aroc
Driving quality and outcome improvements in rehabilitation for 20 YEARS

AROC Ambulatory Report

January 2023 – December 2023

Anywhere Hospital

Australasian Faculty of Rehabilitation Medicine

UNIVERSITY OF WOLLONGONG AUSTRALIA

Table of contents

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. (see Appendix 1)
- Impairment or discipline specific outcomes tools have been added to the dataset to provide more outcome specificity by cohort. (see Appendix 4)
- V4.1 of the AROC dataset was introduced on 1 July 2017. (see Appendix 2)
- 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 metre walk test (if relevant)
- Aphasia tool (specify tool used)

Brain Dysfunction

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

Orthopaedic conditions

- Timed 10 metre walk test

Reconditioning

- de Morton Mobility Index (DEMMI)

Amputation of limb

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

In development – V5 Ambulatory Data Set

We are excited to advise that we are revising the ambulatory data set, moving to an AROC impairment group specific model for outcome measures and will also include some person reported measures.

In the coming months we will be reaching out to ambulatory services to identify outcome measures currently used by your service
ask for nomination for consultation groups.

If you would like to receive regular email correspondence on the development of the dataset and how to participate, please email AROC at aroc@uow.edu.au

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	12
February	18
March	18
April	14
May	15
June	23
July	21
August	17
September	24
October	21
November	14
December	22
Full year	**219**

Completeness of data reported

AROC core data set items	Item collected No.	%
Path	219	100.0
Facility code	219	100.0
Facility name	219	100.0
Ward code[1]	187	85.4
Ward name[1]	179	81.7
MRN	219	100.0
Letters of name	217	99.1
Date of birth	219	100.0
DOB estimate flag	218	99.5
Sex	219	100.0
Indigenous status	218	99.5
Geographical residence	219	100.0
Postcode	217	99.1
Episode begin date	219	100.0
Episode end date	219	100.0
Funding source	219	100.0
Health fund/other payer	111	100.0
NDIS	205	93.6
Referral date	217	99.1
Impairment code	219	100.0
Onset date &/or time since onset	216	98.6
Relevant inpatient episode date	216	98.6
Episode begin reason	216	98.6
First direct care episode	218	99.5
Interpreter required	218	99.5
Date of multi-disciplinary rehab plan	213	97.3
Accommodation prior to episode	219	100.0
Carer status prior to episode	219	100.0
Employment status prior to episode	218	99.5
Accommodation during episode	216	98.6
Carer status during episode	211	100.0
Existing comorbidity interfering with rehab	216	98.6
— Comorbidities identified	81	100.0

AROC core data set items	Item collected No.	%	
Cognitive impairment impacting rehab	216	98.6	
Episode end reason	218	99.5	
Final accommodation – episode end	208	99.5	
Carer status – episode end	208	100.0	
Employment status after discharge	60	27.4	←
Return to pre-impairment activities	208	95.0	
Days seen	211	96.3	
Occasions of service	211	96.3	
Disciplines involved in therapy	216	98.6	
Lawton's start date	216	98.6	
Lawton's start items	216	98.6	
Lawton's end date	212	96.8	
Lawton's end items	211	96.3	
GAS start date[1]	6	2.7	
GAS start scores[1]	7	3.2	
GAS end date[1]	5	2.3	
GAS end scores[1]	7	3.2	
Impairment specific items			
Stroke	**42**		
— Rehab aimed at upper limb function	31	73.8	←
— Rehab aimed at gait retraining	31	73.8	←
— Rehab aimed at aphasia	29	69.0	←
— ULMAS start date	7	77.8	←
— ULMAS start scores	7	77.8	←
— ULMAS end date	6	66.7	←
— ULMAS end scores	6	66.7	←
— Timed ten metre walk start date	13	76.5	←
— Timed ten metre walk test on admission	12	70.6	←
— Timed ten metre walk end date	13	76.5	←
— Timed ten metre walk test on discharge	12	70.6	←

