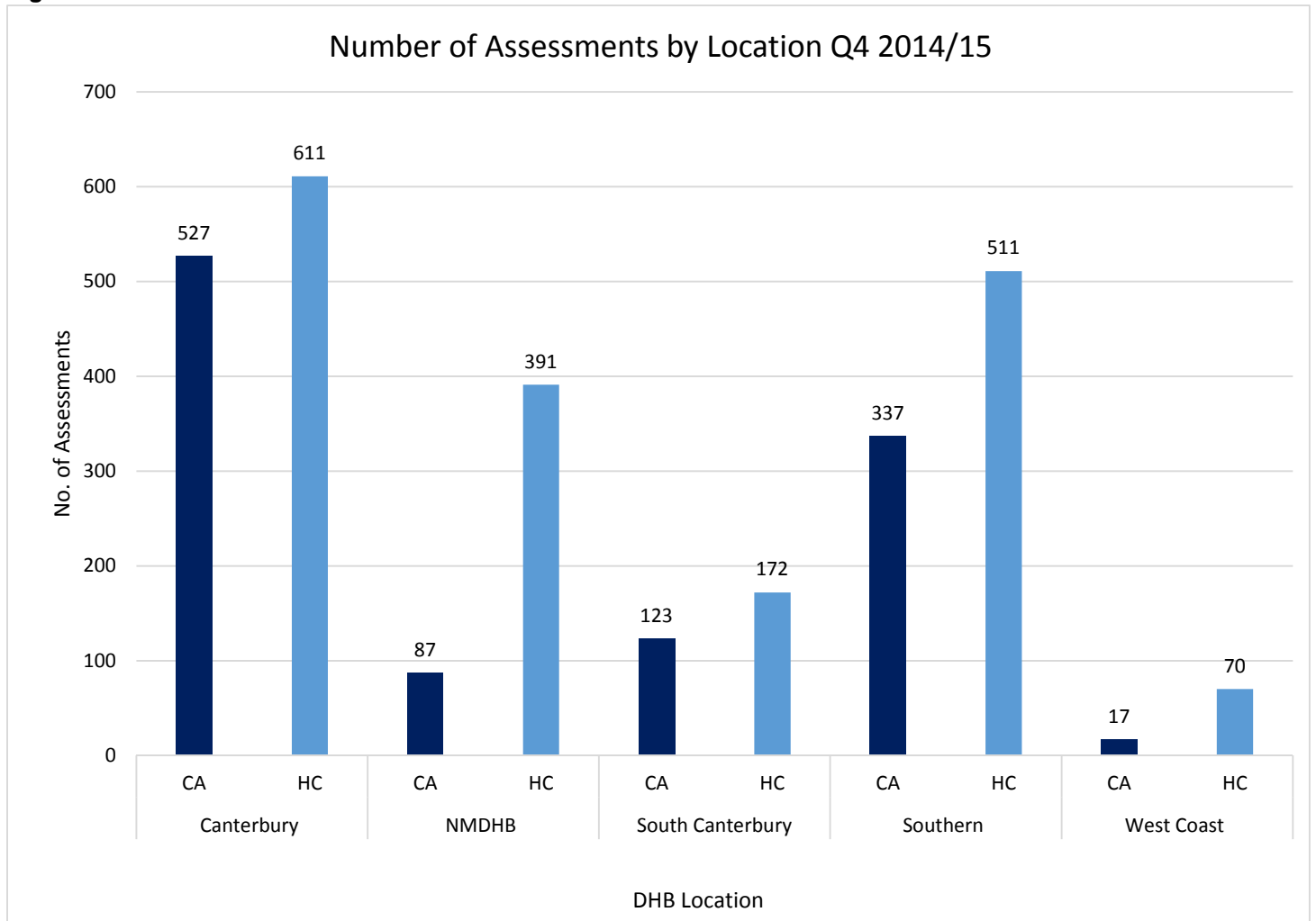
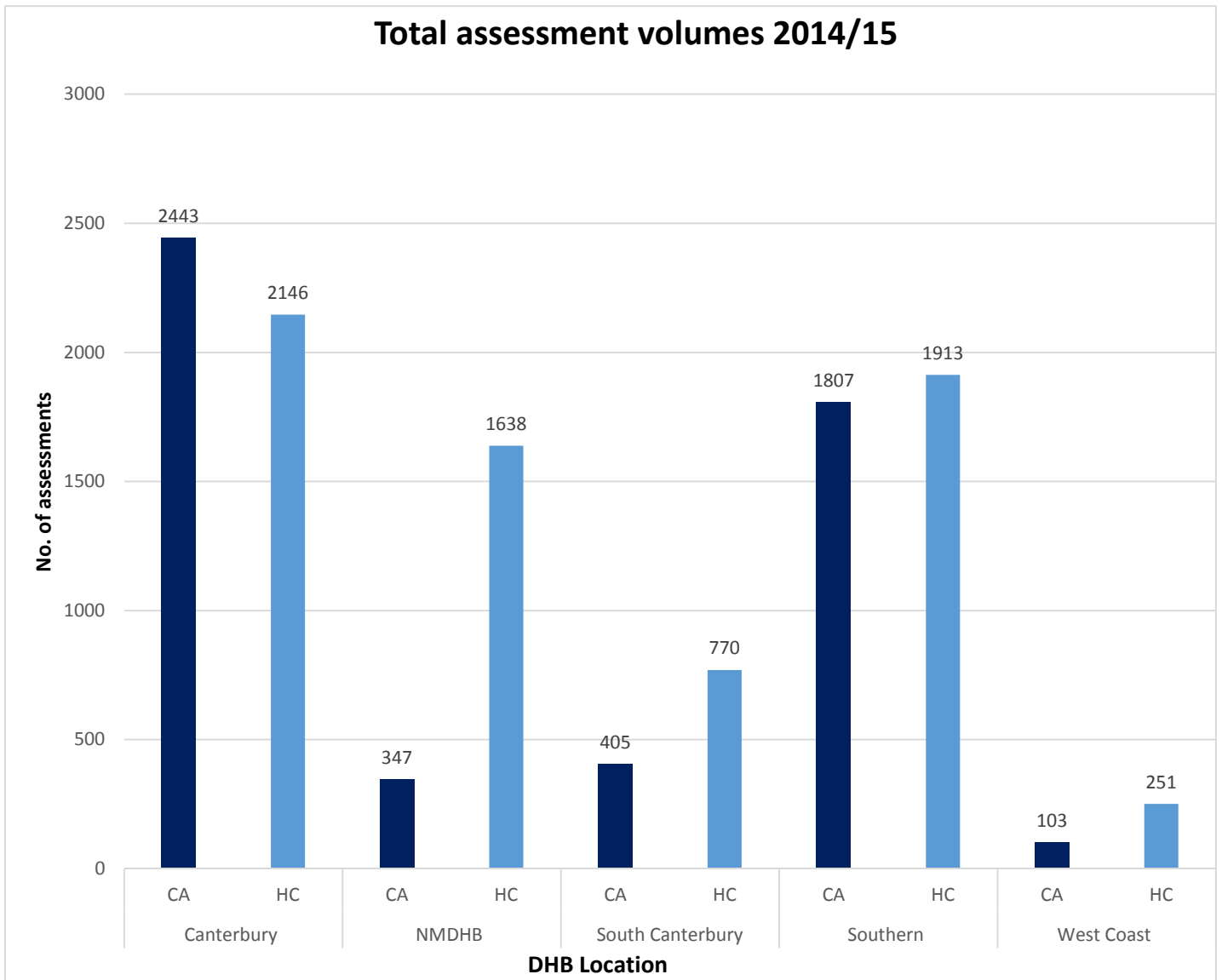


Figure 2.

