AROC Ambulatory Report

January 2017 – December 2017

Anywhere Hospital

Australasian Faculty of Rehabilitaion Medicine

australian health services research institute

UNIVERSITY OF WOLLONGONG AUSTRALIA

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Definition of ambulatory rehabilitation

- Starts with a multi-disciplinary assessment

- Is multi-disciplinary, although all therapies may not necessarily be delivered concurrently

- Is goal orientated – includes goal setting and review

- The program of care is time limited

- Is delivered in an ambulatory setting, either centre or community based

Ambulatory rehabilitation may occur as:

- The continuation of an inpatient episode of rehabilitation

- A rehabilitation program provided solely in an ambulatory setting

AROC ambulatory data collection

- The AROC dataset includes items that relate specifically to evaluating the efficacy of ambulatory rehabilitation programs.

- Data is collected to reflect the program of rehabilitation, thus an 'episode' is defined by the initial and final service contact.

- The challenge in developing the dataset was to include an outcome tool that could best address the diverse range of service models and impairment groups represented in ambulatory rehabilitation, with a minimum burden on resources.

- The over-arching outcome tool included in the dataset is the Australian Modified Lawton's Instrumental Activities of Daily Living (IADL) scale.

- Impairment or discipline specific outcomes tools have been added to the dataset to provide more outcome specificity by cohort.

- V4.1 of the AROC dataset was introduced on 1 July 2017.

- V4 AROC data items have been mapped to the V4.1 AROC dataset.

Ambulatory outcome measures

All impairments

- Australian Modified Lawton's IADL Scale

Stroke

- Upper Limb Motor Assessment Scale (if relevant)
- Timed 10 meter walk test (if relevant)
- Aphasia tool (specify tool used)

Brain Dysfunction

- Mayo - Portland Adaptability Inventory - 4 (MPAI-4)

Orthopaedic conditions

- Timed 10 meter walk test

Reconditioning

- de Morton Mobility Index (DEMMI)

Amputation of limb

- Timed up and go
- 6 minute walk test (optional)
- Timed 10 meter walk test (optional)

Data exclusions

- Demographic and episode start information is reported for all episodes.

- An episode is considered "complete" for the purpose of calculating outcome statistics in this report when mode of episode end is discharged to final or interim destination.

- Outcome measures are based on completed episodes, as defined above, however the volume of reported data may be further reduced if data items are missing.

Interpretation of results

- This descriptive report includes analysis of data that has been collected by your service, and the combined submitted data of all participating ambulatory rehabilitation services.

- Where sufficient data for an impairment group is available (≥ 5), AROC provides comparison analysis.

- The data presented in this report represents a small proportion of all ambulatory rehabilitation services and models of service delivery. Interpretation of these results must be made with care.

Completeness of data reported

Number of episodes submitted each month to AROC by

Anywhere Hospital

Do these numbers look like a complete year was submitted?

Month	No. episodes
January	4
February	4
March	5
April	7
May	11
June	6
July	10
August	14
September	9
October	8
November	8
December	12
Full year	**98**

Quality of data reported

AROC core data set items	Item collected No.	%
Path	98	100.0
Facility code	98	100.0
Facility name	98	100.0
Ward code[1]	80	81.6
Ward name[1]	81	82.7
MRN	98	100.0
Letters of name	96	98.0
Date of birth	98	100.0
DOB estimate flag	96	98.0
Sex	98	100.0
Indigenous status	98	100.0
Geographical residence	98	100.0
Postcode	98	100.0
Episode begin date	98	100.0
Episode end date	98	100.0
Funding source	98	100.0
Health fund/other payer	70	98.6
NDIS	20	20.4 ←
Referral date	98	100.0
Impairment code	98	100.0
Onset date &/or time since onset	97	99.0
Relevant inpatient episode date	79	80.6 ←
Episode begin reason	98	100.0
First direct care episode	98	100.0
Interpreter required	98	100.0
Date of multi-disciplinary rehab plan	96	98.0
Accommodation prior to episode	95	96.9
Carer status prior to episode	94	100.0
Employment status prior to episode	97	99.0
Accommodation during episode	98	100.0
Carer status during episode	93	100.0
Existing comorbidity interfering with rehab	98	100.0
— Comorbidities identified	24	100.0

AROC core data set items	Item collected No.	%
Cognitive impairment impacting rehab	20	20.4 ←
Episode end reason	95	96.9
Final accommodation – episode end	92	100.0
Carer status – episode end	92	100.0
Employment status after discharge	40	40.8 ←
Return to pre-impairment activities	17	17.3 ←
Days seen	98	100.0
Occasions of service	98	100.0
Disciplines involved in therapy	98	100.0
Lawton's start date	97	99.0
Lawton's start items	97	99.0
Lawton's end date	97	99.0
Lawton's end items	97	99.0
GAS start date[1]	3	3.1
GAS start scores[1]	3	3.1
GAS end date[1]	3	3.1
GAS end scores[1]	3	3.1

Impairment specific items

Stroke		7	
— Rehab aimed at upper limb function	0	0.0 ←
— Rehab aimed at gait retraining	0	0.0 ←
— Rehab aimed at aphasia	0	0.0 ←
— ULMAS start date	0	0.0 ←
— ULMAS start scores	0	0.0 ←
— ULMAS end date	0	0.0 ←
— ULMAS end scores	0	0.0 ←
— Timed ten metre walk start date	0	0.0 ←
— Timed ten metre walk test on admission	0	0.0 ←
— Timed ten metre walk end date	0	0.0 ←
— Timed ten metre walk test on discharge	0	0.0 ←

AROC impairment specific items	Item collected No.	%
Brain injury*	1	
— MPAI4 start date	0	0.0 ←
— MPAI4 start scores	0	0.0 ←
— MPAI4 end date	0	0.0 ←
— MPAI4 end scores	0	0.0 ←
Spinal cord injury*	1	
— Injury start level	1	100.0
Reconditioning	11	
— DEMMI start date	0	0.0 ←
— DEMMI start scores	0	0.0 ←
— DEMMI end date	0	0.0 ←
— DEMMI end scores	0	0.0 ←
Amputation of limb	1	
— Phase of care at episode start	0	0.0 ←
— Phase of care during episode	0	0.0 ←
— Phase of care at episode end	0	0.0 ←
— Prosthetic device fitted	0	0.0 ←
— Casting date[2]	0	0.0
— Date of first prosthetic fitting[2]	0	0.0
— Reason for delay in fitting[2]	0	0.0
— Timed up and go test	0	0.0 ←
— Six min walk test[1]	0	0.0
— Ten metre walk test[1]	0	0.0
Orthopaedic conditions	60	
— Timed ten metre walk start date	11	18.3
— Timed ten metre walk test on admission	11	18.3
— Timed ten metre walk end date	11	20.0
— Timed ten metre walk test on discharge	12	21.8 ←

*Also includes MMT that contain this impairment

Overall data quality score **55.6**

NOTE: AROC can provide case listings of missing data to assist with updating.

(1) These data items are optional to collect   (2) Not included in overall data quality score

Demographic data

The following section provides demographic data. These data are presented at service and national levels.

Such data are useful to provide context to the more detailed analysis of rehabilitation outcomes, but in themselves are not impacted by clinical practice.

Distribution of services and episodes

	Public		Private		All Ambulatory	
	No.	**%**	**No.**	**%**	**No.**	**%**
Facilities						
New South Wales	2	3.6	19	34.5	21	38.2
Victoria	0	—	3	5.5	3	5.5
Queensland	2	3.6	10	18.2	12	21.8
South Australia	7	12.7	1	1.8	8	14.5
Western Australia	1	1.8	1	1.8	2	3.6
Tasmania	1	1.8	0	—	1	1.8
Australian territories	0	—	1	1.8	1	1.8
NZ	7	12.7			7	12.7
Total	**20**	**36.4**	**35**	**63.6**	**55**	**100.0**
Episodes						
New South Wales	358	3.5	4,607	44.5	4,965	48.0
Victoria	0	—	1,751	16.9	1,751	16.9
Queensland	485	4.7	765	7.4	1,250	12.1
South Australia	1,296	12.5	337	3.3	1,633	15.8
Western Australia	89	0.9	37	0.4	126	1.2
Tasmania	12	0.1	0	—	12	0.1
Australian territories	0	—	459	4.4	459	4.4
NZ	149	1.4			149	1.4
Total	**2,389**	**23.1**	**7,956**	**76.9**	**10,345**	**100.0**

Episodes by impairment group
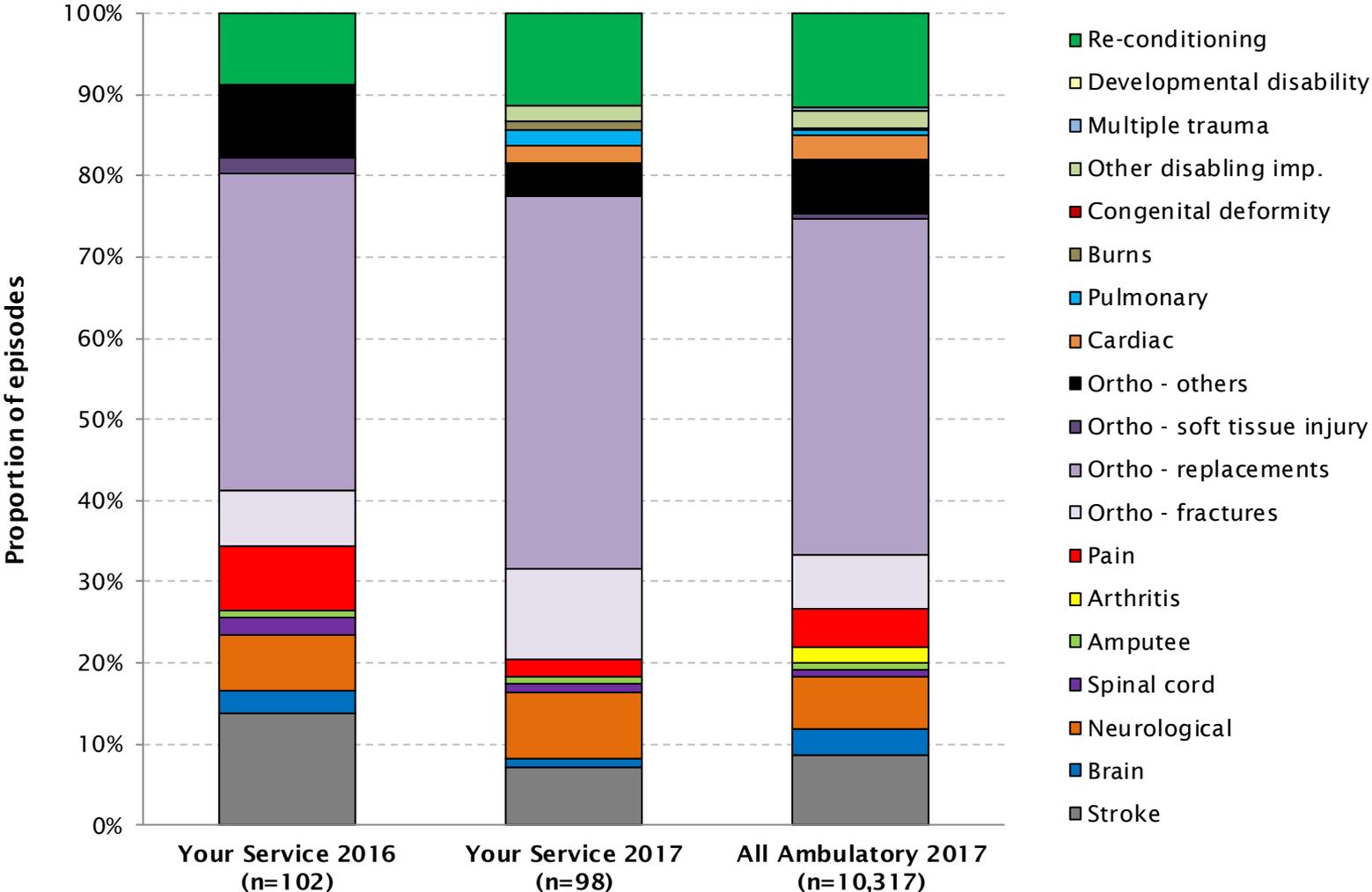
Episodes by impairment group

Impairment group	Your Service 2016 No.	Your Service 2016 %	Your Service 2017 No.	Your Service 2017 %	All Ambulatory 2017 No.	All Ambulatory 2017 %
Stroke	14	13.7	7	7.1	884	8.6
Brain	3	2.9	1	1.0	339	3.3
Neurological	7	6.9	8	8.2	653	6.3
Spinal cord	2	2.0	1	1.0	96	0.9
Amputee	1	1.0	1	1.0	101	1.0
Arthritis	0	—	0	—	180	1.7
Pain	8	7.8	2	2.0	487	4.7
Ortho - fractures	7	6.9	11	11.2	692	6.7
Ortho - replacements	40	39.2	45	45.9	4,270	41.4
Ortho - soft tissue injury	2	2.0	0	—	68	0.7
Ortho - others	9	8.8	4	4.1	693	6.7
Cardiac	0	—	2	2.0	305	3.0
Pulmonary	0	—	2	2.0	81	0.8
Burns	0	—	1	1.0	7	0.1
Congenital deformity	0	—	0	—	2	0.0
Other disabling imp.	0	—	2	2.0	234	2.3
Multiple trauma	0	—	0	—	26	0.3
Developmental disability	0	—	0	—	3	0.0
Re-conditioning	9	8.8	11	11.2	1,196	11.6
Missing or excluded	0		0		28	
All episodes	102	100.0	98	100.0	10,345	100.0

First direct care rehabilitation episode by impairment group

First direct care rehabilitation episode by impairment group

Impairment group	Your Service 2016				Your Service 2017				All Ambulatory 2017			
	No.	Primary admission	Subsequent admission	Missing	No.	Primary admission	Subsequent admission	Missing	No.	Primary admission	Subsequent admission	Missing
Stroke	14	6	8	0	7	3	4	0	884	412	471	1
Brain	3	1	2	0	1	1	0	0	339	186	152	1
Neurological	7	5	2	0	8	4	4	0	653	429	223	1
Spinal cord	2	0	2	0	1	1	0	0	96	42	54	0
Amputee	1	0	1	0	1	0	1	0	101	36	65	0
Arthritis	0	0	0	0	0	0	0	0	180	126	52	2
Pain	8	3	5	0	2	2	0	0	487	336	150	1
Ortho - fractures	7	1	6	0	11	5	6	0	692	331	359	2
Ortho - replacements	40	18	22	0	45	26	19	0	4,270	1,943	2,315	12
Ortho - soft tissue injury	2	0	2	0	0	0	0	0	68	36	32	0
Ortho - others	9	4	5	0	4	1	3	0	693	336	353	4
Cardiac	0	0	0	0	2	2	0	0	305	258	46	1
Pulmonary	0	0	0	0	2	1	1	0	81	45	36	0
Burns	0	0	0	0	1	1	0	0	7	4	3	0
Congenital deformity	0	0	0	0	0	0	0	0	2	1	1	0
Other disabling imp.	0	0	0	0	2	1	1	0	234	160	74	0
Multiple trauma	0	0	0	0	0	0	0	0	26	7	19	0
Developmental disability	0	0	0	0	0	0	0	0	3	1	2	0
Re-conditioning	9	5	4	0	11	8	3	0	1,196	771	424	1
Missing or excluded	0				0				28			
All episodes	102	43	59	0	98	56	42	0	10,345	5,460	4,831	26

Episode source

Legend:
- Referred by GP
- Referred directly from specialist rooms
- Referred from acute specialist unit
- Referred from acute inpatient care different hospital
- Referred from sub-acute care different service
- Referred by therapist
- Referred from ED
- Referred from acute inpatient care same hospital
- Referred from sub-acute care same service

Categories (y-axis):
- Your Service 2016 (n=99)
- Your Service 2016 (n=98)
- All Ambulatory 2017 (n=10,274)

X-axis: Proportion of episodes (0% to 100%)
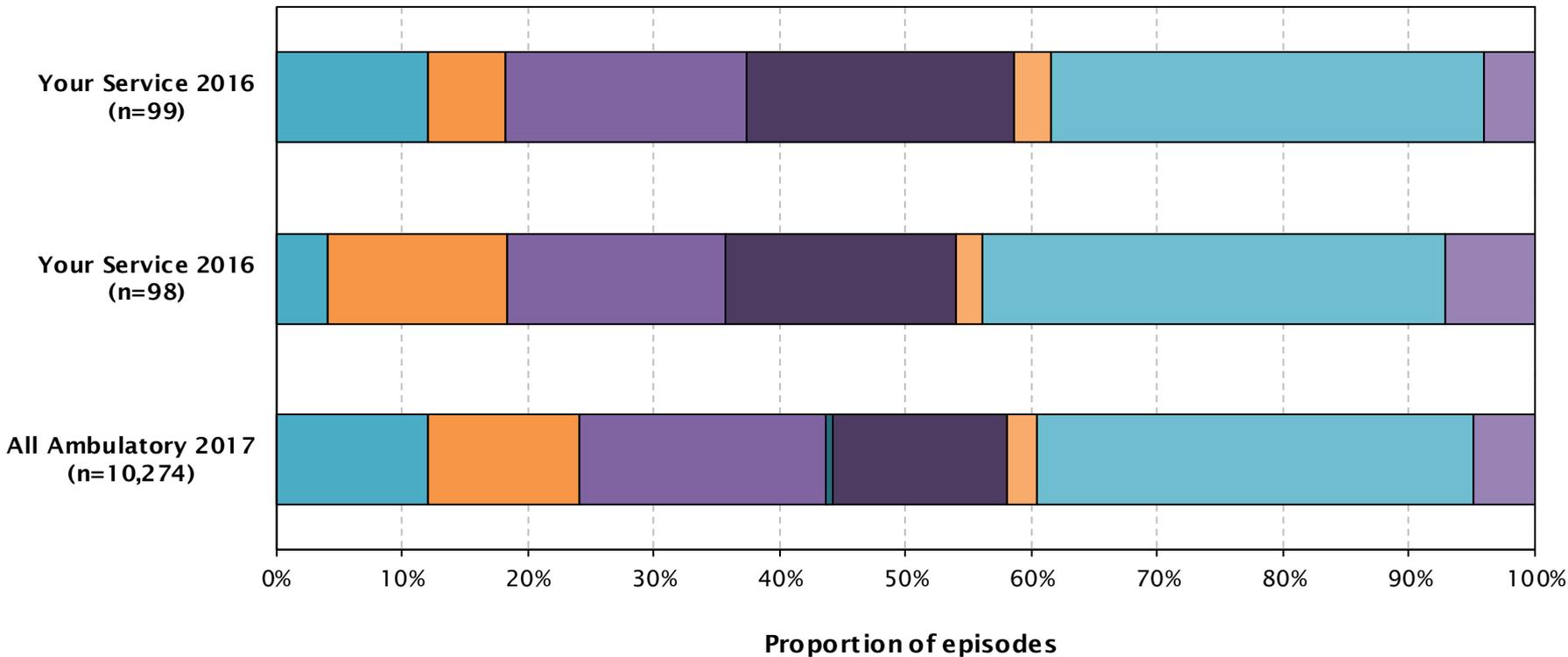
Episode source

Episode source	Your Service 2016		Your Service 2017		All Ambulatory 2017	
	No.	%	No.	%	No.	%
Referred by GP	12	12.1	4	4.1	1,240	12.1
Referred by therapist	6	6.1	14	14.3	1,230	12.0
Referred directly from specialist rooms	19	19.2	17	17.3	2,015	19.6
Referred from ED	0	—	0	—	5	0.0
Referred from acute specialist unit	0	—	0	—	61	0.6
Referred from acute inpatient care same hospital	21	21.2	18	18.4	1,416	13.8
Referred from acute inpatient care different hospital	3	3.0	2	2.0	237	2.3
Referred from sub-acute care same service	34	34.3	36	36.7	3,564	34.7
Referred from sub-acute care different service	4	4.0	7	7.1	506	4.9
Missing	3		0		71	
All episodes	**102**	**100**	**98**	**100**	**10,345**	**100**

First direct care rehabilitation episode by episode source
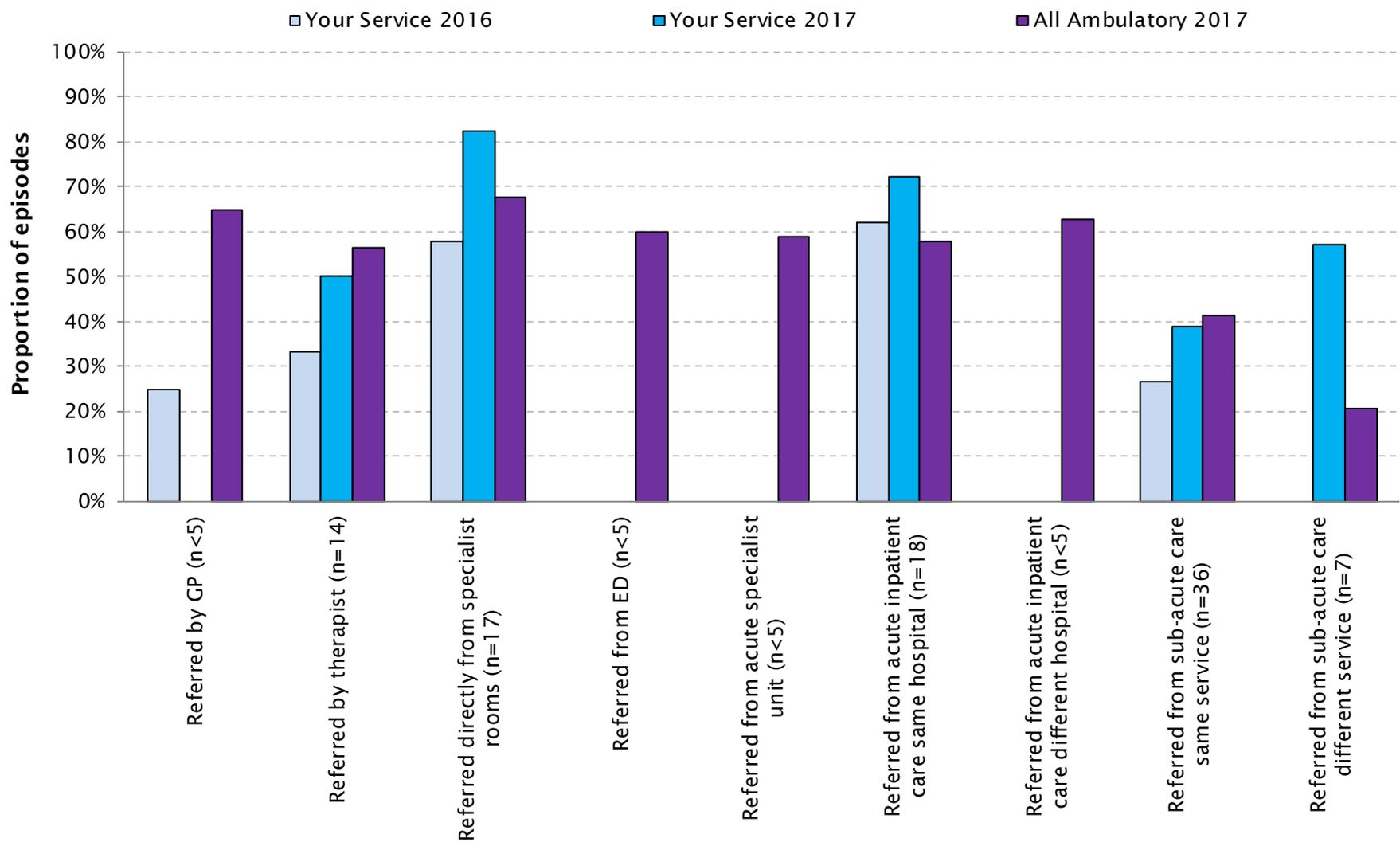
First direct care rehabilitation episode by episode source

Impairment group	Your Service 2016				Your Service 2017				All Ambulatory 2017			
	No.	Primary admission	Subsequent admission	Missing	No.	Primary admission	Subsequent admission	Missing	No.	Primary admission	Subsequent admission	Missing
Referred by GP	12	3	9	0	4	3	1	0	1,240	805	430	5
Referred by therapist	6	2	4	0	14	7	7	0	1,230	695	532	3
Referred directly from specialist rooms	19	11	8	0	17	14	3	0	2,015	1,362	649	4
Referred from ED	0	0	0	0	0	0	0	0	5	3	2	0
Referred from acute specialist unit	0	0	0	0	0	0	0	0	61	36	25	0
Referred from acute inpatient care same hospital	21	13	8	0	18	13	5	0	1,416	820	594	2
Referred from acute inpatient care different hospital	3	2	1	0	2	1	1	0	237	149	88	0
Referred from sub-acute care same service	34	9	25	0	36	14	22	0	3,564	1,476	2,085	3
Referred from sub-acute care different service	4	2	2	0	7	4	3	0	506	105	401	0
Missing	3	1	2	0	0	0	0	0	71	19	39	13
All episodes	102	43	59	0	98	56	42	0	10,345	5,470	4,845	30

Age by impairment group
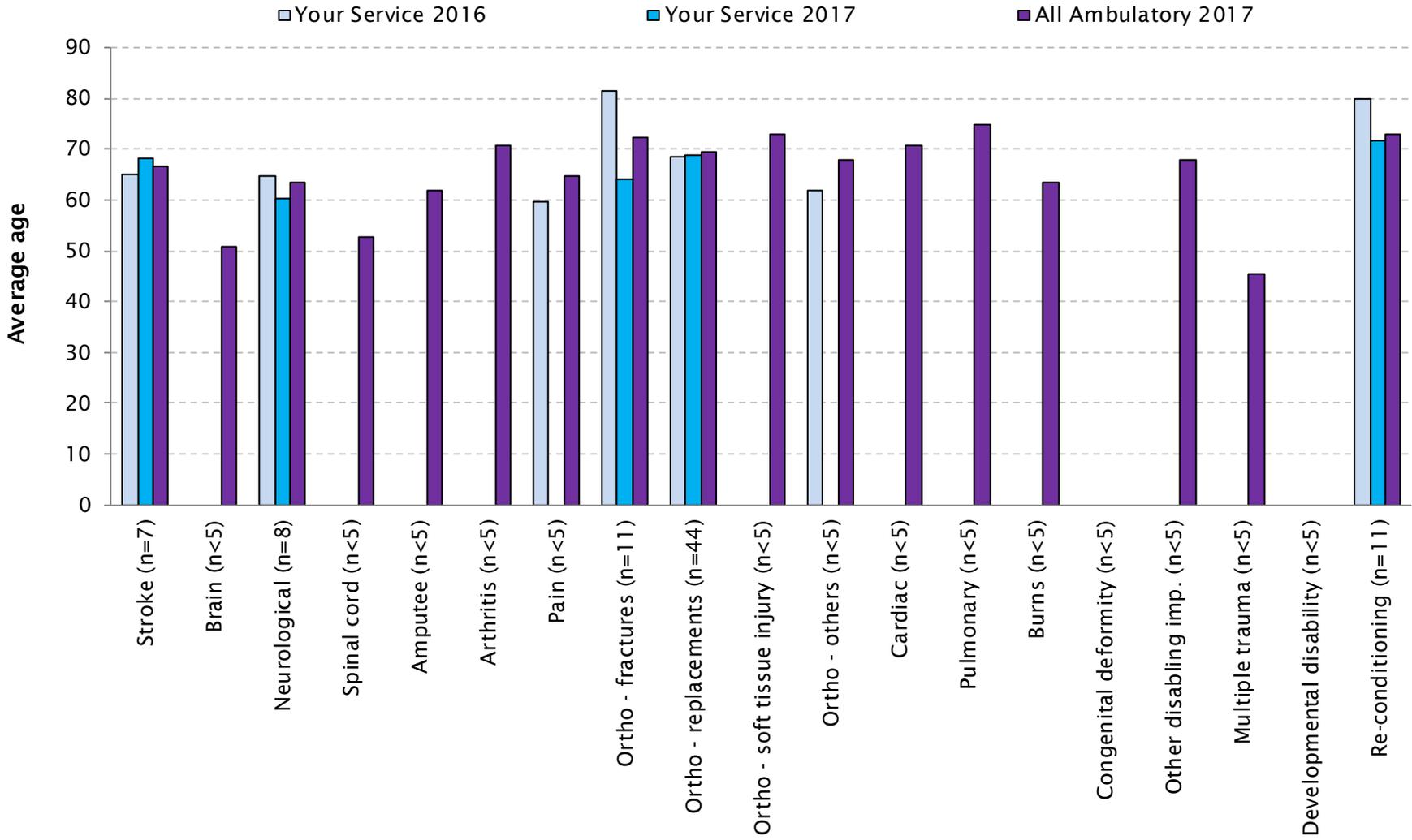
Age by impairment group

Impairment group	Your Service 2016			Your Service 2017			All Ambulatory 2017		
	No.	Mean age	(95% CI)	No.	Mean age	(95% CI)	No.	Mean age	(95% CI)
Stroke	14	65.0	(57.2 – 72.8)	7	68.1	(55.0 – 81.3)	882	66.7	(65.8 – 67.6)
Brain	3	59.3	(40.1 – 78.6)	1	50.0		338	50.9	(49.0 – 52.7)
Neurological	7	64.7	(53.9 – 75.5)	8	60.1	(45.2 – 75.1)	652	63.3	(62.1 – 64.6)
Spinal cord	2	67.0	(49.4 – 84.6)	1	20.0		95	52.8	(49.2 – 56.4)
Amputee	1	67.0		1	38.0		101	61.9	(59.0 – 64.8)
Arthritis	0	—		0	—		180	70.7	(69.1 – 72.3)
Pain	8	59.6	(45.0 – 74.3)	2	49.5	(36.8 – 62.2)	486	64.6	(63.1 – 66.1)
Ortho - fractures	7	81.6	(75.6 – 87.6)	11	64.2	(49.8 – 78.6)	691	72.3	(71.2 – 73.5)
Ortho - replacements	40	68.5	(65.6 – 71.5)	44	68.8	(65.7 – 71.8)	4,266	69.4	(69.1 – 69.7)
Ortho - soft tissue injury	2	77.0	(65.2 – 88.8)	0	—		67	72.9	(69.7 – 76.1)
Ortho - others	9	61.9	(48.5 – 75.3)	4	72.0	(67.3 – 76.7)	692	67.8	(66.8 – 68.7)
Cardiac	0	—		2	72.5	(65.6 – 79.4)	305	70.8	(69.4 – 72.1)
Pulmonary	0	—		2	78.5	(65.8 – 91.2)	81	74.9	(72.8 – 77.1)
Burns	0	—		1	47.0		7	63.3	(48.7 – 77.9)
Congenital deformity	0	—		0	—		2	—	
Other disabling imp.	0	—		2	68.5	(57.7 – 79.3)	233	68.0	(66.1 – 70.0)
Multiple trauma	0	—		0	—		26	45.4	(38.3 – 52.5)
Developmental disability	0	—		0	—		3	—	
Re-conditioning	9	79.9	(75.8 – 84.0)	11	71.5	(63.7 – 79.4)	1,194	72.8	(72.0 – 73.6)
Missing or excluded	0			1			44		
All episodes	**102**	**68.2**	**(65.5 – 71.0)**	**98**	**66.6**	**(63.5 – 69.7)**	**10,345**	**68.2**	**(68.0 – 68.5)**