AROC impairment specific items	Item collected No.	%	
Brain injury*	**9**		
— MPAI4 start date	4	44.4	←
— MPAI4 start scores	4	44.4	←
— MPAI4 end date	4	44.4	←
— MPAI4 end scores	4	44.4	←
Spinal cord injury*	**4**		
— Injury start level	3	75.0	←
Reconditioning	**25**		
— DEMMI start date	15	60.0	←
— DEMMI start scores	15	60.0	←
— DEMMI end date	14	56.0	←
— DEMMI end scores	15	60.0	←
Amputation of limb	**1**		
— Phase of care at episode start	1	100.0	
— Phase of care during episode	1	100.0	
— Phase of care at episode end	1	100.0	
— Prosthetic device fitted	1	100.0	
— Casting date[2]	1	100.0	
— Date of first prosthetic fitting[2]	1	100.0	
— Reason for delay in fitting[2]	0	0.0	
— Timed up and go test	1	100.0	
— Six min walk test[1]	1	100.0	
— Ten metre walk test[1]	1	100.0	
Orthopaedic conditions	**86**		
— Timed ten metre walk start date	67	77.9	←
— Timed ten metre walk test on admission	57	66.3	←
— Timed ten metre walk end date	64	77.1	←
— Timed ten metre walk test on discharge	63	75.9	←

*Also includes MMT that contain this impairment

Overall data completeness score 86.5

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 completeness score

Demographic data

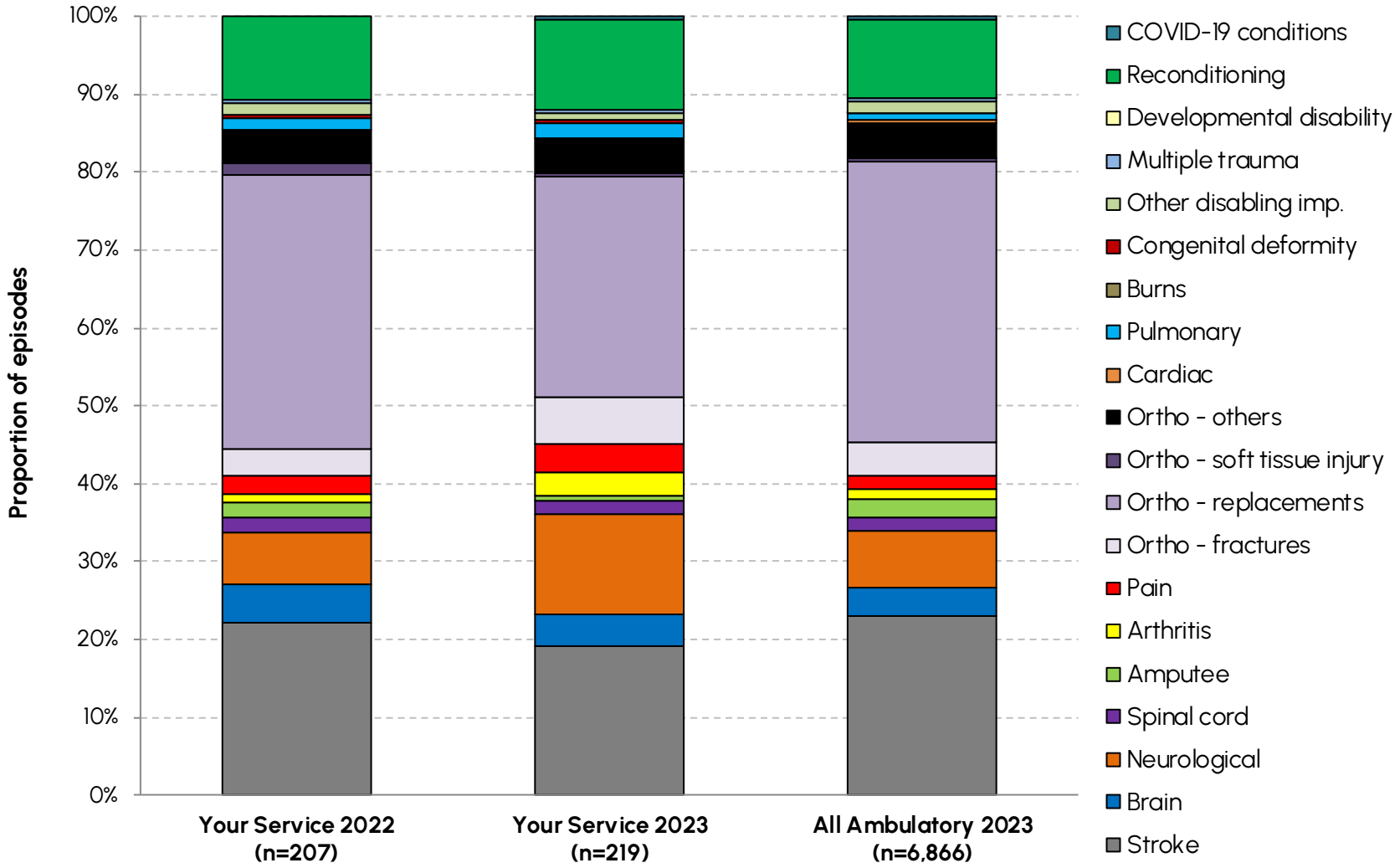
The following section provides demographic data. These data are presented at service and national levels.