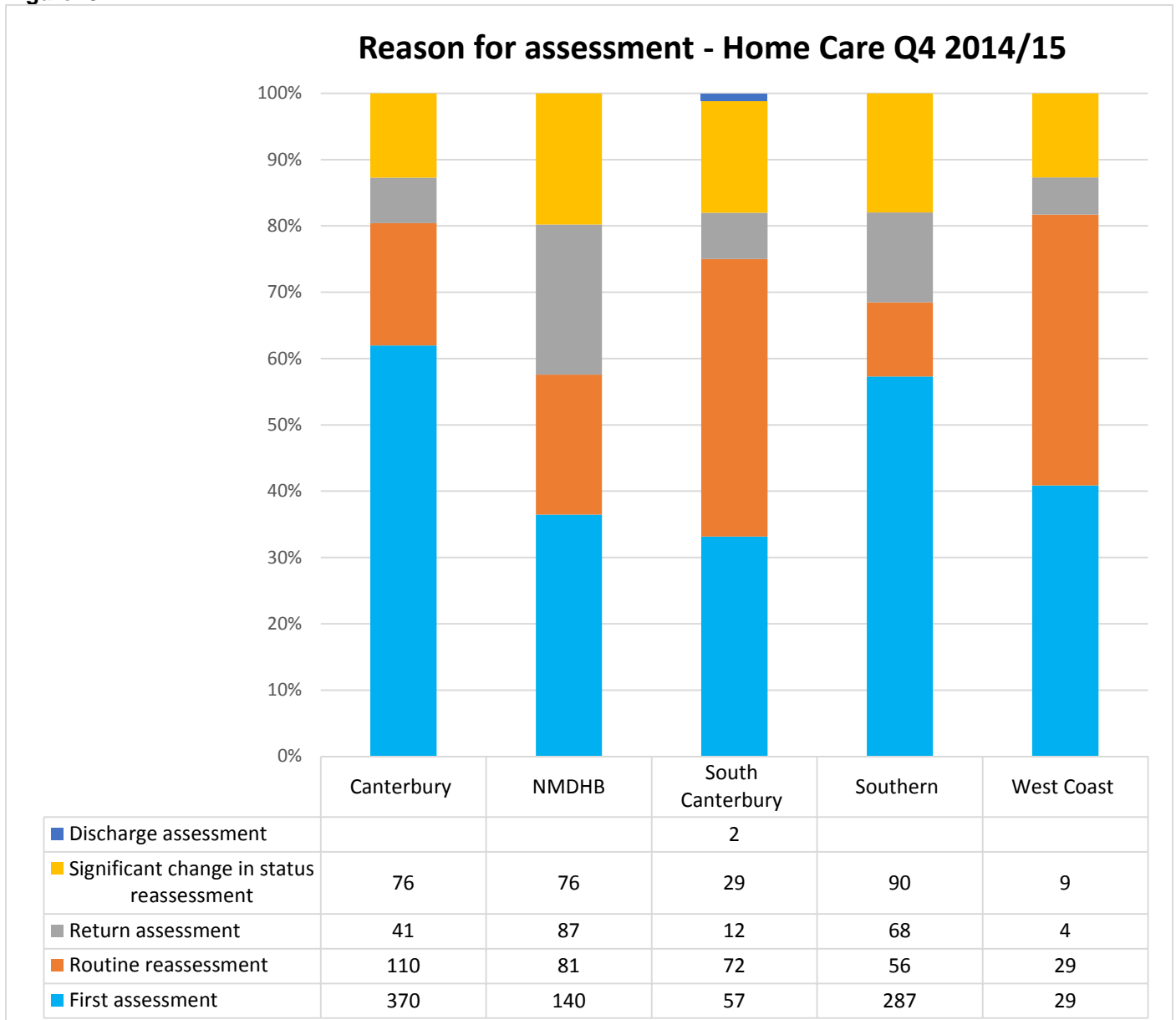


The reasons for differences in volume between regions are untested, but different models of care implemented may account for some of the variance. CDHB and SDHB use case mix models which involve a greater use of contact assessment. West Coast has recently moved to a case mix model. NMDHB and SCDHB have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

Reason for Assessment

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

Figure: 3

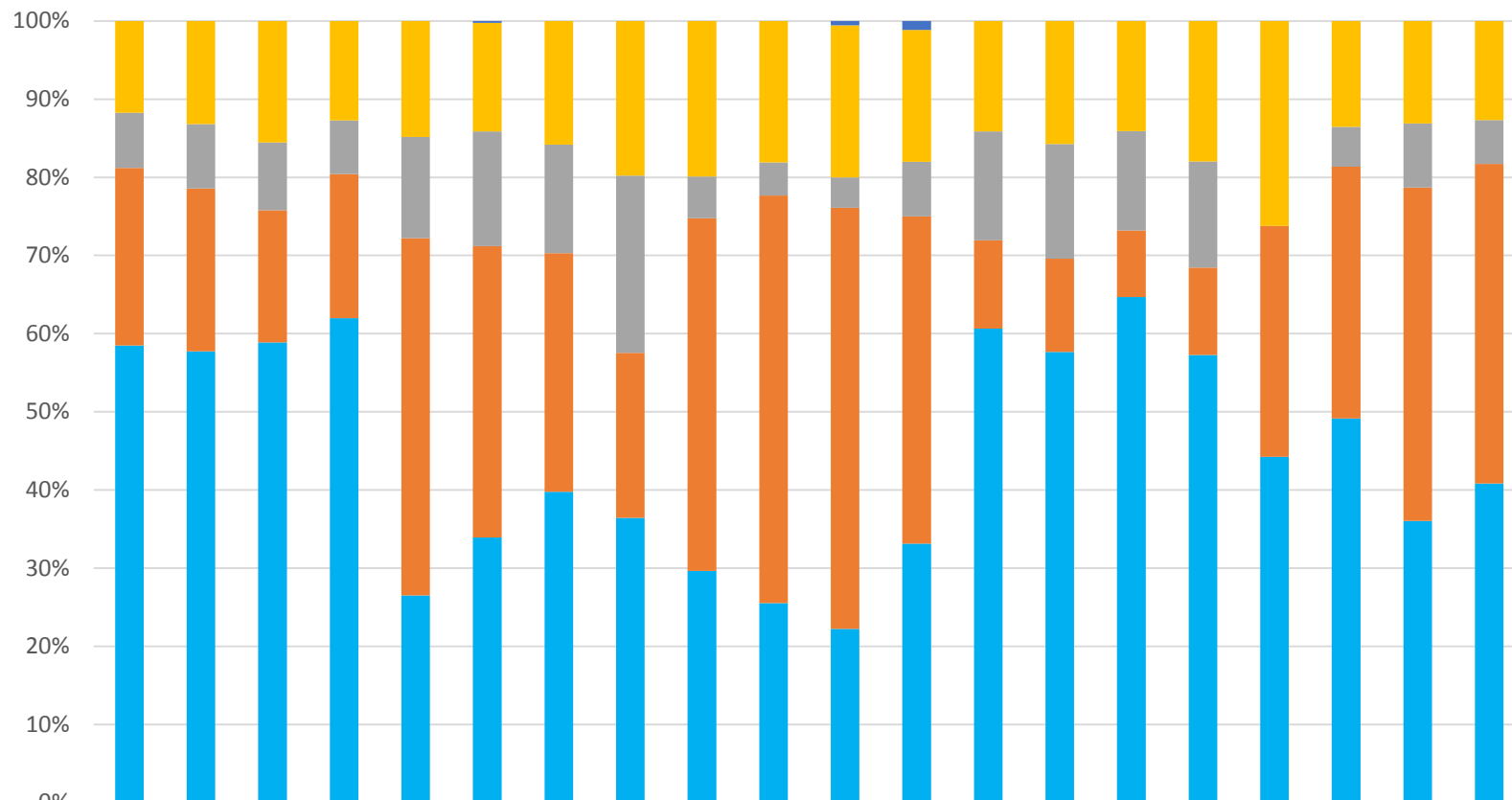


Assessment Type	Description
First Assessment	Completed at the time of entry into or determination of eligibility for a home care system
Routine Reassessment	An assessment conducted at regularly scheduled intervals
Return Assessment	An assessment conducted following a return to a home care program i.e. 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

