

PRIMHD Summary Report – HoNOS65+

Health of the Nation Outcomes Scales – adults 65 years and over report for New Zealand



This report summarises national Programme for the Integration of Mental Health Data (PRIMHD) data submitted by district health boards (DHBs). In particular, it presents Health of the National Outcomes Scale Older Adult (HoNOS65+) data from services where HoNOS65+ is the primary measure.

This report is organised into three major sections that provide information about:

- 1. Outcomes related information:** This provides indications about what changes have occurred for service users between entering and leaving the service. Outcome is assessed by comparing the group admitted and the group discharged from the service in the same time period. This should provide a reasonable indication of outcomes achieved unless the service user mix has changed significantly over the usual period for which service is delivered.
- 2. Service related information:** This provides information about the services, such as the overall severity of service users who use different services.
- 3. Collection completion and validity:** This details the completeness of the data set provided by your mental health services. This is important because it indicates how valid and reliable the data sets are likely to be. The less complete the data set, the less valid the information is likely to be.

In many cases the data is presented graphically for New Zealand, and then presented as a table for the individual team types (see team type classification factsheet).

The time period covered differs for the different data presented. See the title or the notes under the graphs or tables for information about the time period covered. Unless otherwise stated, the notes under the graphs also apply to the corresponding table.

For all graphs and tables, if there are less than twenty cases in the data set, the information is not presented. This is because small samples frequently provide inaccurate and potentially misleading results. See the notes and user guide for other important information about the graphs and tables.

Where appropriate, the statistical **confidence interval** is presented. This is shown by error bars (small lines above and below the average) on the graphs, and a score range in some tables. As a rule of thumb, if the confidence intervals of two data points do not overlap, the two points can be considered to be significantly different. If the confidence intervals of the data points do overlap, we assume the points are not significantly different. It is important to note that statistical significance may not indicate a clinically significant difference. **See the associated user guide for more information** about how to understand and use the data presented in this report.

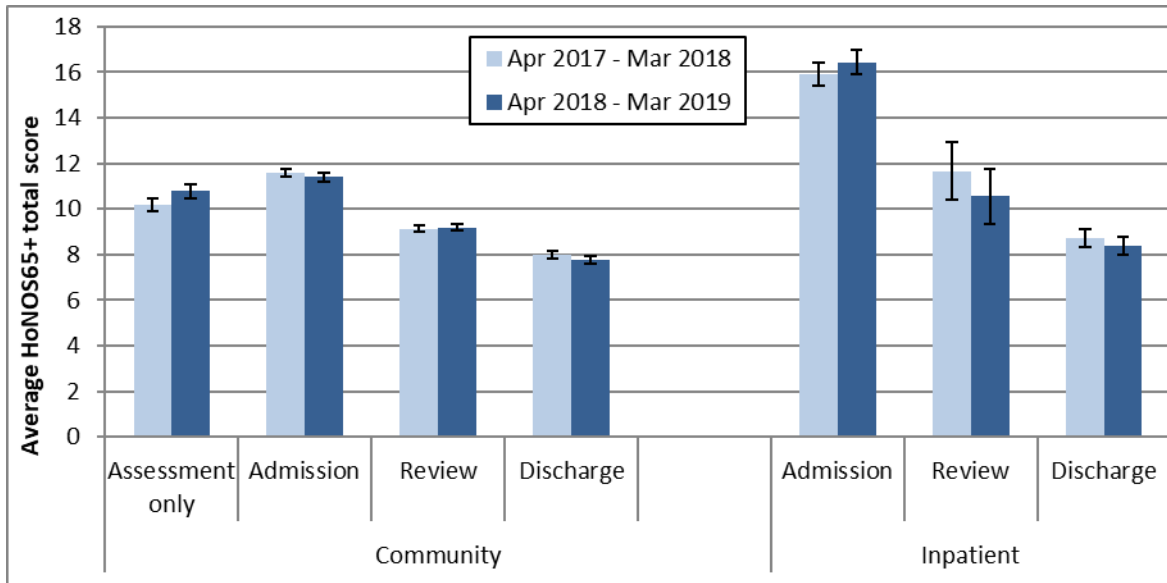
Data for graphs 11 and 12 was extracted 10 July 2019 from PRIMHD by the Ministry of Health and formatted by Te Pou. The data for graphs and tables 1 to 10 and 13 was extracted 9 July 2019 from PRIMHD by the Ministry of Health, then analysed and formatted by Te Pou.

Please note: For this period a few DHBs have incomplete data which will affect New Zealand totals.

1. Outcomes – changes in service user status

This section presents HoNOS65+ data indicating the status of service users at different stages of their contact with the DHB mental health services. Graph and Table 1 and 2 show results from HoNOS65+ total scores. Graphs and Tables 3 to 5b show results related to the percentage of HoNOS65+ items in the clinical range. Graph and Table 6 show results from the Index of Severity derived from HoNOS65+ scores.

Graph 1: Average HoNOS65+ total score (12 items) by collection type, New Zealand, Apr 2017 - Mar 2018 and Apr 2018 - Mar 2019



Notes: Error bars indicate the confidence intervals around the data point. If error bars overlap, the data points are not significantly different. Community discharge does not include discharge to an inpatient unit.

Interpretation: Decrease between admission and discharge is an indication of the outcomes achieved by the service user and service. The greater the decrease between admission and discharge, and the lower the average HoNOS65+ score at discharge, the more positive the outcome.

Target: A greater decrease from admission to discharge and lower average rating at discharge.

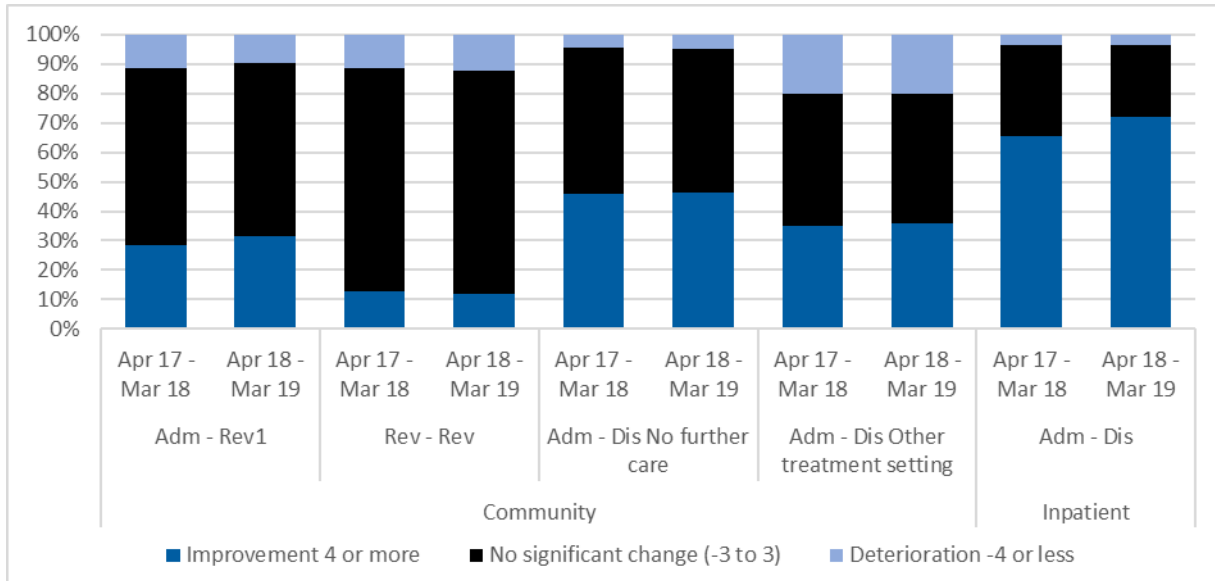
Table 1: Average HoNOS65+ total score (12 items), by collection type and team, New Zealand, Apr 2018 - Mar 2019

Team type	Assessment only			Admission			Review			Discharge		
	N	Mean	CI	N	Mean	CI	N	Mean	CI	N	Mean	CI
Community services												
Community team	358	10.7	10.1-11.2	311	11.1	10.5-11.7	1,550	8.9	8.6-9.1	267	7.1	6.5-7.7
Kaupapa Māori team							54	7.8	6.3-9.3			
Older people team	953	10.7	10.3-11.1	3,252	11.3	11.1-11.5	4,143	9.3	9.2-9.5	2,545	7.9	7.7-8.1
Specialty team	37	12.8	9.7-15.8	32	22.5	20.9-24.0						
Total	1,358	10.8	10.5-11.1	3,634	11.4	11.2-11.6	5,792	9.2	9.1-9.3	2,833	7.8	7.6-8.0
Inpatient services												
Inpatient team				254	15.6	14.8-16.4	35	10.1	7.7-12.5	219	8.7	7.9-9.4
Older people team				582	16.8	16.1-17.5	77	10.9	9.4-12.4	662	8.3	7.8-8.7
Total				837	16.4	15.9-17.0	120	10.6	9.3-11.8	885	8.4	8.0-8.8

Notes: N = number of collections in period. Average = average HoNOS65+ (12 item) score, CI = confidence interval for average score. Community discharge does not include discharge to an inpatient unit.