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	4	12.5	10	31.3	14	43.8
Victoria	0	—	0	—	0	—
Queensland	2	6.3	3	9.4	5	15.6
South Australia	8	25.0	0	—	8	25.0
Western Australia	1	3.1	1	3.1	2	6.3
Tasmania	0	—	0	—	0	—
Australian territories	0	—	1	3.1	1	3.1
NZ	2	6.3			2	6.3
Total	**17**	**53.1**	**15**	**46.9**	**32**	**100.0**
Episodes						
New South Wales	416	6.0	2,638	38.4	3,054	44.4
Victoria	0	—	0	—	0	—
Queensland	705	10.3	402	5.8	1,107	16.1
South Australia	1,375	20.0	0	—	1,375	20.0
Western Australia	266	3.9	56	0.8	322	4.7
Tasmania	0	—	0	—	0	—
Australian territories	0	—	424	6.2	424	6.2
NZ	596	8.7			596	8.7
Total	**3,358**	**48.8**	**3,520**	**51.2**	**6,878**	**100.0**

Episodes by impairment group



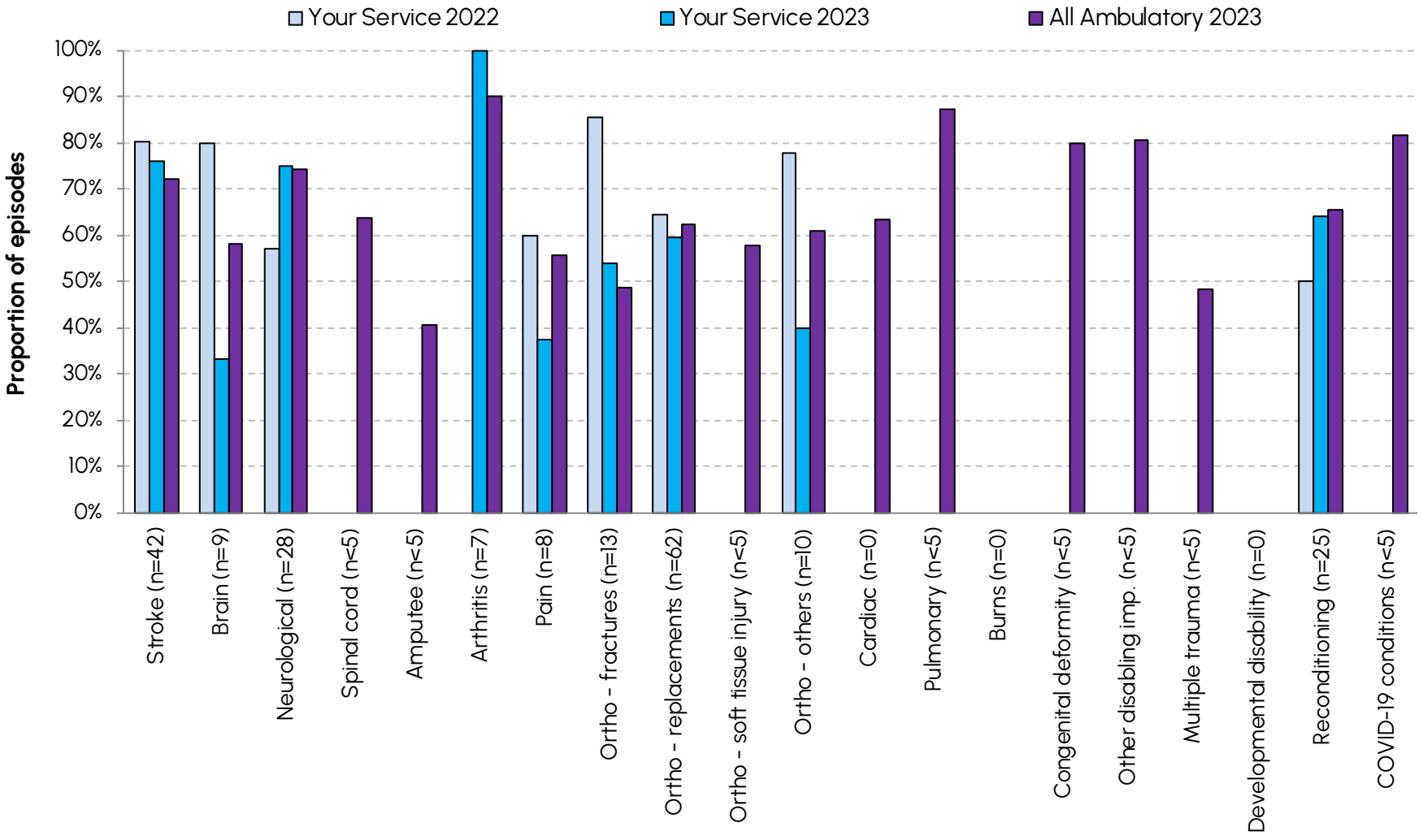
NOTE: For a full list of impairment codes please refer to Appendix 4