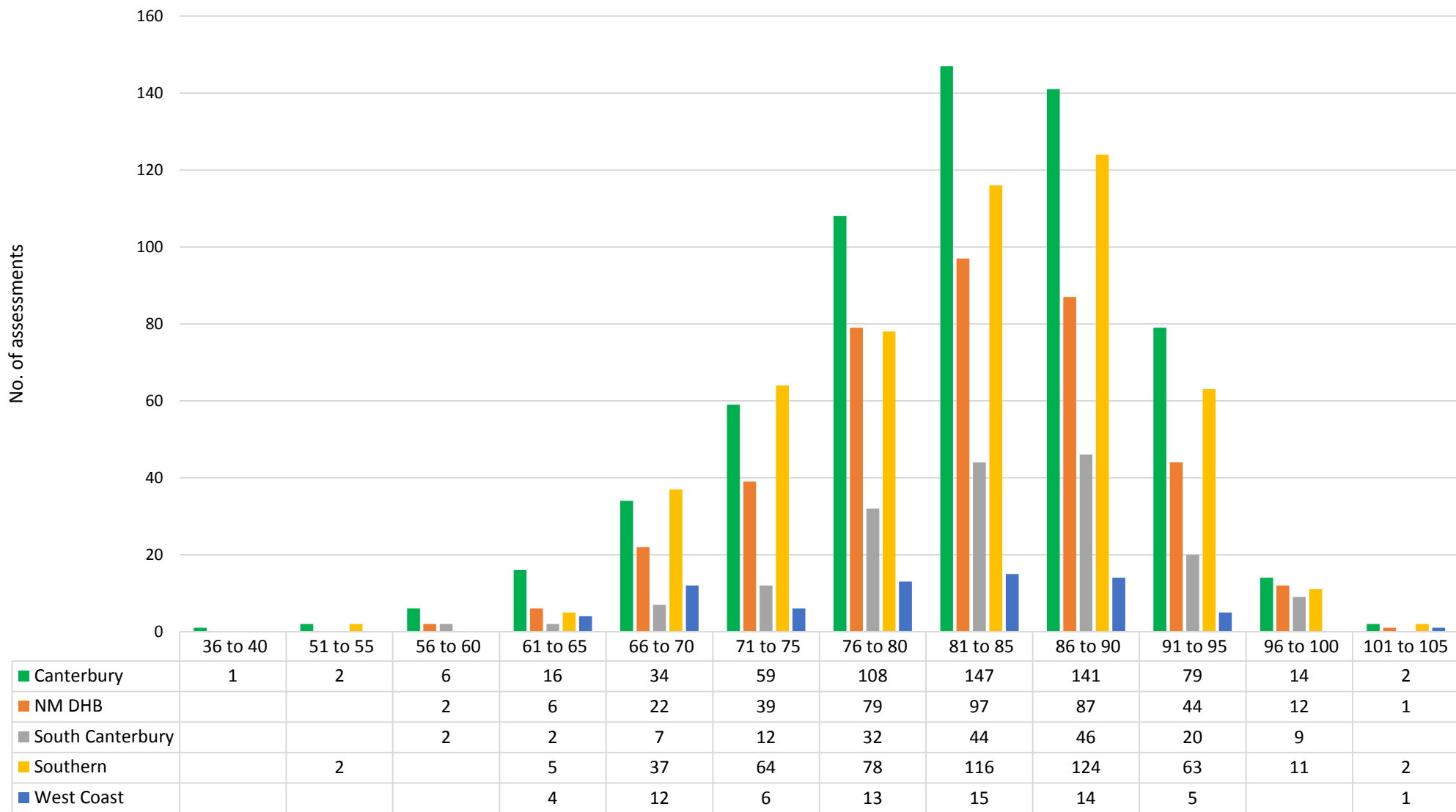
Reason for assessment - Home Care 2014/15



	Canterbury				NMDHB				South Canterbury				Southern				West Coast			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
■ Discharge assessment					1						1	2								
■ Significant change in status reassessment	63	64	79	76	71	54	58	76	45	34	35	29	69	74	61	90	16	8	8	9
■ Return assessment	38	40	44	41	62	57	51	87	12	8	7	12	68	69	55	68		3	5	4
■ Routine reassessment	122	101	86	110	219	145	112	81	102	98	97	72	55	56	37	56	18	19	26	29
■ First assessment	314	280	299	370	127	132	146	140	67	48	40	57	296	271	280	287	27	29	22	29

Figure: 5

Home Care assessments by Age Q4 2014/15



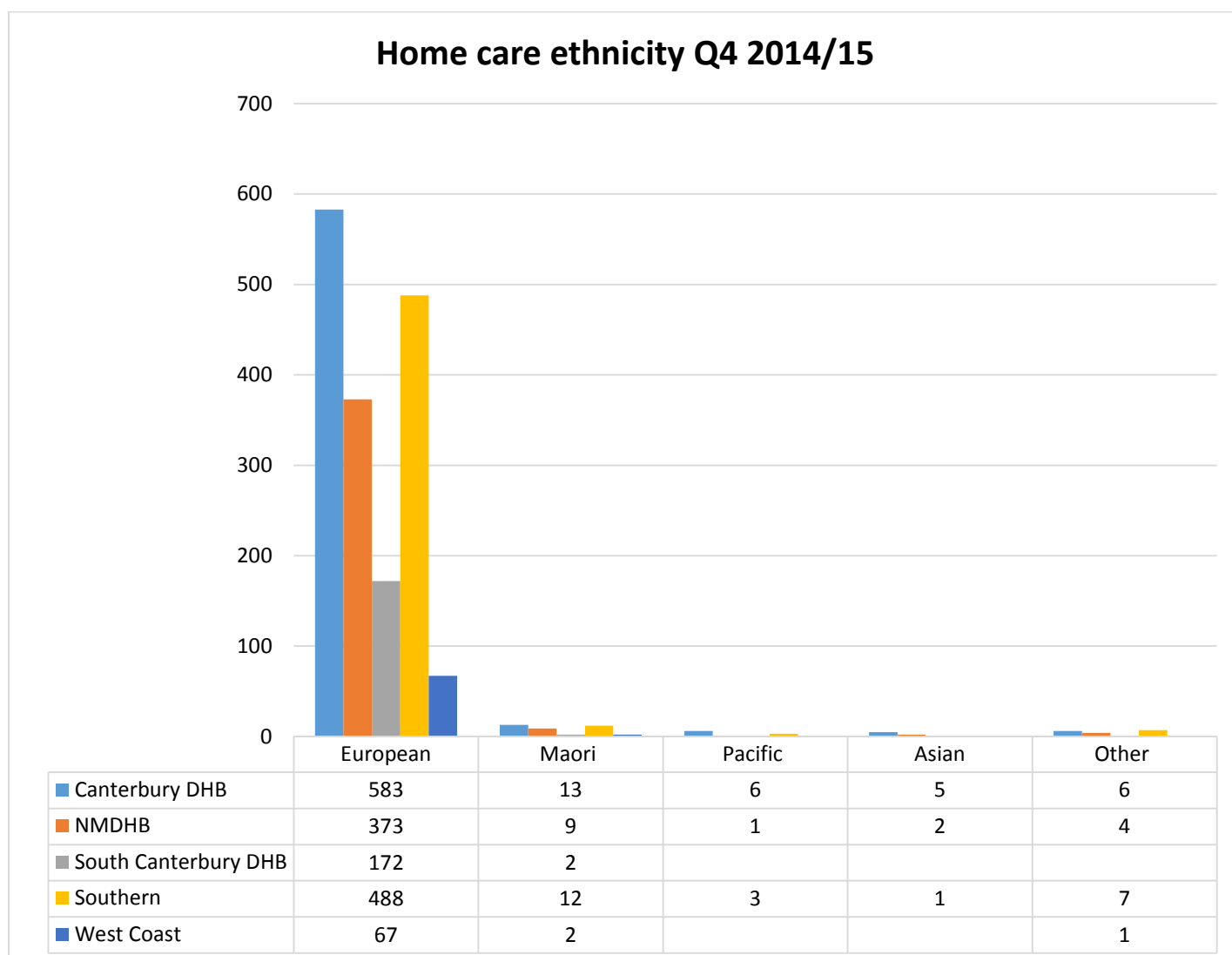
Age Range (5 years)

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.