Interpretation: If confidence intervals for two scores do not overlap, then the scores are statistically significantly different. It is important to note that statistical significance may not indicate a clinically significant difference.

Graph 2: Difference in HoNOS65+ total score (12 items) of matched pairs by pair type and setting, A DHB, Apr 2018 – Mar 2019

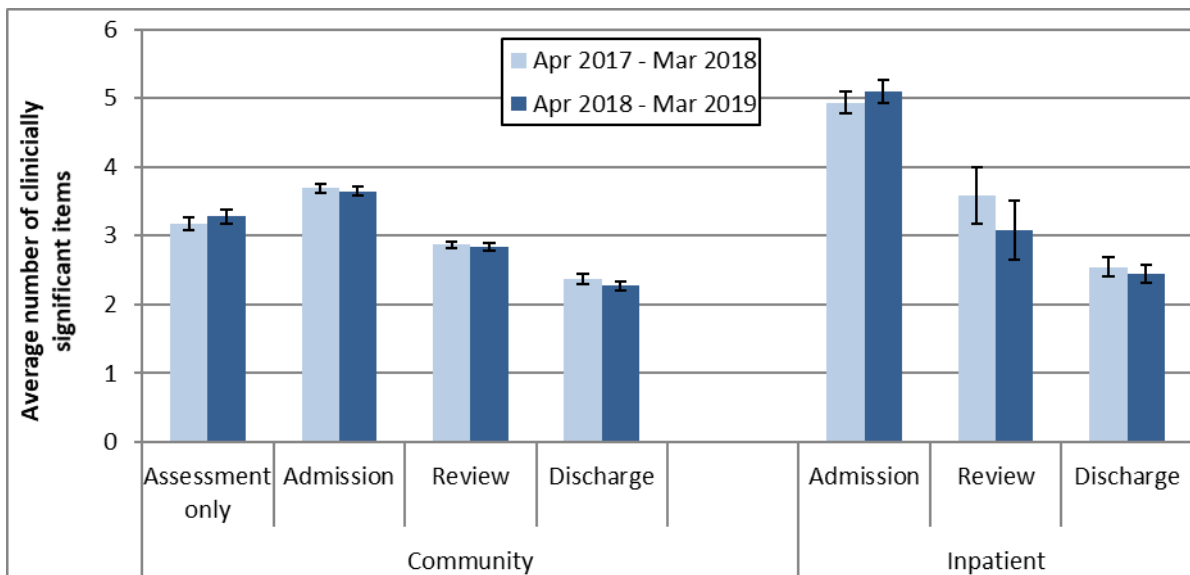


Notes: Shows the difference of the matched pair between the start and end HoNOS65+ total score.

Interpretation: The graphs compare two time periods. Dark blue band indicates percentage improvement within the given time period, while black band indicates no significant change and light blue deterioration. Improvement = 4 or more, no significant change = -3 to 3 and deterioration = -4 or less.

Target: A greater percentage increase in improvement for both community and inpatient settings and a smaller percentage in deterioration.

Graph 3: Average number of clinically significant HoNOS65+ items by collection type, New Zealand, Apr 2017 - Mar 2018 and Apr 2018 - Mar 2019



Notes: Average number clinically significant items = the average number of items in the clinical range (2, 3 or 4) per collection. Community discharge does not include discharge to an inpatient unit.

Interpretation: Points are significantly different if error bars don't overlap. Decrease between admission and discharge is an indication of the outcomes achieved by the service and service user. A greater decrease between admission and discharge indicates a better outcome. A lower admission score could be indication of service users seeking out and being engaged by services at a lower level of severity.

Target: A greater decrease from admission to discharge and smaller percentage in clinical range at discharge.

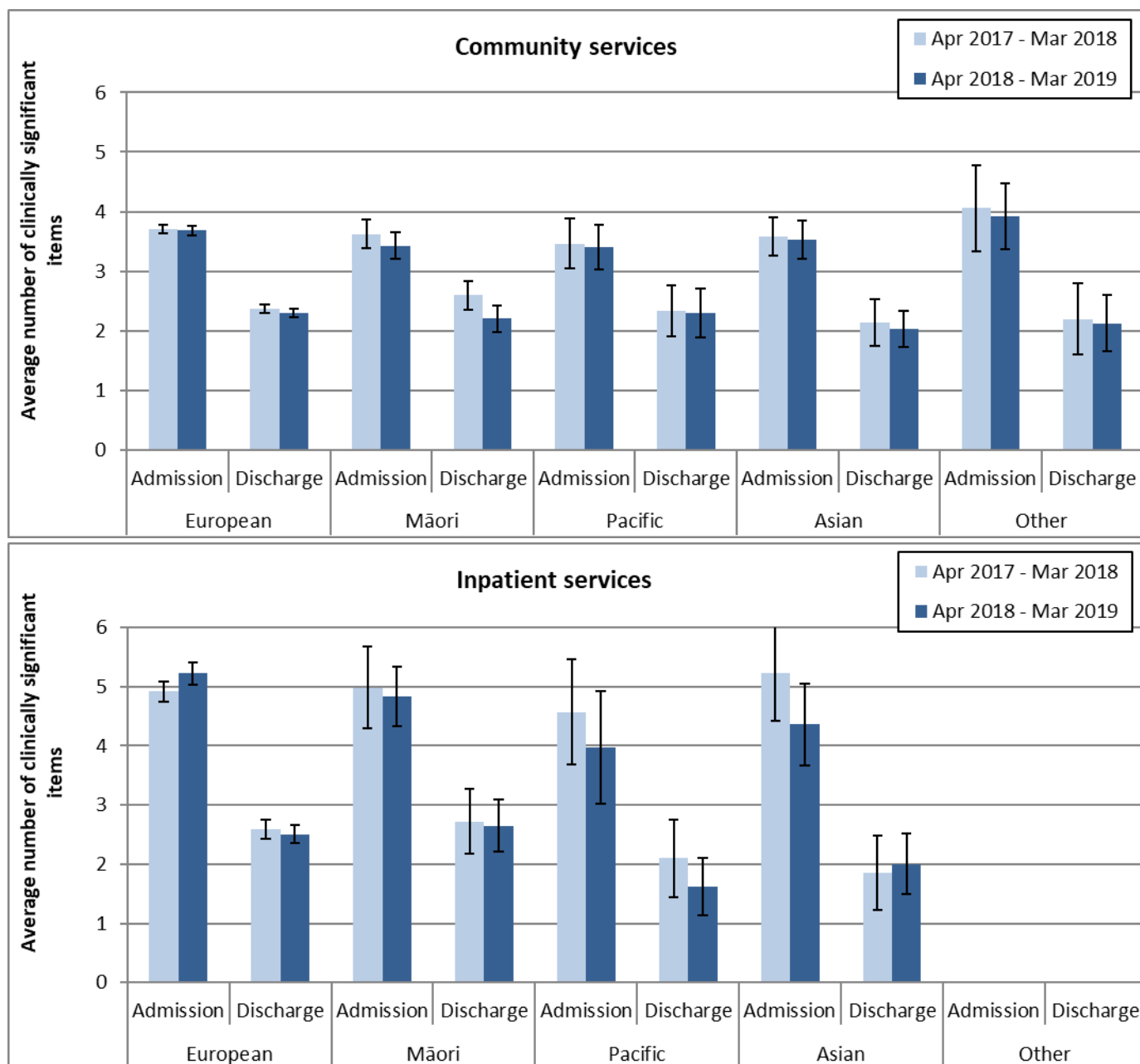
Table 3: Average number of clinically significant HoNOS65+ items by collection type and team, New Zealand, Apr 2018 - Mar 2019