Episodes by impairment group

	Your Service 2022		Your Service 2023		All Ambulatory 2023	
Impairment group	**No.**	**%**	**No.**	**%**	**No.**	**%**
Stroke	46	22.2	42	19.2	1,584	23.1
Brain	10	4.8	9	4.1	243	3.5
Neurological	14	6.8	28	12.8	511	7.4
Spinal cord	4	1.9	4	1.8	105	1.5
Amputee	4	1.9	1	0.5	162	2.4
Arthritis	2	1.0	7	3.2	90	1.3
Pain	5	2.4	8	3.7	120	1.7
Ortho - fractures	7	3.4	13	5.9	303	4.4
Ortho - replacements	73	35.3	62	28.3	2,475	36.0
Ortho - soft tissue injury	3	1.4	1	0.5	19	0.3
Ortho - others	9	4.3	10	4.6	308	4.5
Cardiac	0	—	0	—	41	0.6
Pulmonary	3	1.4	4	1.8	48	0.7
Burns	0	—	0	—	1	0.0
Congenital deformity	1	0.5	1	0.5	5	0.1
Other disabling imp.	3	1.4	2	0.9	104	1.5
Multiple trauma	1	0.5	1	0.5	29	0.4
Developmental disability	0	—	0	—	3	0.0
Reconditioning	22	10.6	25	11.4	693	10.1
COVID-19 conditions	0	—	1	0.5	22	0.3
Missing or excluded	0		0		12	
All episodes	**207**	**100.0**	**219**	**100.0**	**6,878**	**100.0**