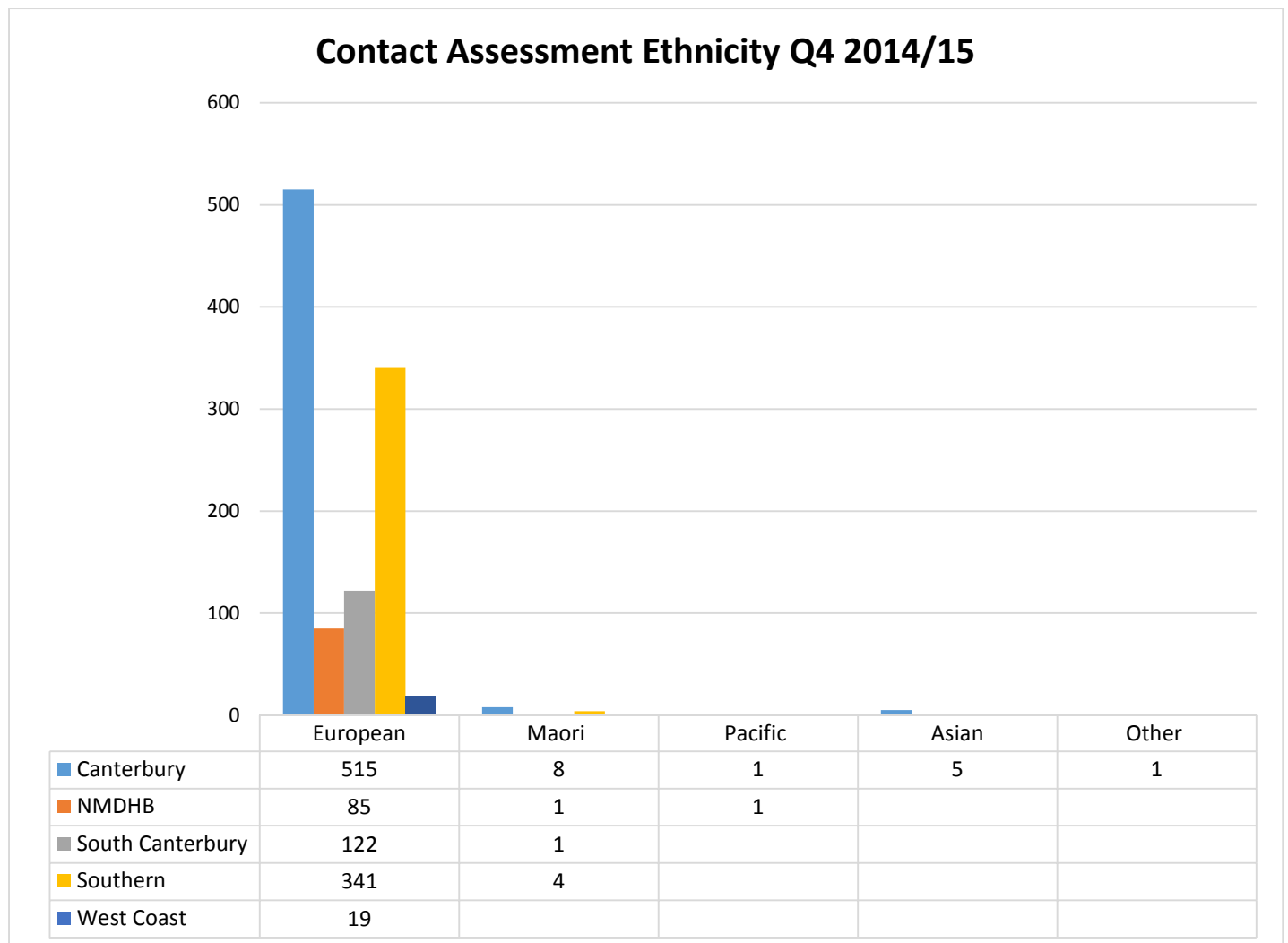
Note: Individuals may be represented more than once in following Figures as individuals can select more than one ethnicity if required.