NDIS funding status at episode end

Episode source	Your Service 2016 No.	Your Service 2016 %	Your Service 2017 No.	Your Service 2017 %	All Ambulatory 2017 No.	All Ambulatory 2017 %
Accepted - on a plan	0	—	0	—	4	0.3
Accepted - waiting	0	—	0	—	1	0.1
Awaiting eligibility determination	0	—	0	—	5	0.4
Eligible - hasn't applied	0	—	0	—	12	0.9
Eligible - NDIS not yet available in the region	0	—	0	—	2	0.2
Not eligible / not relevant	0	—	20	100.0	1,308	98.2
Missing	102		78		9,013	
All episodes	102		98		10,345	

Staff type by impairment group

percentage of patients receiving treatment from this staff type	Physiotherapist	Hydrotherapist	Occupational Therapist	Exercise Physiologist	Therapy Aide	Medical Officer	Registered Nurse	Enrolled Nurse	Speech Pathologist	Social Worker	Dietician	Psychologist	Other Staff Type
Impairment group													
Stroke (n=7)	42.9	14.3	71.4	28.6	42.9	28.6	0.0	14.3	57.1	28.6	0.0	0.0	57.1
Brain (n=1)	100.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	200.0
Neurological (n=8)	100.0	12.5	75.0	62.5	37.5	0.0	12.5	0.0	12.5	50.0	12.5	0.0	62.5
Spinal cord (n=1)	100.0	0.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amputee (n=1)	100.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0
Arthritis (n=0)	—	—	—	—	—	—	—	—	—	—	—	—	—
Pain (n=2)	100.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0
Ortho - fractures (n=11)	81.8	45.5	54.5	36.4	0.0	9.1	0.0	9.1	0.0	0.0	0.0	9.1	9.1
Ortho - replacements (n=45)	100.0	68.9	42.2	26.7	28.9	20.0	17.8	2.2	0.0	0.0	2.2	0.0	11.1
Ortho - soft tissue injury (n=0)	—	—	—	—	—	—	—	—	—	—	—	—	—
Ortho - others (n=4)	100.0	100.0	25.0	25.0	25.0	0.0	25.0	25.0	0.0	0.0	25.0	0.0	0.0
Cardiac (n=2)	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Pulmonary (n=2)	100.0	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0
Burns (n=1)	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	200.0
Congenital deformity (n=0)	—	—	—	—	—	—	—	—	—	—	—	—	—
Other disabling imp. (n=2)	100.0	0.0	100.0	0.0	0.0	100.0	50.0	50.0	0.0	50.0	0.0	0.0	0.0
Multiple trauma (n=0)	—	—	—	—	—	—	—	—	—	—	—	—	—
Developmental disability (n=0)	—	—	—	—	—	—	—	—	—	—	—	—	—
Re-conditioning (n=11)	100.0	27.3	54.5	81.8	27.3	18.2	18.2	9.1	0.0	9.1	18.2	0.0	9.1

Outcome measures – All impairments

The following section presents analysis of each of the following elements:

- Episode length

- Occasions of service

- Employment status

- Independence outcomes

- Lawton's score outcomes

Length of program by impairment group
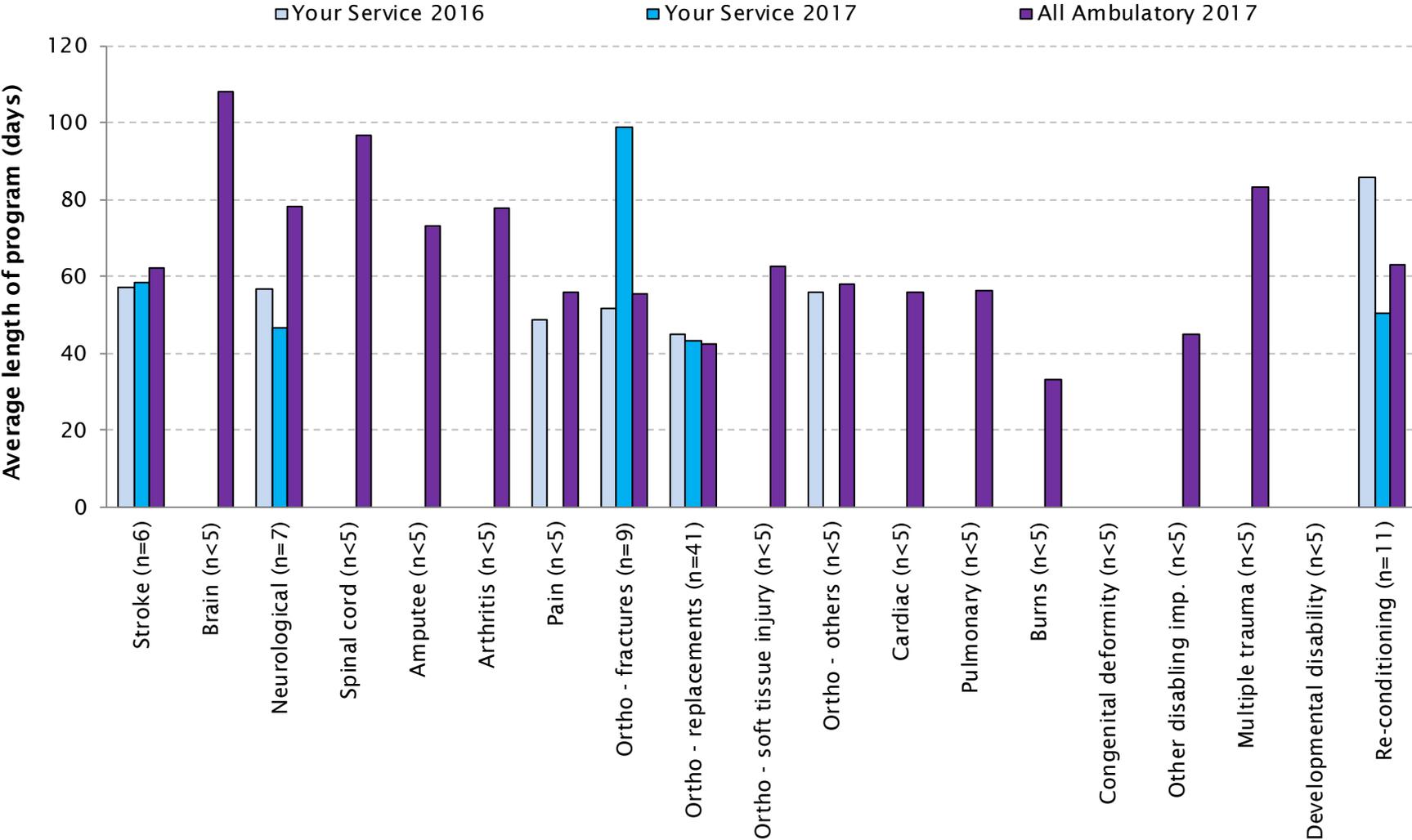
Length of program by impairment group

Impairment group	Your Service 2016			Your Service 2017			All Ambulatory 2017		
	No.	Mean LOP	Trimmed data range*	No.	Mean LOP	Trimmed data range*	No.	Mean LOP	Trimmed data range*
Stroke	12	57.2		6	58.5		808	62.1	(15 – 157)
Brain	1	—		1	—		287	108.2	(21 – 299)
Neurological	6	56.7		7	46.6		580	78.1	(21 – 210)
Spinal cord	2	—		1	—		65	96.6	(25 – 220)
Amputee	1	—		1	—		92	73.0	(16 – 155)
Arthritis	0	—		0	—		118	77.8	(23 – 155)
Pain	8	48.6		2	—		406	55.9	(21 – 125)
Ortho - fractures	7	51.9		9	98.9		624	55.5	(19 – 120)
Ortho - replacements	39	45.1	(22 – 91)	41	43.1	(21 – 77)	3,824	42.3	(16 – 90)
Ortho - soft tissue injury	2	—		0	—		58	62.5	(21 – 154)
Ortho - others	9	56.0		3	—		610	58.0	(21 – 133)
Cardiac	0	—		2	—		287	56.0	(23 – 110)
Pulmonary	0	—		2	—		75	56.3	(26 – 105)
Burns	0	—		1	—		7	33.3	
Congenital deformity	0	—		0	—		2	—	
Other disabling imp.	0	—		2	—		197	44.8	(11 – 112)
Multiple trauma	0	—		0	—		25	83.3	(16 – 185)
Developmental disability	0	—		0	—		3	—	
Re-conditioning	8	85.9		11	50.5		1,053	62.9	(21 – 135)
Missing or excluded	7			9			1,224		
All episodes	**102**	**57.9**	**(23 – 151)**	**98**	**55.6**	**(21 – 150)**	**10,345**	**53.6**	**(17 – 133)**

*Includes middle 90% of episodes

Days seen by impairment group

Days seen by impairment group

Impairment group	Your Service 2016			Your Service 2017			All Ambulatory 2017		
	No.	Mean days seen	Trimmed data range*	No.	Mean days seen	Trimmed data range*	No.	Mean days seen	Trimmed data range*
Stroke	14	12.9		7	14.6		827	17.3	(2 – 50)
Brain	1	—		1	—		305	28.4	(2 – 103)
Neurological	6	12.8		7	13.9		586	15.6	(4 – 42)
Spinal cord	2	—		1	—		83	23.1	(2 – 62)
Amputee	1	—		1	—		93	17.7	(3 – 43)
Arthritis	0	—		0	—		125	14.6	(3 – 30)
Pain	8	10.8		2	—		425	11.1	(3 – 20)
Ortho - fractures	7	13.0		10	14.3		635	11.4	(4 – 25)
Ortho - replacements	40	11.5	(8 – 20)	42	9.8	(5 – 16)	3,954	9.9	(4 – 18)
Ortho - soft tissue injury	2	—		0	—		61	11.3	(3 – 23)
Ortho - others	9	10.6		3	—		628	11.1	(5 – 23)
Cardiac	0	—		2	—		287	12.1	(4 – 18)
Pulmonary	0	—		2	—		77	10.6	(6 – 17)
Burns	0	—		1	—		6	13.2	
Congenital deformity	0	—		0	—		2	—	
Other disabling imp.	0	—		2	—		216	10.9	(3 – 20)
Multiple trauma	0	—		0	—		24	15.5	(5 – 40)
Developmental disability	0	—		0	—		3	—	
Re-conditioning	8	11.6		11	8.0		1,066	12.1	(3 – 25)
Missing or excluded	4			6			942		
All episodes	102	12.0	(6 – 22)	98	12.2	(4 – 28)	10,345	12.0	(4 – 26)

*Includes middle 90% of episodes

Days seen per elapsed week by impairment group

Days seen per elapsed week by impairment group

Impairment group	Your Service 2016			Your Service 2017			All Ambulatory 2017		
	No.	Mean days seen per week	Trimmed data range*	No.	Mean days seen per week	Trimmed data range*	No.	Mean days seen per week	Trimmed data range*
Stroke	12	2.0		6	2.3		797	2.2	(0.5 – 5.1)
Brain	1	—		1	—		281	1.7	(0.3 – 4.3)
Neurological	6	1.8		7	1.9		572	1.8	(0.4 – 4.1)
Spinal cord	2	—		1	—		64	1.8	(0.1 – 5.8)
Amputee	1	—		1	—		92	1.9	(0.6 – 3.5)
Arthritis	0	—		0	—		116	1.5	(0.7 – 2.5)
Pain	8	1.6		2	—		406	1.7	(0.7 – 2.8)
Ortho - fractures	7	1.8		9	1.2		620	1.7	(0.7 – 3.0)
Ortho - replacements	39	2.0	(1.1 – 3.5)	41	1.8	(1.0 – 2.6)	3,814	1.9	(0.9 – 3.1)
Ortho - soft tissue injury	2	—		0	—		58	1.4	(0.6 – 2.4)
Ortho - others	9	1.4		3	—		610	1.6	(0.7 – 2.6)
Cardiac	0	—		2	—		283	1.8	(0.7 – 2.4)
Pulmonary	0	—		2	—		75	1.5	(0.6 – 2.5)
Burns	0	—		1	—		6	2.2	
Congenital deformity	0	—		0	—		2	—	
Other disabling imp.	0	—		2	—		196	2.9	(0.5 – 6.4)
Multiple trauma	0	—		0	—		24	1.5	(0.5 – 2.3)
Developmental disability	0	—		0	—		3	—	
Re-conditioning	8	1.4		11	1.5		1,048	1.6	(0.5 – 3.0)
Missing or excluded	7			9			1,278		
All episodes	**102**	**1.8**	**(0.6 – 3.5)**	**98**	**1.8**	**(0.6 – 3.3)**	**10,345**	**1.8**	**(0.6 – 3.3)**

*Includes middle 90% of episodes
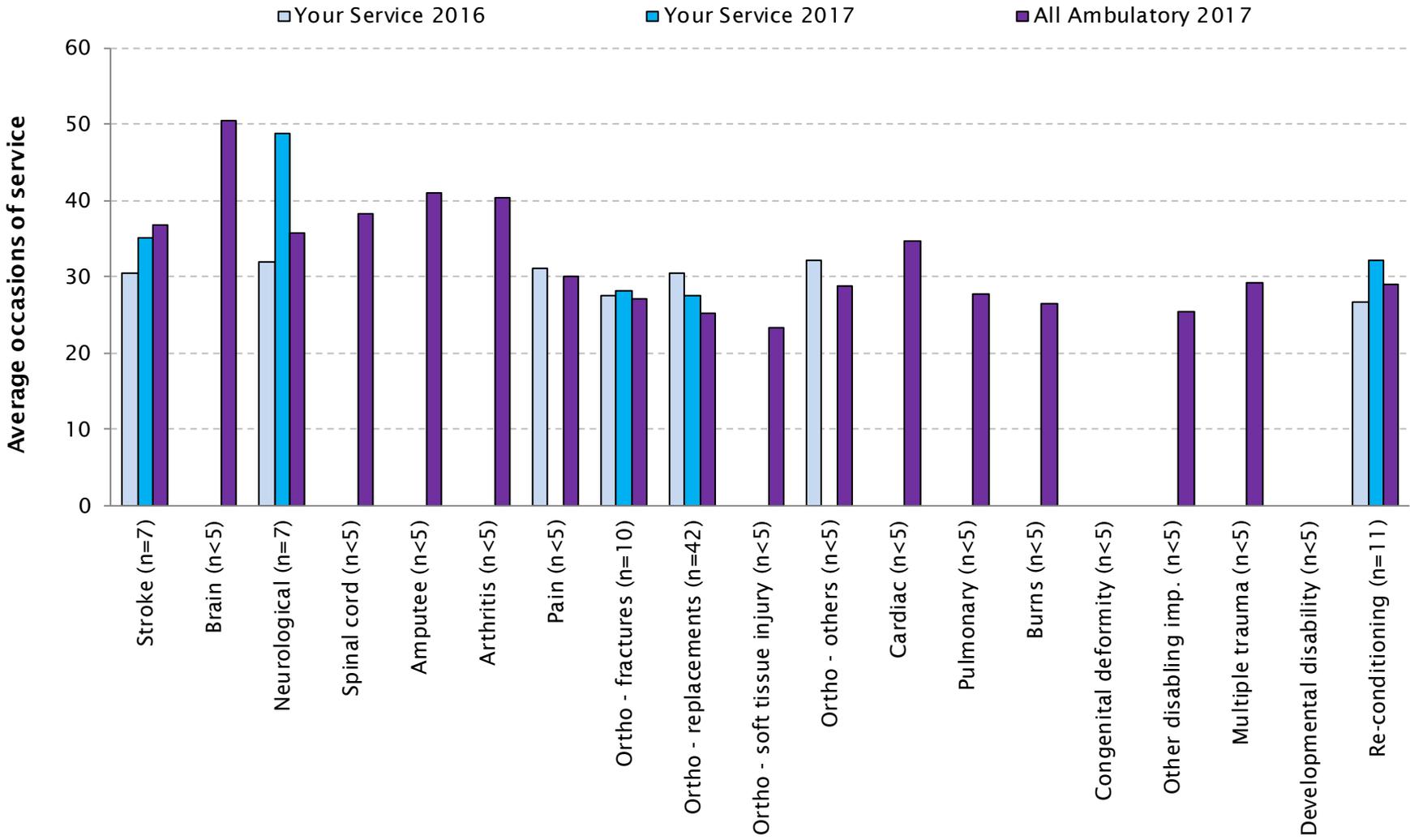
Occasions of service by impairment group

Occasions of service by impairment group

Impairment group	Your Service 2016			Your Service 2017			All Ambulatory 2017		
	No.	Mean occasions of service	Trimmed data range*	No.	Mean occasions of service	Trimmed data range*	No.	Mean occasions of service	Trimmed data range*
Stroke	14	30.6		7	35.1		827	36.7	(4 – 100)
Brain	1	—		1	—		305	50.4	(3 – 176)
Neurological	6	32.0		7	48.9		586	35.7	(8 – 78)
Spinal cord	2	—		1	—		83	38.4	(3 – 100)
Amputee	1	—		1	—		93	41.0	(5 – 108)
Arthritis	0	—		0	—		125	40.5	(8 – 96)
Pain	8	31.1		2	—		425	30.1	(6 – 60)
Ortho - fractures	7	27.6		10	28.1		634	27.1	(5 – 70)
Ortho - replacements	40	30.6	(12 – 56)	42	27.6	(9 – 51)	3,952	25.2	(8 – 51)
Ortho - soft tissue injury	2	—		0	—		61	23.3	(4 – 58)
Ortho - others	9	32.1		3	—		628	28.7	(10 – 69)
Cardiac	0	—		2	—		287	34.7	(10 – 52)
Pulmonary	0	—		2	—		77	27.7	(10 – 56)
Burns	0	—		1	—		7	26.6	
Congenital deformity	0	—		0	—		2	—	
Other disabling imp.	0	—		2	—		215	25.5	(5 – 57)
Multiple trauma	0	—		0	—		24	29.2	(8 – 69)
Developmental disability	0	—		0	—		3	—	
Re-conditioning	8	26.6		11	32.3		1,064	29.0	(6 – 62)
Missing or excluded	4			6			947		
All episodes	**102**	**30.0**	**(11 – 64)**	**98**	**33.1**	**(5 – 116)**	**10,345**	**29.0**	**(6 – 65)**

*Includes middle 90% of episodes
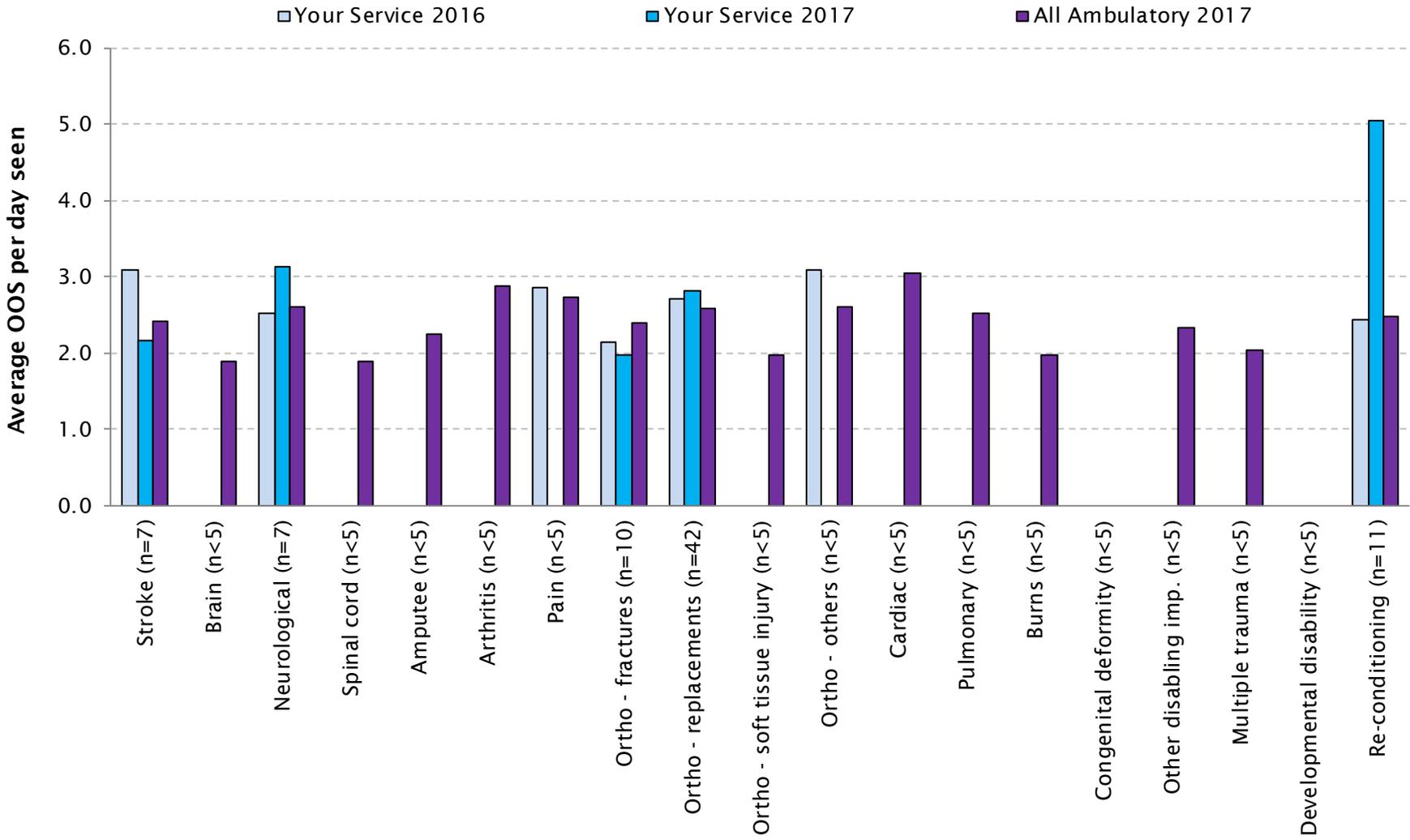
Occasions of service per day seen by impairment group

Occasions of service per day seen by impairment group

Impairment group	Your Service 2016			Your Service 2017			All Ambulatory 2017		
	No.	Mean OOS per day seen	Trimmed data range*	No.	Mean OOS per day seen	Trimmed data range*	No.	Mean OOS per day seen	Trimmed data range*
Stroke	14	3.1		7	2.2		827	2.4	(1.0 – 4.9)
Brain	1	—		1	—		305	1.9	(1.0 – 3.8)
Neurological	6	2.5		7	3.1		586	2.6	(1.1 – 4.6)
Spinal cord	2	—		1	—		83	1.9	(1.0 – 3.6)
Amputee	1	—		1	—		93	2.2	(1.0 – 3.9)
Arthritis	0	—		0	—		125	2.9	(1.1 – 4.0)
Pain	8	2.9		2	—		425	2.7	(1.2 – 5.3)
Ortho - fractures	7	2.1		10	2.0		634	2.4	(1.0 – 4.1)
Ortho - replacements	40	2.7	(1.0 – 4.3)	42	2.8	(1.1 – 5.0)	3,952	2.6	(1.4 – 4.0)
Ortho - soft tissue injury	2	—		0	—		61	2.0	(1.0 – 3.0)
Ortho - others	9	3.1		3	—		628	2.6	(1.0 – 4.6)
Cardiac	0	—		2	—		287	3.0	(1.2 – 4.0)
Pulmonary	0	—		2	—		77	2.5	(1.5 – 3.9)
Burns	0	—		1	—		6	2.0	
Congenital deformity	0	—		0	—		2	—	
Other disabling imp.	0	—		2	—		215	2.3	(1.7 – 3.7)
Multiple trauma	0	—		0	—		24	2.0	(1.0 – 4.5)
Developmental disability	0	—		0	—		3	—	
Re-conditioning	8	2.4		11	5.1		1,064	2.5	(1.0 – 4.0)
Missing or excluded	4			6			948		
All episodes	**102**	**2.7**	**(1.0 – 4.4)**	**98**	**2.9**	**(1.0 – 5.0)**	**10,345**	**2.5**	**(1.0 – 4.1)**

*Includes middle 90% of episodes

Employment outcomes by impairment group

A patient with an 'equivalent employment outcome' is in:

- the same or similar job with same or similar hours

  or

- a different job by choice.

A patient with a 'reduced employment outcome' is in:
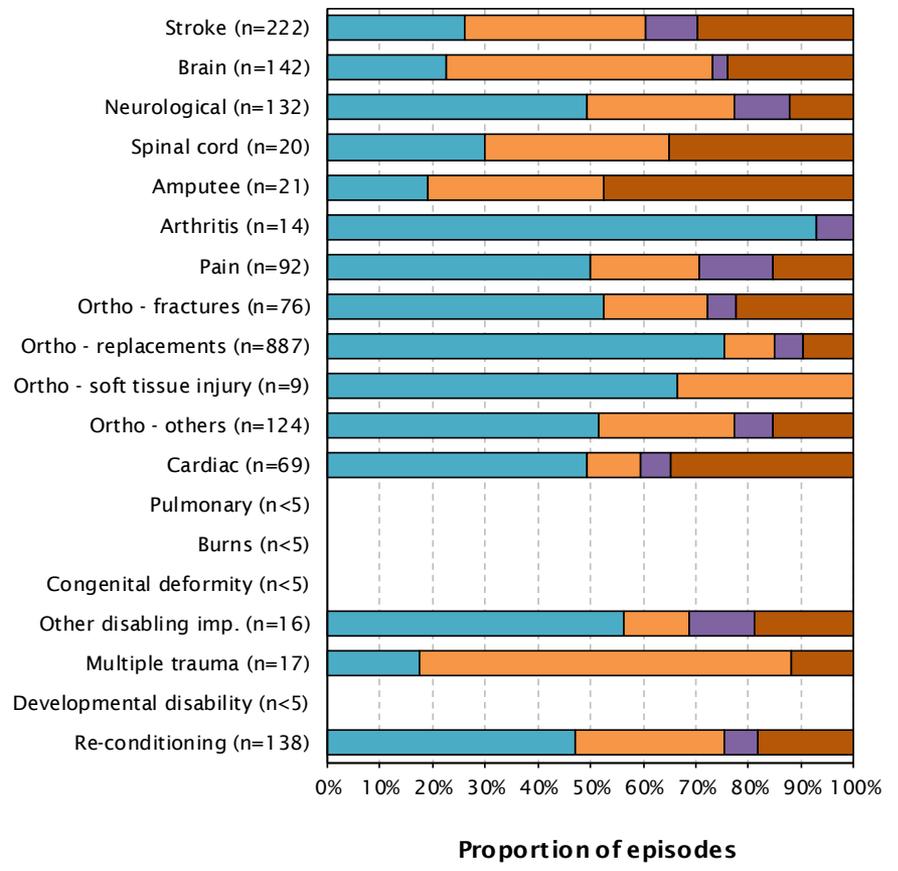
- the same or similar job with reduced hours

  or

- a different job due to reduced function

  or

- not able to work.

Employment outcomes are only considered for patients who were employed prior to injury / impairment or exacerbation of impairment.

Employment outcomes by impairment group

Employment outcomes by impairment group

Impairment group	Your Service 2016		Your Service 2017		All Ambulatory 2017	
	Employed prior to impair (No.)	Equivalent employment outcome (%)	Employed prior to impair (No.)	Equivalent employment outcome (%)	Employed prior to impair (No.)	Equivalent employment outcome (%)
Stroke	3	0.0	1	0.0	222	26.1
Brain	0	—	0	—	142	22.5
Neurological	1	0.0	2	0.0	132	49.2
Spinal cord	0	—	1	0.0	20	30.0
Amputee	1	0.0	1	0.0	21	19.0
Arthritis	0	—	0	—	14	92.9
Pain	2	0.0	1	0.0	92	50.0
Ortho - fractures	0	—	1	100.0	76	52.6
Ortho - replacements	7	57.1	13	84.6	887	75.3
Ortho - soft tissue injury	0	—	0	—	9	66.7
Ortho - others	1	100.0	1	0.0	124	51.6
Cardiac	0	—	1	0.0	69	49.3
Pulmonary	0	—	0	—	4	—
Burns	0	—	1	0.0	3	—
Congenital deformity	0	—	0	—	0	—
Other disabling imp.	0	—	0	—	16	56.3
Multiple trauma	0	—	0	—	17	17.6
Developmental disability	0	—	0	—	0	—
Re-conditioning	0	—	2	0.0	138	47.1
Missing or excluded	87		73		8,359	
All episodes	**102**	**33.3**	**98**	**48.0**	**10,345**	**56.2**

Independence outcomes by impairment group

Independence outcomes are based on changes in accommodation and carer status.

Independence is ranked using the following order:

High

Low

Private residence & no carer needed

Private residence & carer needed

Supported living

Residential aged care
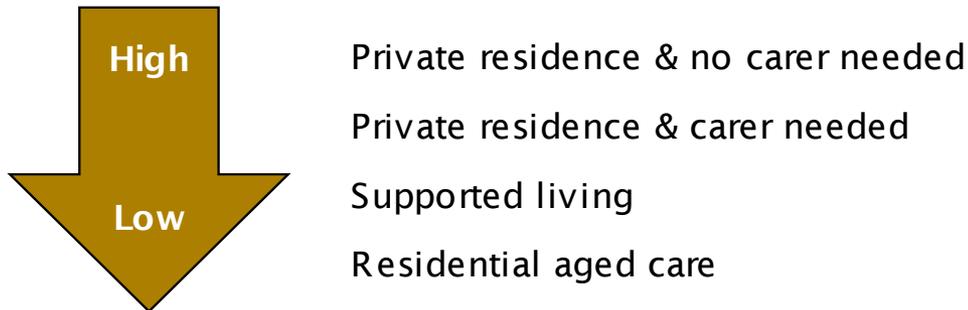
A patient is define as having 'equivalent independence' when:

- independence after the rehabilitation episode was the same or greater than prior to rehabilitation.