Team type	Assessment only			Admission			Review			Discharge		
	N	Mean	CI	N	Mean	CI	N	Mean	CI	N	Mean	CI
Community services												
Community team	358	3.4	3.2-3.6	311	3.6	3.3-3.8	1,550	2.7	2.6-2.8	267	2.0	1.8-2.2
Kaupapa Māori team							54	2.3	1.7-2.8			
Older people team	953	3.2	3.1-3.3	3,252	3.6	3.6-3.7	4,143	2.9	2.9-3.0	2,545	2.3	2.2-2.4
Specialty team	37	3.4	2.6-4.2	32	6.2	5.6-6.7						
Total	1,358	3.3	3.2-3.4	3,634	3.6	3.6-3.7	5,792	2.8	2.8-2.9	2,833	2.3	2.2-2.3
Inpatient services												
Inpatient team				254	5.0	4.7-5.2	35	2.9	2.1-3.7	219	2.6	2.3-2.9
Older people team				582	5.1	4.9-5.4	77	3.2	2.7-3.8	662	2.4	2.2-2.6
Total				837	5.1	4.9-5.3	120	3.1	2.7-3.5	885	2.4	2.3-2.6

Notes: N = number of collections in period. Average = average number of HoNOS65+ items in the clinically significant range (ie scoring 2, 3, or 4), CI = confidence interval for average score. Community discharge does not include discharge to an inpatient unit.

Interpretation: If confidence intervals for two scores do not overlap, then the scores are statistically significantly different. Please note that statistical significance may not indicate a clinically significant difference.

Graph 4: Average number of clinically significant HoNOS65+ items at admission and discharge by ethnic group, New Zealand, Apr 2017 - Mar 2018 and Apr 2018 - Mar 2019

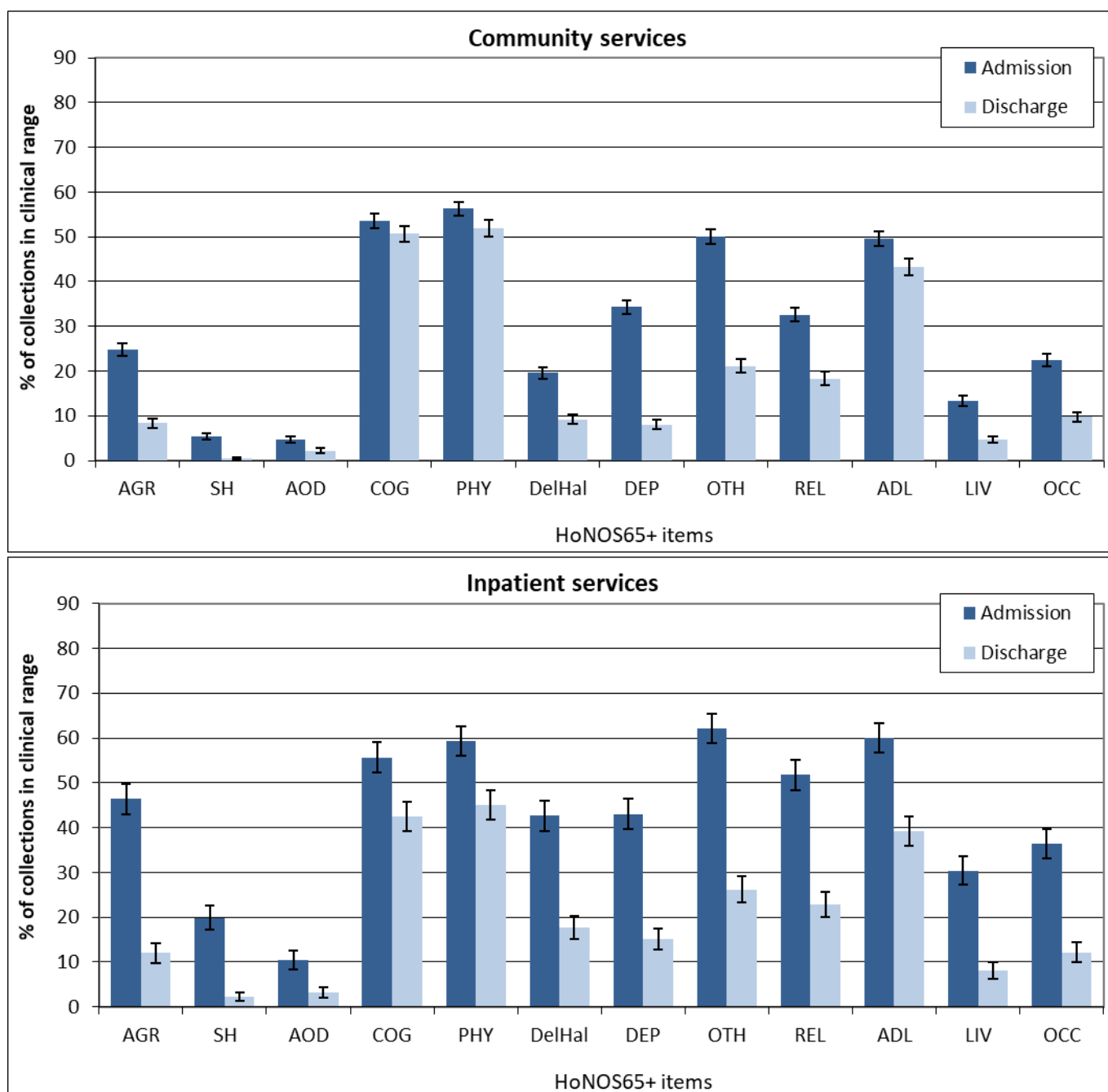


Notes: Average number of HoNOS65+ items in the clinical range (2, 3 or 4). Community discharge does not include discharge to an inpatient unit.

Interpretation: Points are significantly different if error bars don't overlap. Decrease between admission and discharge is an indication of the outcomes achieved by the service and service user. A greater decrease between admission and discharge indicates a better outcome. A lower admission score could be indication of service users seeking out and being engaged by services at a lower level of acuity.

Target: A greater decrease from admission to discharge and smaller percentage in clinical range at discharge.

Graph 5a: Percentage of collections in clinical range on each HoNOS65+ item, New Zealand, Apr 2018 - Mar 2019



Notes: Percentage of service users in the clinical range (2, 3 or 4) for each HoNOS65+ item. Community discharge does not include discharge to an inpatient unit.

Interpretation: The longer the bar, the more prevalent the difficulty measured by the item is amongst service users. A greater decrease in the length of the bar from admission to discharge suggests a better outcome for the difficulty measured by the item. Items that show medium to high frequency and less change may suggest possible targets for service improvement.

Target: A greater decrease from admission to discharge and smaller percentage in clinical range at discharge.