Figure: 6



Contact Assessment Ethnicity

Figure: 7



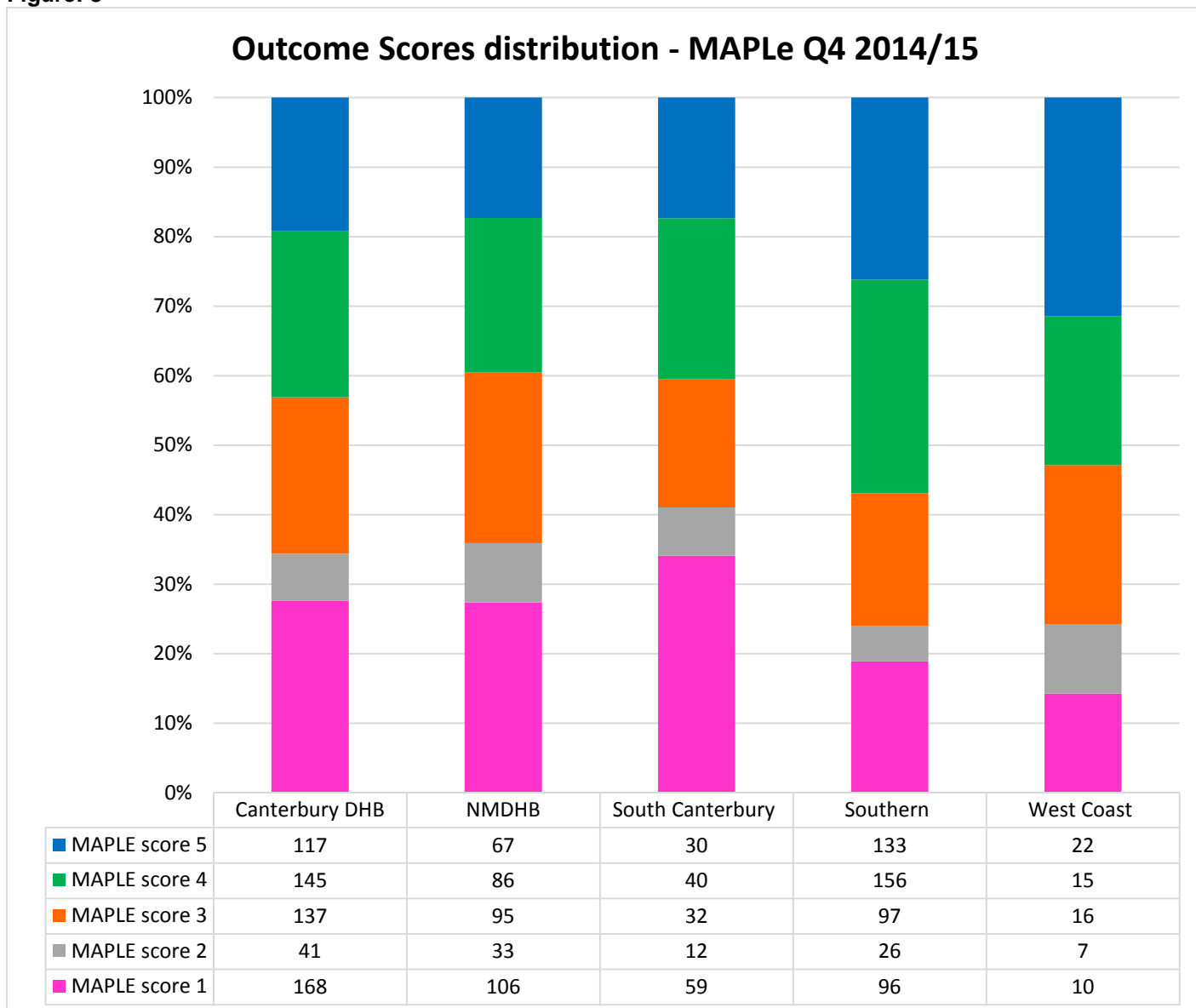
Outcome Scores

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

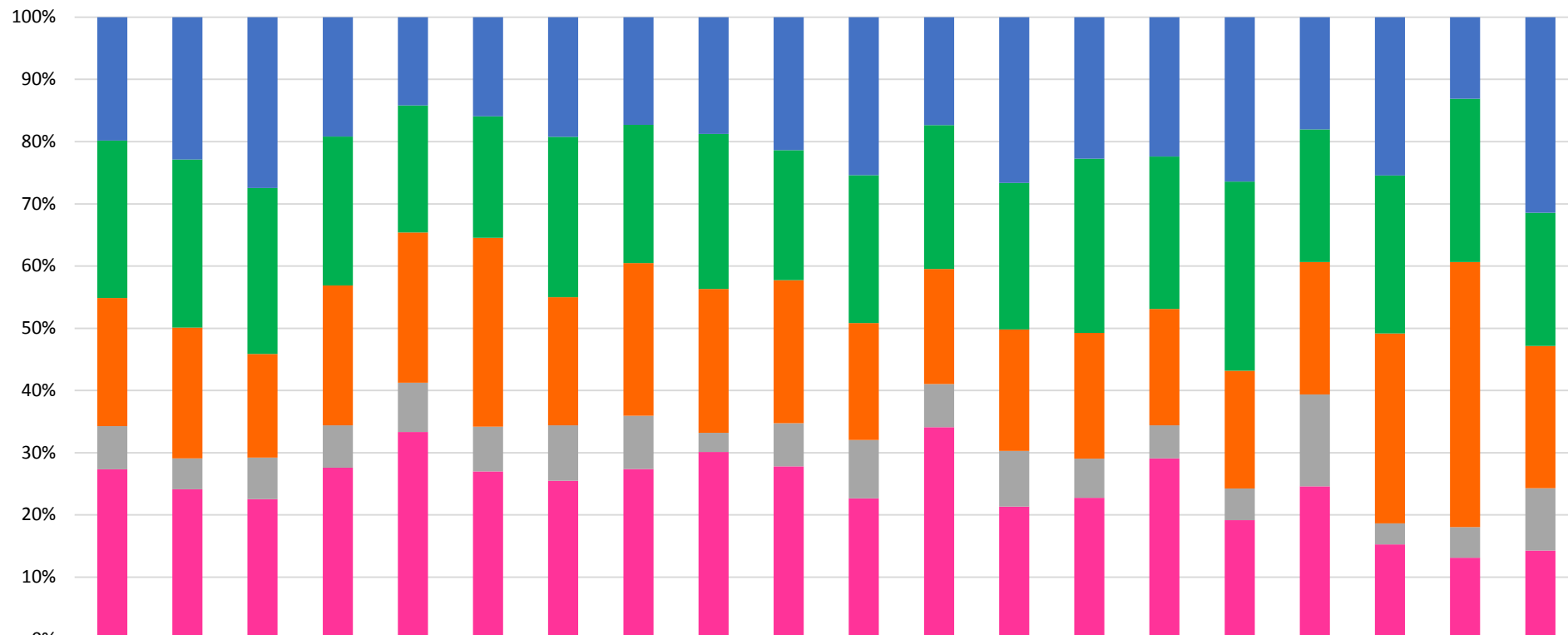


Score Description

- 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 2014/2015

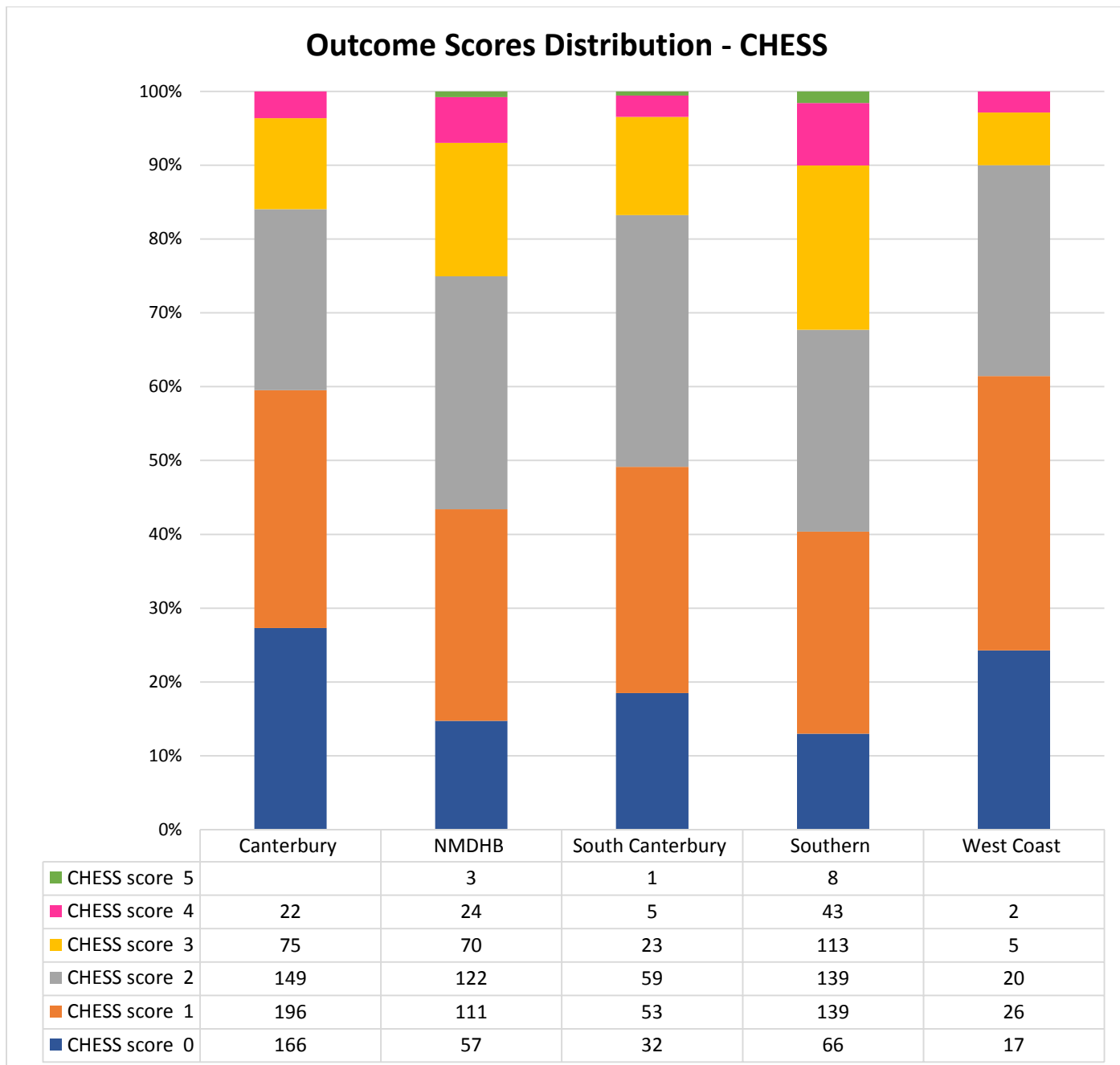


	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Canterbury				NMDHB				South Canterbury				Southern				West Coast			
MAPLE Score 5	106	111	140	116	68	62	71	67	43	40	46	30	131	108	97	134	11	15	8	22
MAPLE Score 4	135	131	136	145	98	76	95	86	57	39	43	40	116	133	106	154	13	15	16	15
MAPLE Score 3	110	102	85	136	116	118	76	95	53	43	34	32	96	96	81	96	13	18	26	16
MAPLE Score 2	37	24	34	41	38	28	33	33	7	13	17	12	44	30	23	26	9	2	3	7
MAPLE Score 1	146	117	115	167	160	105	94	106	69	52	41	59	105	108	126	97	15	9	8	10