A patient is defined as having 'reduced independence' when:

- independence after the rehabilitation episode was less than before rehabilitation.

Independence outcomes by impairment group
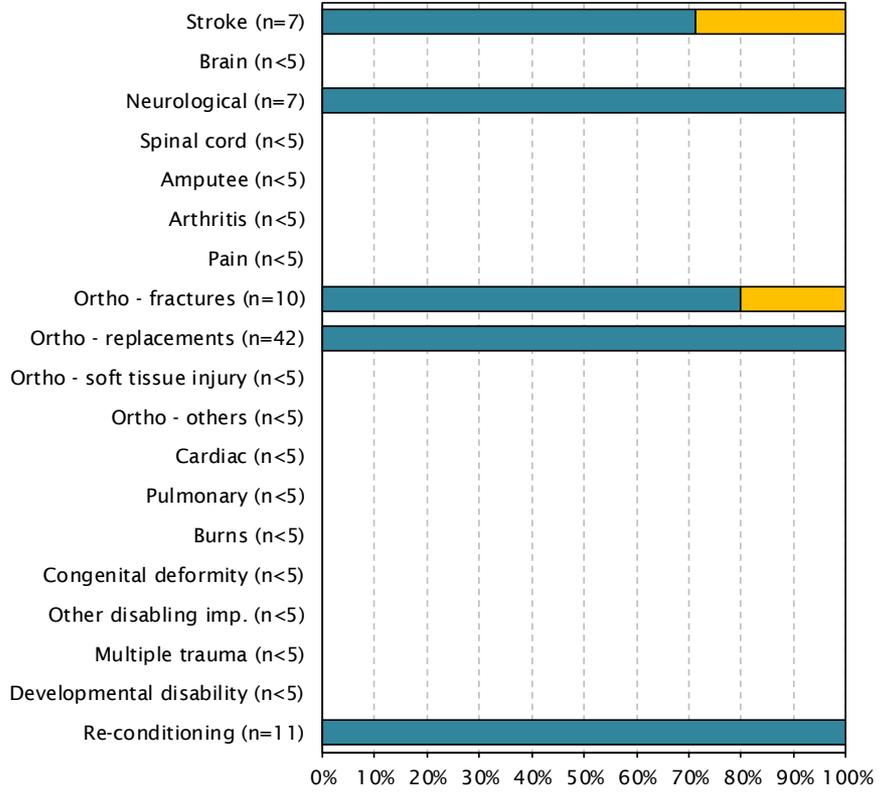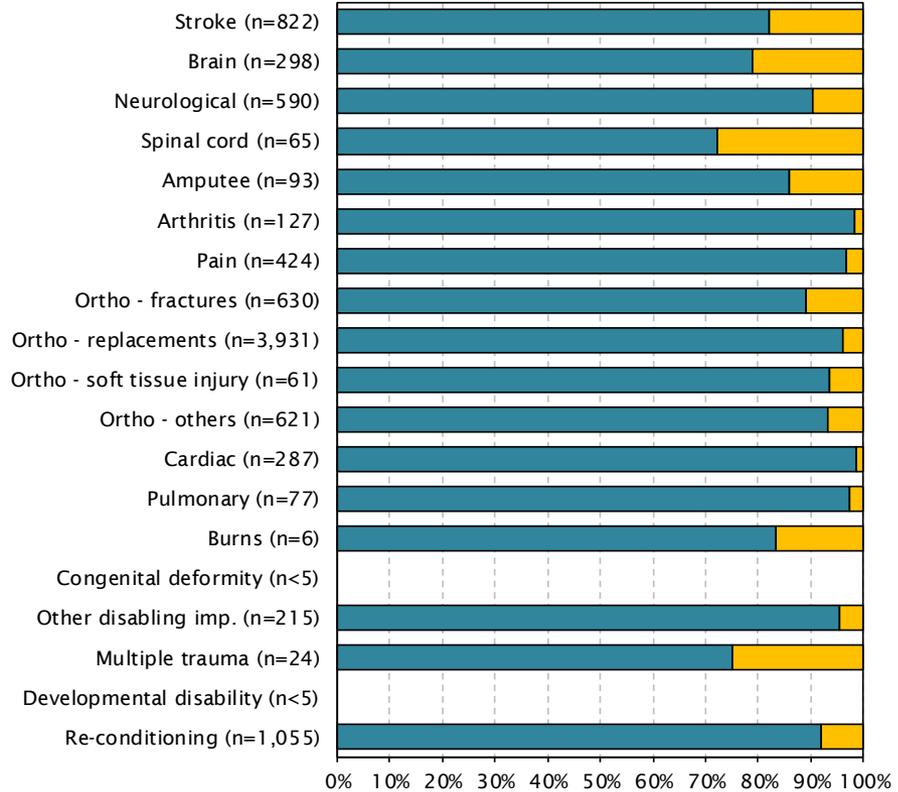
Independence outcomes by impairment group

Impairment group	Your Service 2016		Your Service 2017		All Ambulatory 2017	
	No.	Equivalent independence outcome (%)	No.	Equivalent independence outcome (%)	No.	Equivalent independence outcome (%)
Stroke	12	75.0	7	71.4	822	82.0
Brain	1	100.0	1	100.0	298	78.9
Neurological	6	100.0	7	100.0	590	90.3
Spinal cord	0	—	1	100.0	65	72.3
Amputee	1	100.0	1	0.0	93	86.0
Arthritis	0	—	0	—	127	98.4
Pain	8	100.0	2	100.0	424	96.7
Ortho - fractures	7	57.1	10	80.0	630	89.0
Ortho - replacements	40	95.0	42	100.0	3,931	96.2
Ortho - soft tissue injury	2	100.0	0	—	61	93.4
Ortho - others	9	100.0	3	100.0	621	93.2
Cardiac	0	—	2	100.0	287	98.6
Pulmonary	0	—	2	100.0	77	97.4
Burns	0	—	1	100.0	6	83.3
Congenital deformity	0	—	0	—	2	—
Other disabling imp.	0	—	2	100.0	215	95.3
Multiple trauma	0	—	0	—	24	75.0
Developmental disability	0	—	0	—	3	—
Re-conditioning	8	87.5	11	100.0	1,055	91.8
Missing or excluded	8		6		1,014	
All episodes	**102**	**90.4**	**98**	**94.6**	**10,345**	**92.6**

Lawton's score change by impairment
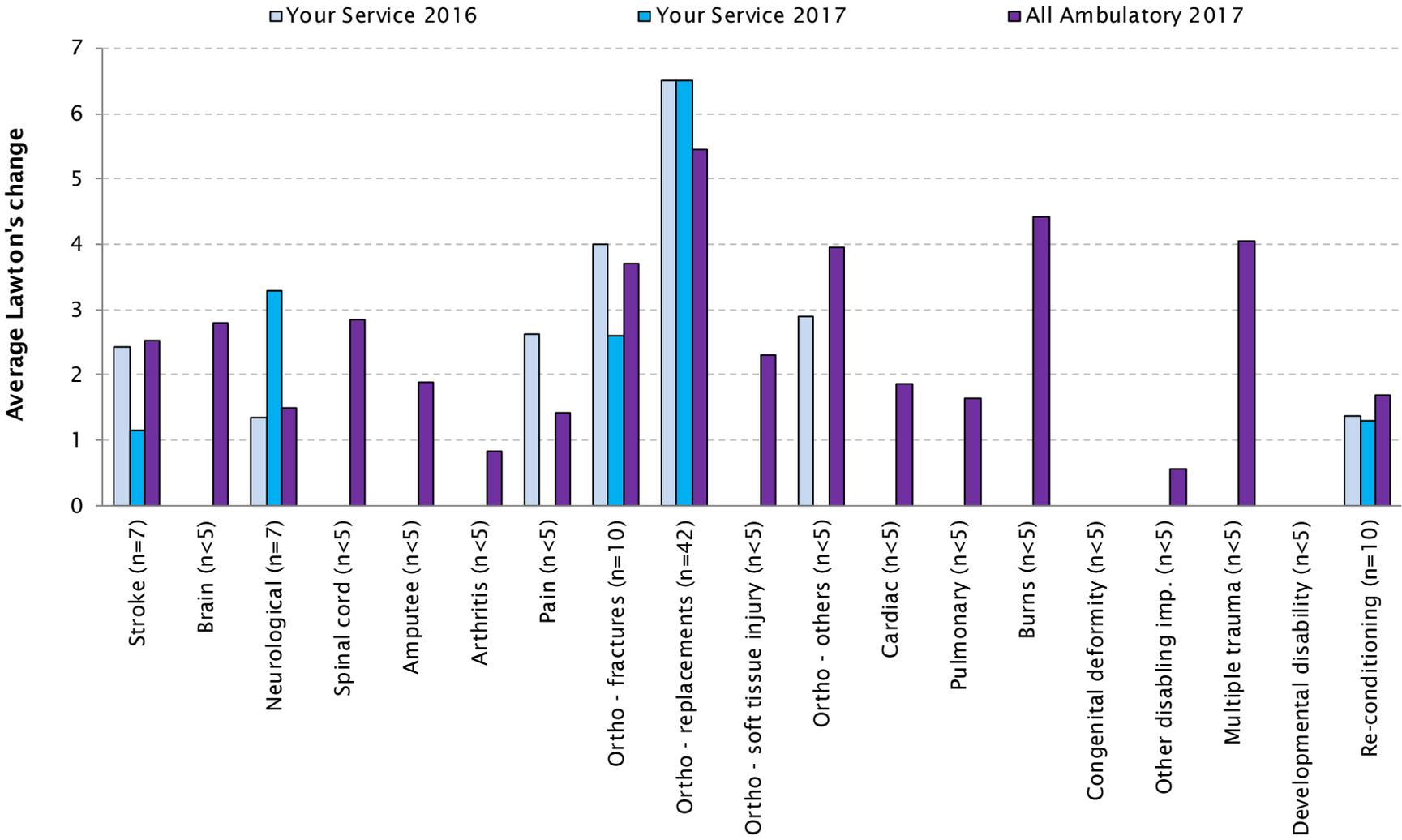
Lawton's score change by impairment

Impairment group	Your Service 2016		Your Service 2017		All Ambulatory 2017	
	No.	Avg. Lawton's change	No.	Avg. Lawton's change	No.	Avg. Lawton's change
Stroke	14	2.4	7	1.1	806	2.5
Brain	1	0.0	1	5.0	300	2.8
Neurological	6	1.3	7	3.3	582	1.5
Spinal cord	0	—	1	12.0	61	2.9
Amputee	1	1.0	1	2.0	90	1.9
Arthritis	0	—	0	—	119	0.8
Pain	8	2.6	2	0.0	419	1.4
Ortho - fractures	7	4.0	10	2.6	627	3.7
Ortho - replacements	40	6.5	42	6.5	3,944	5.4
Ortho - soft tissue injury	2	5.0	0	—	58	2.3
Ortho - others	9	2.9	3	4.0	622	3.9
Cardiac	0	—	2	5.5	287	1.9
Pulmonary	0	—	2	3.0	75	1.6
Burns	0	—	1	4.0	7	4.4
Congenital deformity	0	—	0	—	2	—
Other disabling imp.	0	—	2	3.0	216	0.6
Multiple trauma	0	—	0	—	25	4.0
Developmental disability	0	—	0	—	3	—
Re-conditioning	8	1.4	10	1.3	1,034	1.7
Missing or excluded	6		7		1,068	
All episodes	102	4.2	98	4.4	10,345	3.6

Episodes with a Lawton's start score of 30 by impairment group

Legend: Your Service 2016 · Your Service 2017 · All Ambulatory 2017

Y-axis: Proportion of episodes (0% to 100%)

X-axis categories: Stroke (n=7), Brain (n<5), Neurological (n=7), Spinal cord (n<5), Amputee (n<5), Arthritis (n<5), Pain (n<5), Ortho - fractures (n=10), Ortho - replacements (n=42), Ortho - soft tissue injury (n<5), Ortho - others (n<5), Cardiac (n<5), Pulmonary (n<5), Burns (n<5), Congenital deformity (n<5), Other disabling imp. (n<5), Multiple trauma (n<5), Developmental disability (n<5), Re-conditioning (n=10)

Episodes with no change in Lawton's score by impairment group
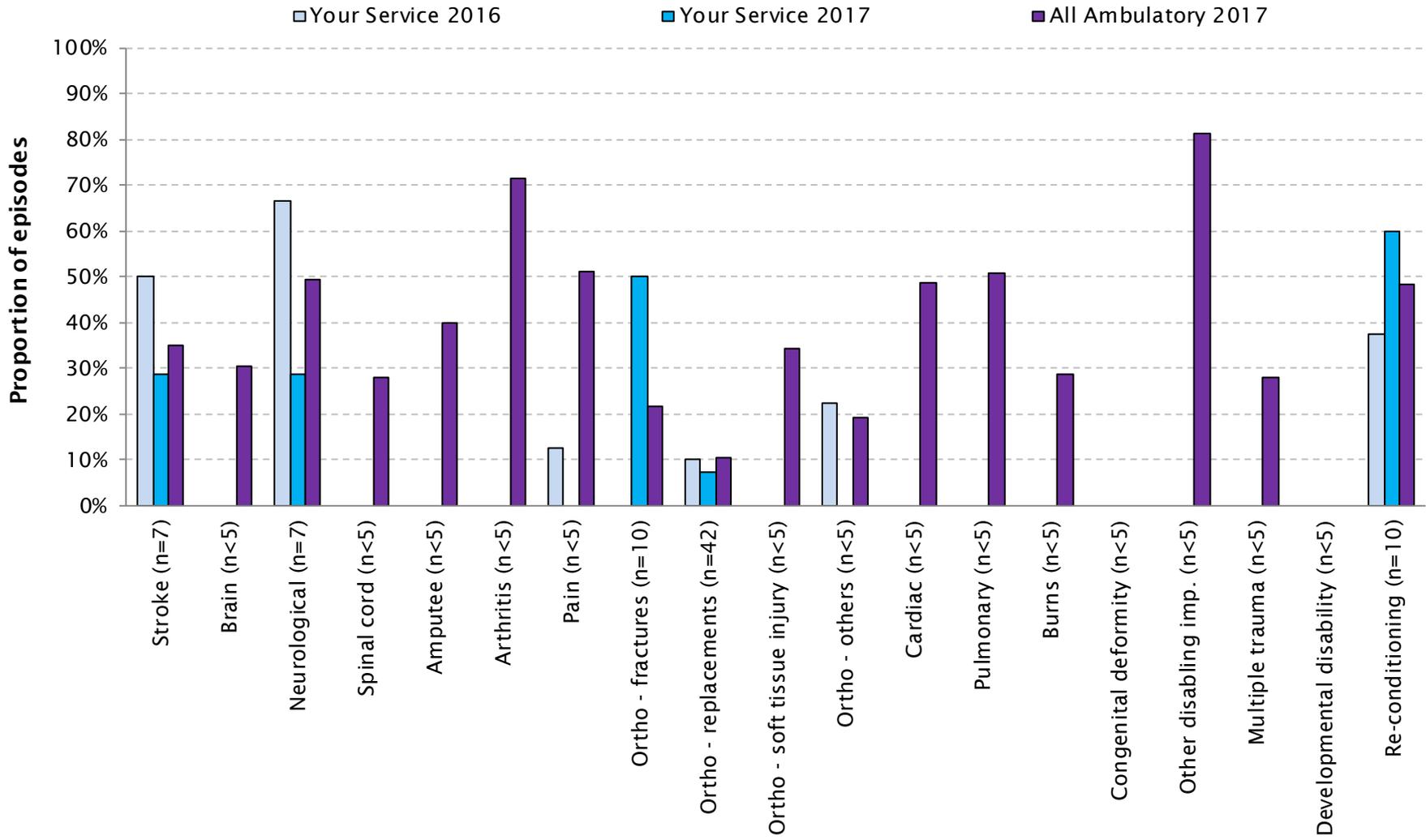
Lawton's start and end total – all episodes

Your Service 2017 (n=91)
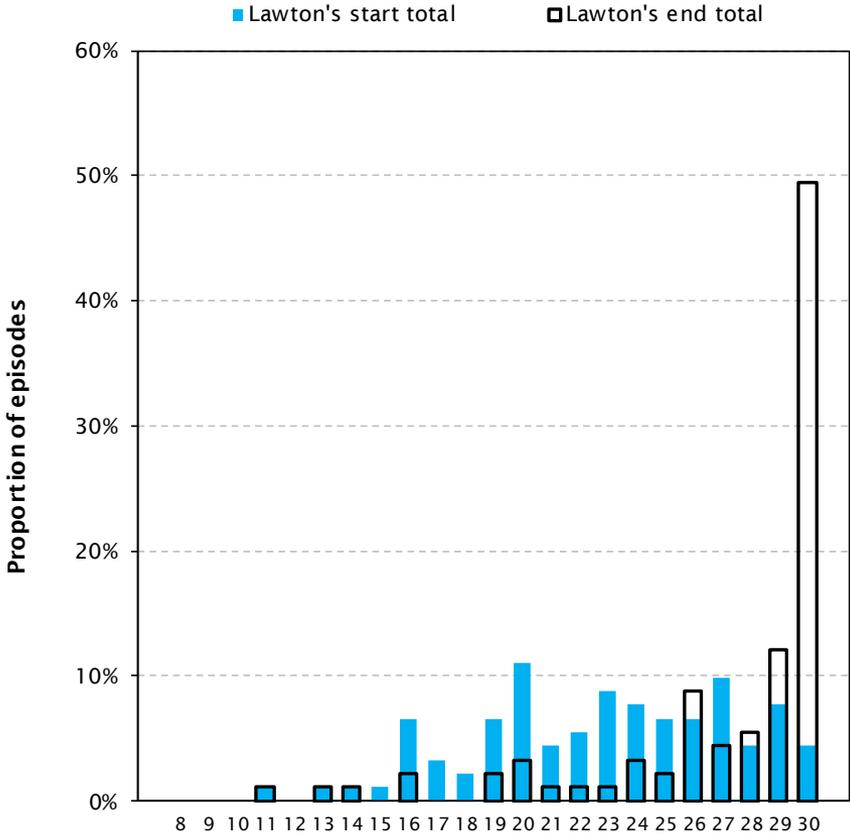
All Ambulatory 2017 (n=9,300)
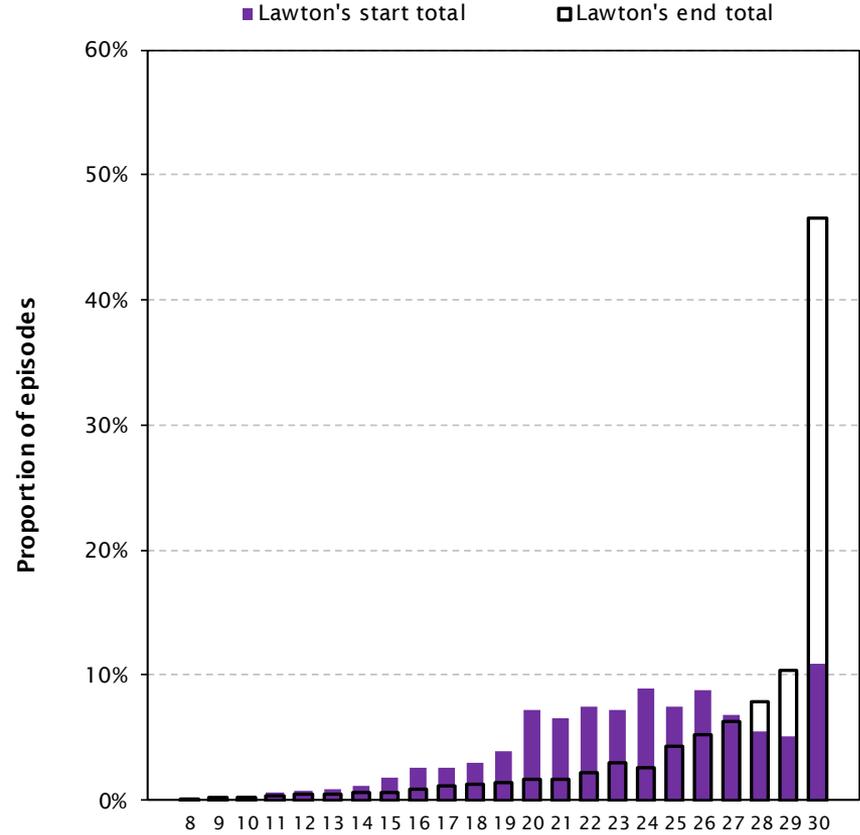
Change in Lawton's score – all episodes

Your Service 2017 (n=91)
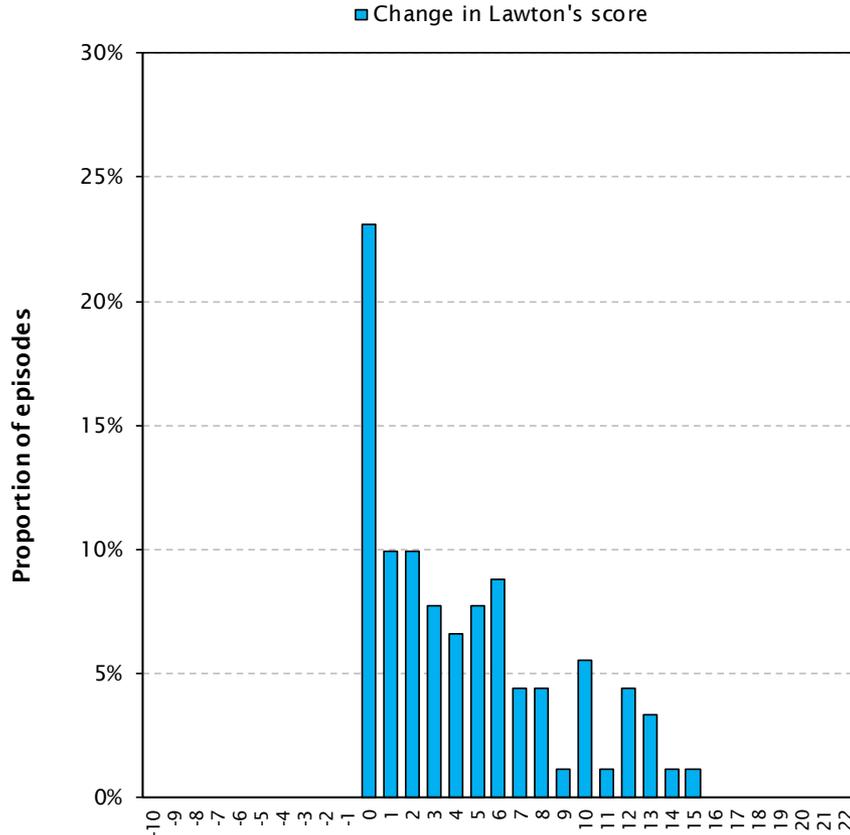
All Ambulatory 2017 (n=9,300)
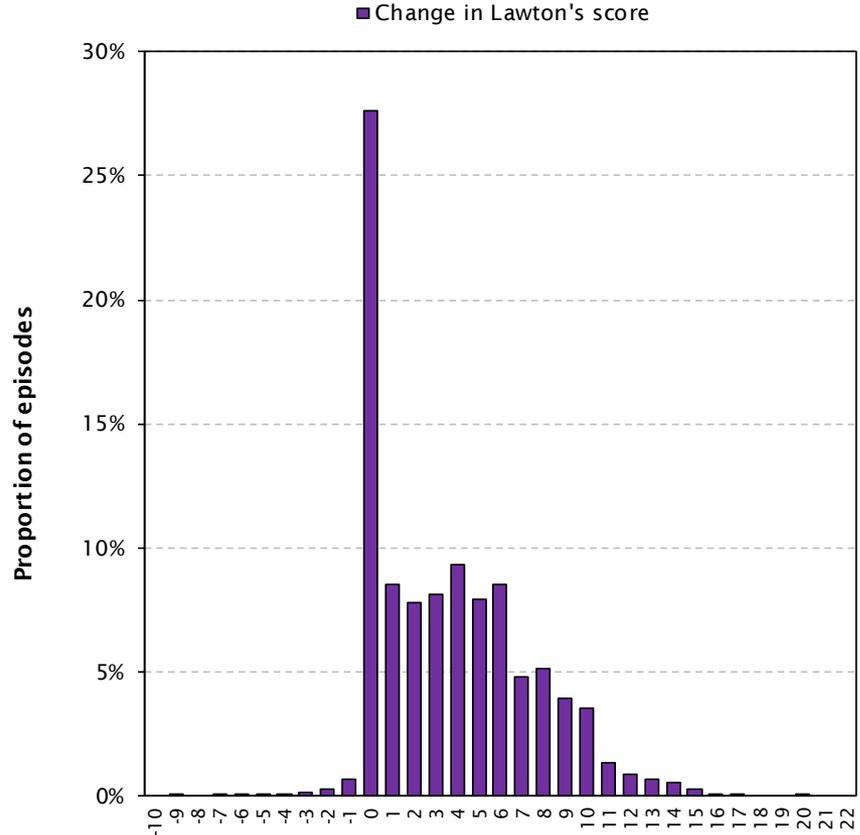
Change in Lawton's item scores – all episodes

Your Service 2017 (n=91)

■ Average change in Lawton's item score

All Ambulatory 2017 (n=9,300)

■ Average change in Lawton's item score
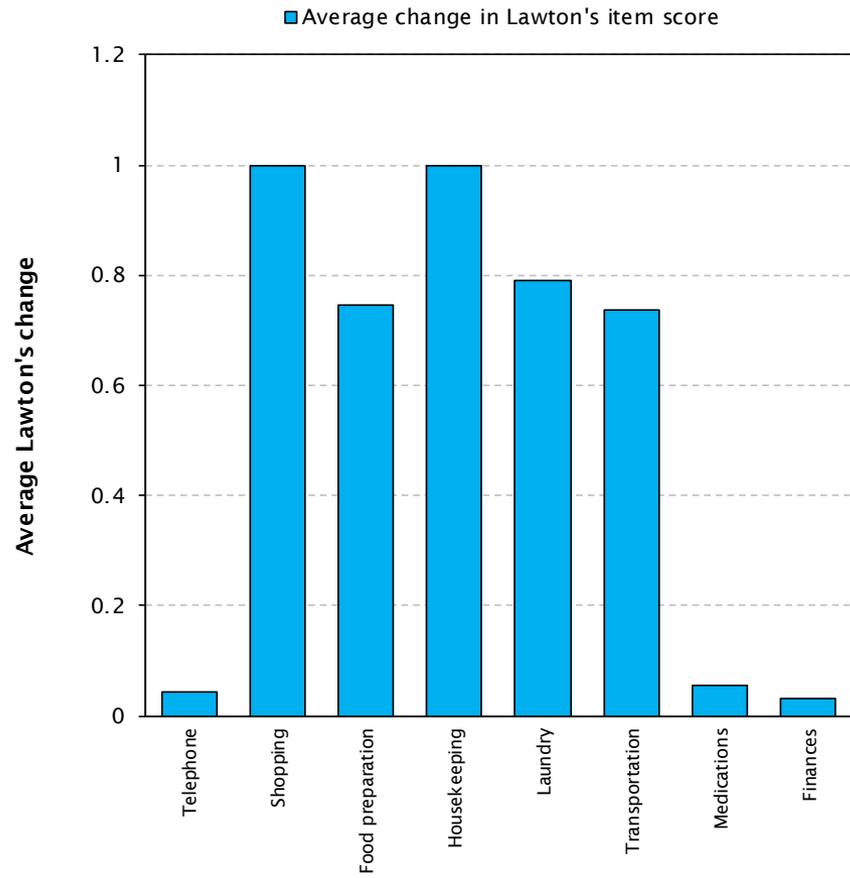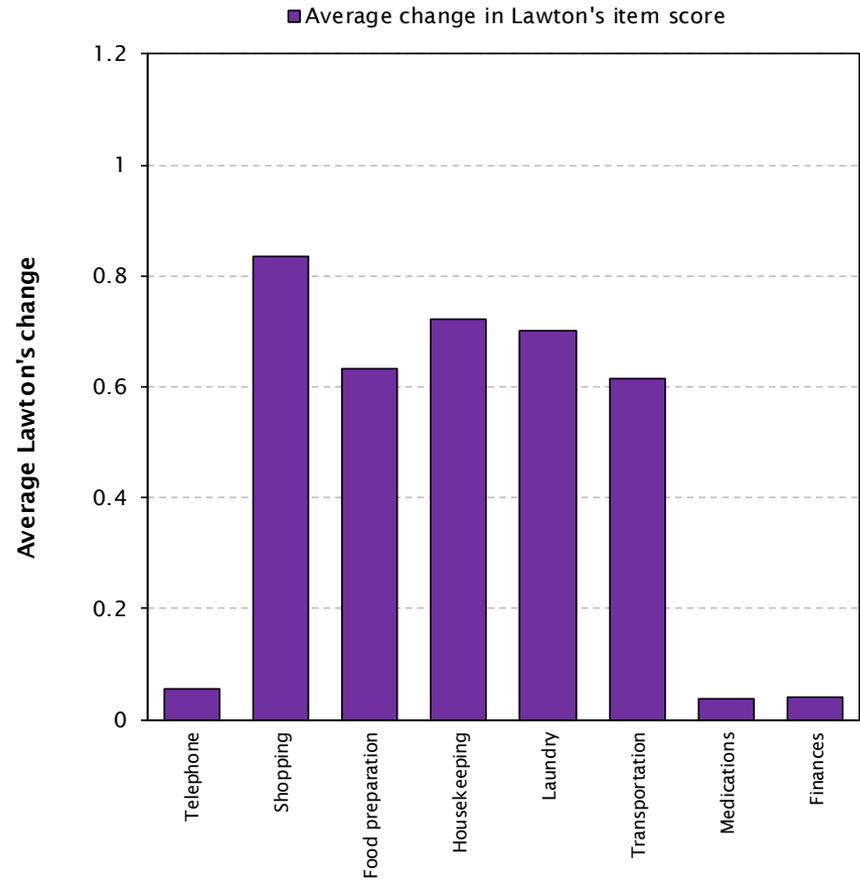
Change in Lawton's score by OOS/day seen – all episodes
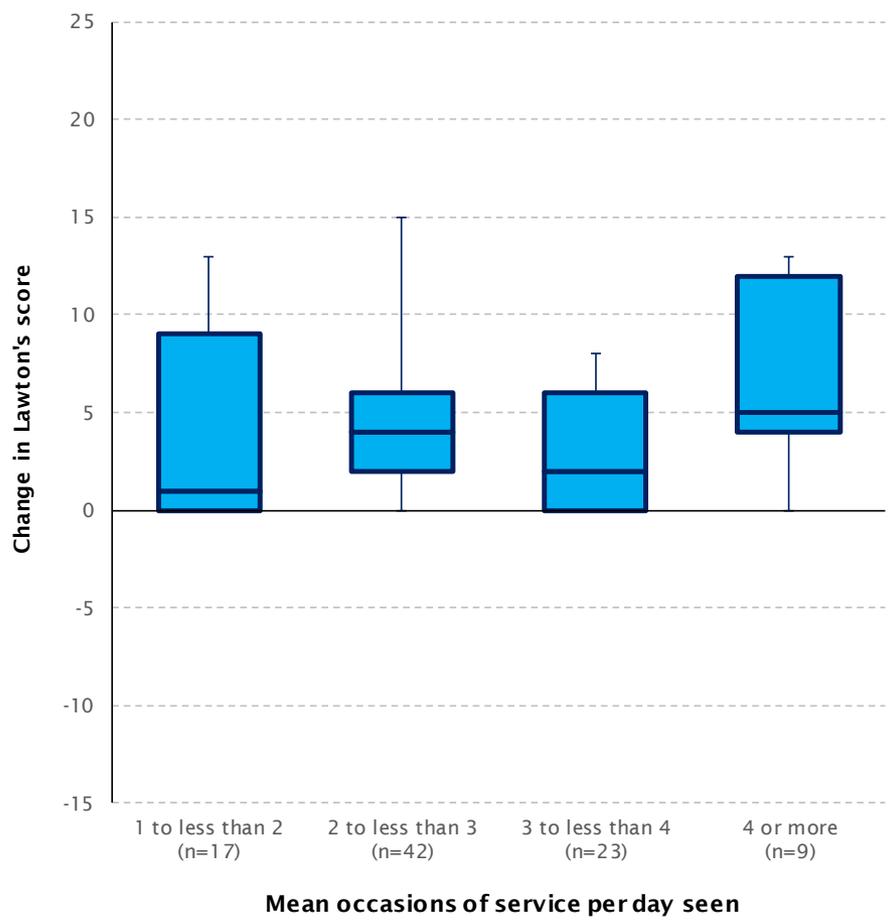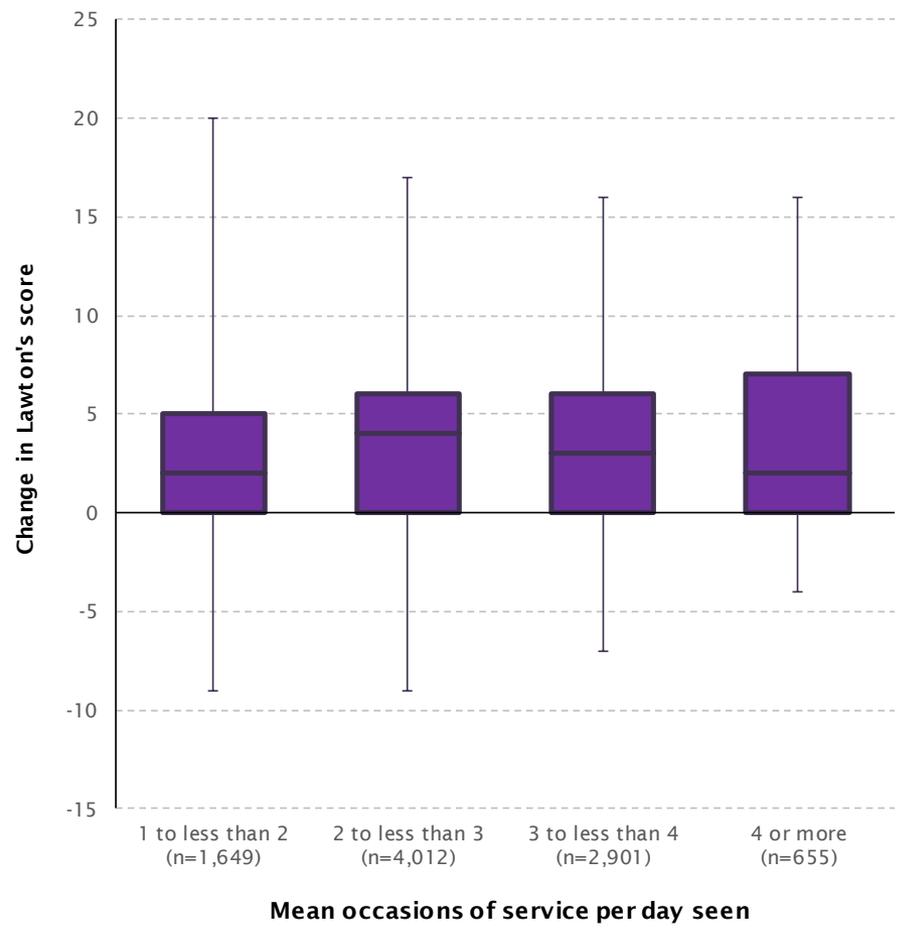
Change in Lawton's score by onset time – all episodes