Table 5a: Percentage of collections in clinical range on each HoNOS65+ item (admission and discharge collections) by team, New Zealand, Apr 2018 - Mar 2019

Community services

First 6 HoNOS items														
Team type	N		AGR		SH		AOD		COG		PHY		DelHal	
	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch
Community team	311	267	16%	6%	15%	2%	6%	4%	30%	24%	63%	52%	21%	11%
Older people team	3,251	2,545	26%	9%	4%	0%	4%	2%	56%	54%	55%	52%	19%	9%
Specialty team	32		34%		6%		0%		72%		88%		25%	
Total	3,633	2,833	25%	8%	5%	0%	5%	2%	54%	51%	56%	52%	20%	9%

Second 6 HoNOS items														
Team type	DEP		OTH		REL		ADL		LIV		OCC			
	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch
Community team	47%	15%	62%	32%	34%	17%	33%	29%	13%	5%	18%	9%		
Older people team	33%	7%	48%	20%	32%	19%	51%	45%	13%	5%	22%	10%		
Specialty team	22%		91%		44%		97%		54%		97%			
Total	34%	8%	50%	21%	33%	18%	50%	43%	13%	5%	22%	10%		

Inpatient services

First 6 HoNOS items														
Team type	N		AGR		SH		AOD		COG		PHY		DelHal	
	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch
Inpatient team	254	219	54%	15%	19%	4%	15%	6%	49%	35%	58%	45%	46%	23%
Older people team	581	662	43%	11%	20%	2%	8%	2%	58%	45%	60%	45%	41%	16%
Total	836	885	46%	12%	20%	2%	10%	3%	56%	43%	59%	45%	43%	18%

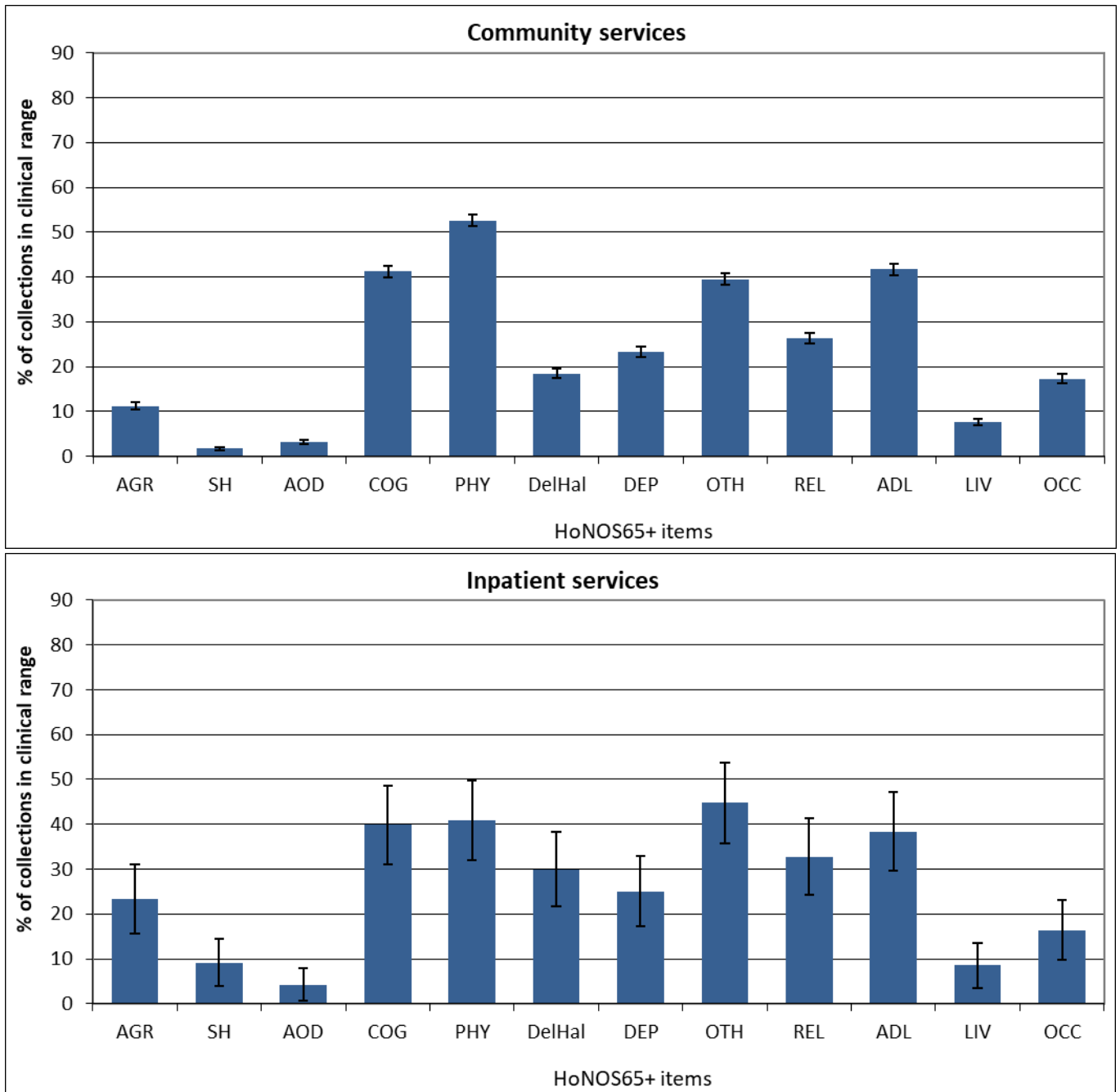
Second 6 HoNOS items														
Team type	DEP		OTH		REL		ADL		LIV		OCC			
	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch	Adm	Disch
Inpatient team	43%	25%	71%	28%	50%	29%	51%	34%	21%	8%	25%	9%		
Older people team	43%	12%	58%	26%	53%	21%	64%	41%	35%	8%	42%	13%		
Total	43%	15%	62%	26%	52%	23%	60%	39%	30%	8%	36%	12%		

Notes: Percentage of service users in the clinical range (2, 3 or 4) for each HoNOS65+ item. Community discharge does not include discharge to an inpatient unit.

Interpretation: The higher the percentage, the more prevalent the difficulty measured by the item is amongst service users. A greater decrease between admission to discharge suggests a better outcome for the difficulty measured by the item. Items that show medium to high frequency and less change may suggest possible targets for service improvement.

Target: A greater decrease from admission to discharge and smaller percentage in clinical range at discharge.

Graph 5b: Percentage of collections in clinical range on each HoNOS65+ item (review collections), New Zealand, Apr 2018 - Mar 2019



Notes: Percentage of service users in the clinical range (2, 3 or 4) for each HoNOS65+ item on review collections. Due to most admission being less than 91 days, the data set for review collections in inpatient settings is relatively small.

Interpretation: The longer the bar, the more prevalent the difficulty measured by the item is amongst service users.

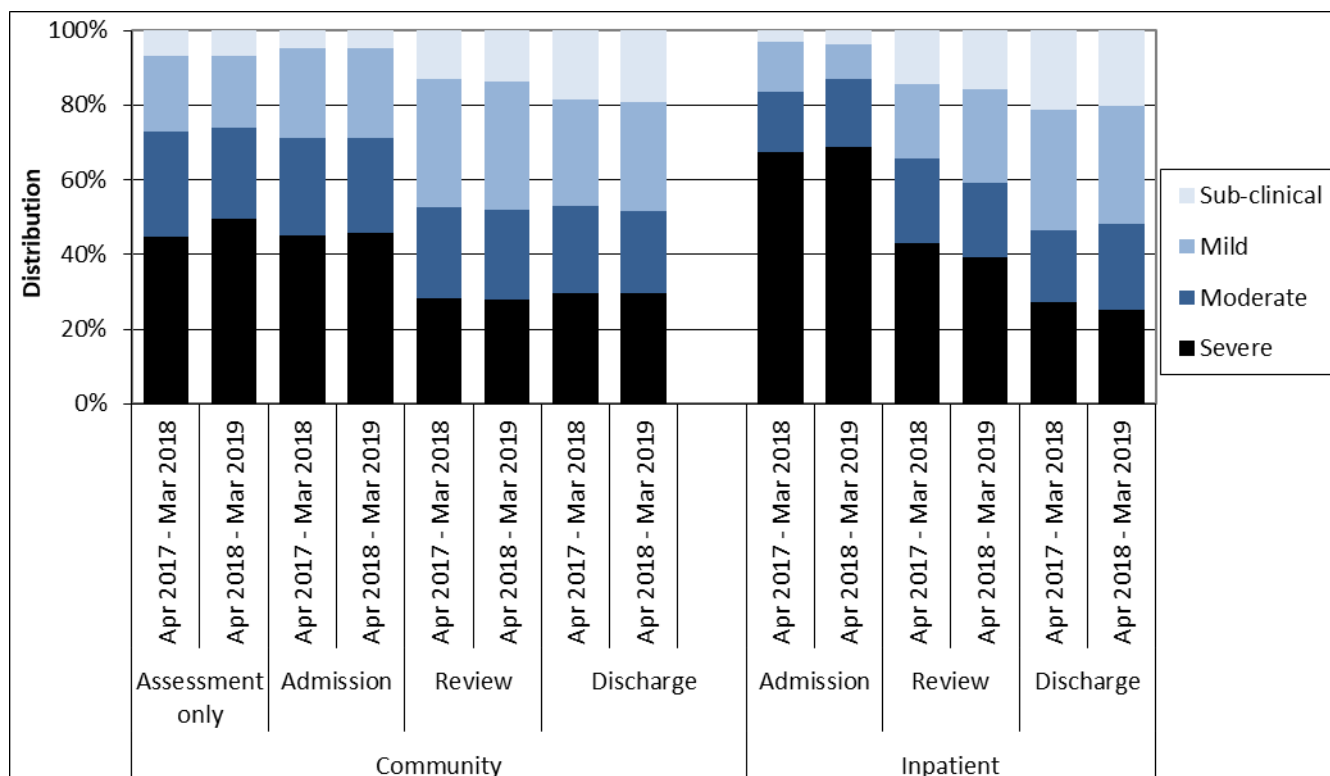
Table 5b: Percentage of collections in clinical range on each HoNOS65+ item (review collections) by team, New Zealand, Apr 2018 - Mar 2019