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



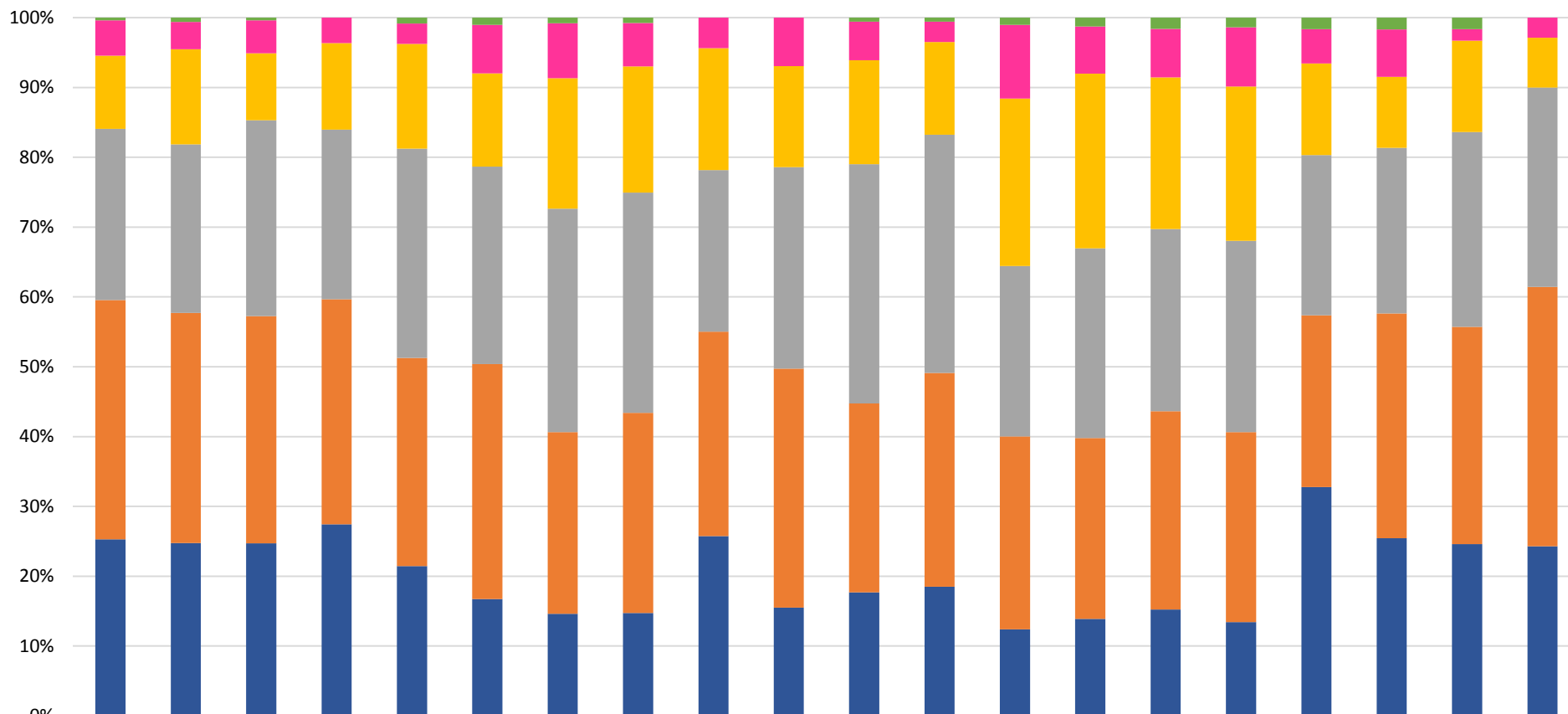
Score Description

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 score 2014/15

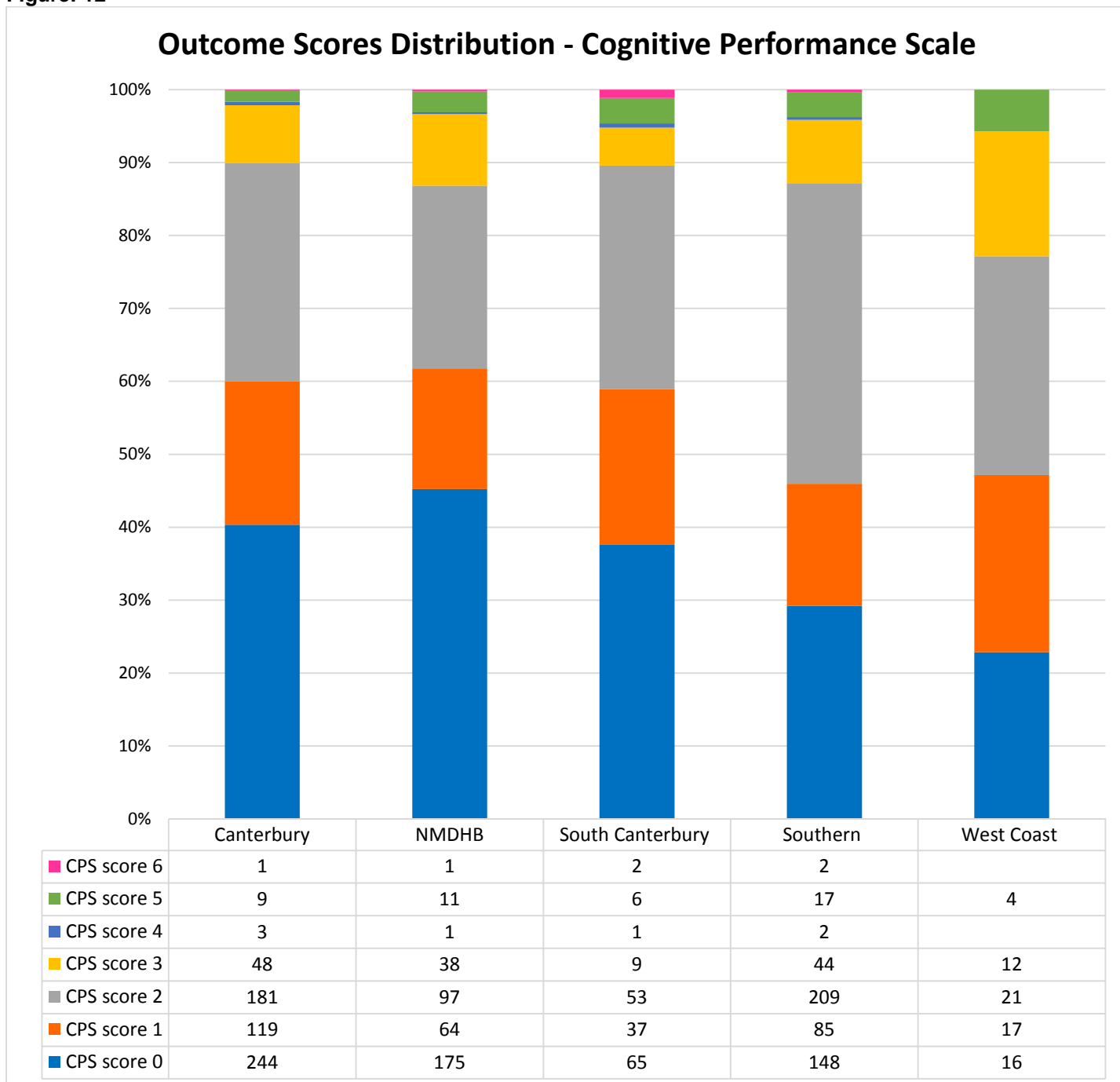


	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Canterbury				NMDHB				South Canterbury				Southern				West Coast			
■ CHES score 5	2	3	2		4	4	3	3			1	1	5	6	7	7	1	1	1	
■ CHES score 4	27	19	24	22	14	27	29	24	10	13	10	5	52	32	30	43	3	4	1	2
■ CHES score 3	56	66	49	75	72	52	69	70	40	27	27	23	118	119	94	112	8	6	8	5
■ CHES score 2	131	117	143	147	144	110	118	122	53	54	62	59	120	129	113	139	14	14	17	20
■ CHES score 1	183	160	166	195	143	131	96	111	67	64	49	53	136	123	123	138	15	19	19	26
■ CHES score 0	135	120	126	166	103	65	54	57	59	29	32	32	61	66	66	68	20	15	15	17

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

0	Intact
1	Borderline intact
2	Mild impairment
3	Moderate impairment
4	Moderate / severe impairment
5	Severe impairment
6	Very severe impairment