Your Service 2017

All Ambulatory 2017

Impairment Specific Outcomes Measures
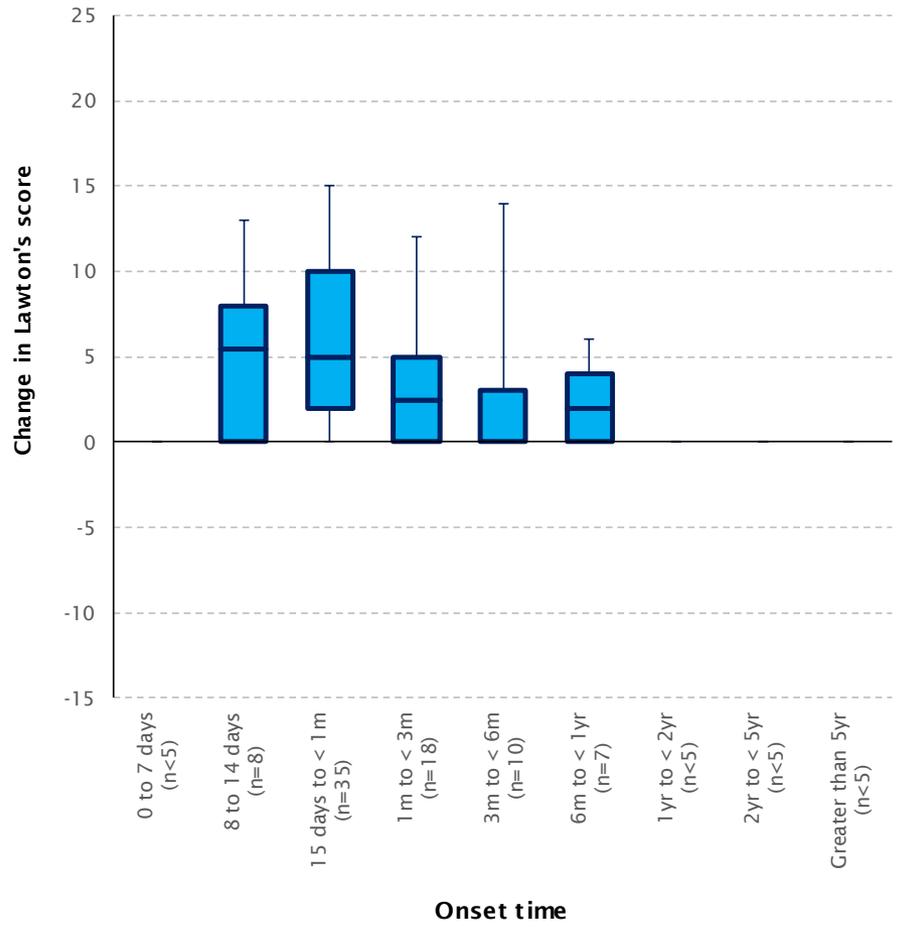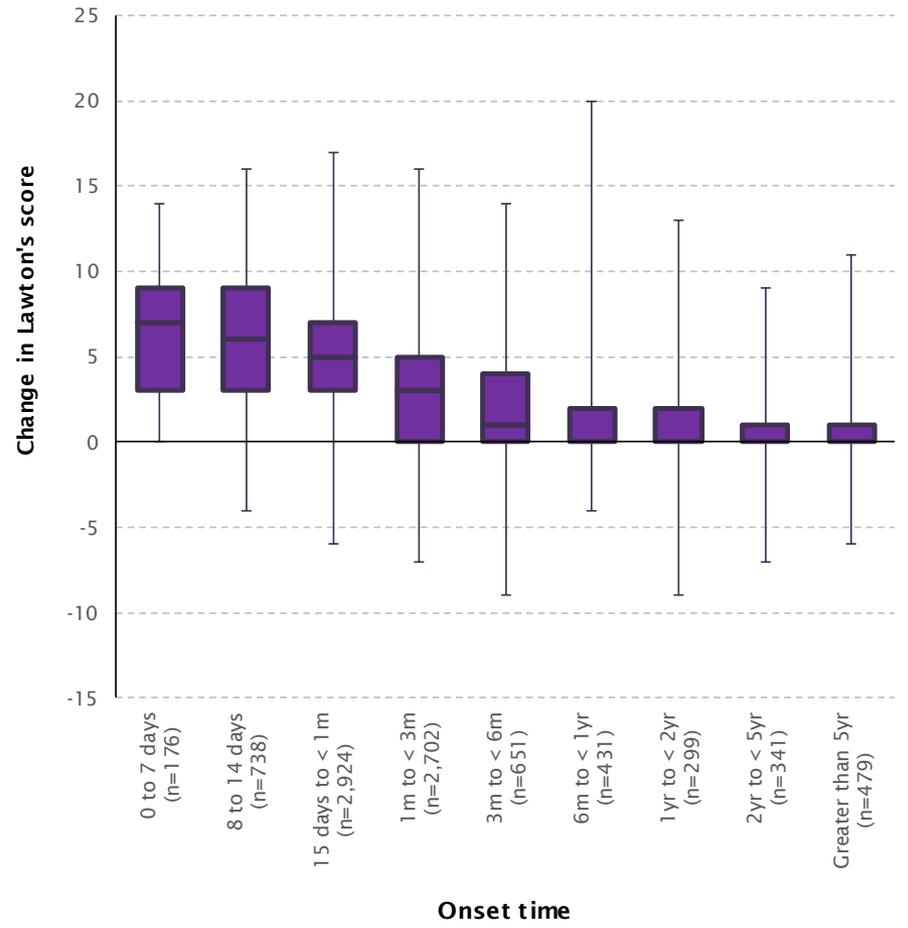
No single outcome measure can provide comprehensive outcome information across the range of impairments treated in ambulatory settings. For this reason, in addition to the Australian Modified Lawton's IADL Scale which is used for every episode, a number of impairment specific measures are included in the AROC Ambulatory Dataset V4.1. This dataset was implemented in August 2017, following widespread clinical consultation.

The following section provides information about these measures, as relevant to your facility's patient population:

- Upper Limb Motor Assessment Scale (UL-MAS)
- Times 10 Metre Walk Test
- Mayo-Portland Adaptability Inventory-4 (MPAI-4)
- De Morton Mobility Index (DEMMI)
- Timed Up and Go

Upper Limb Motor Assessment Scale (UL-MAS)

- This data item is collected in addition to the Australian Modified Lawton's IADL Scale for patients who have sustained upper limb impairment following a stroke
- The UL-MAS is used to assess everyday upper limb motor function in adults following stroke

For further information refer to the AROC Ambulatory Data Dictionary V4.1 for Clinicians.

Average ULMAS start and end score by sub-group

Your Service 2017 (n<5)

■ Start ULMAS score   ■ End ULMAS score

Average ULMAS score

Upper Arm Function   Hand Movements   Hand Activities

All Ambulatory 2017 (n=8)

■ Start ULMAS score   ■ End ULMAS score

Average ULMAS score

Upper Arm Function   Hand Movements   Hand Activities
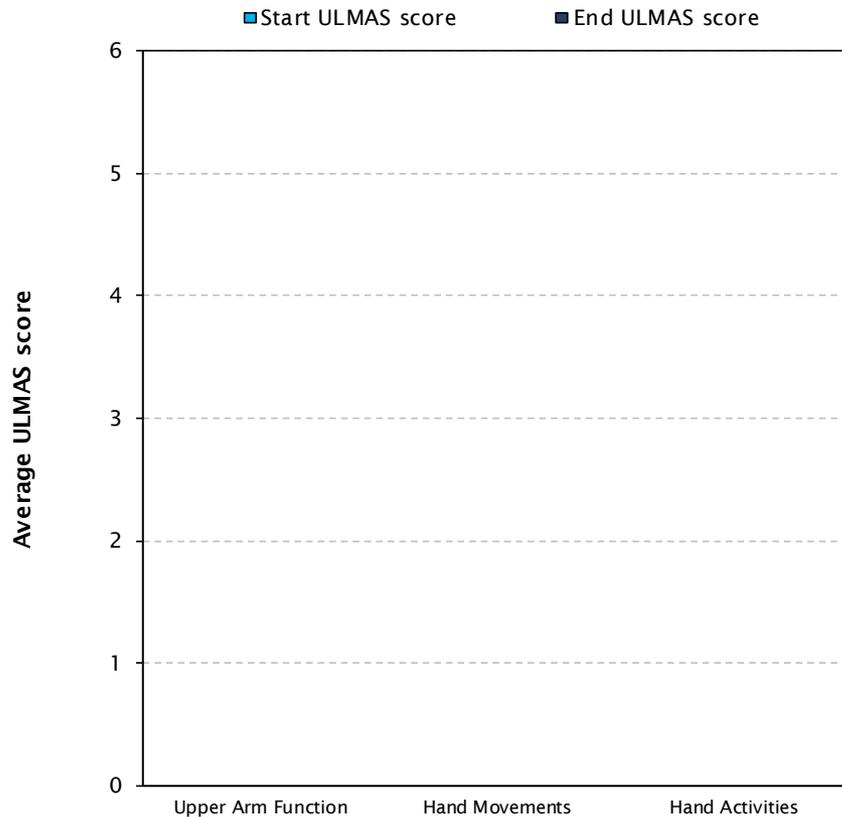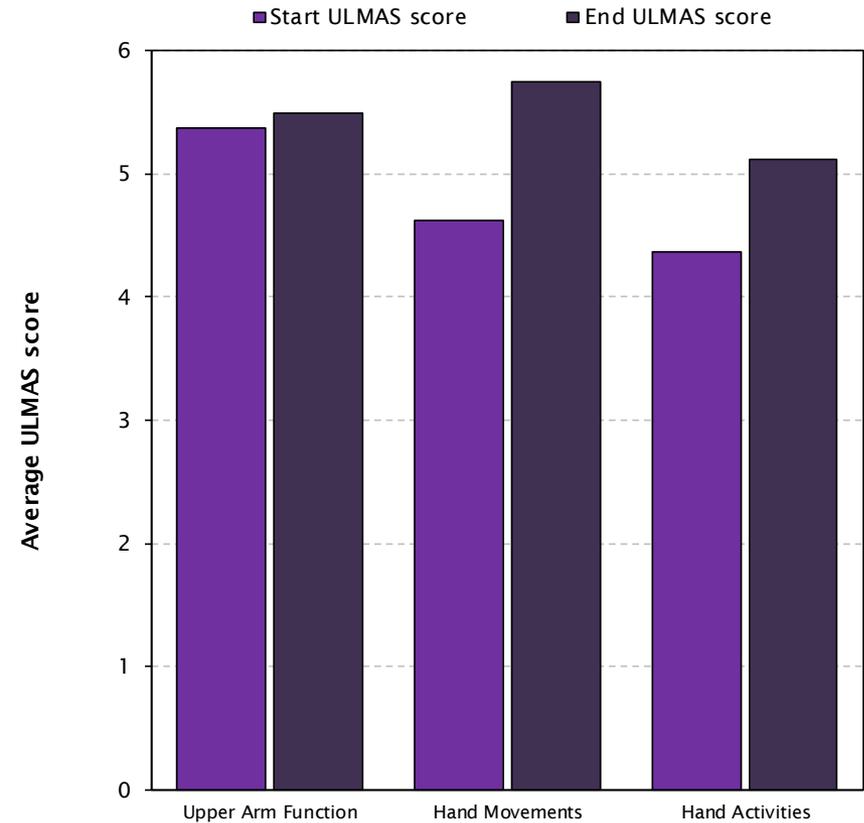
ULMAS start and end total – Upper arm function

Your Service 2017 (n<5)
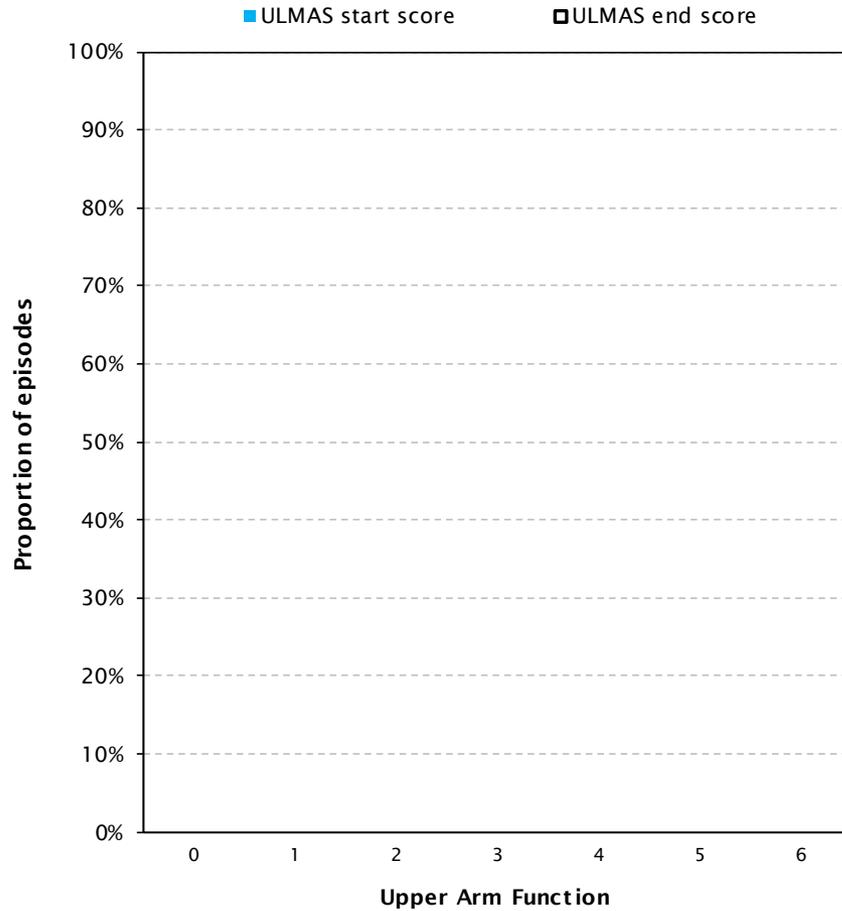
All Ambulatory 2017 (n=8)
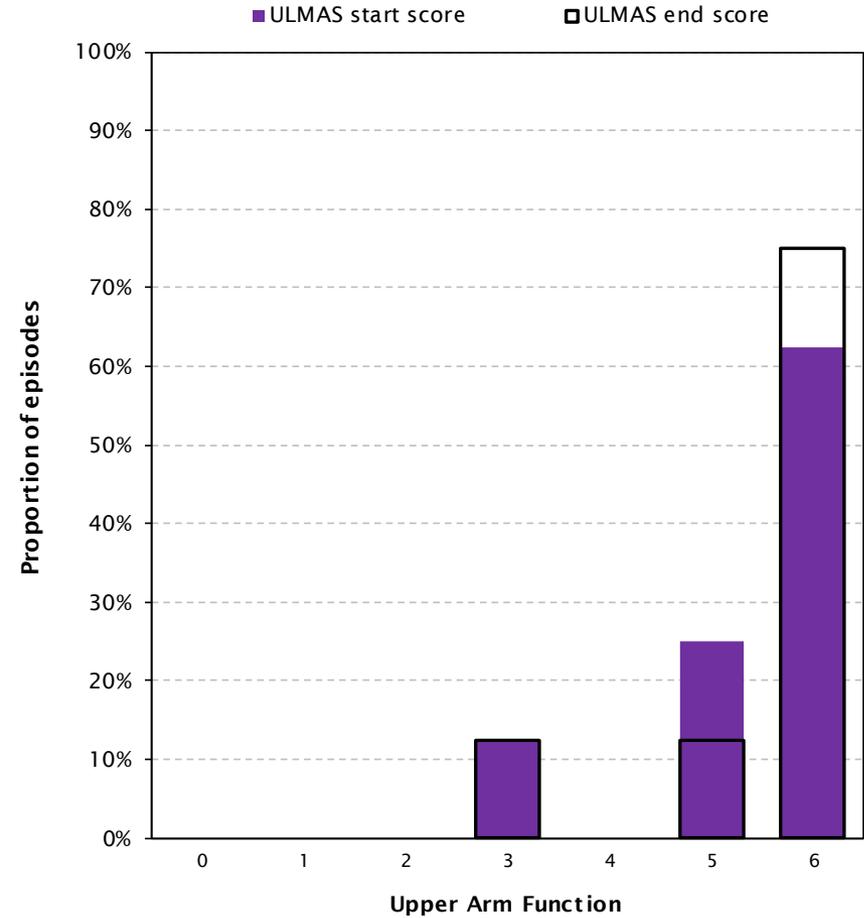
ULMAS start and end total – Hand movements

Your Service 2017 (n<5)
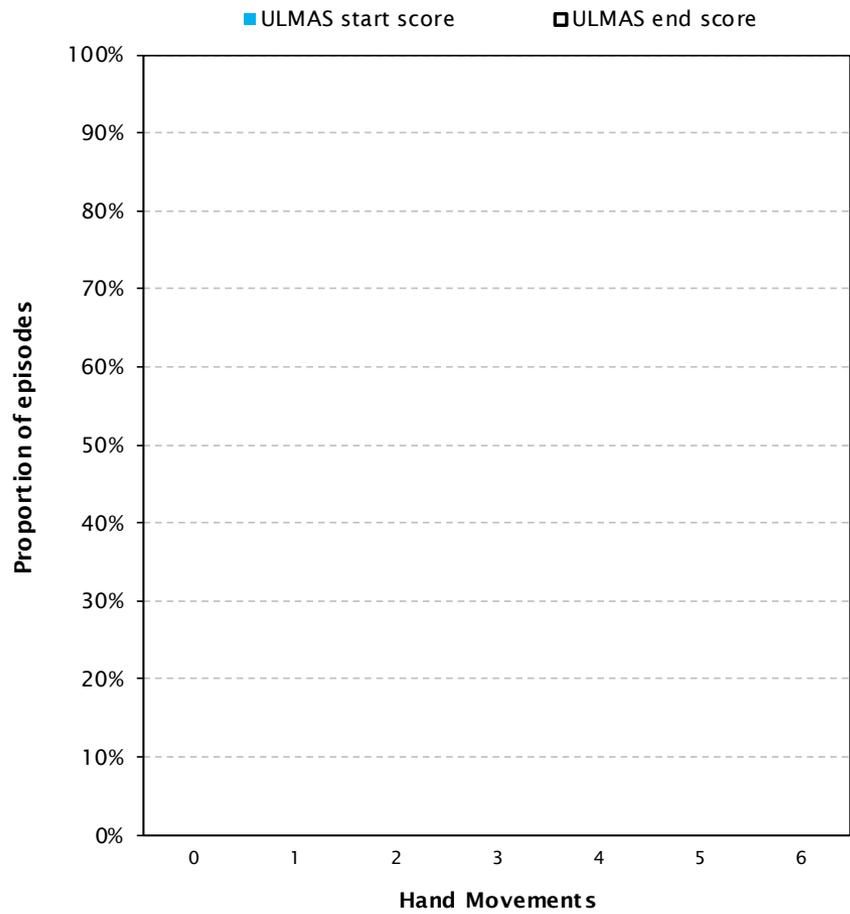
All Ambulatory 2017 (n=8)
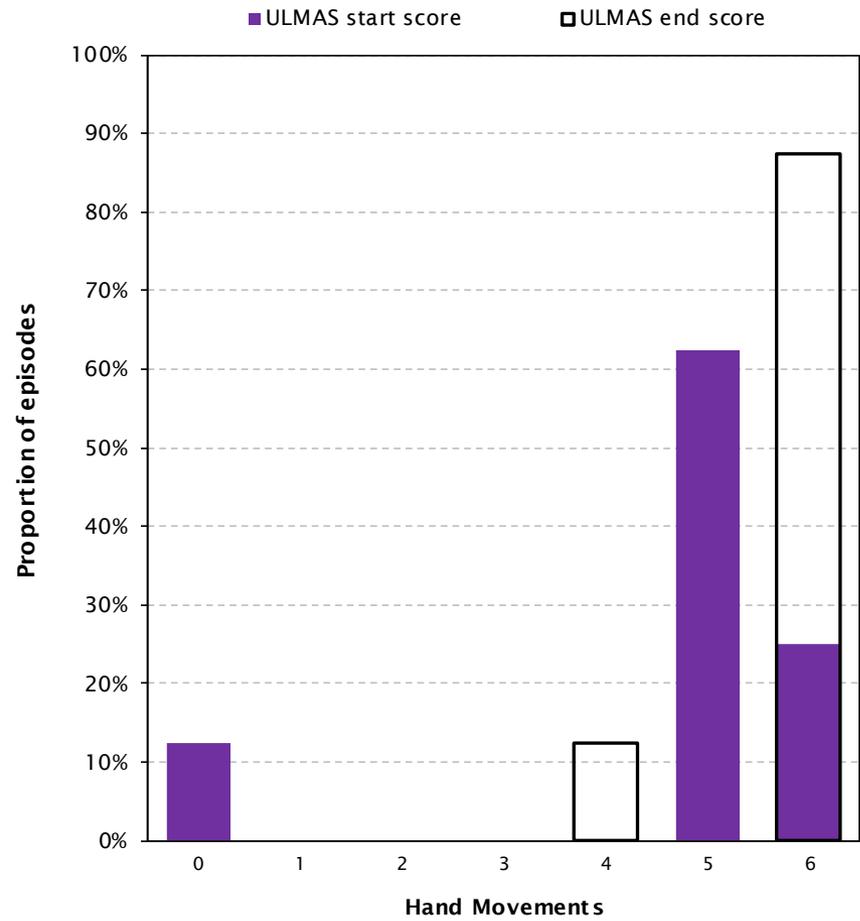
ULMAS start and end total – Hand activities

Your Service 2017 (n<5)
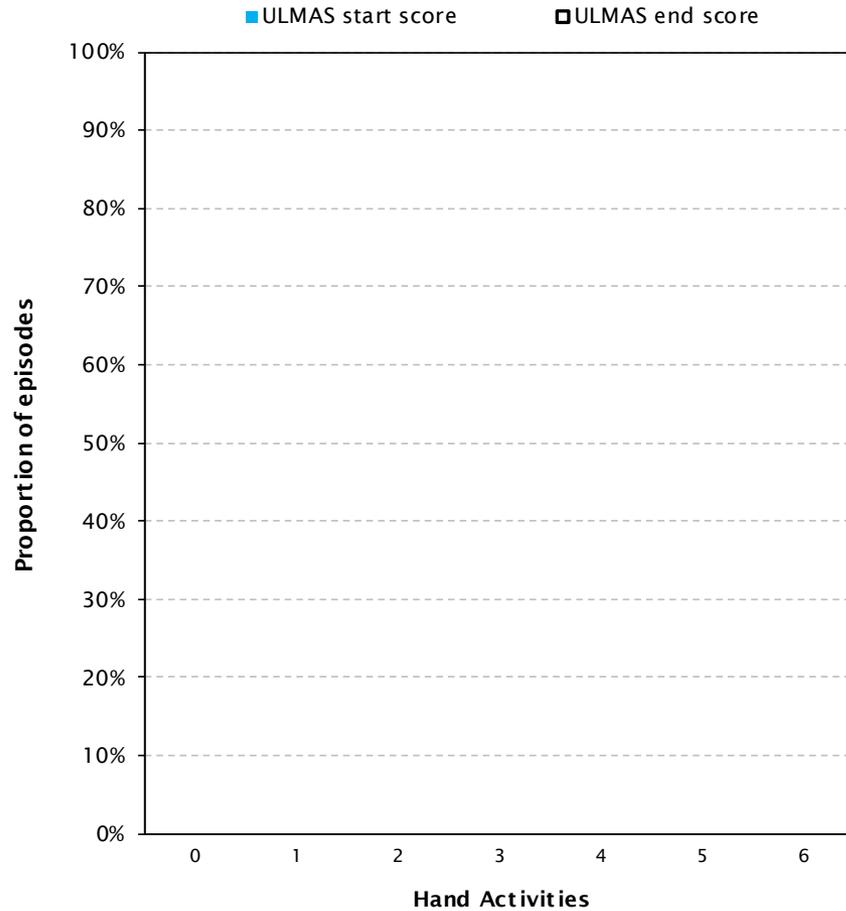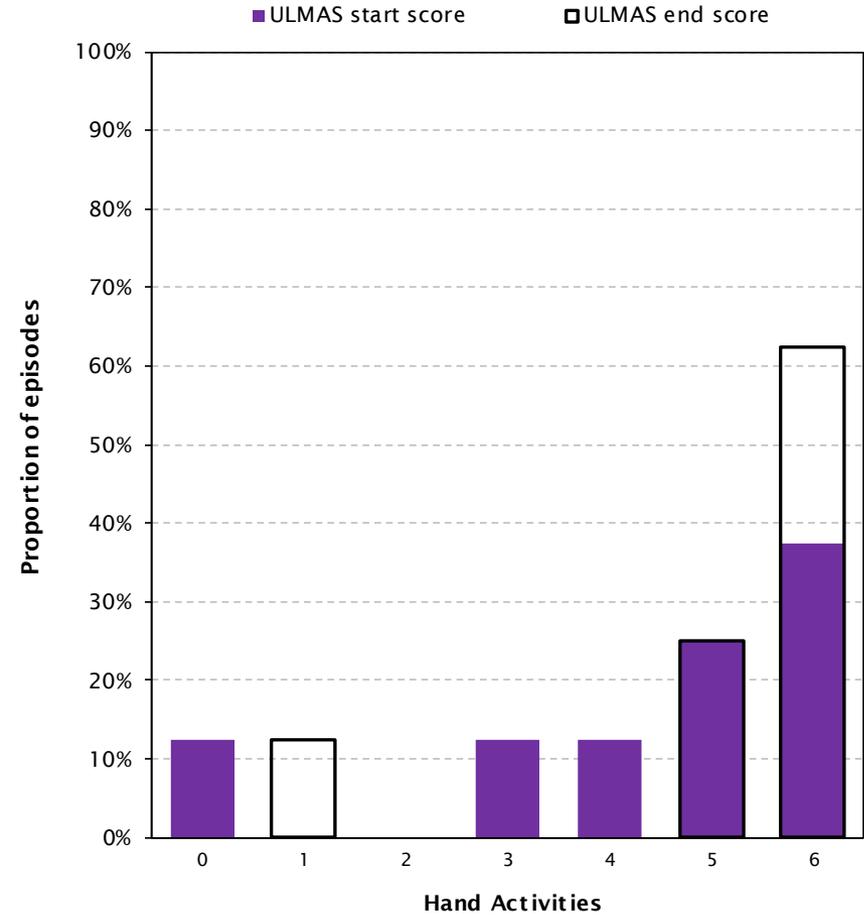
■ ULMAS start score   □ ULMAS end score