NOTE: For a full list of impairment codes please refer to Appendix 4

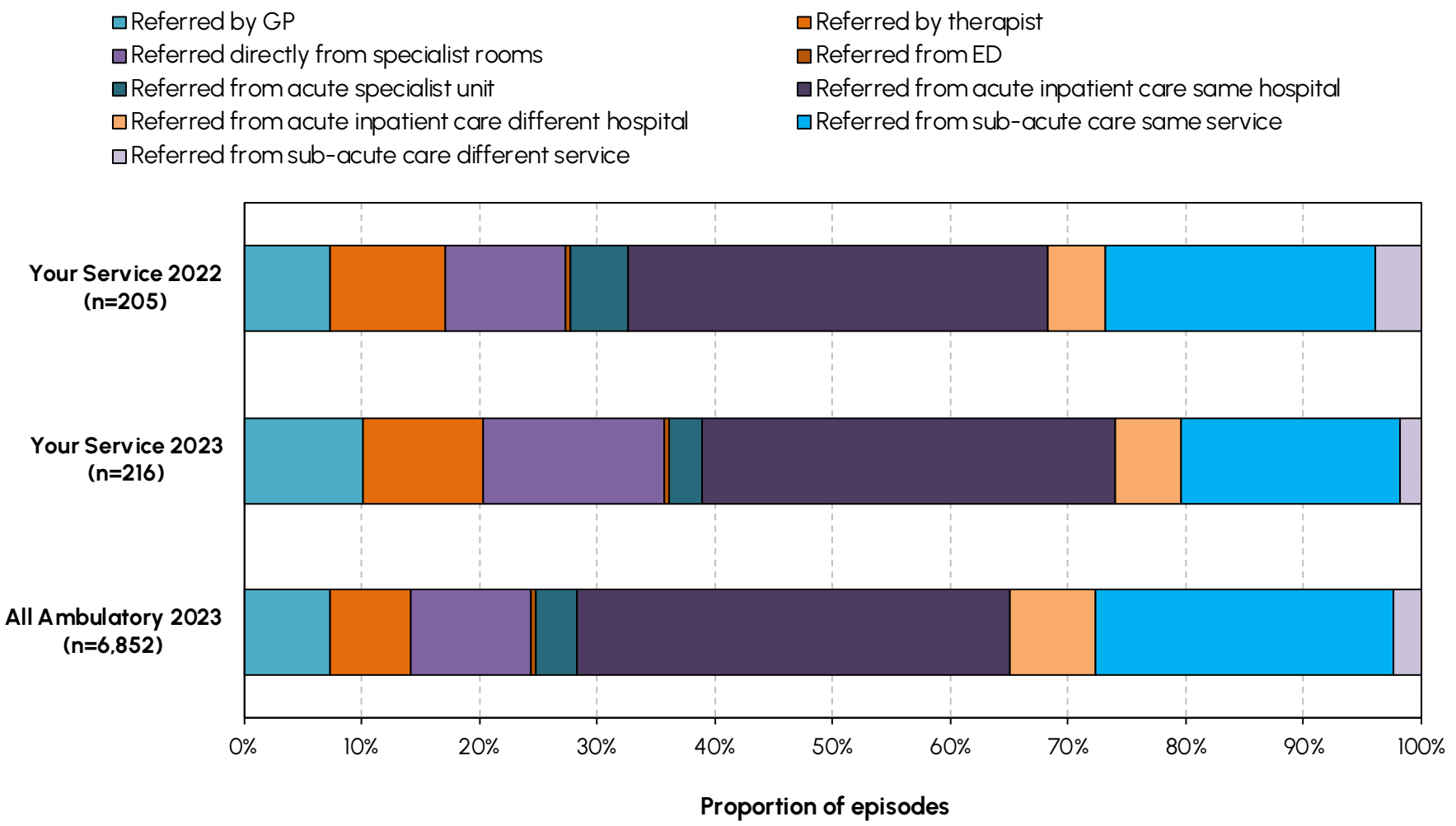
First direct care rehabilitation episode by impairment group



First direct care rehabilitation episode by impairment group

	Your Service 2022				Your Service 2023				All Ambulatory 2023			
Impairment group	No.	Primary admission	Subsequent admission	Missing	No.	Primary admission	Subsequent admission	Missing	No.	Primary admission	Subsequent admission	Missing
Stroke	46	37	8	1	42	32	9	1	1,584	1,144	430	10
Brain	10	8	2	0	9	3	6	0	243	141	101	1
Neurological	14	8	6	0	28	21	7	0	511	380	131	0
Spinal cord	4	2	2	0	4	1	3	0	105	67	38	0
Amputee	4	2	2	0	1	1	0	0	162	66	95	1
Arthritis	2	2	0	0	7	7	0	0	90	81	9	0
Pain	5	3	2	0	8	3	5	0	120	67	53	0
Ortho - fractures	7	6	1	0	13	7	6	0	303	148	155	0
Ortho - replacements	73	47	26	0	62	37	25	0	2,475	1,547	928	0
Ortho - soft tissue injury	3	2	1	0	1	1	0	0	19	11	8	0
Ortho - others	9	7	2	0	10	4	6	0	308	188	120	0
Cardiac	0	0	0	0	0	0	0	0	41	26	15	0
Pulmonary	3	3	0	0	4	3	1	0	48	42	6	0
Burns	0	0	0	0	0	0	0	0	1	1	0	0
Congenital deformity	1	0	1	0	1	0	1	0	5	4	1	0
Other disabling imp.	3	3	0	0	2	1	1	0	104	84	20	0
Multiple trauma	1	0	1	0	1	0	1	0	29	14	15	0
Developmental disability	0	0	0	0	0	0	0	0	3	3	0	0
Reconditioning	22	11	11	0	25	16	9	0	693	455	238	0
COVID-19 conditions	0	0	0	0	1	1	0	0	22	18	3	1
Missing or excluded	0				0				12			
All episodes	**207**	**141**	**65**	**1**	**219**	**138**	**80**	**1**	**6,878**	**4,487**	**2,366**	**13**