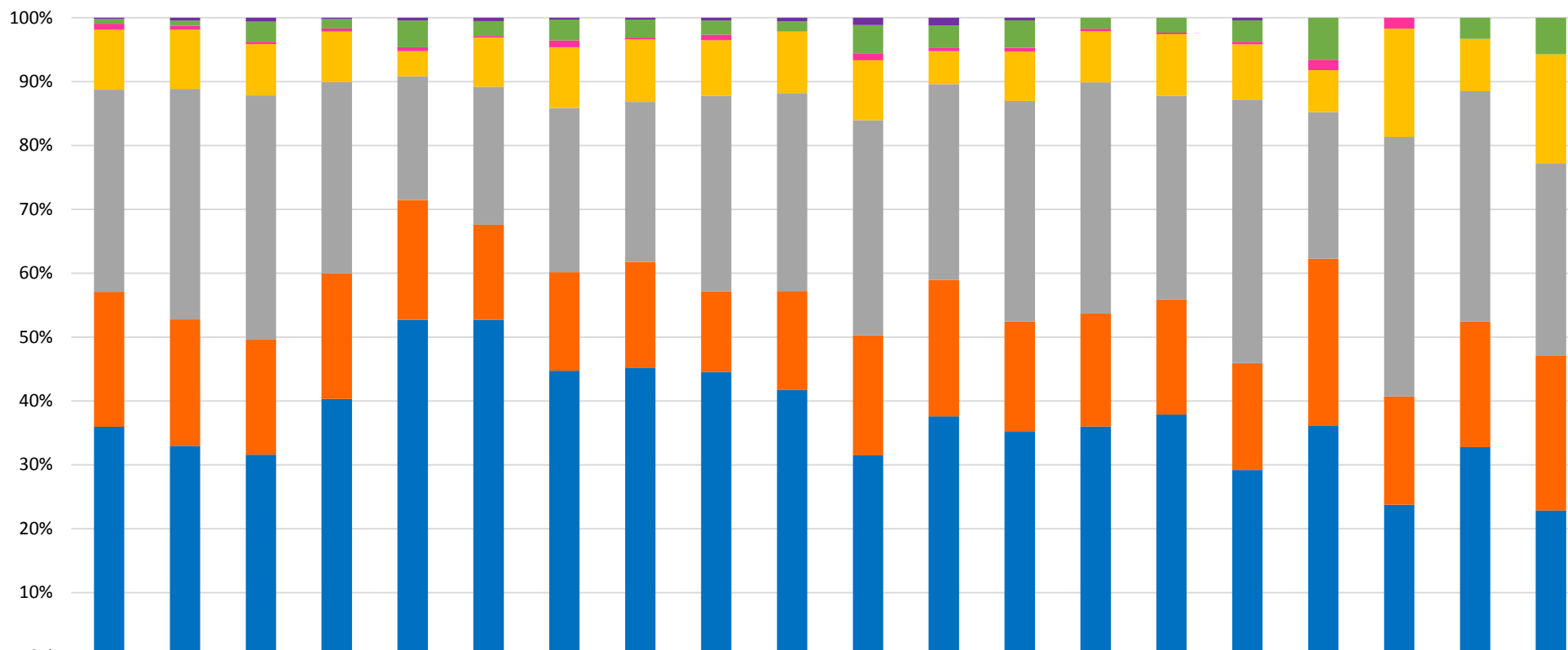
Approx. MMSE equivalent*

30-25
22
20
15
7
5
0.5

* MMSE Equivalent score based on interRAI International Research

Figure: 13

CPS Scores 2014/15

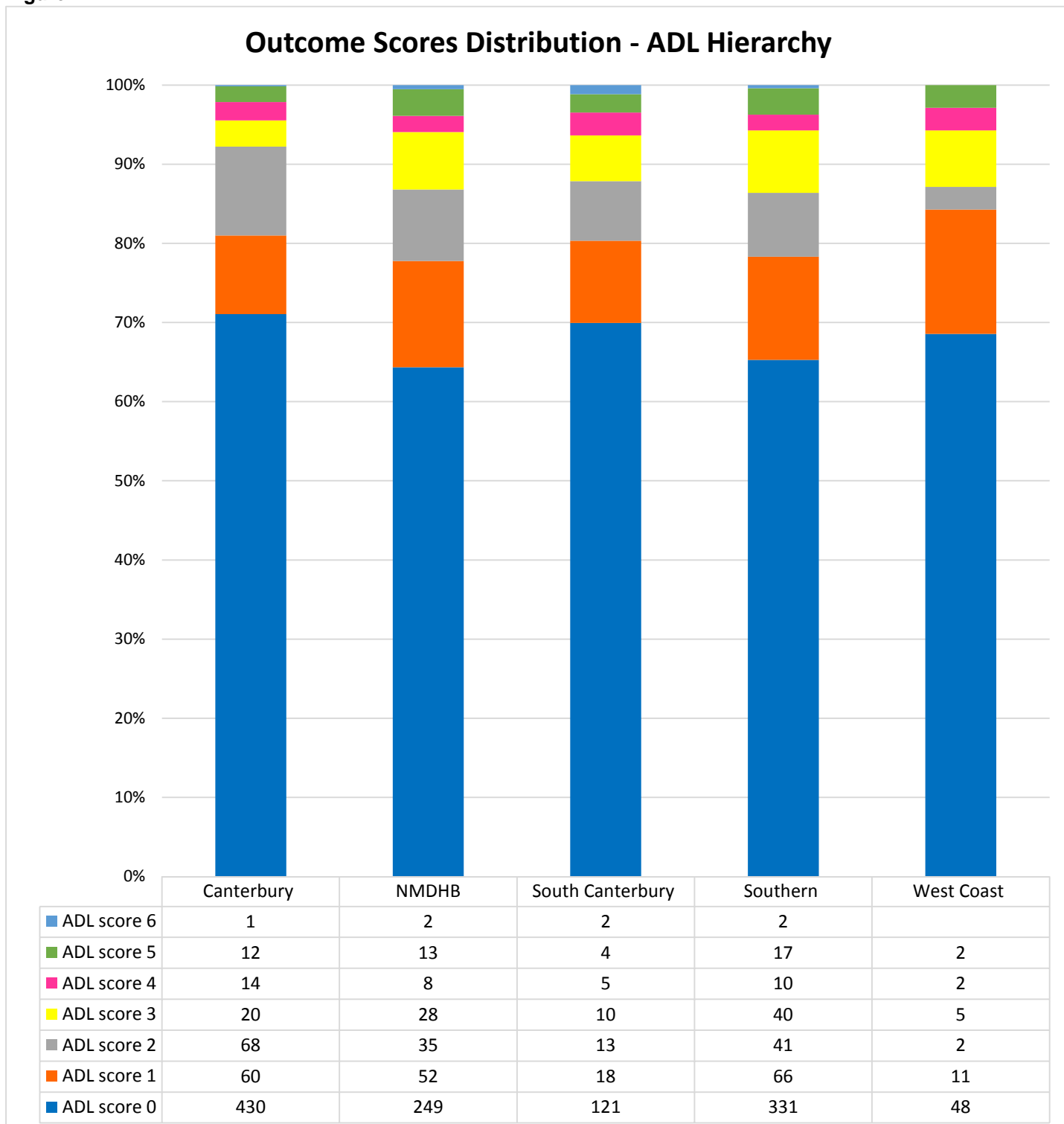


	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Canterbury				NMDHB				South Canterbury				Southern				West Coast			
■ CPS scores 6	1	2	3	1	2	2	1	1	1	1	2	2	2			2				
■ CPS scores 5	4	4	16	9	20	9	12	11	5	3	8	6	21	8	10	17	4		2	4
■ CPS scores 4	5	3	2	3	3	1	4	1	2		2	1	3	2	1	2	1	1		
■ CPS scores 3	50	45	41	48	19	30	35	38	20	18	17	9	38	38	42	44	4	10	5	12
■ CPS scores 2	169	175	195	181	93	84	95	97	70	58	61	53	170	172	138	209	14	24	22	21
■ CPS scores 1	113	96	92	119	90	58	57	64	29	29	34	37	85	84	78	85	16	10	12	17
■ CPS scores 0	192	160	161	244	253	205	165	175	102	78	57	65	173	171	164	148	22	14	20	16

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)

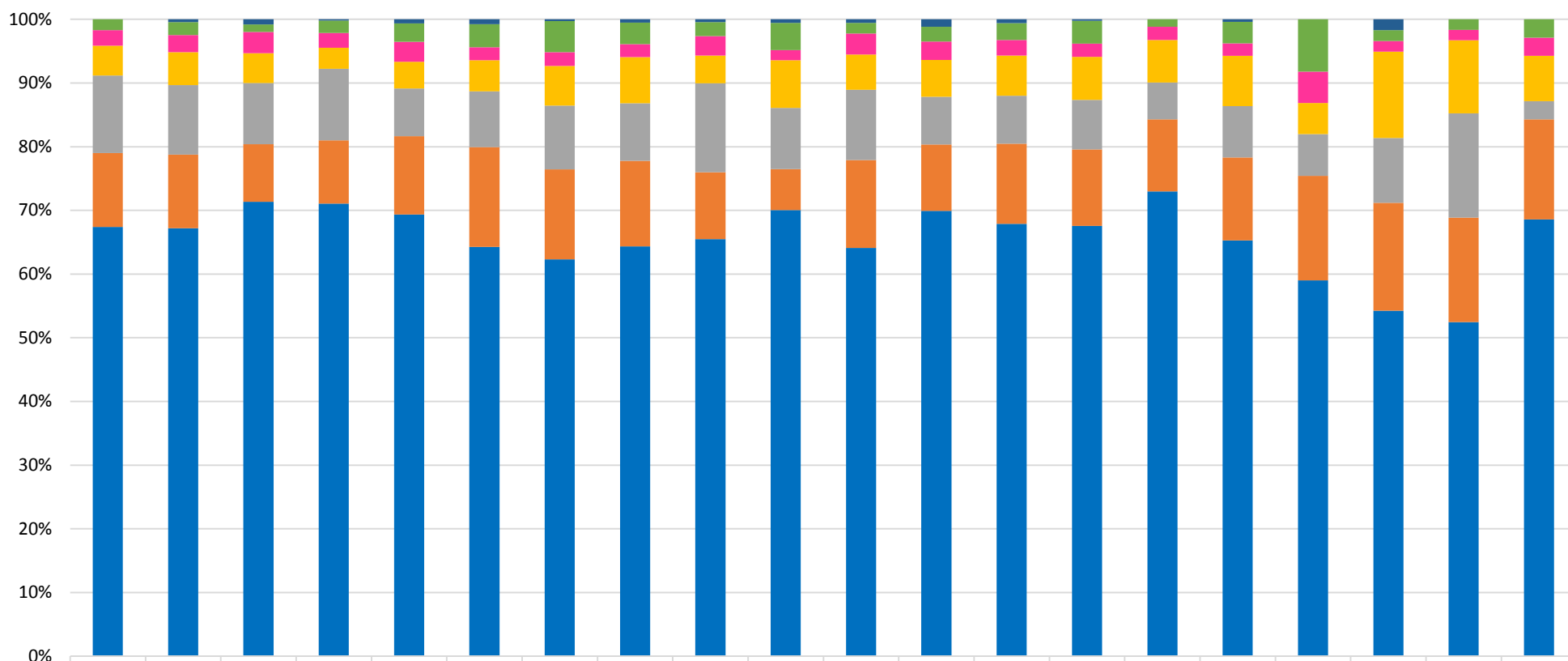
4 Extensive assistance required (2)