Proportion of episodes

Hand Activities

All Ambulatory 2017 (n=8)

■ ULMAS start score   □ ULMAS end score

Proportion of episodes

Hand Activities

Change in ULMAS score – Upper arm function

Your Service 2017 (n<5)

■ Change in ULMAS score

All Ambulatory 2017 (n=8)

■ Change in ULMAS score

Change in ULMAS score – Hand movements

Your Service 2017 (n<5)

■ Change in ULMAS score

All Ambulatory 2017 (n=8)

■ Change in ULMAS score

Change in ULMAS score – Hand activities

![aroc]
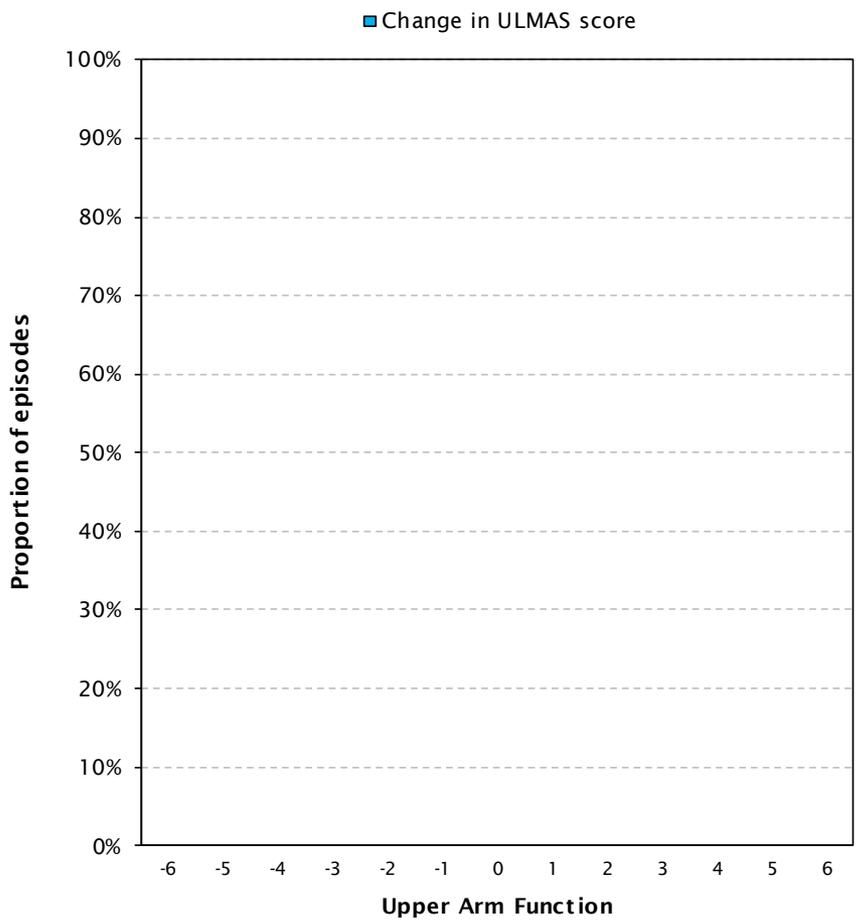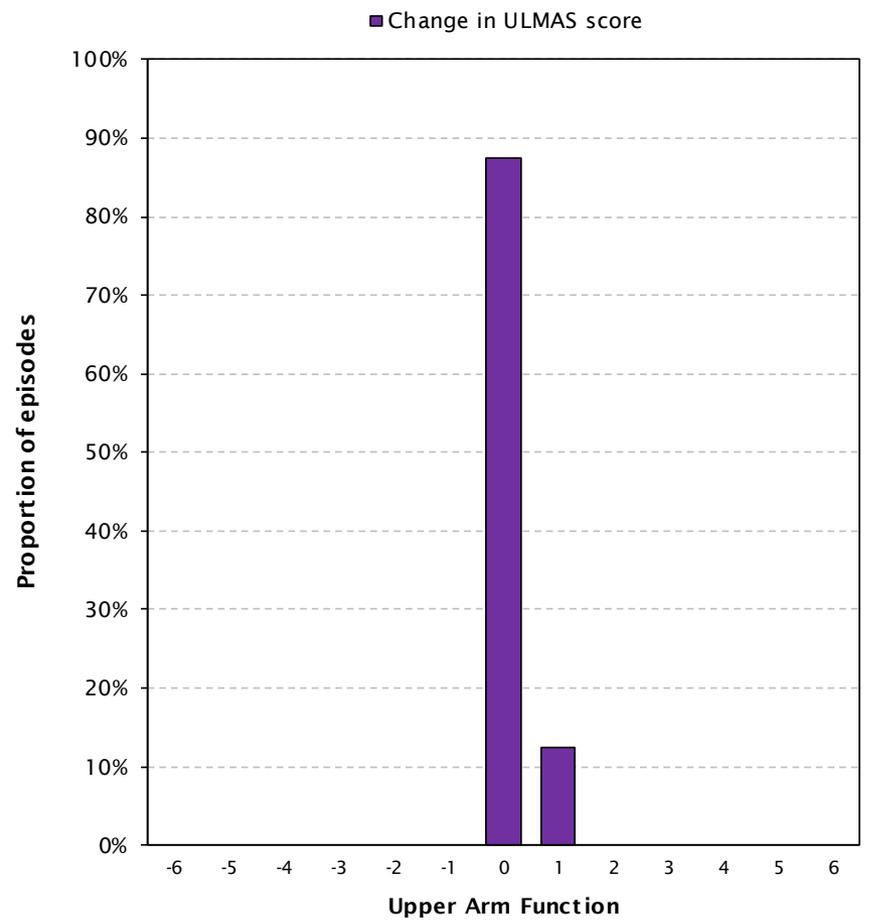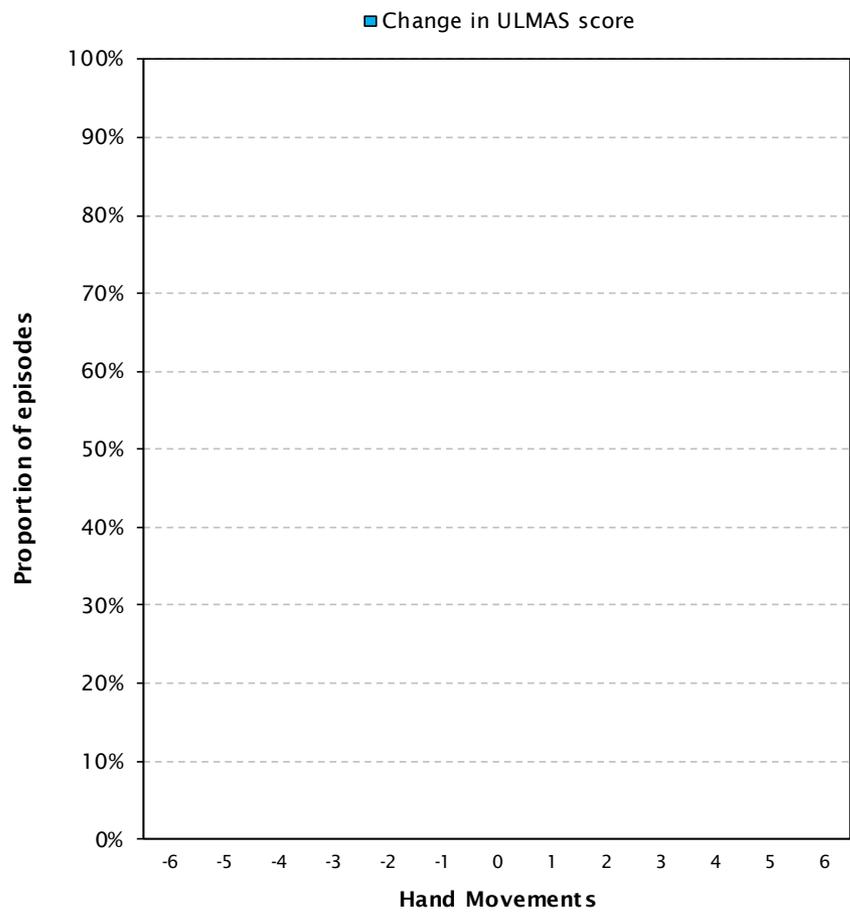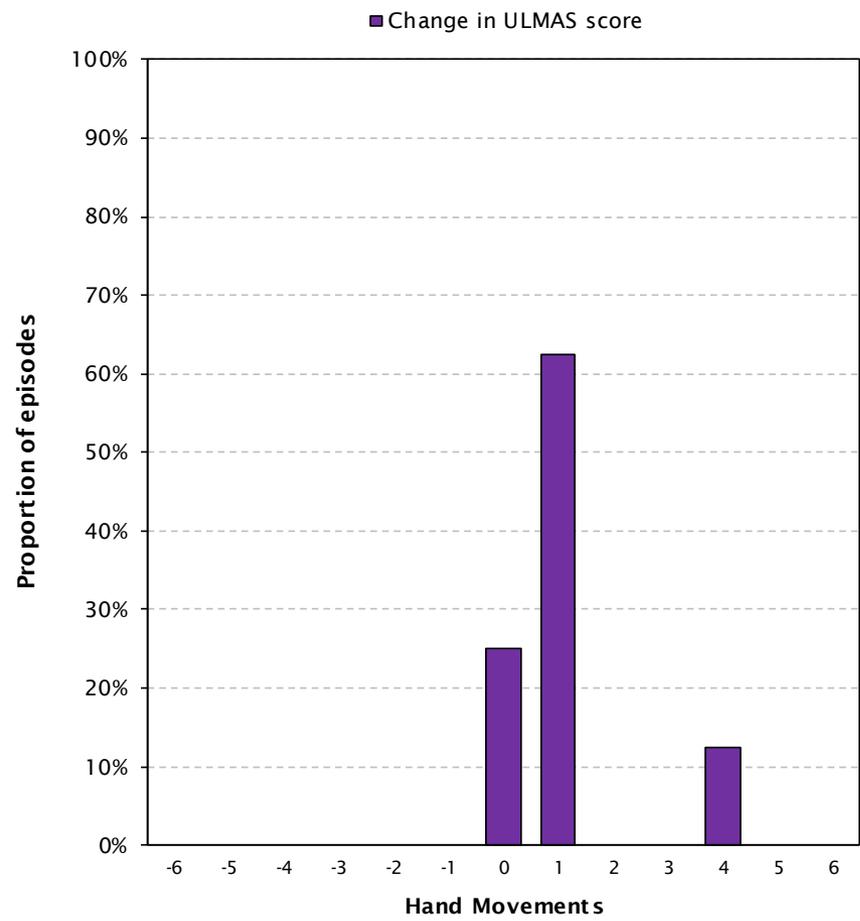
Your Service 2017 (n<5)

■ Change in ULMAS score

All Ambulatory 2017 (n=8)
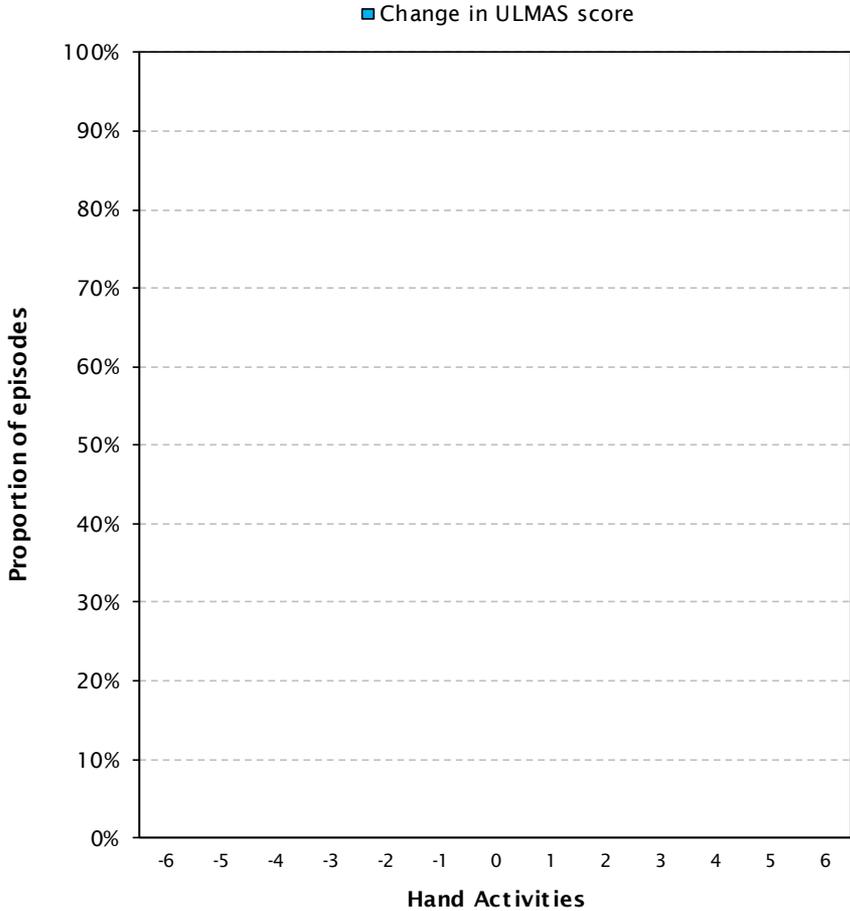
■ Change in ULMAS score
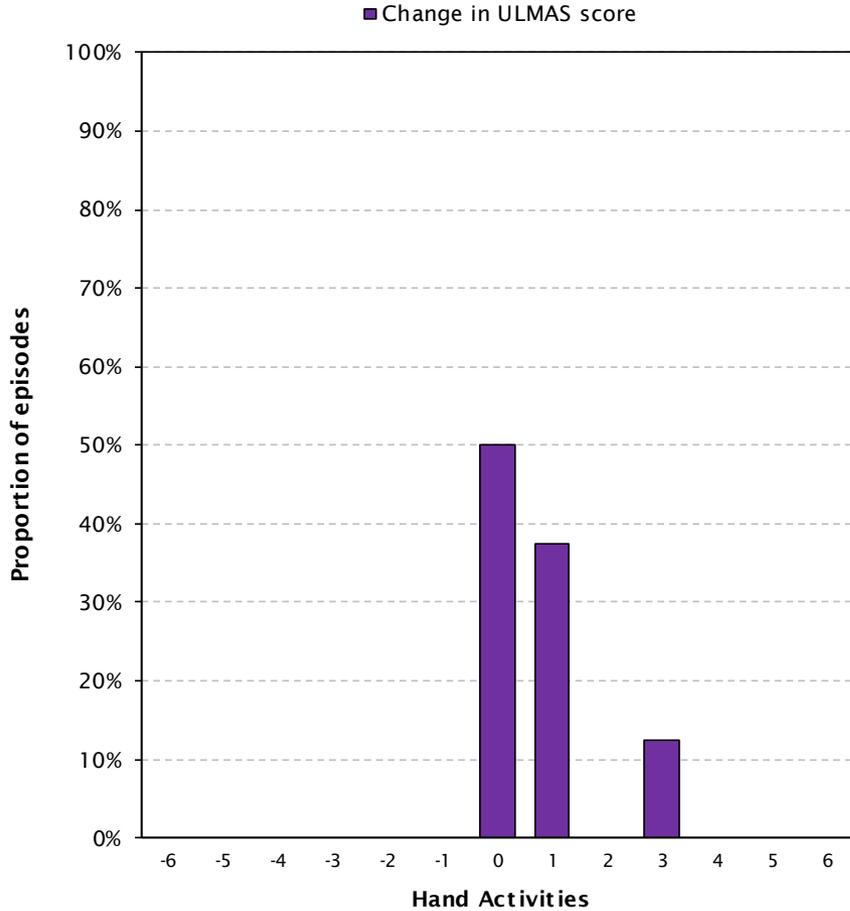
Change in ULMAS score by OOS/day seen – Upper arm function

Your Service 2017

Change in ULMAS score – Upper Arm Function

Mean occasions of service per day seen

| 1 to less than 2 (n<5) | 2 to less than 3 (n<5) | 3 to less than 4 (n<5) | 4 or more (n<5) |

All Ambulatory 2017

Change in ULMAS score – Upper Arm Function

Mean occasions of service per day seen

| 1 to less than 2 (n<5) | 2 to less than 3 (n<5) | 3 to less than 4 (n<5) | 4 or more (n<5) |
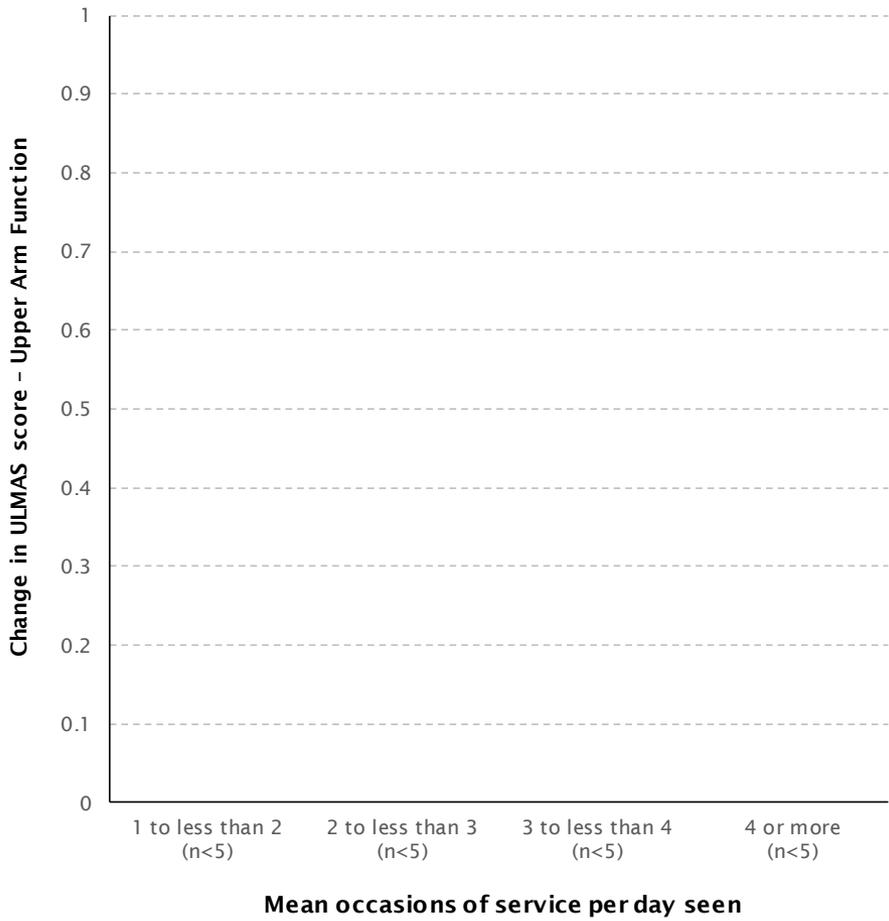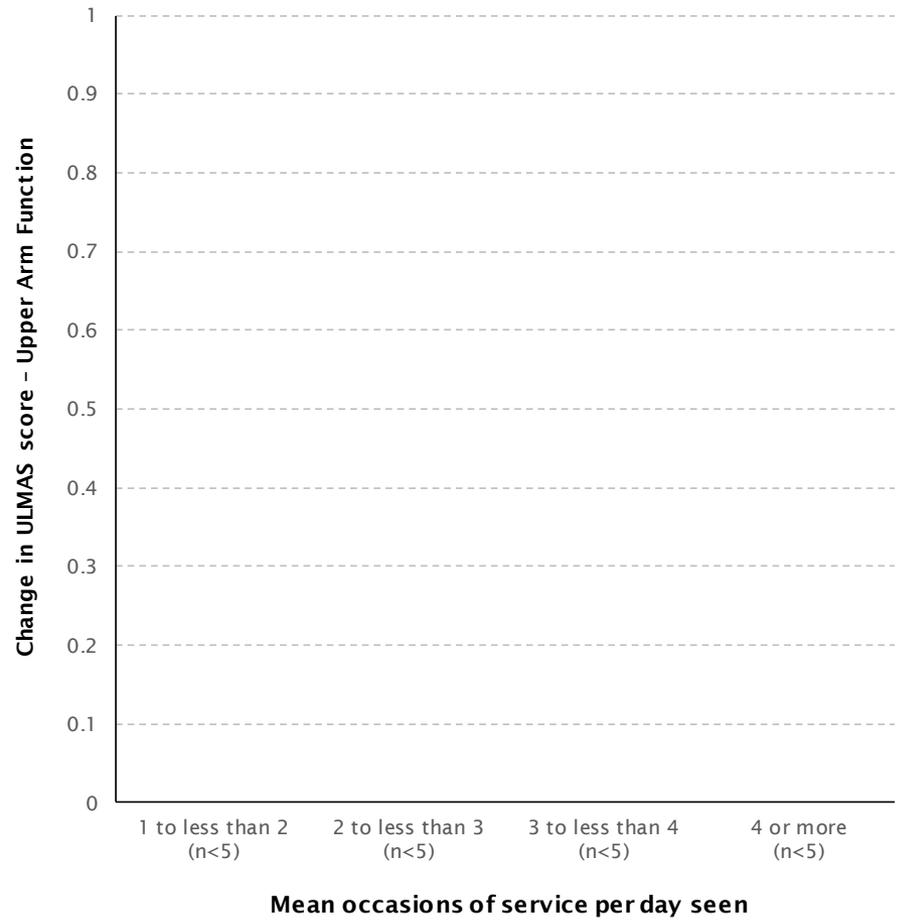
Change in ULMAS score by OOS/day seen – Hand movements

Your Service 2017

Change in ULMAS score – Hand Movements

| | 1 to less than 2 (n<5) | 2 to less than 3 (n<5) | 3 to less than 4 (n<5) | 4 or more (n<5) |

Mean occasions of service per day seen

All Ambulatory 2017

Change in ULMAS score – Hand Movements

| | 1 to less than 2 (n<5) | 2 to less than 3 (n<5) | 3 to less than 4 (n<5) | 4 or more (n<5) |

Mean occasions of service per day seen
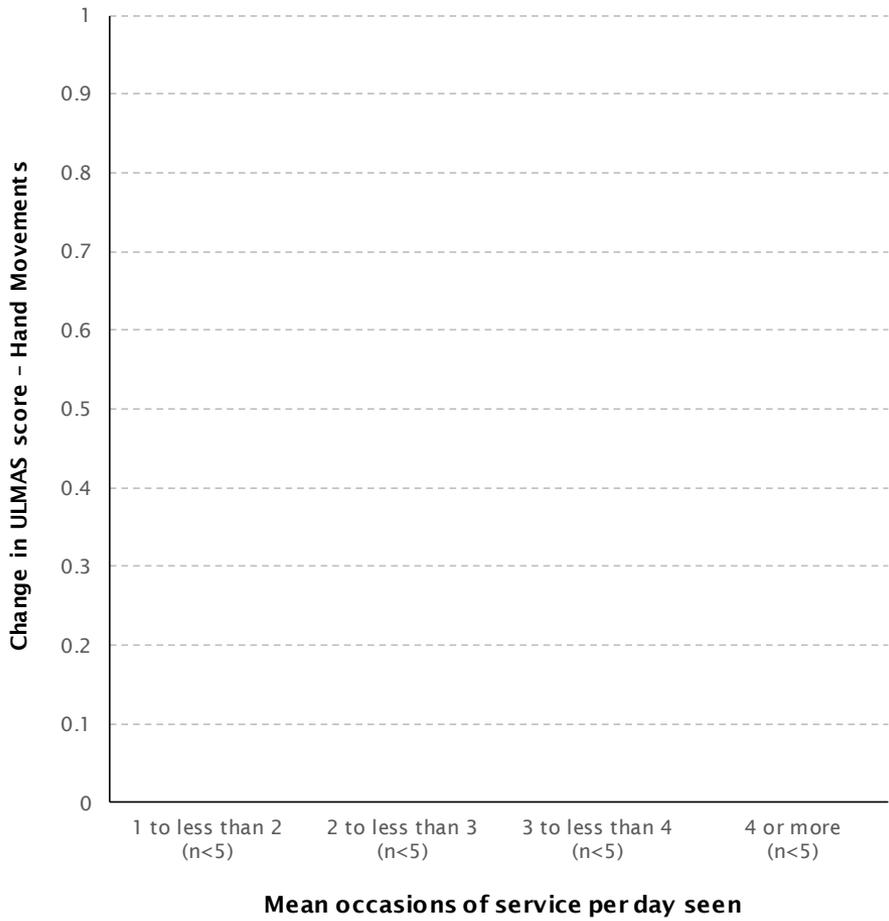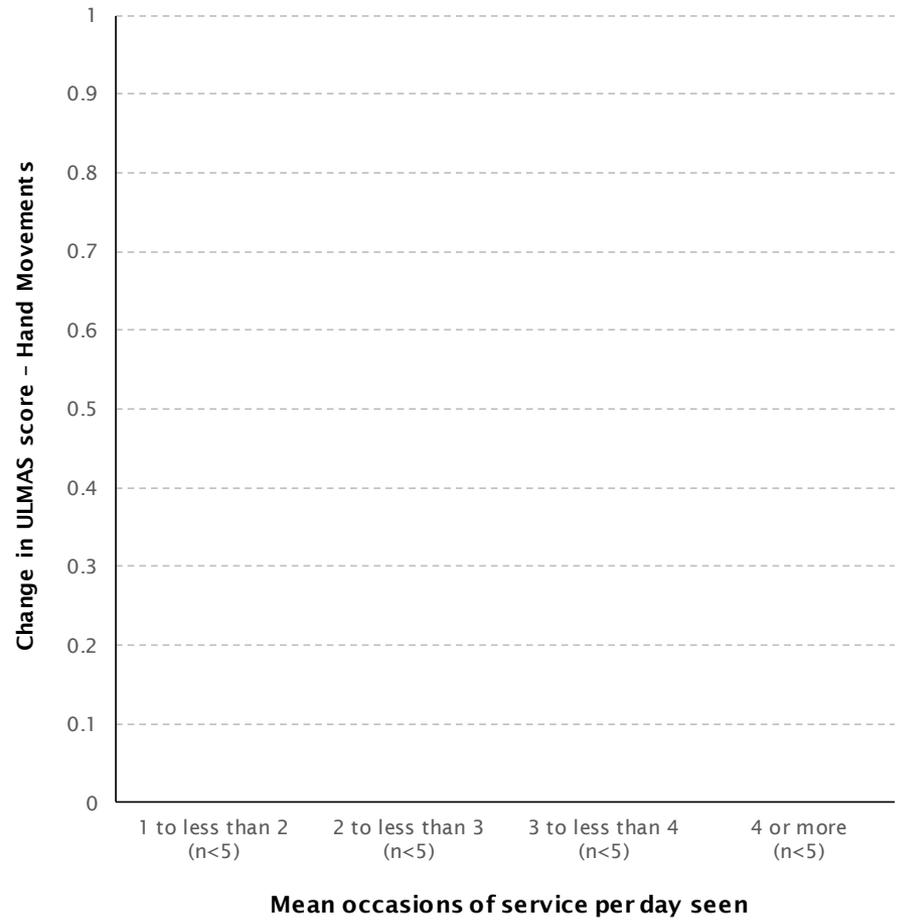
Change in ULMAS score by OOS/day seen – Hand activities

Your Service 2017

Change in ULMAS score – Hand Activities

Mean occasions of service per day seen

1 to less than 2 (n<5)	
2 to less than 3 (n<5)	
3 to less than 4 (n<5)	
4 or more (n<5)	