Team type	N	AGR	SH	AOD	COG	PHY	DelHal	DEP	OTH	REL	ADL	LIV	OCC
Community services													
Community team	1,550	7%	2%	5%	26%	51%	27%	23%	41%	28%	30%	8%	18%
Kaupapa Māori team	54	13%	4%	2%	22%	59%	22%	20%	30%	20%	22%	4%	7%
Older people team	4,143	13%	1%	2%	47%	53%	15%	24%	39%	26%	46%	7%	17%
Total	5,792	11%	2%	3%	41%	53%	18%	23%	40%	26%	42%	8%	17%
Inpatient services													
Inpatient team	35	29%	14%	6%	37%	29%	34%	14%	36%	37%	46%	9%	6%
Older people team	77	22%	8%	4%	44%	49%	30%	31%	49%	29%	38%	6%	18%
Total	120	23%	9%	4%	40%	41%	30%	25%	45%	33%	38%	9%	16%

Notes: Percentage of service users in the clinical range (2, 3 or 4) for each HoNOS65+ item on review collections. Due to most admission being less than 91 days, the data set for review collections in inpatient settings is relatively small.

Interpretation: The higher the percentage, the more prevalent the difficulty measured by the item is amongst service users.

Graph 6: Index of severity ratings for HoNOS65+ by collection type, New Zealand, Apr 2017 - Mar 2018 and Apr 2018 - Mar 2019



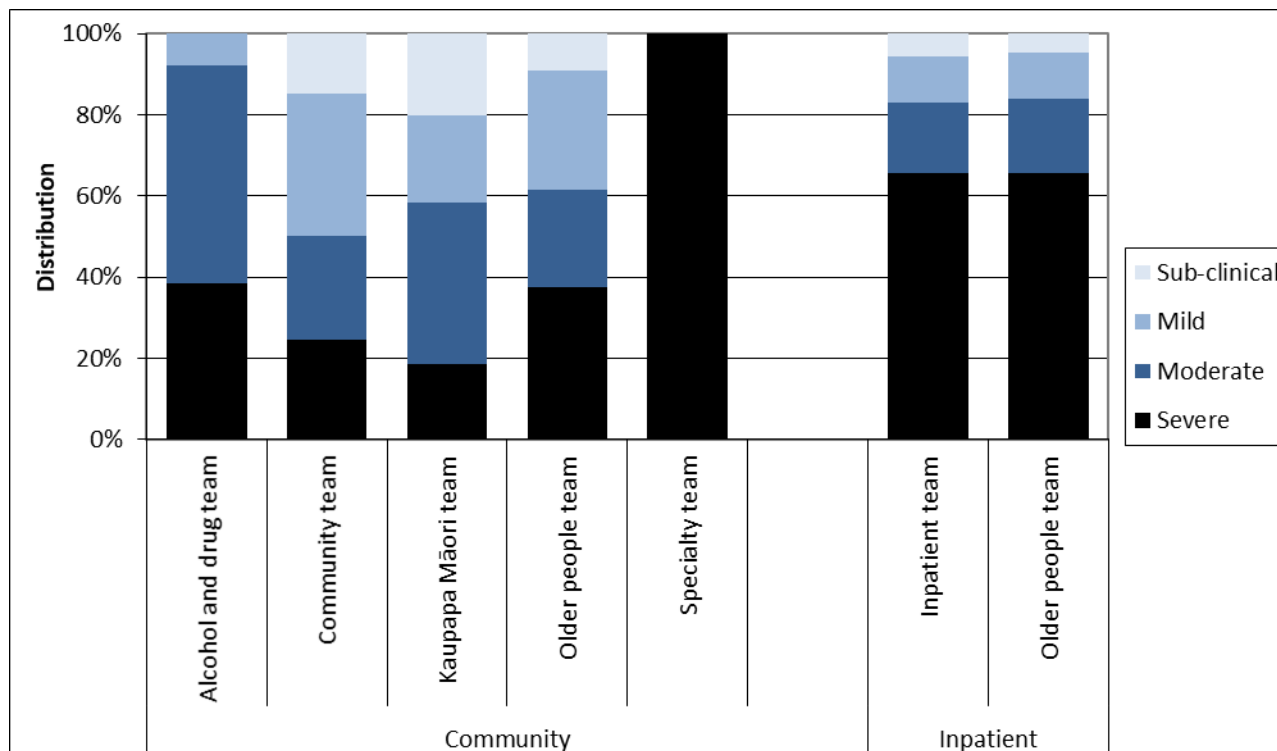
Notes: Community discharge does not include discharge to an inpatient unit. Index of Severity: Sub clinical = all items <2, mild = at least one item >1 and all items <3, moderate = at least one item >=3, severe = at least 2 items >=3 using the first 10 items. Community discharge does not include discharge to an inpatient unit.

Interpretation: Darker bars indicate higher overall level of severity. A more positive outcome is indicated by a larger decrease in darker sections of bar between admission and discharge.

2. Other measures of service activity

This section presents other information related to data collected in PRIMHD that may be helpful for understanding how teams are operating. This includes information relevant to caseload intensity and team activity.

Graph 7: Index of severity for HoNOS65+ (admission and review collections) by team, New Zealand, Apr 2018 - Mar 2019



Notes: Only data related to collection at admission and review is included so that results reflect the severity of service users during their engagement with the service. Index of Severity: Sub clinical = all items <2, mild = at least one item >1 and all items <3, moderate = at least one item >=3, severe = at least 2 items >=3 using first 10 items.

Interpretation: This graph gives an impression of the overall severity of the caseload for different teams at admission. The longer the darker bar, the higher the overall severity of the team's caseload.

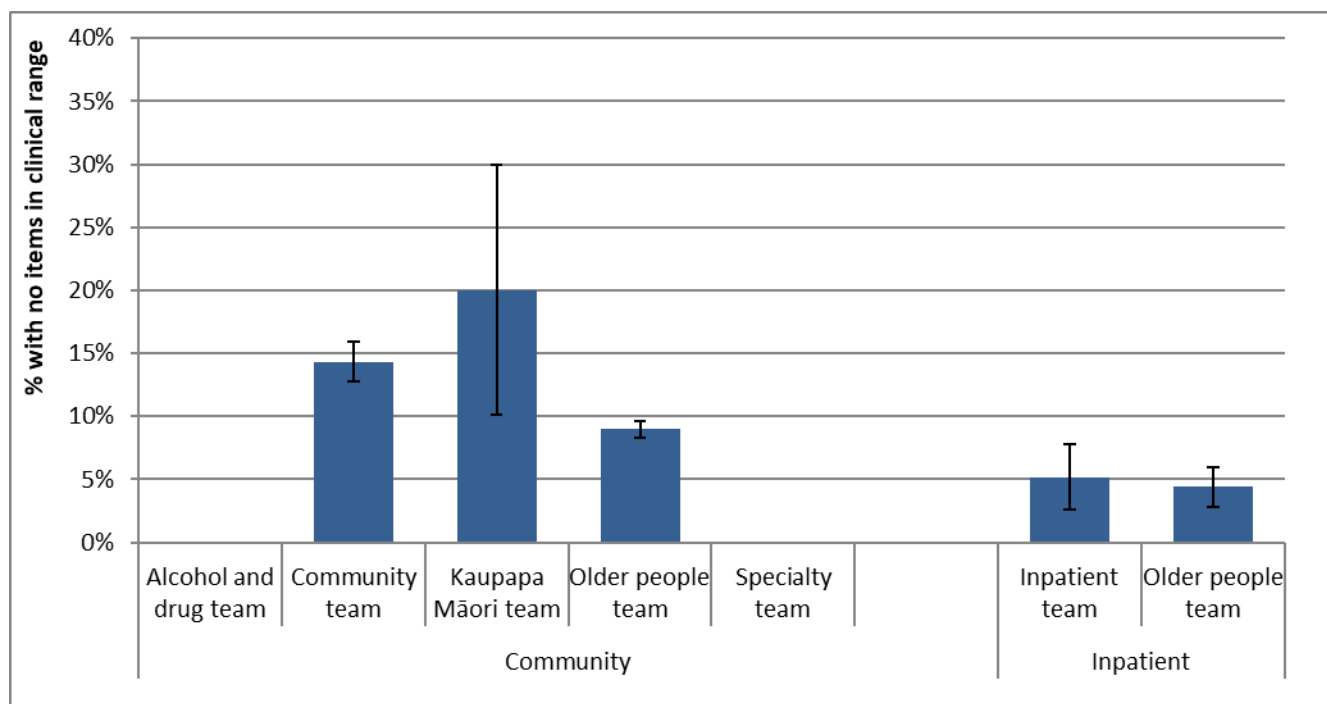
Table 7: Index of severity for HoNOS65+ by collection type and team, New Zealand, Apr 2018 - Mar 2019