5 Very dependent

6 Total dependence

Figure: 15

ADL Hierarchy scores 2014/15



	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Canterbury				NMDHB				South Canterbury				Southern				West Coast			
ADL score 6		2	4	1	3	3	1	2	1	1	1	2	3	1		2		1		
ADL score 5	9	10	6	12	14	14	18	13	5	8	3	4	13	17	5	17	5	1	1	2
ADL score 4	13	13	17	14	15	8	8	8	7	3	6	5	12	10	9	10	3	1	1	2
ADL score 3	25	25	24	20	20	19	23	28	10	14	10	10	31	32	29	40	3	8	7	5
ADL score 2	65	53	49	68	36	34	37	35	32	18	20	13	37	37	25	41	4	6	10	2
ADL score 1	62	56	46	60	59	61	52	52	24	12	25	18	62	57	49	66	10	10	10	11
ADL score 0	360	326	364	430	333	250	230	249	150	131	116	121	334	321	316	331	36	32	32	48

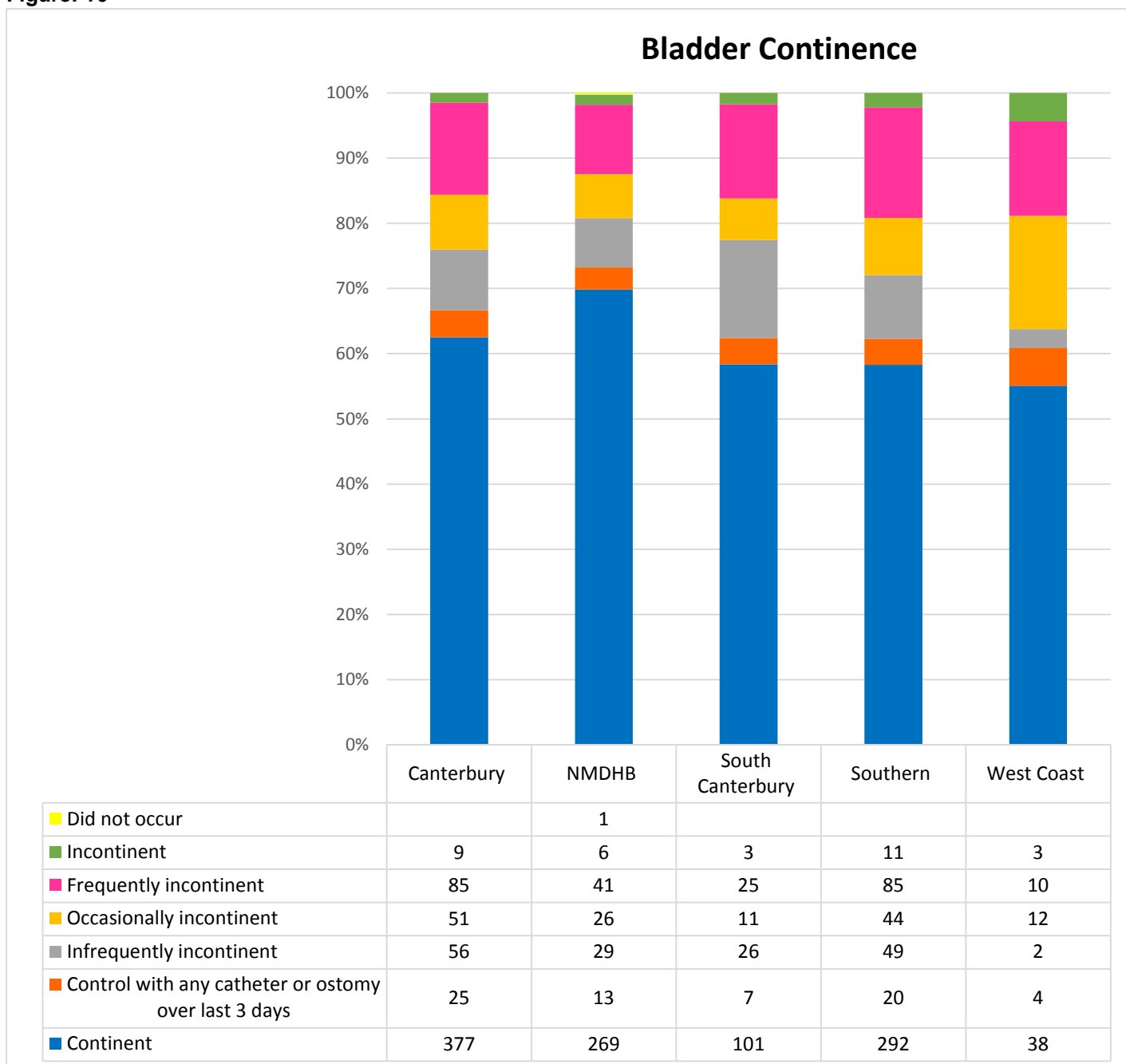
Specific Assessment Responses

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.

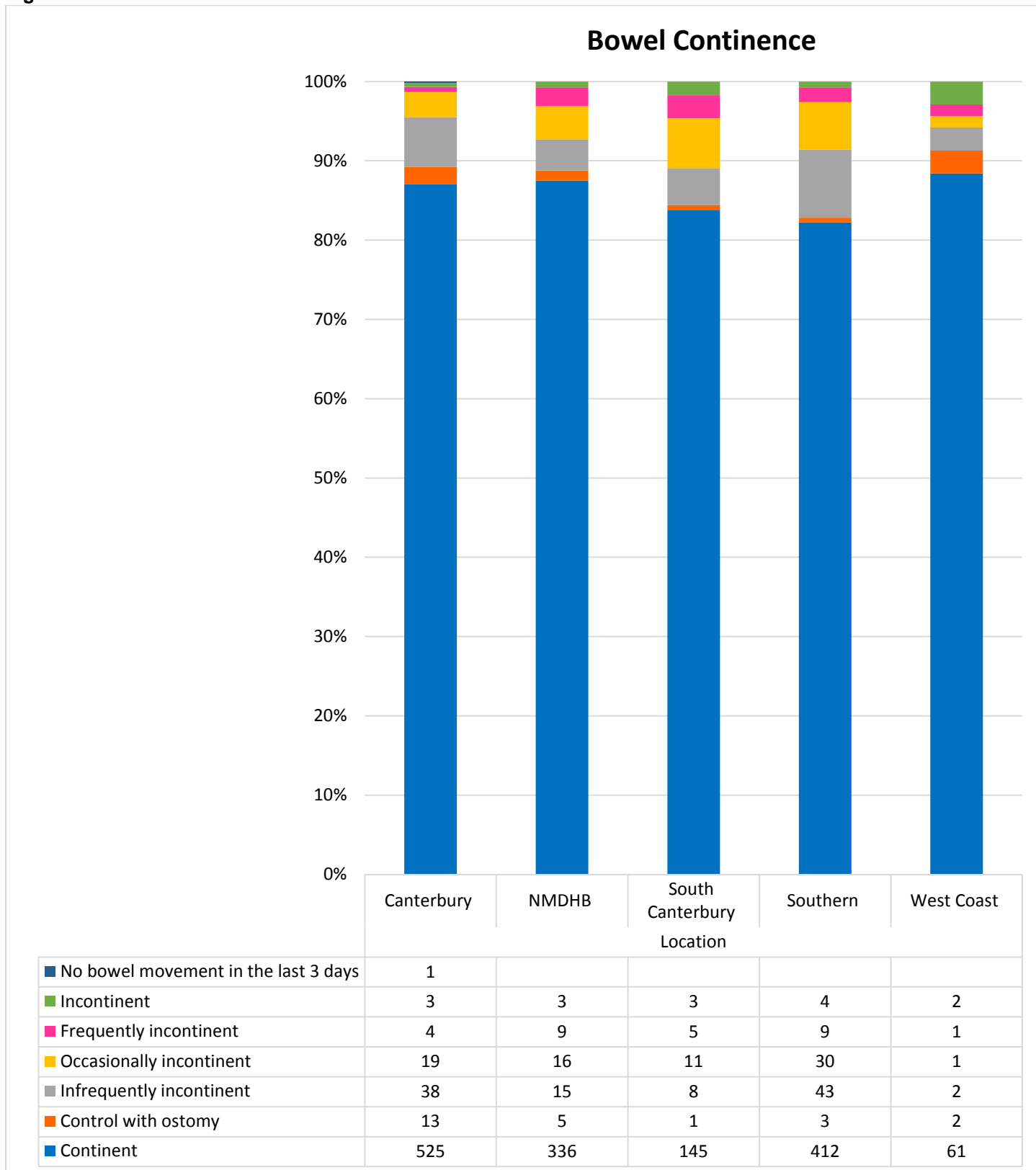
Figure: 16



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
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% 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				