All Ambulatory 2017

Change in ULMAS score – Hand Activities

Mean occasions of service per day seen

1 to less than 2 (n<5)	
2 to less than 3 (n<5)	
3 to less than 4 (n<5)	
4 or more (n<5)	
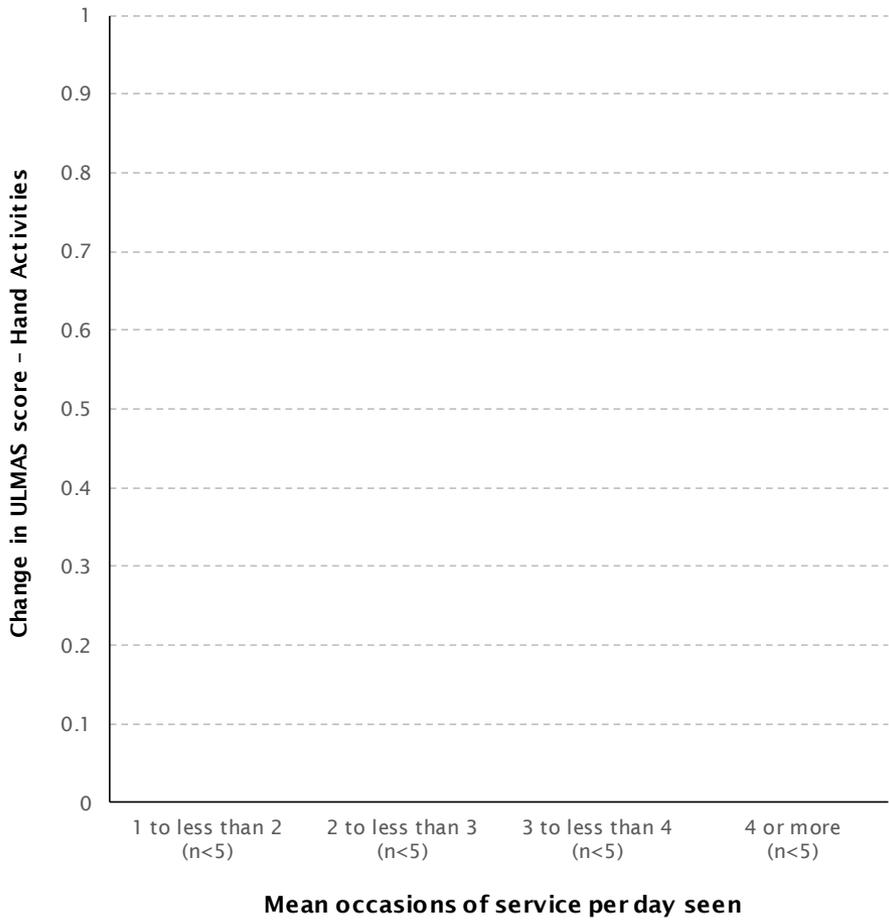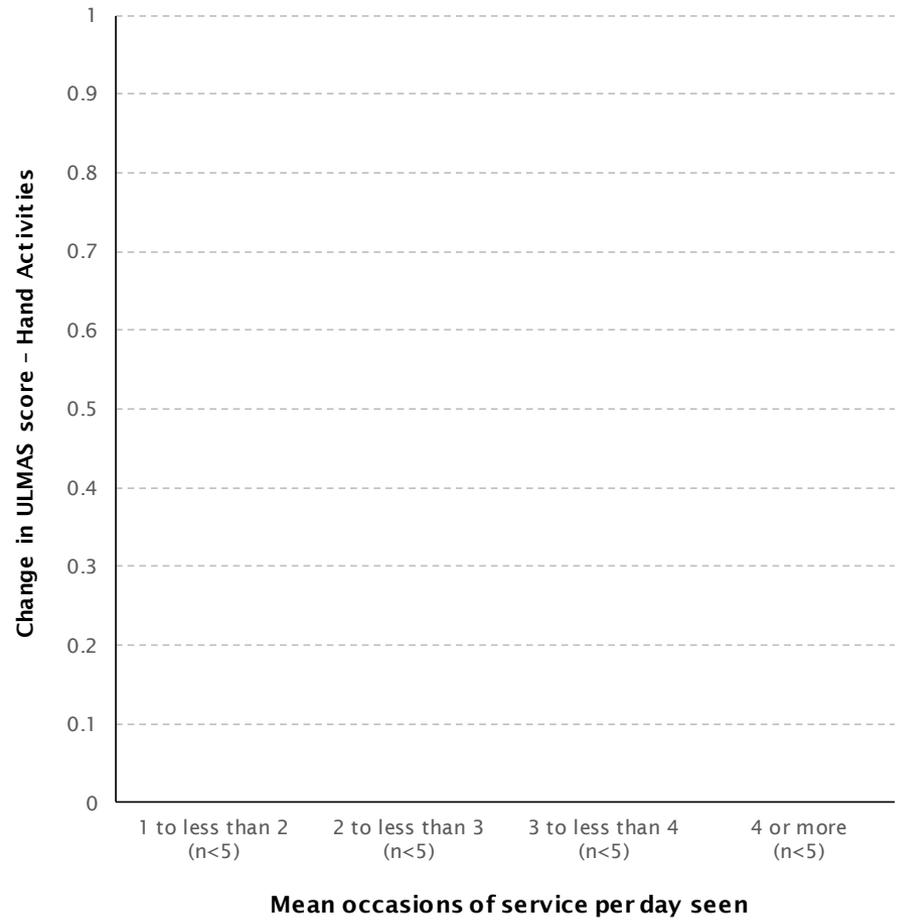
Change in ULMAS score by onset time – Upper arm function
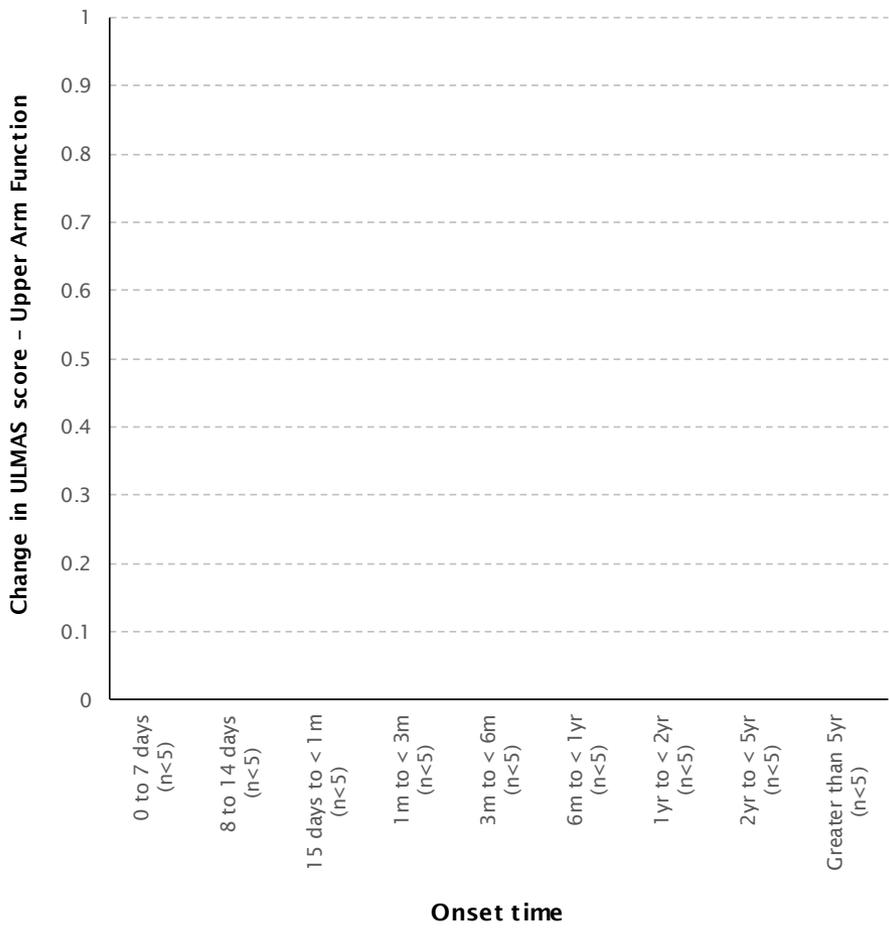
Your Service 2017

All Ambulatory 2017
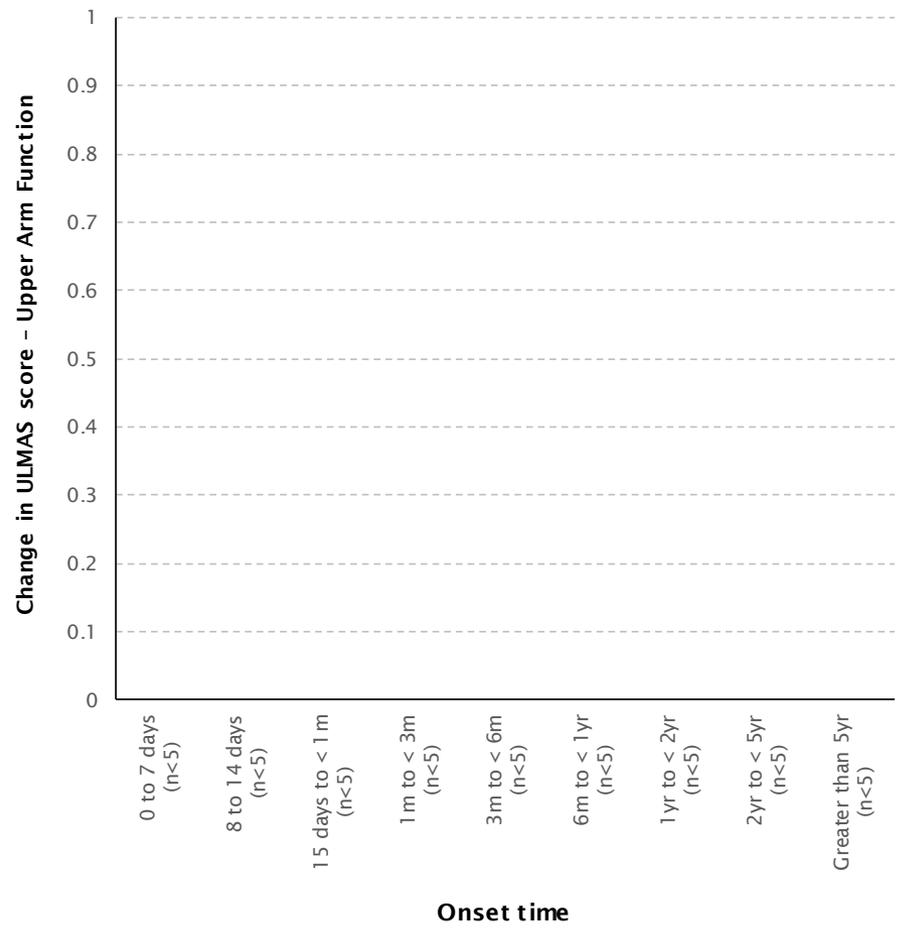
Change in ULMAS score by onset time – Hand movements

Your Service 2017

Change in ULMAS score – Hand Movements

1	
0.9	
0.8	
0.7	
0.6	
0.5	
0.4	
0.3	
0.2	
0.1	
0	

0 to 7 days (n<5) | 8 to 14 days (n<5) | 15 days to < 1m (n<5) | 1m to < 3m (n<5) | 3m to < 6m (n<5) | 6m to < 1yr (n<5) | 1yr to < 2yr (n<5) | 2yr to < 5yr (n<5) | Greater than 5yr (n<5)

Onset time

All Ambulatory 2017

Change in ULMAS score – Hand Movements

1	
0.9	
0.8	
0.7	
0.6	
0.5	
0.4	
0.3	
0.2	
0.1	
0	

0 to 7 days (n<5) | 8 to 14 days (n<5) | 15 days to < 1m (n<5) | 1m to < 3m (n<5) | 3m to < 6m (n<5) | 6m to < 1yr (n<5) | 1yr to < 2yr (n<5) | 2yr to < 5yr (n<5) | Greater than 5yr (n<5)
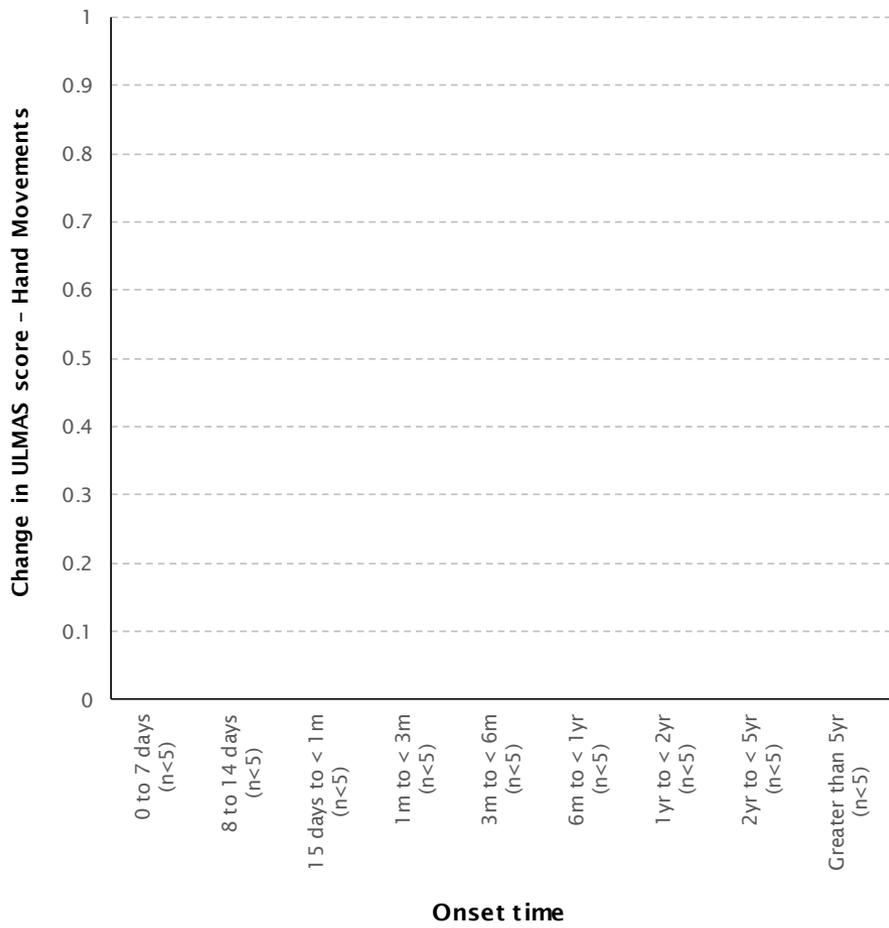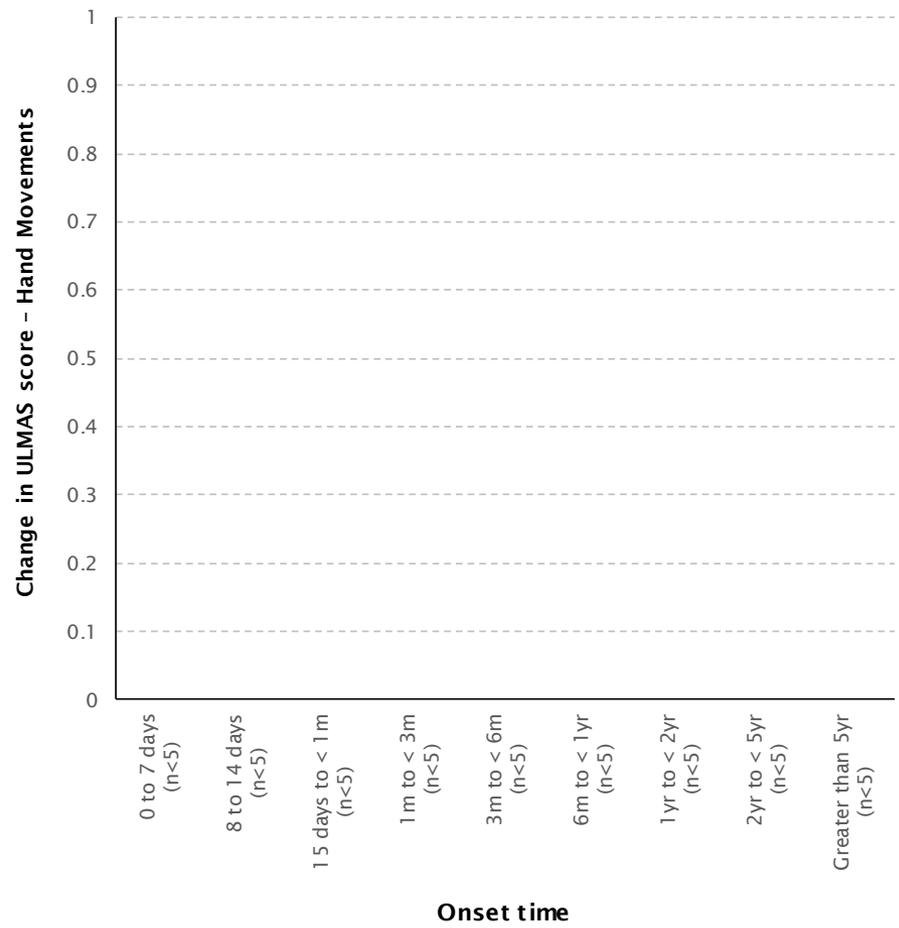
Onset time

Change in ULMAS score by onset time – Hand activities

Your Service 2017
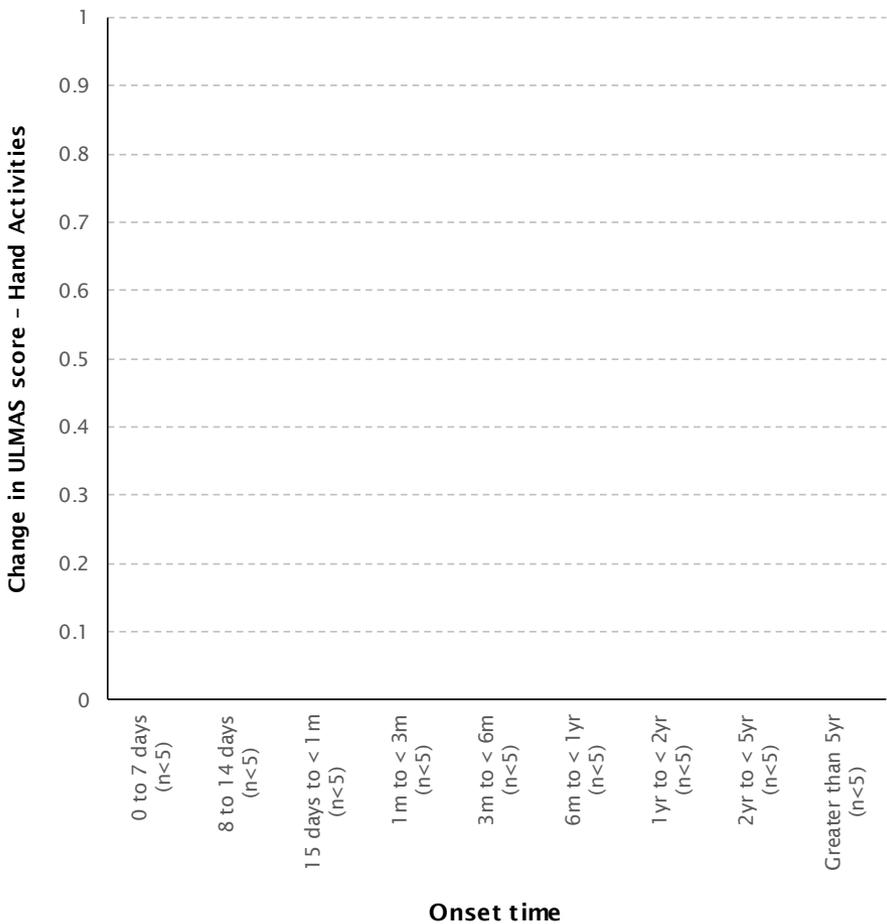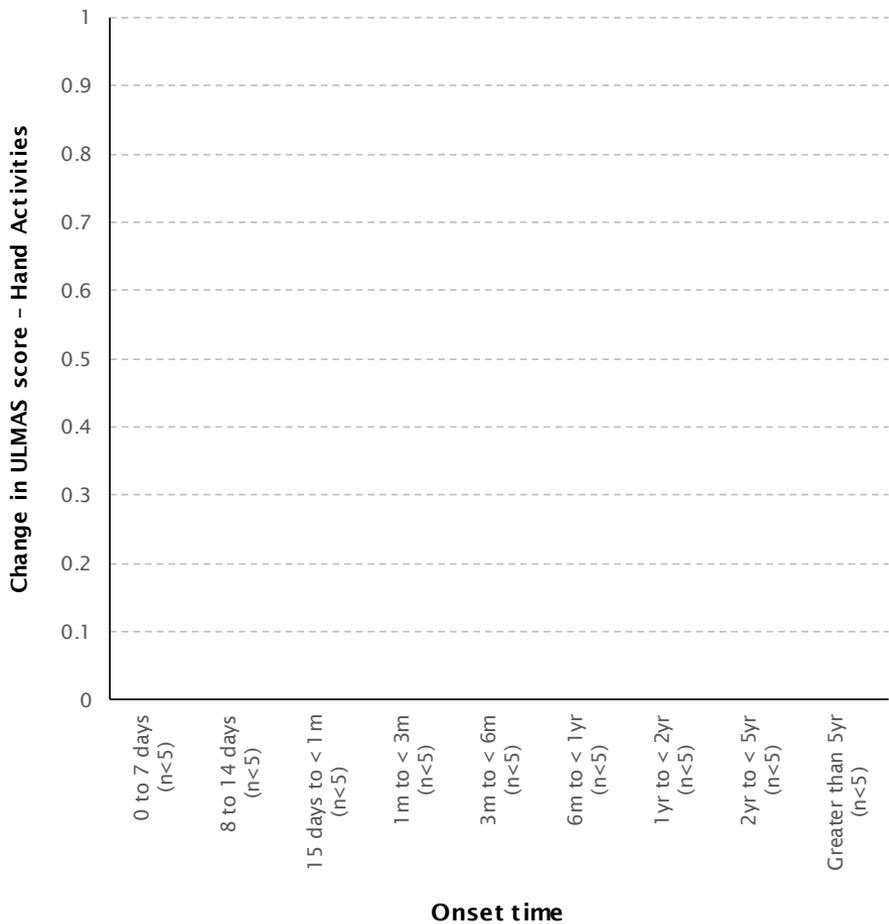
All Ambulatory 2017

Timed 10 metre walk test

This data item is collected in addition to the Australian Modified Lawton's IADL Scale for patients who may have gait impairment as a result of:

- Stroke
- Lower limb orthopaedic injury or joint replacement
- Amputation of lower limb (optional measure)

For further information refer to the AROC Ambulatory Data Dictionary V4.1 for Clinicians.

Admission timed 10 metre walk test speed by impairment

Your Service 2017

All Ambulatory 2017

Note: All admissions.
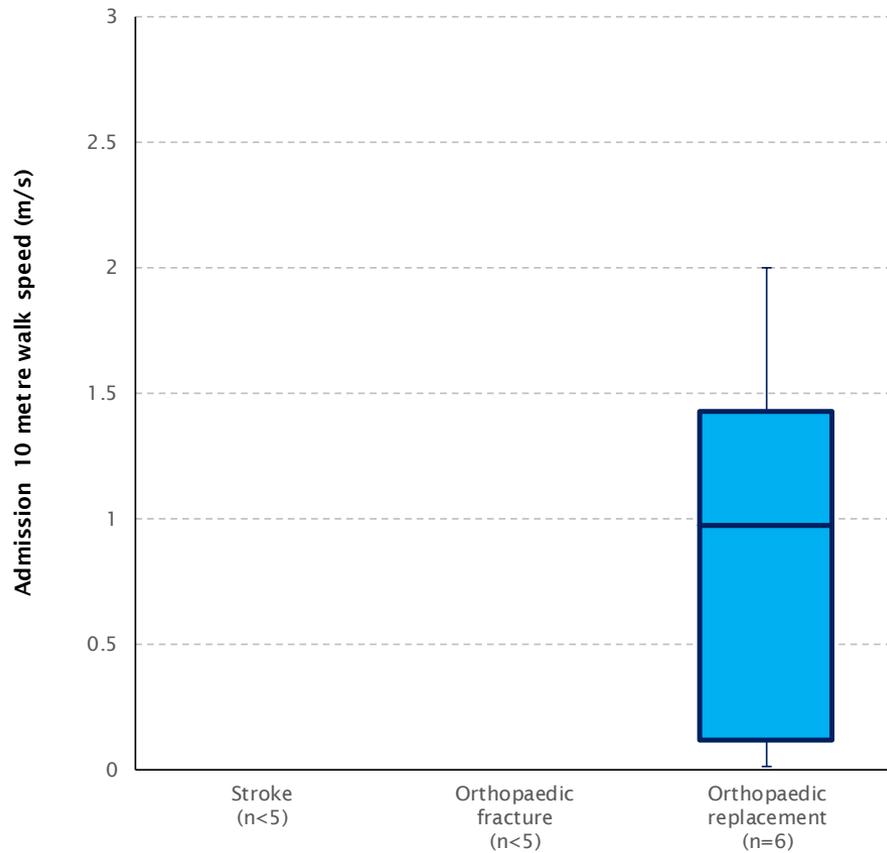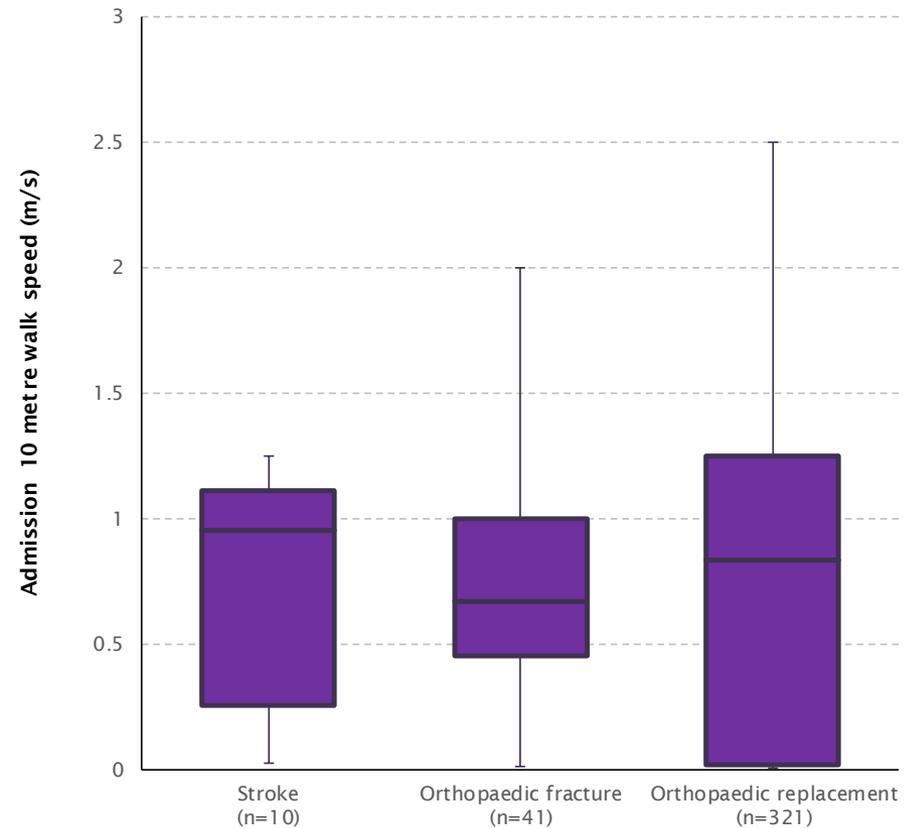
Note: All admissions.

Admission and discharge timed 10 metre walk test speed by impairment

Your Service 2017

All Ambulatory 2017
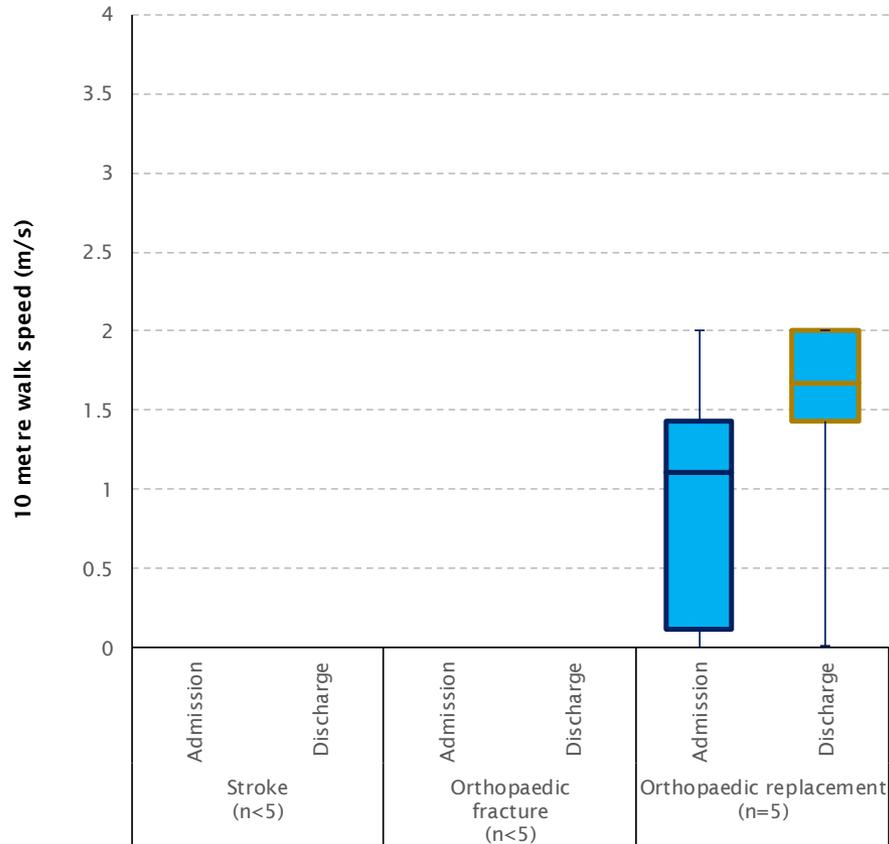
Note: Completed episodes only.