Team type	Assessment only					Admission					Review					Discharge				
	Sub	Mild	Mod	Sev	N	Sub	Mild	Mod	Sev	N	Sub	Mild	Mod	Sev	N	Sub	Mild	Mod	Sev	N
Community services																				
Community team	3%	20%	29%	47%	358	6%	26%	25%	42%	311	17%	37%	25%	21%	1,550	22%	34%	24%	19%	267
Kaupapa Māori team											24%	22%	39%	15%	54					
Older people team	8%	19%	23%	51%	953	5%	24%	25%	46%	3,252	13%	33%	23%	31%	4,143	19%	29%	22%	31%	2,545
Specialty team	11%	22%	22%	46%	37	0%	0%	0%	100%	32										
Total	7%	19%	24%	50%	1,358	5%	24%	25%	46%	3,634	14%	34%	24%	28%	5,792	19%	29%	22%	30%	2,833
Inpatient services																				
Inpatient team						3%	10%	18%	69%	254	23%	23%	11%	43%	35	16%	32%	29%	22%	219
Older people team						4%	9%	18%	69%	582	9%	27%	25%	39%	77	22%	31%	21%	26%	662
Total						4%	9%	18%	69%	837	16%	25%	20%	39%	120	20%	32%	23%	25%	885

Notes: Sub = sub clinical, Mild = mild, Mod = moderate, Sev = severe on Index of Severity. Only admission collection data is included so that results reflect the severity of service users during their engagement with the service. Index of Severity: Sub clinical = all items <2, mild = at least one item >1 and all items <3, moderate = at least one item >=3, severe = at least 2 items >=3 using first 10 items. Community discharge does not include discharge to an inpatient unit.

Interpretation: Larger percentages in the columns to the right for each type of collection, the higher the overall severity of the team's caseload.

Graph 8: Collections with no HoNOS65+ items in clinical range, New Zealand, Apr 2018 - Mar 2019



Notes: Includes admission and review collections. Shows percentage of service users with all HoNOS65+ items less than two, ie no HoNOS65+ items in the clinical range.

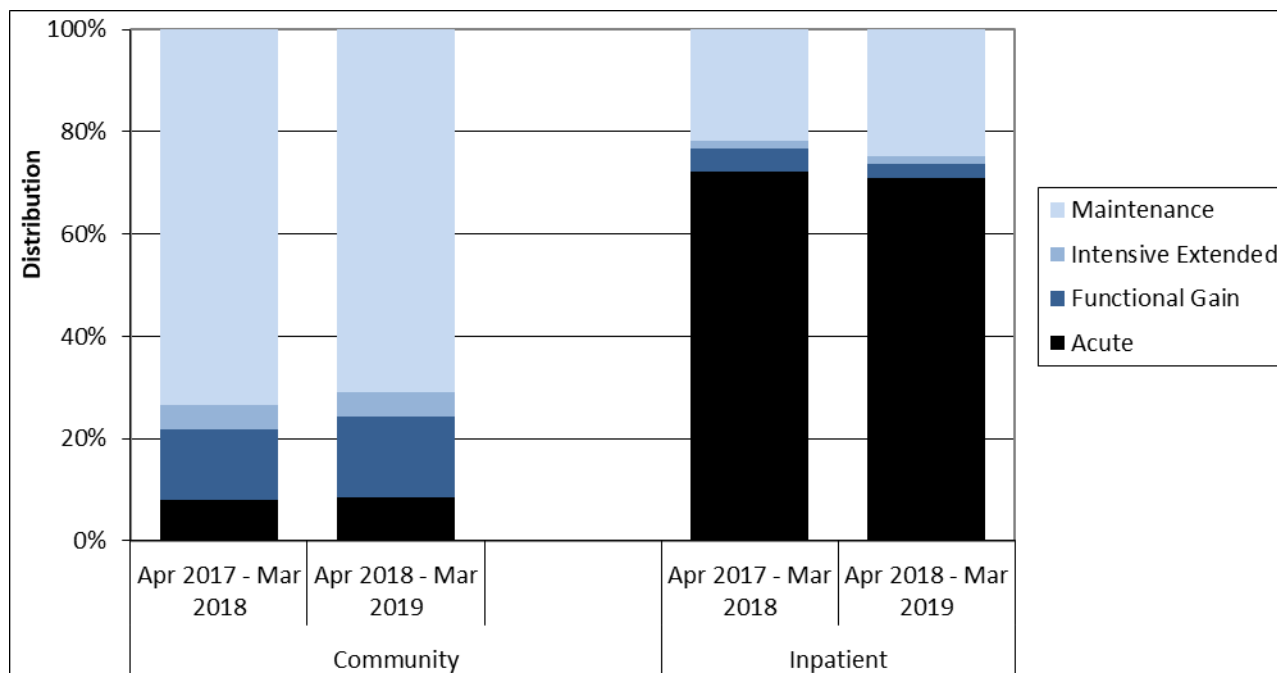
Interpretation: There are a variety of reasons that may make it appropriate for service users to remain in the service even though they show no HoNOS65+ items in the clinical range. However, teams showing a larger or substantial percentage of service users with no HoNOS65+ items in the clinical range could benefit from reviewing these cases to ensure that the service remains appropriate for this service user.

Table 8: Collections with no HoNOS65+ items in clinical range, New Zealand, Apr 2018 - Mar 2019

Team type	Number of collections with no items in clinical range	Percentage with no items in clinical range
Community services		
Alcohol and drug team	0	0%
Community team	267	14%
Kaupapa Māori team	13	20%
Older people team	663	9%
Specialty team	0	0%
Total	951	10%
Inpatient services		
Inpatient team	15	5%
Older people team	29	4%
Total	46	5%

Notes: For further information see notes for Graph 8.

Graph 9: Focus of care categories, New Zealand, Apr 2017 - Mar 2018 and Apr 2018 - Mar 2019



Notes: Data from review and discharge collections.