Change in 10 metre walk speed by impairment

Change in 10 metre walk speed by OOS/day seen – Stroke

Your Service 2017

Change in 10 metre walk speed (m/s)

| | 1 to less than 2 (n<5) | 2 to less than 3 (n<5) | 3 to less than 4 (n<5) | 4 or more (n<5) |

Mean occasions of service per day seen

All Ambulatory 2017

Change in 10 metre walk speed (m/s)

| | 1 to less than 2 (n<5) | 2 to less than 3 (n<5) | 3 to less than 4 (n<5) | 4 or more (n<5) |
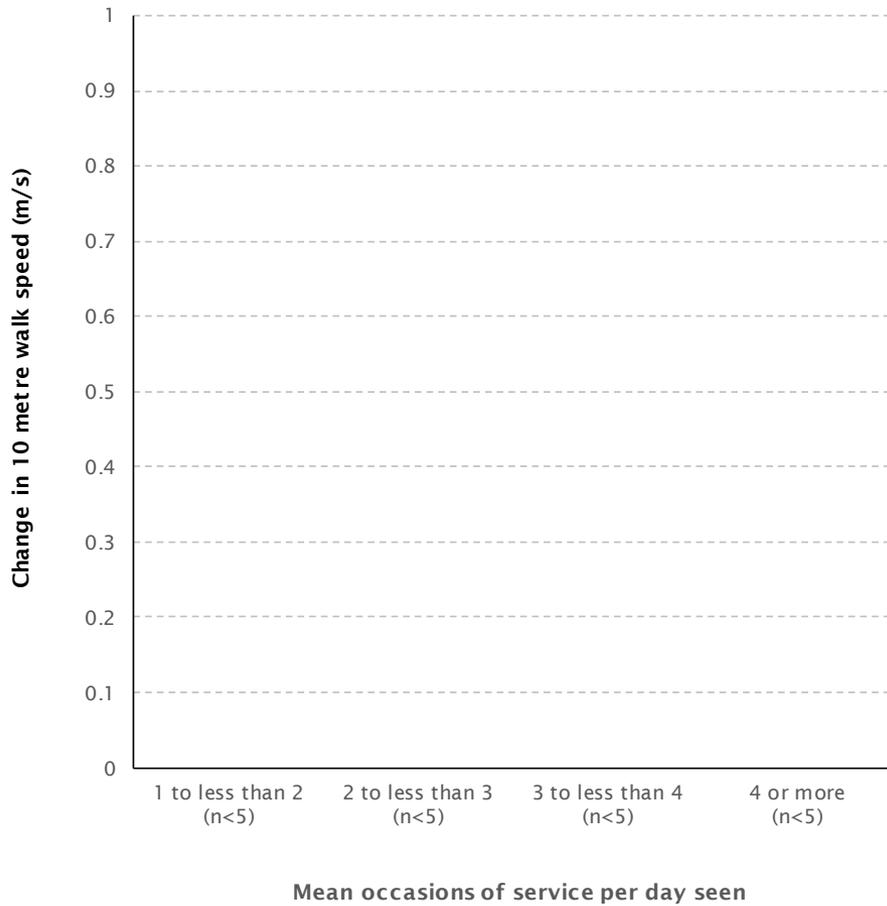
Mean occasions of service per day seen
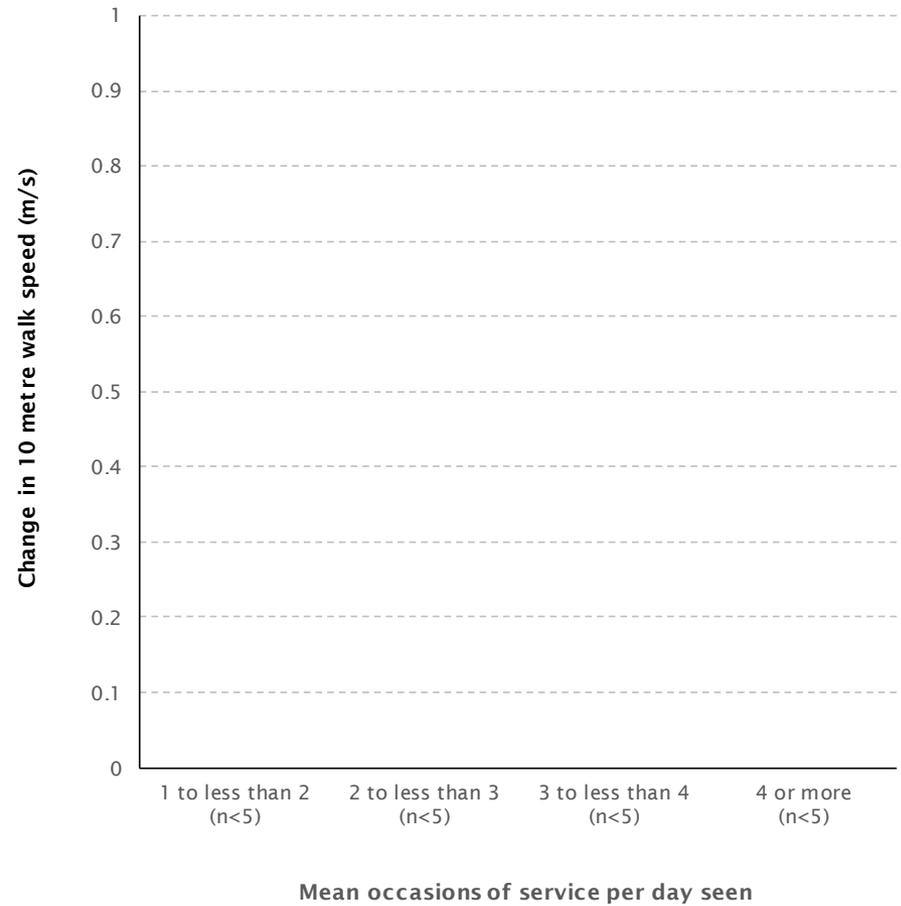
Change in 10 metre walk speed by OOS/day seen – Orthopaedic fractures

Your Service 2017

Change in 10 metre walk speed (m/s)

| Mean occasions of service per day seen |
| 1 to less than 2 (n<5) | 2 to less than 3 (n<5) | 3 to less than 4 (n<5) | 4 or more (n<5) |

All Ambulatory 2017

Change in 10 metre walk speed (m/s)

| Mean occasions of service per day seen |
| 1 to less than 2 (n=13) | 2 to less than 3 (n=20) | 3 to less than 4 (n<5) | 4 or more (n<5) |

Change in 10 metre walk speed by OOS/day seen – Orthopaedic replacements

Your Service 2017
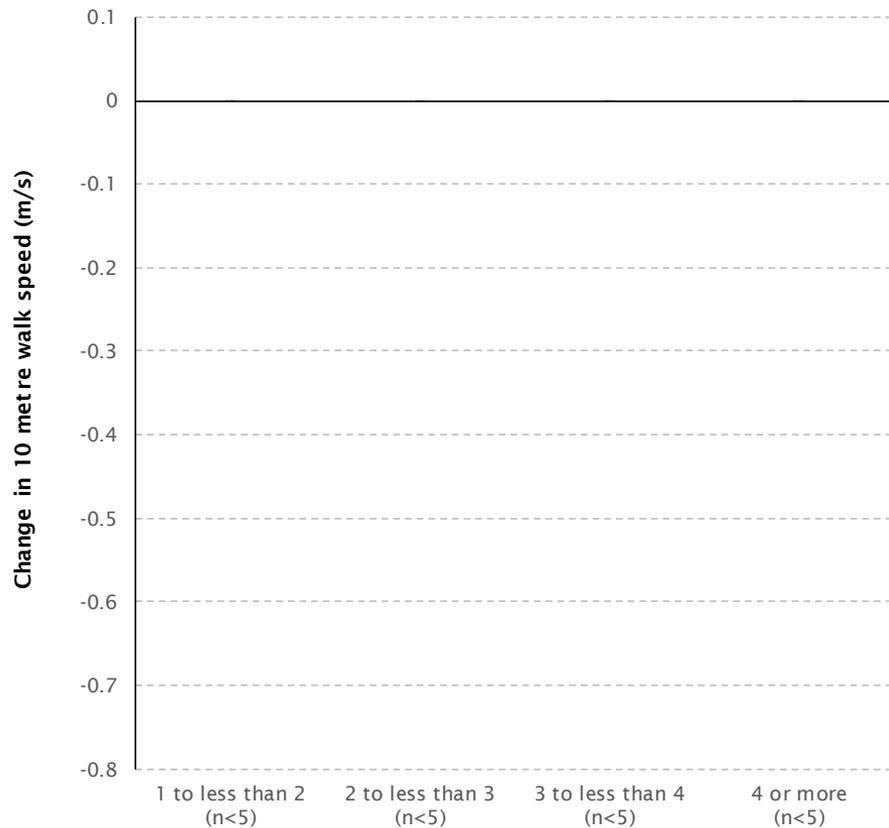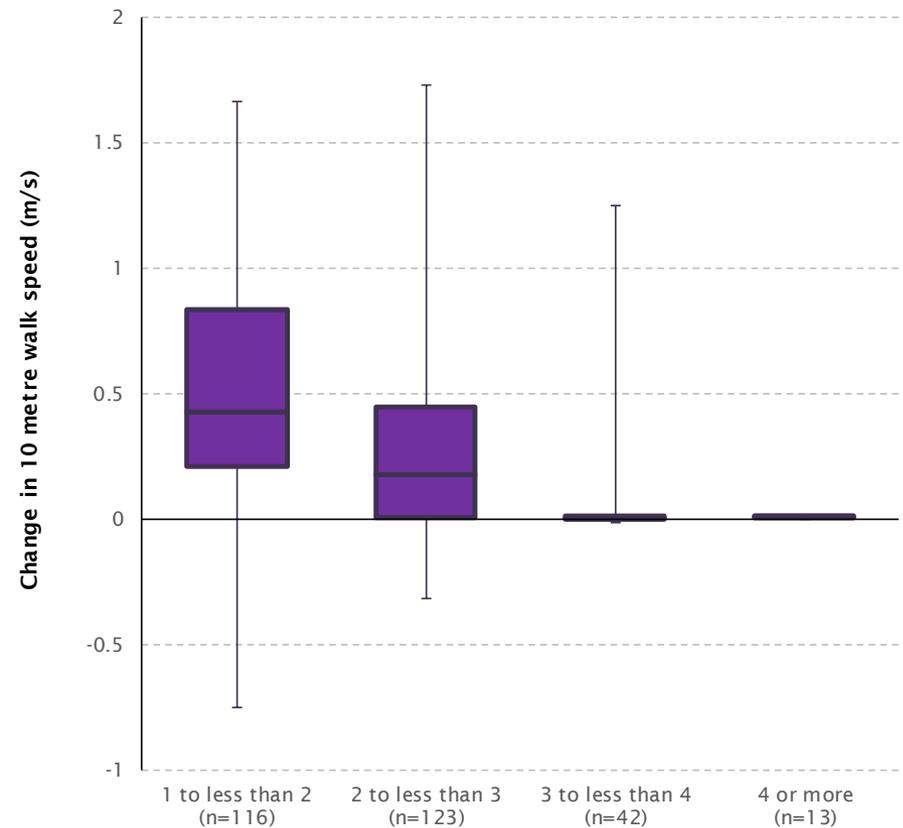
All Ambulatory 2017

De Morton Mobility Index (DEMMI)

- This data item is collected in addition to the Australian Modified Lawton's IADL Scale for patients who may have functional impairment as a result of deconditioning
- The DEMMI is an advanced instrument for accurately measuring and monitoring changes in mobility for all older adults

Only complete for rehabilitation episodes with AROC impairment codes:

- 16.1 - Reconditioning following surgery
- 16.2 - Reconditioning following medical illness
- 16.3 - Cancer rehabilitation

For further information refer to the AROC Ambulatory Data Dictionary V4.1 for Clinicians.

Average DEMMI start and end score

Your Service 2017 (n<5)
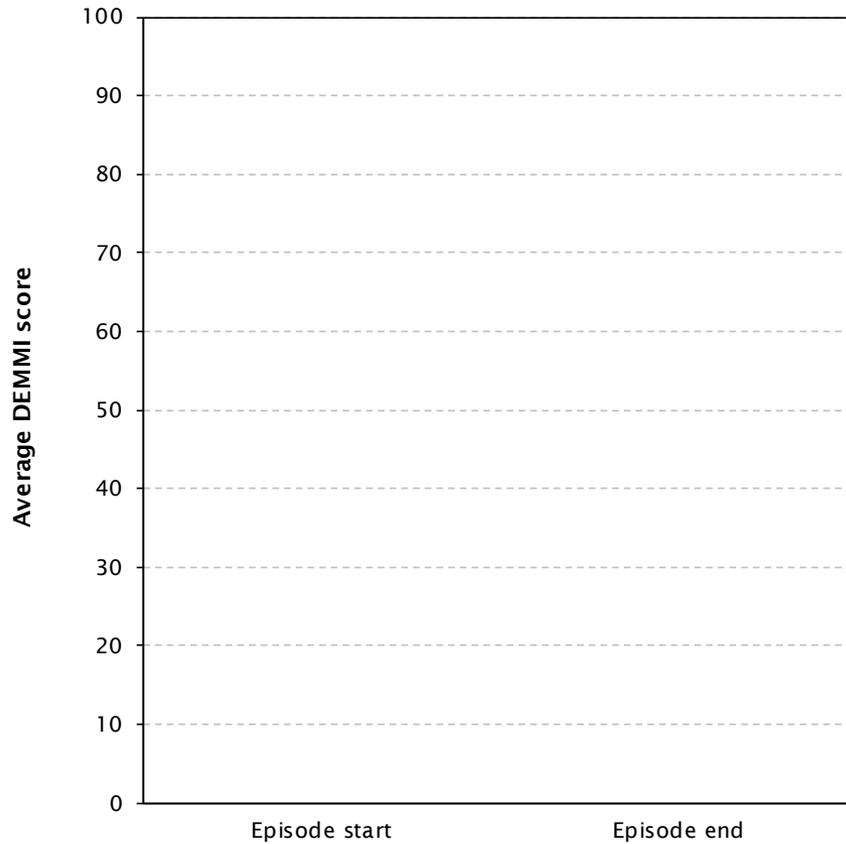
All Ambulatory 2017 (n=35)

DEMMI start and end total – all episodes

Your Service 2017 (n<5)

■ DEMMI start score   □ DEMMI end score

All Ambulatory 2017 (n=35)

■ DEMMI start score   □ DEMMI end score
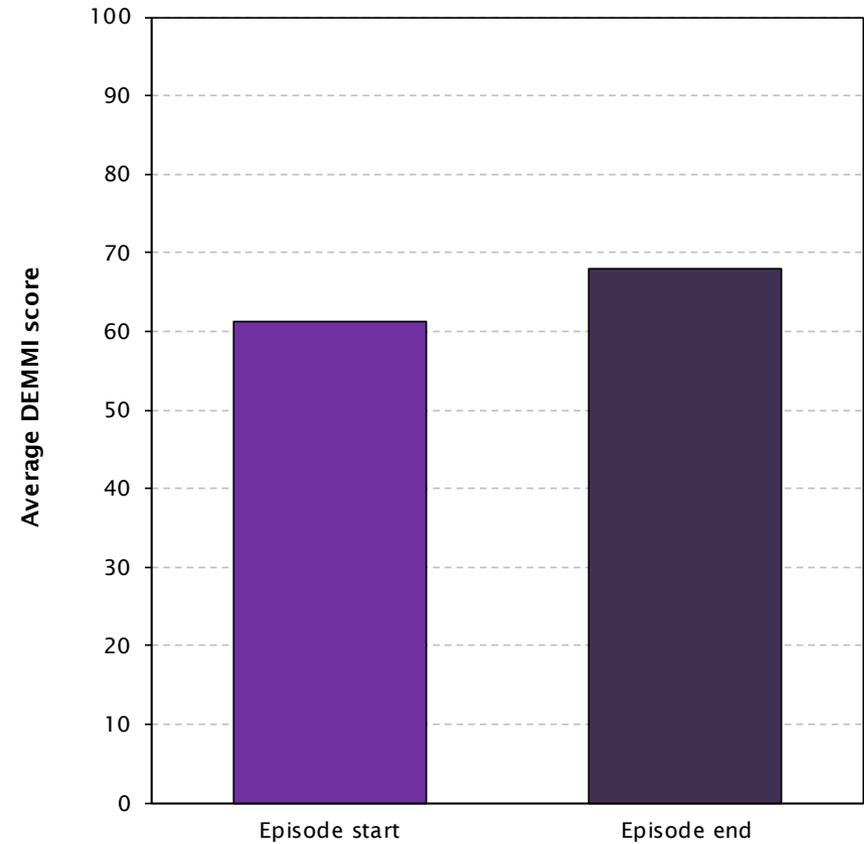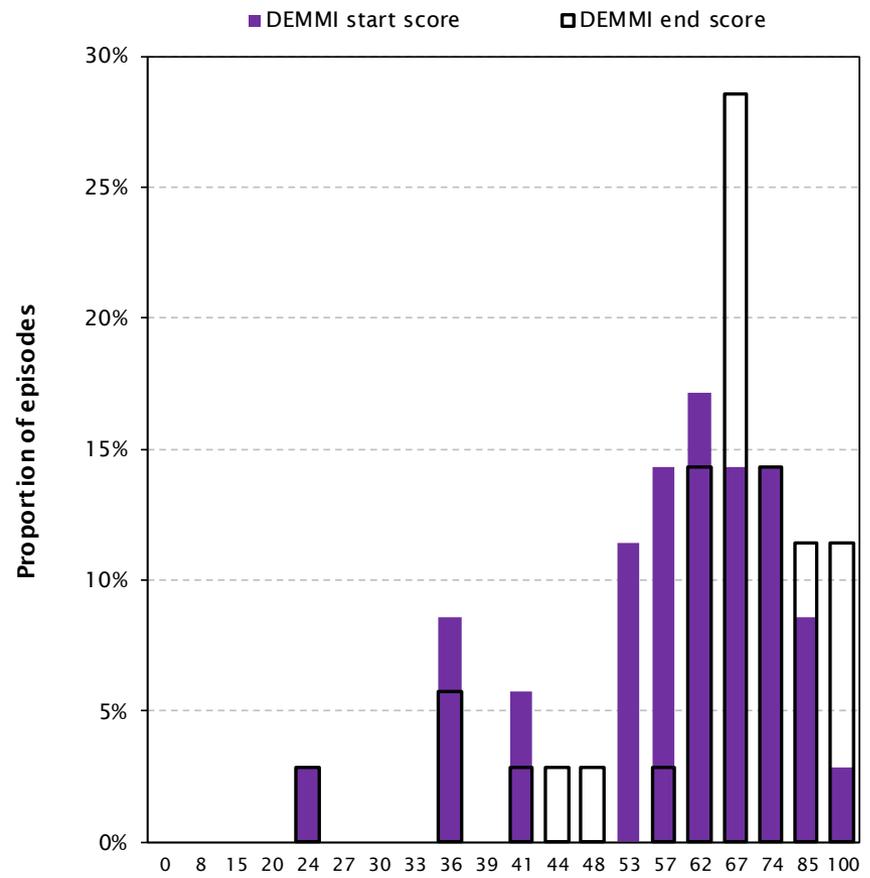
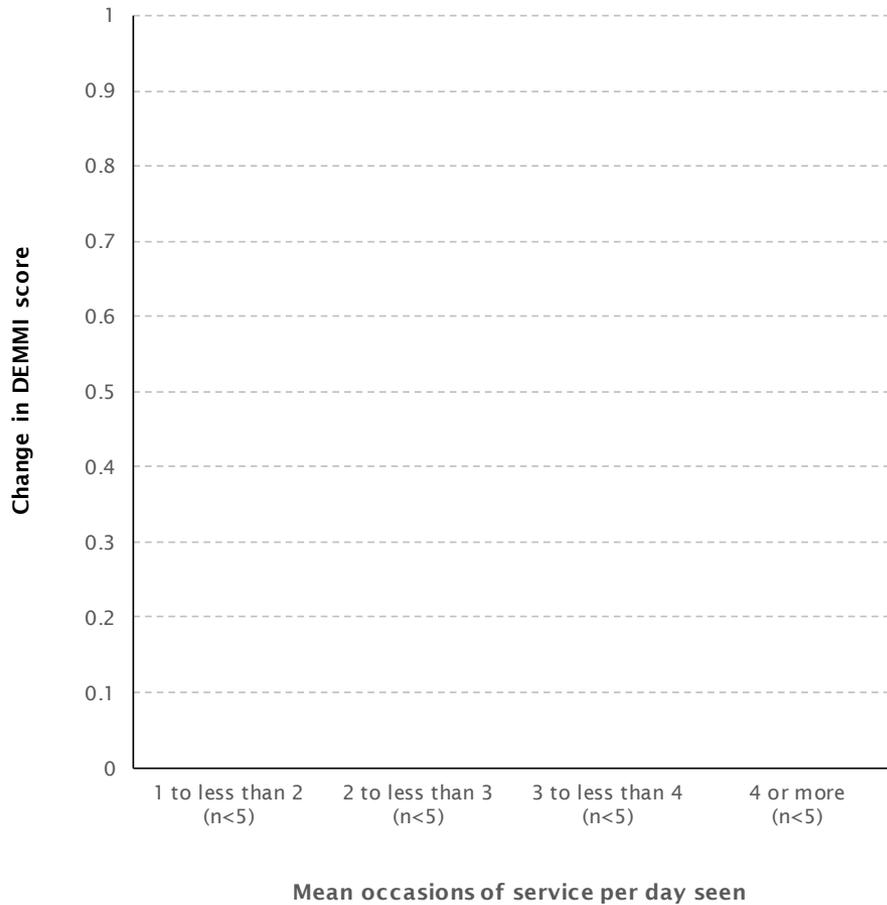# Change in DEMMI score – all episodes

Your Service 2017 (n<5)
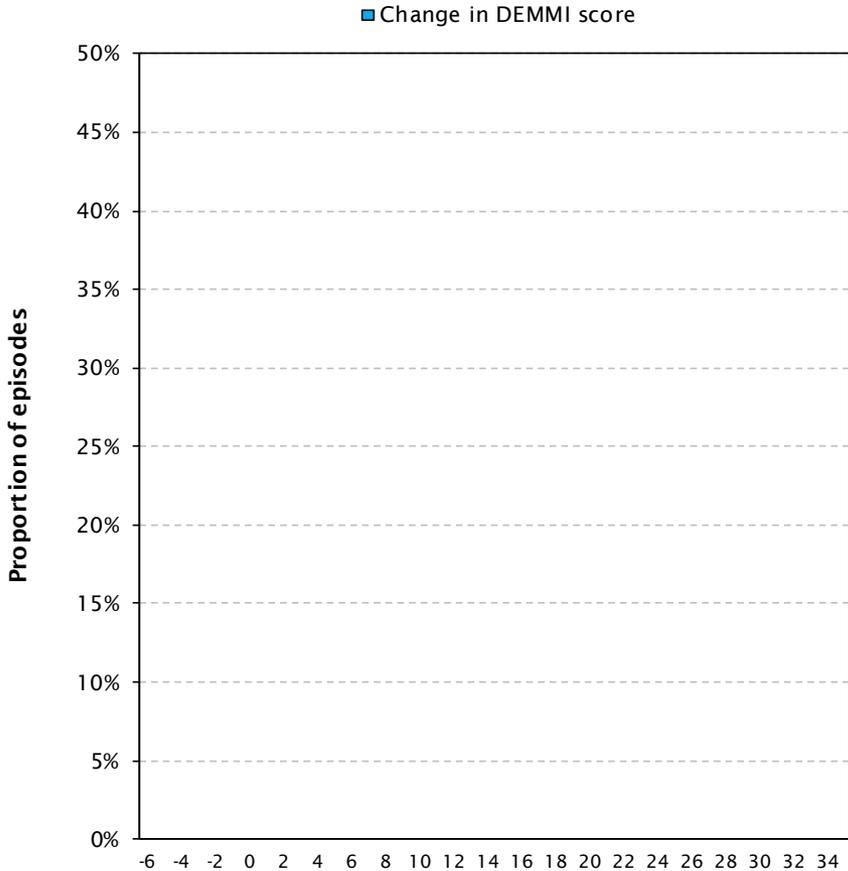
All Ambulatory 2017 (n=35)
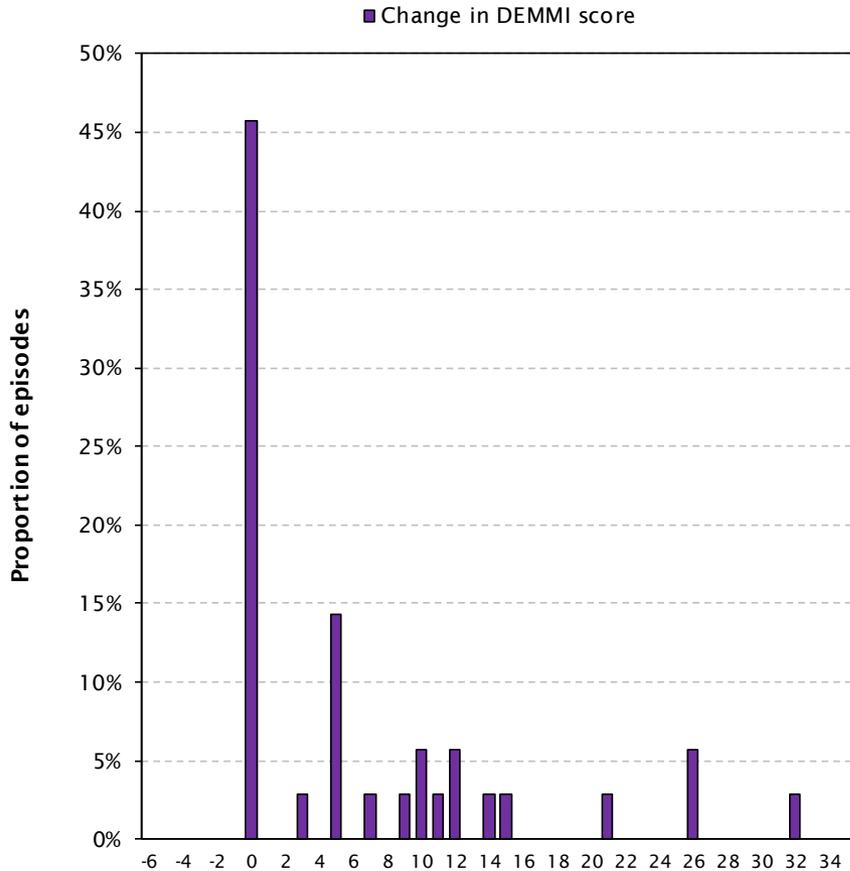
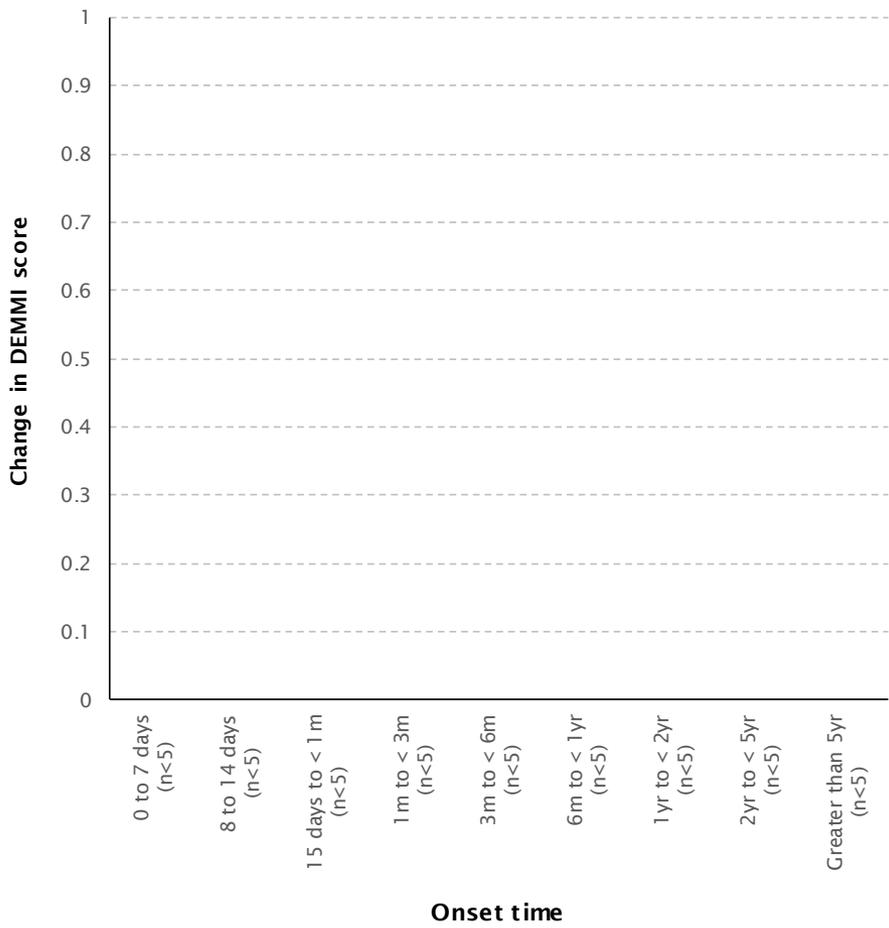# Change in DEMMI score by OOS/day seen – all episodes

Your Service 2017

Change in DEMMI score

| 1 to less than 2 (n<5) | 2 to less than 3 (n<5) | 3 to less than 4 (n<5) | 4 or more (n<5) |

Mean occasions of service per day seen

All Ambulatory 2017

Change in DEMMI score

| 1 to less than 2 (n=5) | 2 to less than 3 (n=28) | 3 to less than 4 (n<5) | 4 or more (n<5) |

Mean occasions of service per day seen
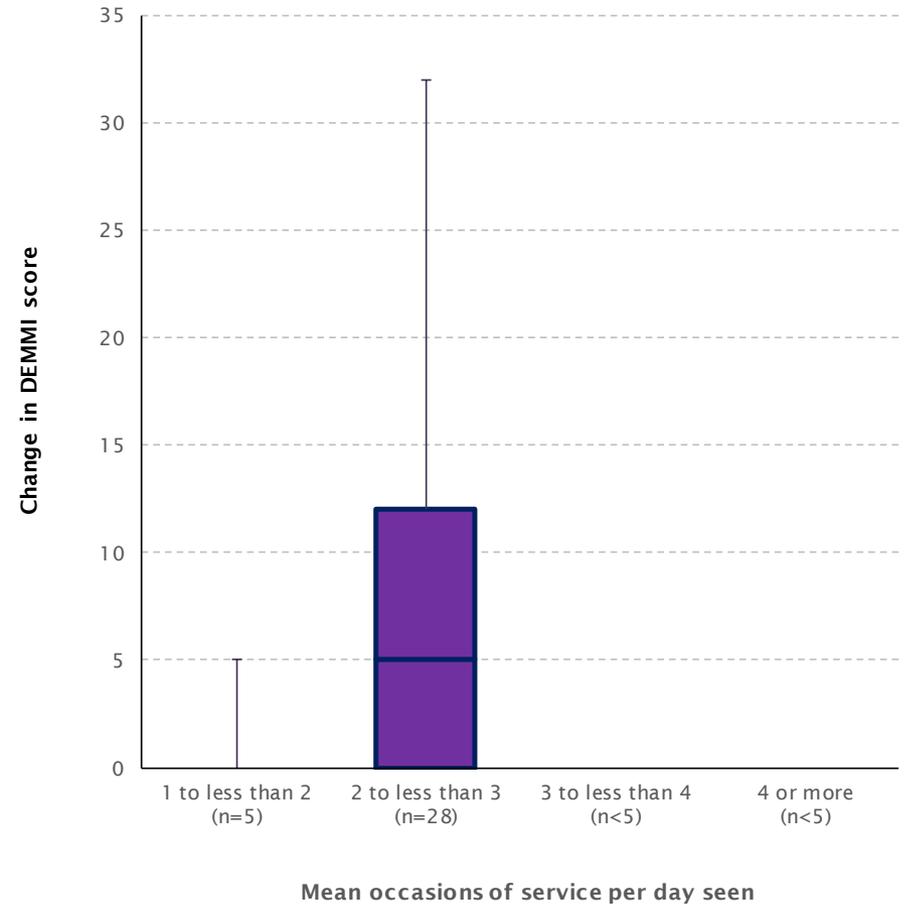
Change in DEMMI score by onset time – all episodes
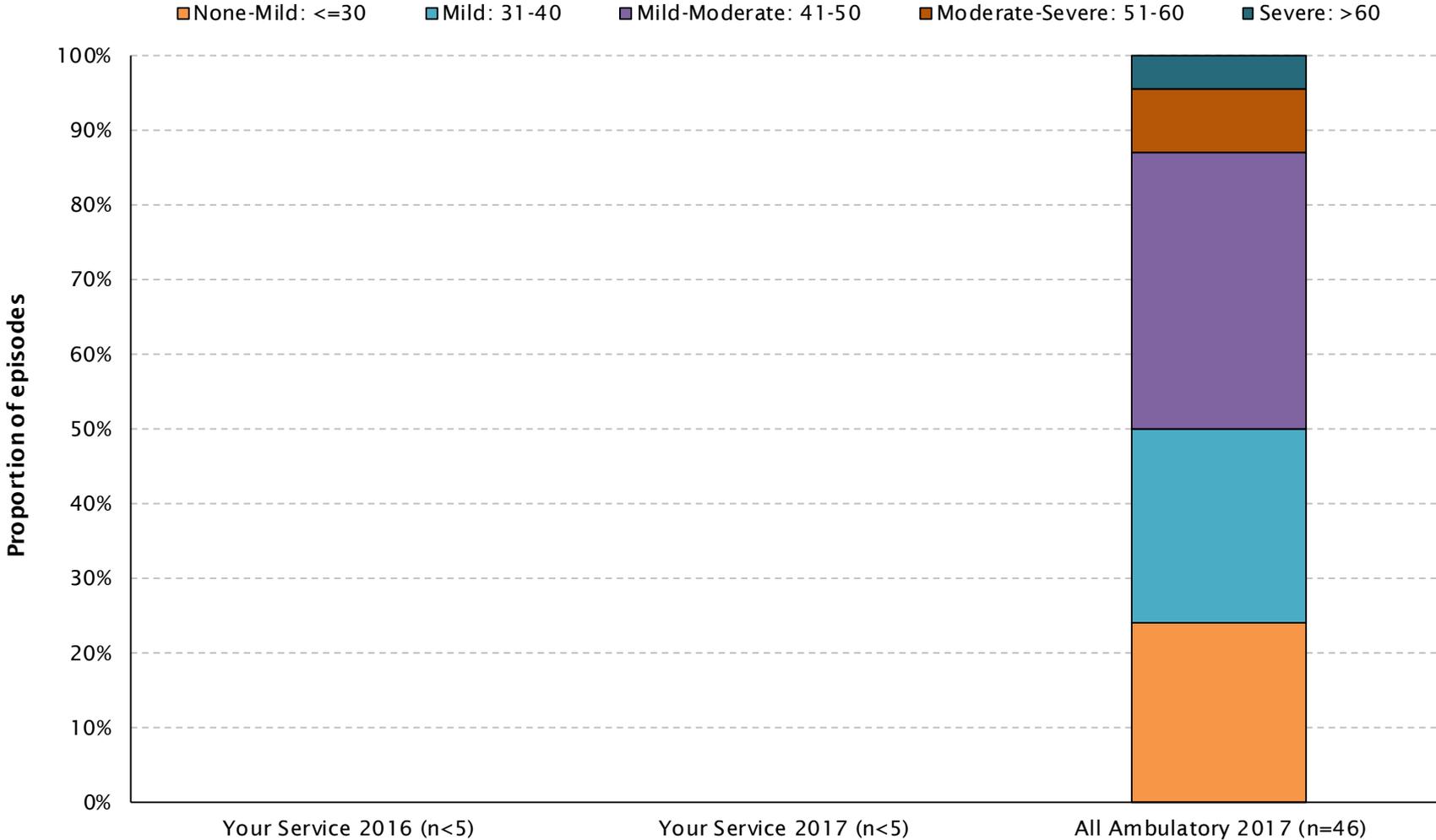