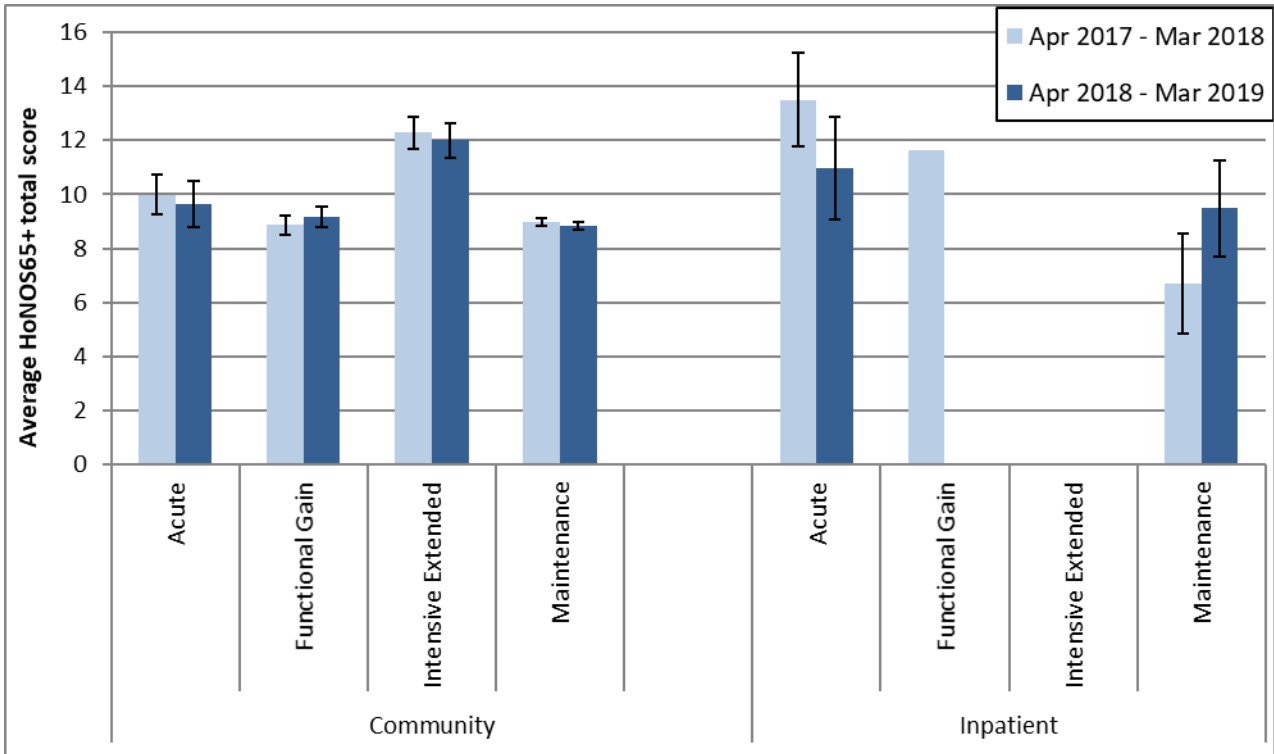
Interpretation: Darker bars indicate more intensive involvement in care, so a longer or darker bar in general suggests more intensive working. A longer functional gain bar and shorter maintenance bar potentially suggests more recovery focused ways of working.

Table 9: Focus of care categories by team, New Zealand, Graph 11: Focus of care categories, New Zealand, Apr 2017 - Mar 2018 and Apr 2018 - Mar 2019

Team type	Acute		Functional gain		Intensive extended		Maintenance		Number of collections	
	Last Period	This Period	Last Period	This Period	Last Period	This Period	Last Period	This Period	Last Period	This Period
Community services										
Community team	5%	6%	20%	22%	4%	4%	71%	68%	2,161	1,814
Kaupapa Māori team	0%	5%	7%	18%	3%	3%	90%	74%	71	61
Older people team	9%	9%	12%	14%	5%	5%	74%	72%	6,789	6,328
Pacific people team	0%		39%		0%		61%		23	
Total	8%	9%	14%	16%	5%	5%	73%	71%	9,089	8,267
Inpatient services										
Inpatient team	84%	79%	6%	6%	2%	4%	7%	12%	327	246
Older people team	68%	69%	3%	2%	1%	1%	28%	28%	663	708
Total	72%	71%	5%	3%	1%	1%	22%	25%	1,006	966

Notes: For further information see notes for Graph 9.

Graph 10: HoNOS65+ total score (review collections) by focus of care, New Zealand, Apr 2017 - Mar 2018 and Apr 2018 - Mar 2019



Notes: This data is for review collections only.

Interpretation: Points are significantly different if error bars don't overlap. A general downward trend in scores from acute to maintenance focus of care might be expected.

Table 10: HoNOS65+ total score (review collections) by focus of care by team, New Zealand, Apr 2018 - Mar 2019

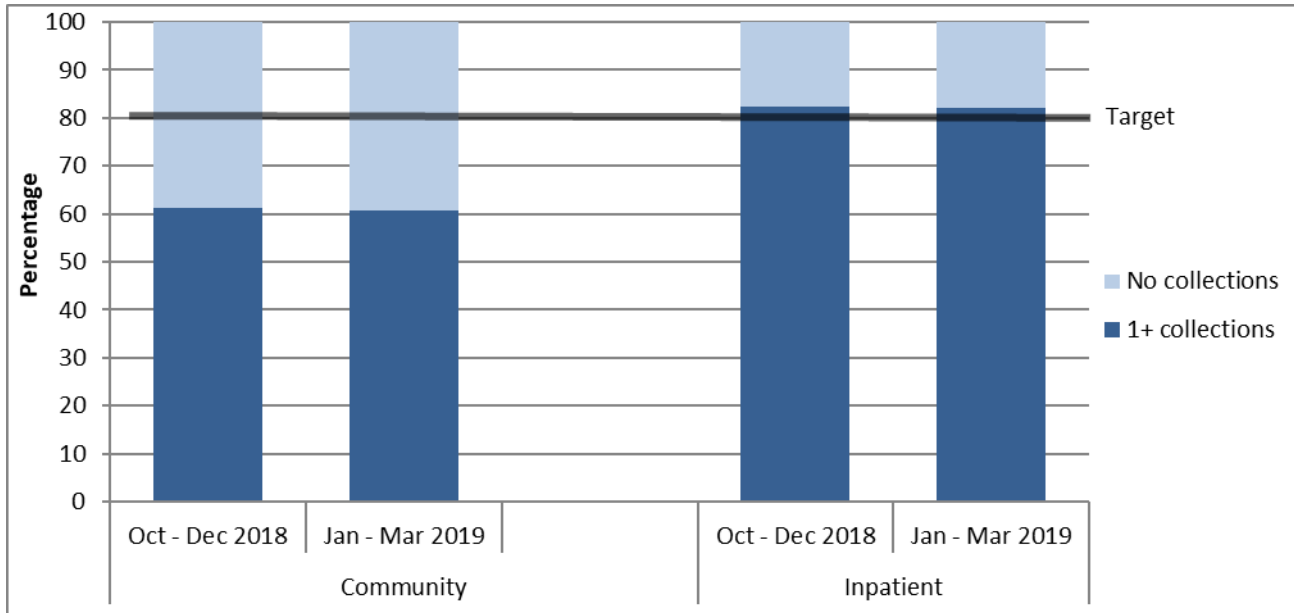
Team type	Acute			Functional gain			Intensive extended			Maintenance		
	N	Mean	CI	N	Mean	CI	N	Mean	CI	N	Mean	CI
Community services												
Community team	40	12.5	10.3-14.8	318	9.6	9.1-10.2	65	10.6	9.2-12.0	1,071	8.4	8.0-8.7
Kaupapa Māori team										43	7.1	5.7-8.5
Older people team	174	9.0	8.1-9.9	508	8.9	8.4-9.3	207	12.5	11.8-13.2	2,927	9.0	8.9-9.2
Total	214	9.6	8.8-10.5	845	9.2	8.8-9.5	273	12.0	11.4-12.6	4,077	8.8	8.7-9.0
Inpatient services												
Older people team	39	12.0	9.7-14.3							34	9.5	7.5-11.4
Total	57	11.0	9.1-12.9							50	9.5	7.7-11.3

Notes: For further information see notes for Graph 10.

3. Collection completion and validity

This section presents information about the completeness and validity of the data on which the remainder of this report is based. It also shows the current targets for the variables presented.