Your Service 2017

All Ambulatory 2017
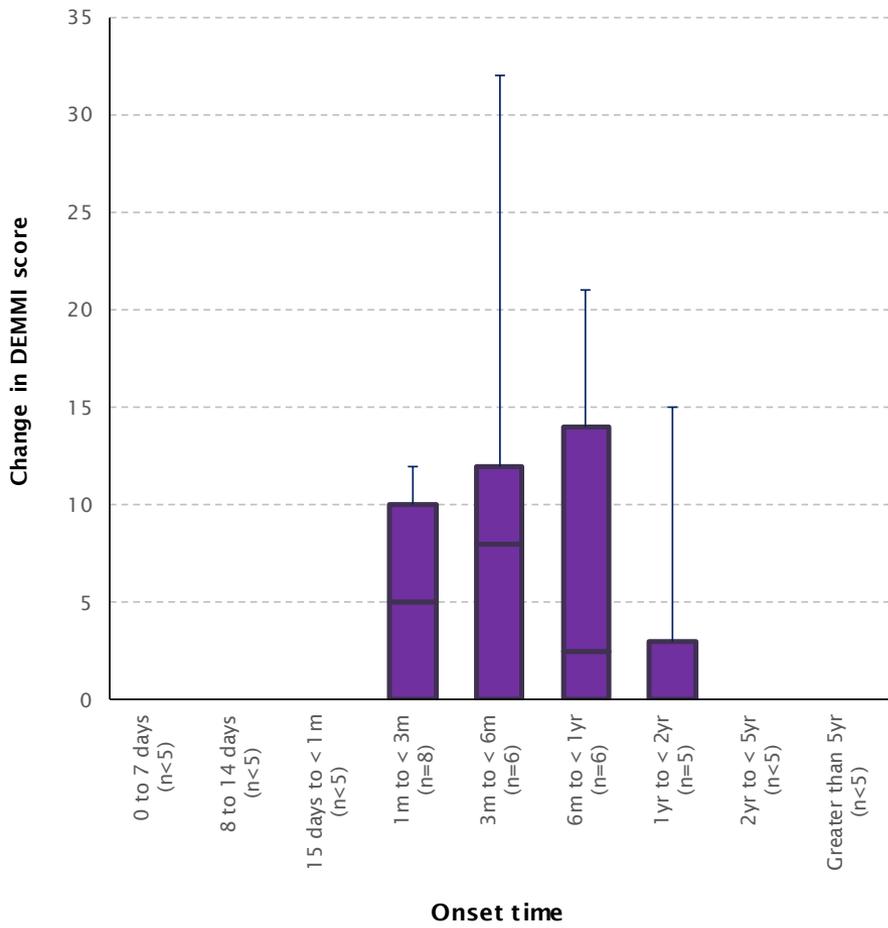
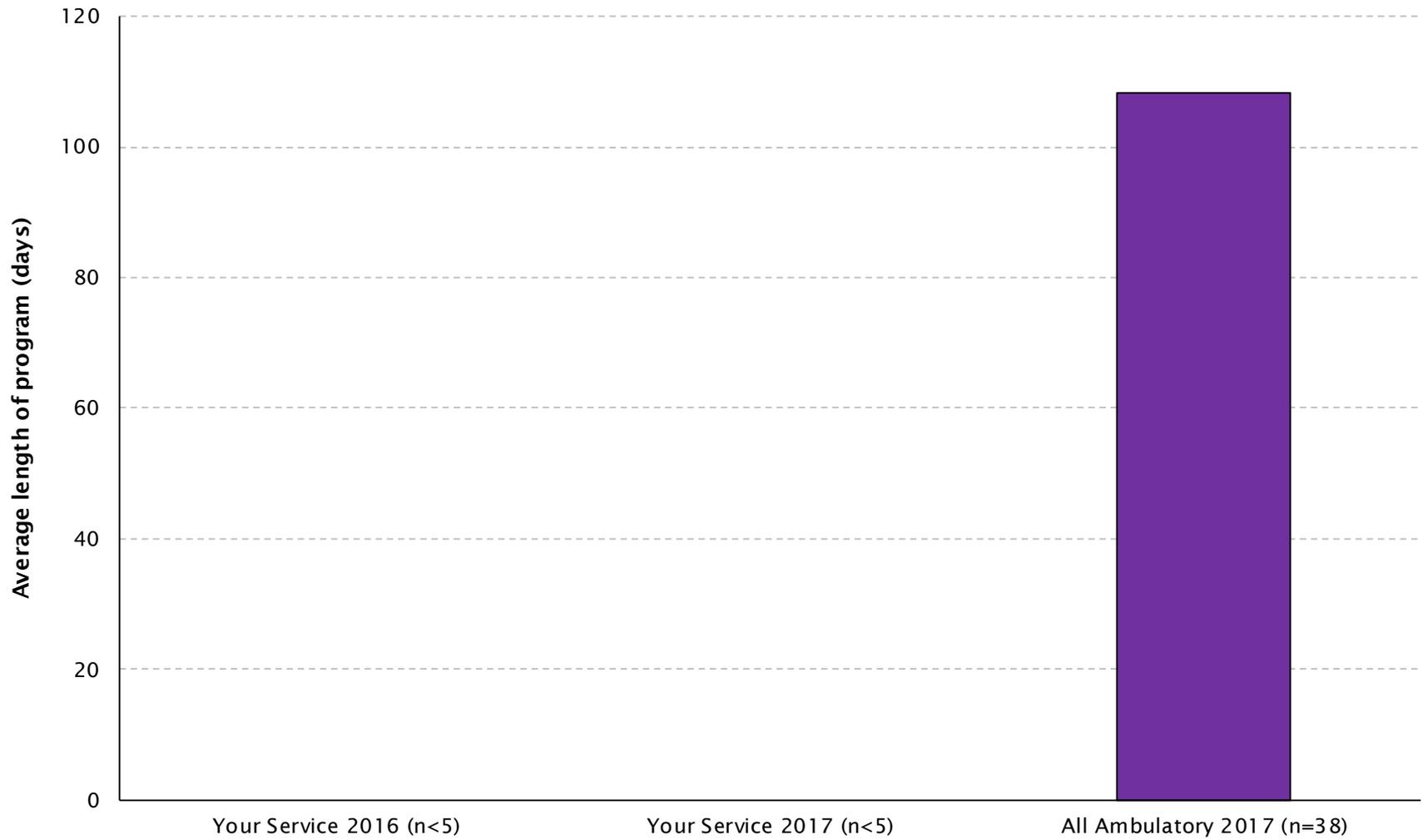# Mayo-Portland Adaptability Index-4 (MPAI-4)

- This data item is collected in addition to the Australian Modified Lawton's IADL Scale for patients who may have functional impairment as a result of brain injury
- The MPAI-4 was specifically designed for the evaluation of individuals during the post-acute period following ABI
- The MPAI-4 consists of 29 items in three subscales (the Ability Index, the Adjustment Index and the Participation Index) plus an additional six items that are not included in the MPAI-4 score

For further information refer to the AROC Ambulatory Data Dictionary V4.1 for Clinicians.
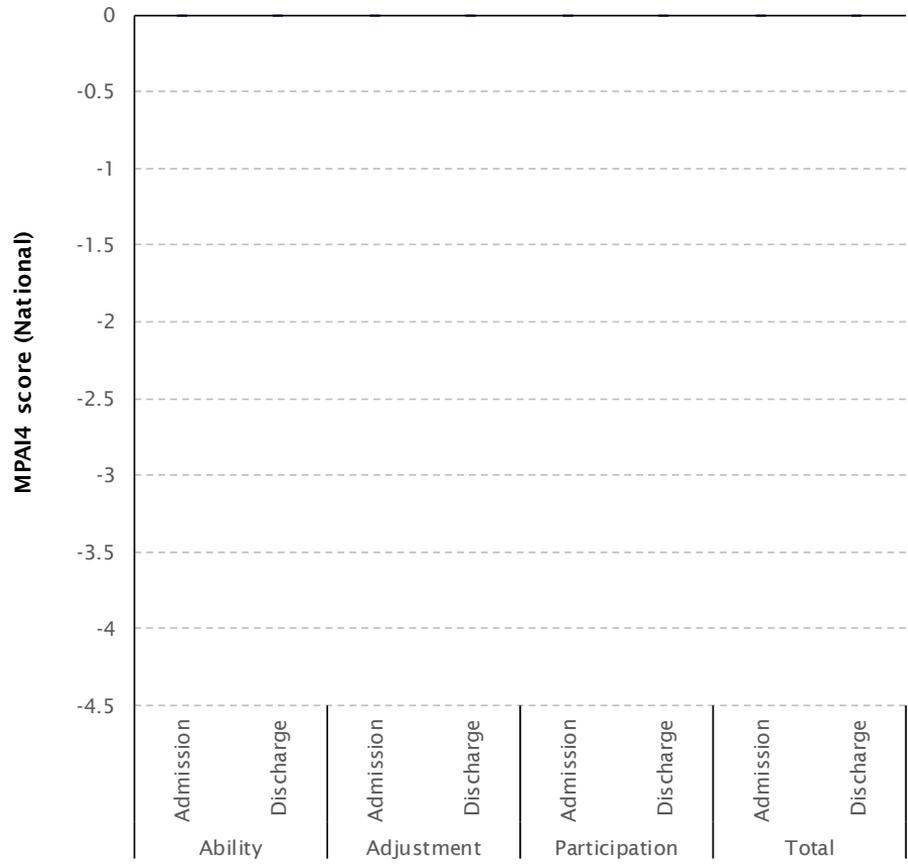
Casemix of episodes submitted MPAI-4

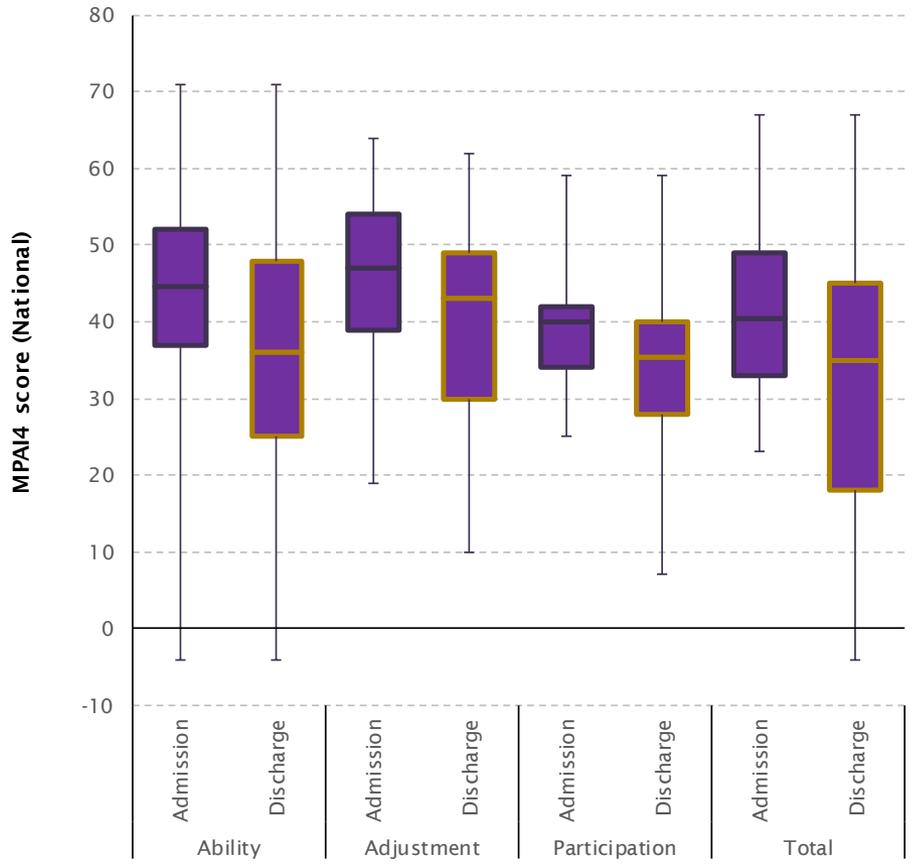# Average program length for episodes with submitted MPAI-4

Chart: Average length of program (days), y-axis ranging from 0 to 120.

- Your Service 2016 (n<5): no bar
- Your Service 2017 (n<5): no bar
- All Ambulatory 2017 (n=38): approximately 108 days
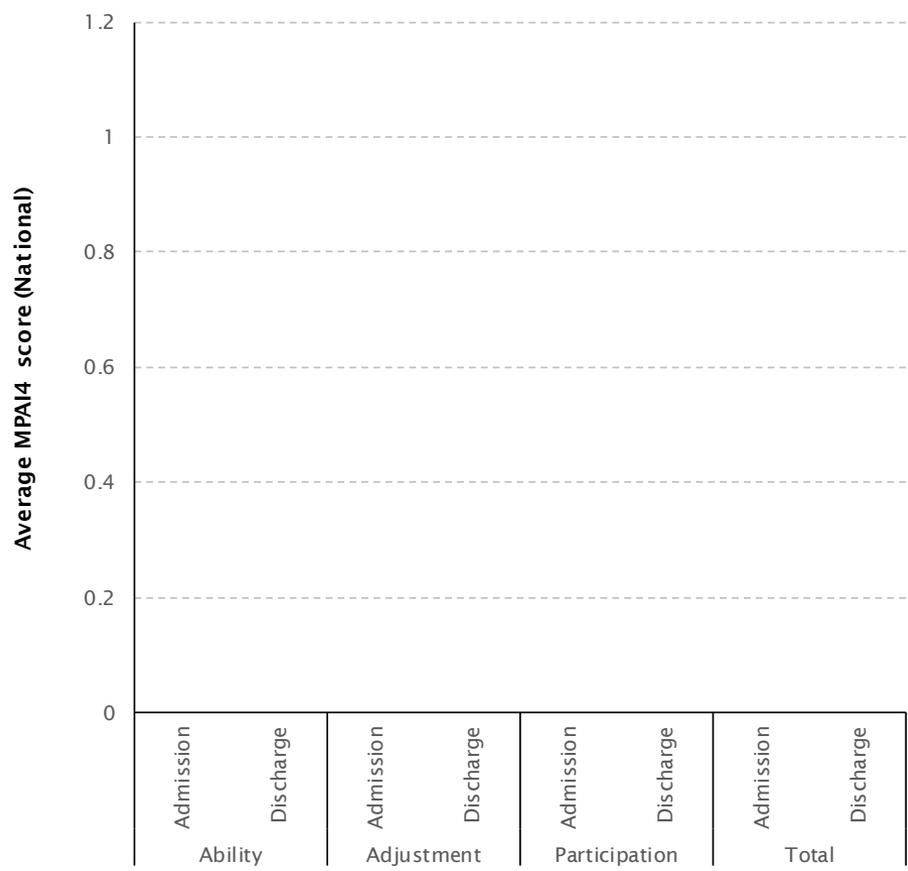
Your Service 2017 (n<5)
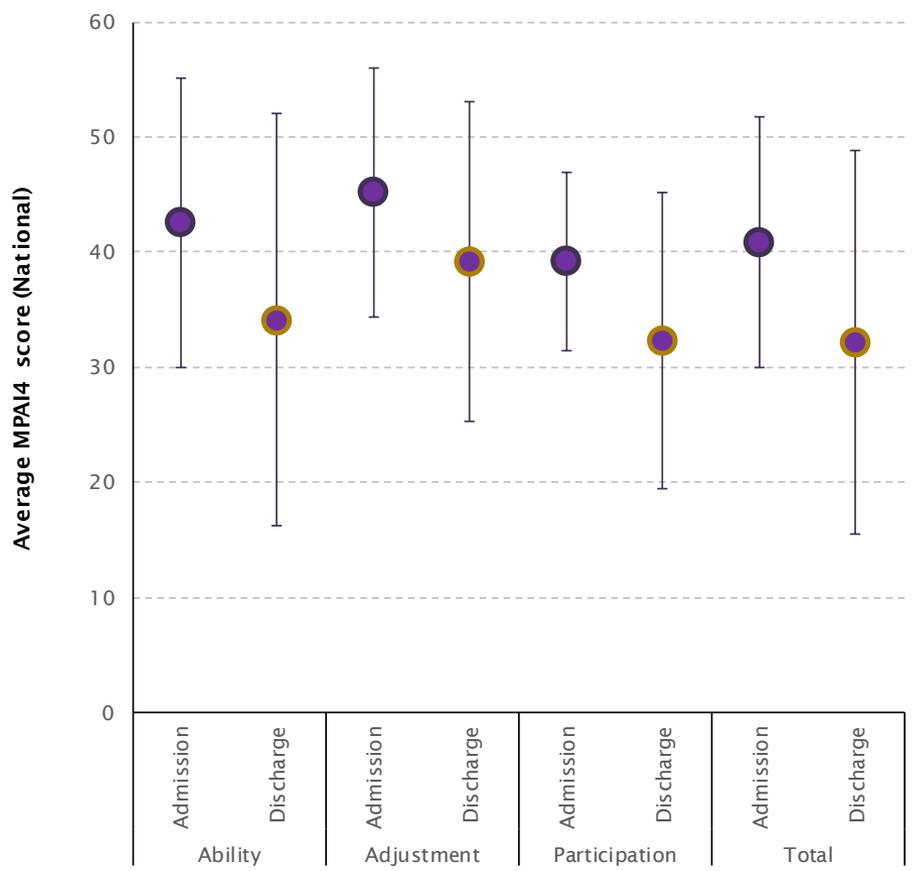
All Ambulatory 2017 (n=38)

Admission and discharge average T score by MPAI-4 index

Your Service 2017 (n<5)

All Ambulatory 2017 (n=38)

Appendix 1: The Australian Modified Lawton's

- The Australian Modified Lawton's represents a sensitive measure of the outcome of ambulatory rehabilitation as it relates to instrumental tasks, such as a patient's ability to do their own shopping, cleaning, cooking, manage their finances, skills that demonstrate their independence in the wider context

- In general most participants in ambulatory care have already demonstrated a degree of functional independence, thus a straight ADL tool (such as the FIM), is not an appropriate outcome measure in this setting

- The Lawton's tool is quick and easy to administer, requires minimal training, and is not discipline or impairment specific

- The Lawton's is endorsed by AFRM as the over-arching ambulatory benchmarking outcome tool of choice

- It has demonstrated validity and reliability in measurement of outcomes Green J, Eagar K, Owen A, Gordon R and Quinsey K (2006). Towards a Measure of Function for Home and Community Care Services in Australia: Part II - Evaluation of the Screening Tool and Assessment Instruments. Australian Journal of Primary Health 12 (1), 82-90

- The Lawton's is not suggested to replace any service or impairment specific outcome measures that services may already collect or are considering collecting, but to provide a platform from which to launch a national benchmarking program with the expectation of further development over time

Episode

The program of ambulatory rehabilitation. A completed episode is one with a mode of episode end of discharge/case closure.

Elapsed time

The elapsed time describes the number of days from commencement to end of an ambulatory rehabilitation program. It is calculated as the episode end date minus the start date.

Days Seen

Days seen is the number of days within an episode of ambulatory rehabilitation on which an occasion of service has been provided.

Occasions of Service (OOS)

An occasion of service is any therapy session and / or therapist contact within an episode. A patient may have several occasions of service on a 'day seen' and these may be delivered by the same or different staff type. Total occasions of service reflects the total number of therapy sessions provided to the patient during those visits. For example:

Mr Jones attends the program on Monday, Wednesday and Friday. On Monday he sees the physio and also attends hydrotherapy. On Wednesday he has a group exercise session, sees the OT and the speech pathologist. On Friday he sees the physio and attends hydrotherapy again. This program continues for 6 weeks. At week 7 his program is reviewed and he only needs to attend group exercise therapy and hydrotherapy twice a week until the program concludes at week 12.

The total number of days seen in this instance is (3 x 6) + (2 x 6) = 30
The total occasions of service in this instance is (7 x 6) + (4 x 6) = 66

Appendix 1: Definition of terms

Therapy type

Reflects the type of therapy the patient is receiving and is collected by staff type. Where a single staff type provides more than one therapy, e.g. hydrotherapy provided/supervised by a physiotherapist, the staff type selected should reflect the type of therapy session the patient is receiving

ADL

Activities of daily living describe a person's level of functioning in basic physical activities such as bathing, dressing, transferring, toileting, continence, eating, and walking

IADL

Instrumental activities of daily living (also known as extended or domestic activities of daily living), describe tasks that enable a person to live independently in the community and include, but not are limited to, light housework, preparing meals, taking medications, shopping for groceries, using the telephone, and managing money.

Outcome Measure

The score recorded using the specified outcome measure at both the beginning and end of an ambulatory rehabilitation program

Valid Outcome Measure

A valid Outcome Measure requires all items within the scale to have a value assigned and be completed for both the episode begin and episode end assessments

Outcome Measure change

The calculated difference between the valid Outcome Measure score at the begin and the end of the ambulatory rehabilitation episode

Appendix 3: Interpreting box plots

Box Plots

Box plots, or box-and-whisker plots, provide insight into the distribution of observations within a data set by dividing it into four sections. The box indicates the spread of the central 50% of the data; the median is denoted by a horizontal line through the box. The portion of the box above the median line denotes the 50th - 75th percentile range. Likewise, the portion of the box below the median denotes the 25th-50th percentile range. The whiskers represent the full range of data, the whisker above the box extends to the maximum data value and the whisker below the box extends to the minimum data value.

Appendix 4: AROC Impairment Codes
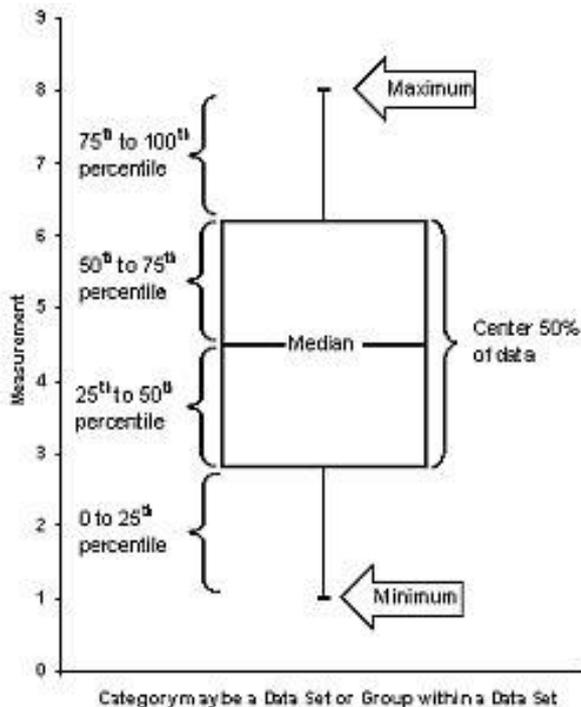
STROKE

Haemorrhagic

1.11 Left body involvement
1.12 Right body involvement
1.13 Bilateral involvement
1.14 No paresis
1.19 Other Orthopaedic fractures

Ischaemic

1.21 Left body involvement (right brain)
1.22 Right body involvement (left brain)
1.23 Bilateral involvement
1.24 No paresis
1.29 Other Orthopaedic fractures

BRAIN DYSFUNCTION

Non-traumatic

2.11 Sub-arachnoid haemorrhage
2.12 Anoxic brain damage
2.13 Other non-traumatic brain dysfunction

Traumatic

2.21 Open injury
2.22 Closed injury

NEUROLOGICAL CONDITIONS

3.1 Multiple Sclerosis
3.2 Parkinsonism
3.3 Polyneuropathy
3.4 Guillian-Barre
3.5 Cerebral palsy
3.8 Neuromuscular disorders
3.9 Other neurological conditions

SPINAL CORD DYSFUNCTION

Non traumatic spinal cord dysfunction

4.111 Paraplegia, incomplete
4.112 Paraplegia, complete
4.1211 Quadriplegia, incomplete C1-4
4.1212 Quadriplegia, incomplete C5-8
4.1221 Quadriplegia, complete C1-4
4.1222 Quadriplegia, complete C5-8
4.13 Other non-traumatic spinal cord dysfunction

Traumatic spinal cord dysfunction

4.211 Paraplegia, incomplete
4.212 Paraplegia, complete
4.2211 Quadriplegia, incomplete C1-4
4.2212 Quadriplegia, incomplete C5-8
4.2221 Quadriplegia, complete C1-4
4.2222 Quadriplegia, complete C5-8
4.23 Other traumatic spinal cord dysfunction

AMPUTATION OF LIMB

Not resulting from trauma

5.11 Single upper above elbow
5.12 Single upper below elbow
5.13 Single lower above knee (includes through knee)
5.14 Single lower below knee
5.15 Double lower above knee (includes through knee)
5.16 Double lower above/below knee
5.17 Double lower below knee
5.18 Partial foot (single or double)
5.19 Other amputation not from trauma

AMPUTATION OF LIMB

Resulting from trauma

5.21 Single upper above elbow
5.22 Single upper below elbow
5.23 Single lower above knee (includes through knee)
5.24 Single lower below knee
5.25 Double lower above knee (includes through knee)
5.26 Double lower above/below knee
5.27 Double lower below knee
5.28 Partial foot (single or double)
5.29 Other amputation from trauma

ARTHRITIS

6.1 Rheumatoid arthritis
6.2 Osteoarthritis
6.9 Other arthritis

PAIN SYNDROMES

7.1 Neck pain
7.2 Back Pain
7.3 Extremity pain
7.4 Headache (includes migraine)
7.5 Multi-site pain
7.9 Other pain (includes abdo/chest wall)

Appendix 4: AROC Impairment Codes

ORTHOPAEDIC CONDITIONS

Fractures (includes dislocation)

8.111 Fracture of hip, unilateral (incl. #NOF)
8.112 Fracture of hip, bilateral (incl. #NOF)
8.12 Fracture of shaft of femur
8.13 Fracture of pelvis
8.141 Fracture of knee
8.142 Fracture of lower leg, ankle, foot
8.15 Fracture of upper limb
8.16 Fracture of spine
8.17 Fracture of multiple sites
8.19 Other orthopaedic fracture

Post Orthopaedic Surgery

8.211 Unilateral hip replacement
8.212 Bilateral hip replacement
8.221 Unilateral knee replacement
8.222 Bilateral knee replacement
8.231 Knee and hip replacement, same side
8.232 Knee and hip replacement, diff sides
8.24 Shoulder replacement
8.25 Post spinal surgery
8.26 Other orthopaedic surgery

Soft tissue injury

8.3 Soft tissue injury

CARDIAC

9.1 Following recent onset of new cardiac impairment
9.2 Chronic cardiac insufficiency
9.3 Heart and heart/lung transplant

PULMONARY

10.1 Chronic obstructive pulmonary disease
10.2 Lung transplant
10.9 Other pulmonary

BURNS

11 Burns

CONGENITAL DEFORMITIES

12.1 Spina bifida
12.9 Other congenital deformity

OTHER DISABLING IMPAIRMENTS

13.1 Lymphoedema
13.3 Conversion disorder
13.9 Other disabling impairments that cannot be classified into a specific group

MAJOR MULTIPLE TRAUMA

14.1 Brain + spinal cord injury
14.2 Brain + multiple fracture/amputation
14.3 Spinal cord + multi fracture/amputation
14.9 Other multiple trauma

DEVELOPMENTAL DISABILITIES

15.1 Developmental disabilities (excludes cerebral palsy)

RE-CONDITIONING/RESTORATIVE

16.1 Re-conditioning following surgery
16.2 Reconditioning following medical illness
16.3 Cancer rehabilitation

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