Graph 11: Percentage of service users with at least one collection during the period, New Zealand, Oct – Dec 2018 and Jan – Mar 2019 (65 years and over)



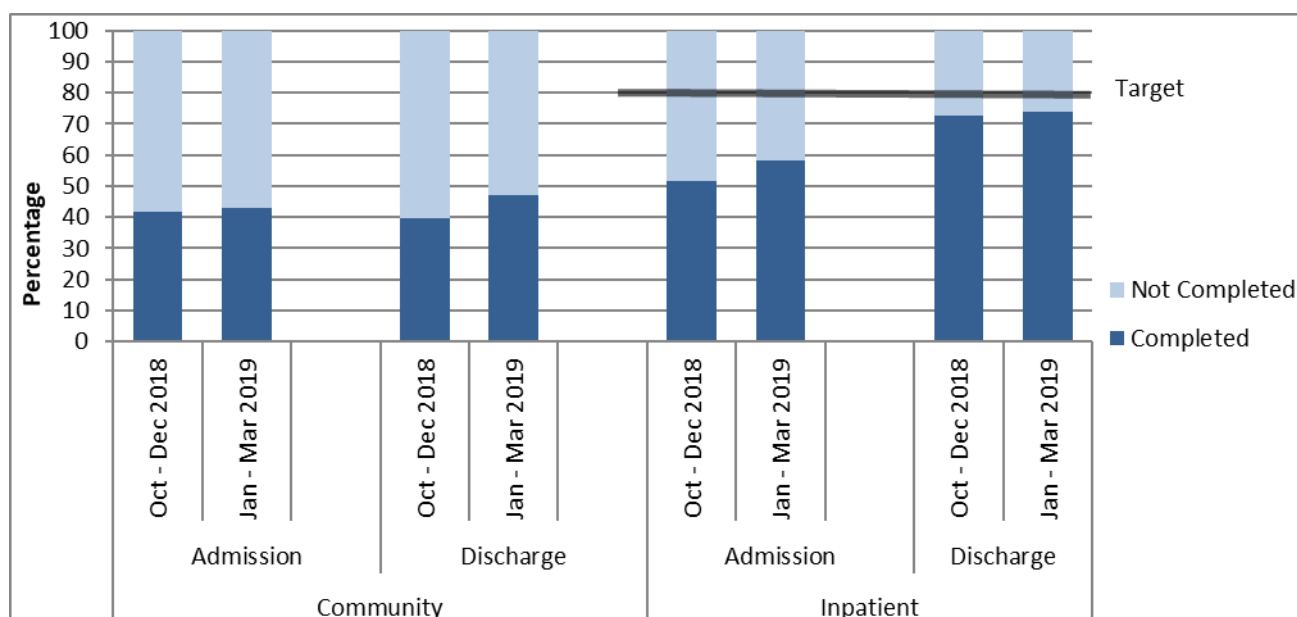
Notes: Community compliance is affected by crisis teams completing triage or brief assessment type activity which is not a comprehensive assessment.

Interpretation: The longer the dark part of the bar, the more completely the data set includes all service users, and the more meaningful and representative the graphs, tables, and analyses using this data will be. Data is approximate due to movements of service users between teams and similar variations; however, it does provide a reasonably accurate representation of completion of measures. Only data with valid collections is included.

Target: To meet or exceed the target shown on the graph for the percentage of service users with at least one collection within the period.



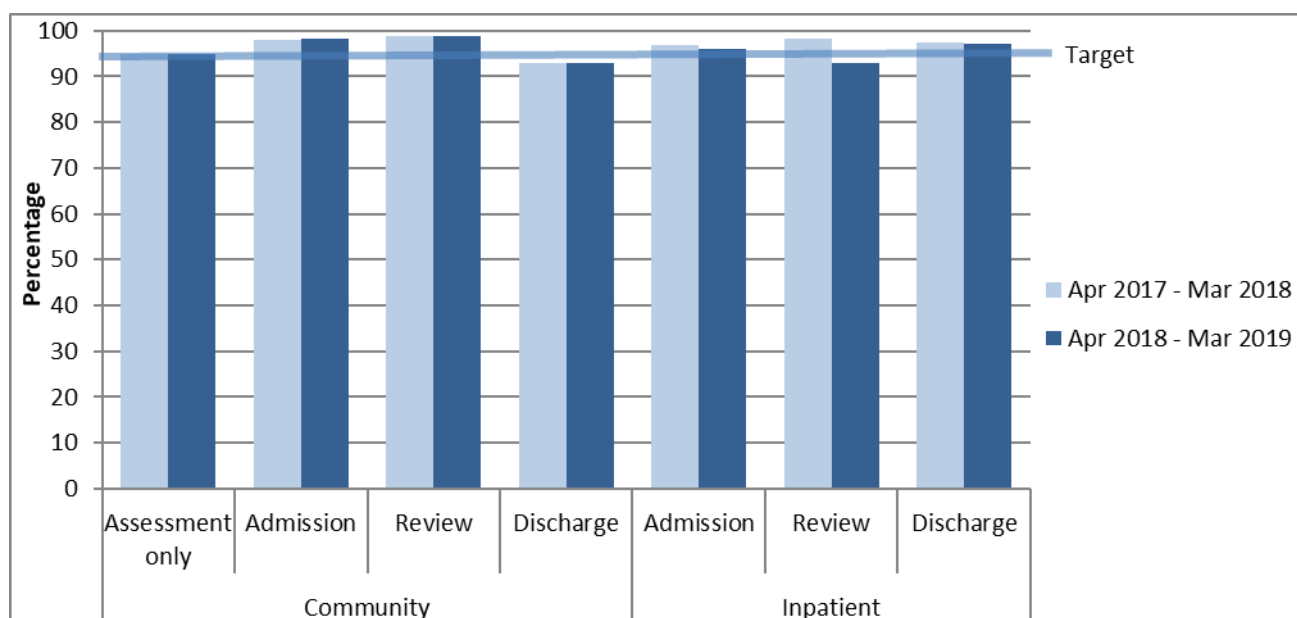
Graph 12: Percentage of service users with admission and discharge collections completed, New Zealand, Oct – Dec 2018 and Jan – Mar 2019 (65 years and over)



Notes: Community compliance is affected by crisis teams completing triage or brief assessment type activity which is not a comprehensive assessment.

Interpretation: The longer the dark bar, the larger the percentage of admission and discharge that had the relevant data collection type. Data is approximate due to movements of service users between teams and similar variations; however, it does provide a reasonably accurate representation of completion of measures. Only data with valid collections is included.

Graph 13: Percentage of valid collections, HoNOS65+, New Zealand, Apr 2017 - Mar 2018 and Apr 2018 - Mar 2019



Notes: Valid = Two or fewer of the 12 items scored as unknown or missing. Discharge excludes collection types for lost to care, discharge dead and brief episode of care. Collection in drug and alcohol teams is not required, therefore AOD data is excluded.

Interpretation: The longer the dark lines, the higher the percentage of valid scores.

Target: Aim for 95% valid collections.

Table 13: Invalid collections by team, by HoNOS65+ item, New Zealand, Apr 2018 - Mar 2019

Team type	% Invalid			Number of invalid ratings by HoNOS65+ item												Total number
	Adm	Rev	Dch	1	2	3	4	5	6	7	8	9	10	11	12	
Community services																
Community team	2%	1%	12%	74	81	86	87	85	89	85	100	85	82	87	98	2,681
Kaupapa Māori team		0%		3	3	3	3	3	3	3	3	3	3	3	3	77
Older people team	2%	1%	6%	275	316	331	404	283	387	357	549	308	307	350	399	11,717
Specialty team	9%			5	5	6	6	5	9	8	10	23	23	31	29	105
Total	2%	1%	7%	362	410	432	505	381	493	458	667	424	420	475	533	14,644
Inpatient services																
Inpatient team	3%	5%	1%	1	5	3	3	6	5	7	28	11	6	14	21	510
Older people team	5%	8%	4%	5	18	23	22	6	30	28	32	45	26	137	152	1,377
Total	4%	7%	3%	6	23	26	25	12	35	35	60	56	32	151	173	1,898

Notes: Percentage of invalid collections = the percentage of collections that had three or more of the 12 items scored as unknown or missing. Number of invalid ratings by HoNOS65+ item = for each of the HoNOS65+ items, the number of collections for which that item was unknown or missing. Discharge excludes collection types for lost to care, deceased and brief episode of care. Collection in drug and alcohol teams is not required, therefore AOD data is excluded.

Interpretation: The lower the percentage of invalid collections by team, the higher the percentage of valid scores. The lower the number of invalid collections by HoNOS65+ item, the more collections that have valid data on that HoNOS65+ item.

Target: Aim for 95% valid collections (5% invalid collections) or better. Aim for as few invalid items as possible, with all items having a similar validity rate.