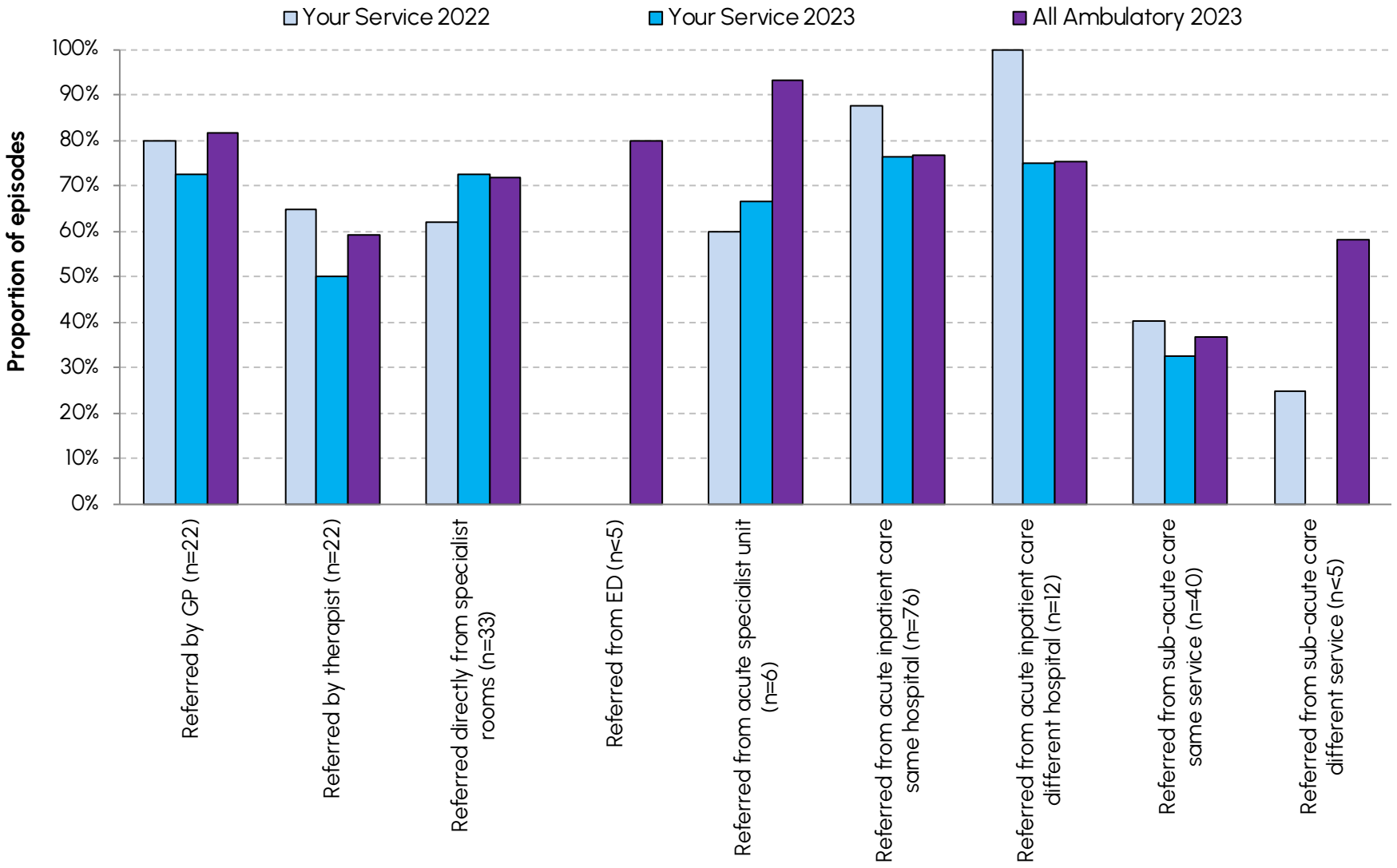
Episode source



Episode source

	Your Service 2022		Your Service 2023		All Ambulatory 2023	
Episode source	**No.**	**%**	**No.**	**%**	**No.**	**%**
Referred by GP	15	7.3	22	10.2	497	7.3
Referred by therapist	20	9.8	22	10.2	473	6.9
Referred directly from specialist rooms	21	10.2	33	15.3	705	10.3
Referred from ED	1	0.5	1	0.5	20	0.3
Referred from acute specialist unit	10	4.9	6	2.8	244	3.6
Referred from acute inpatient care same hospital	73	35.6	76	35.2	2,518	36.7
Referred from acute inpatient care different hospital	10	4.9	12	5.6	495	7.2
Referred from sub-acute care same service	47	22.9	40	18.5	1,735	25.3
Referred from sub-acute care different service	8	3.9	4	1.9	165	2.4
Missing	2		3		26	
All episodes	**207**	**100**	**219**	**100**	**6,878**	**100**

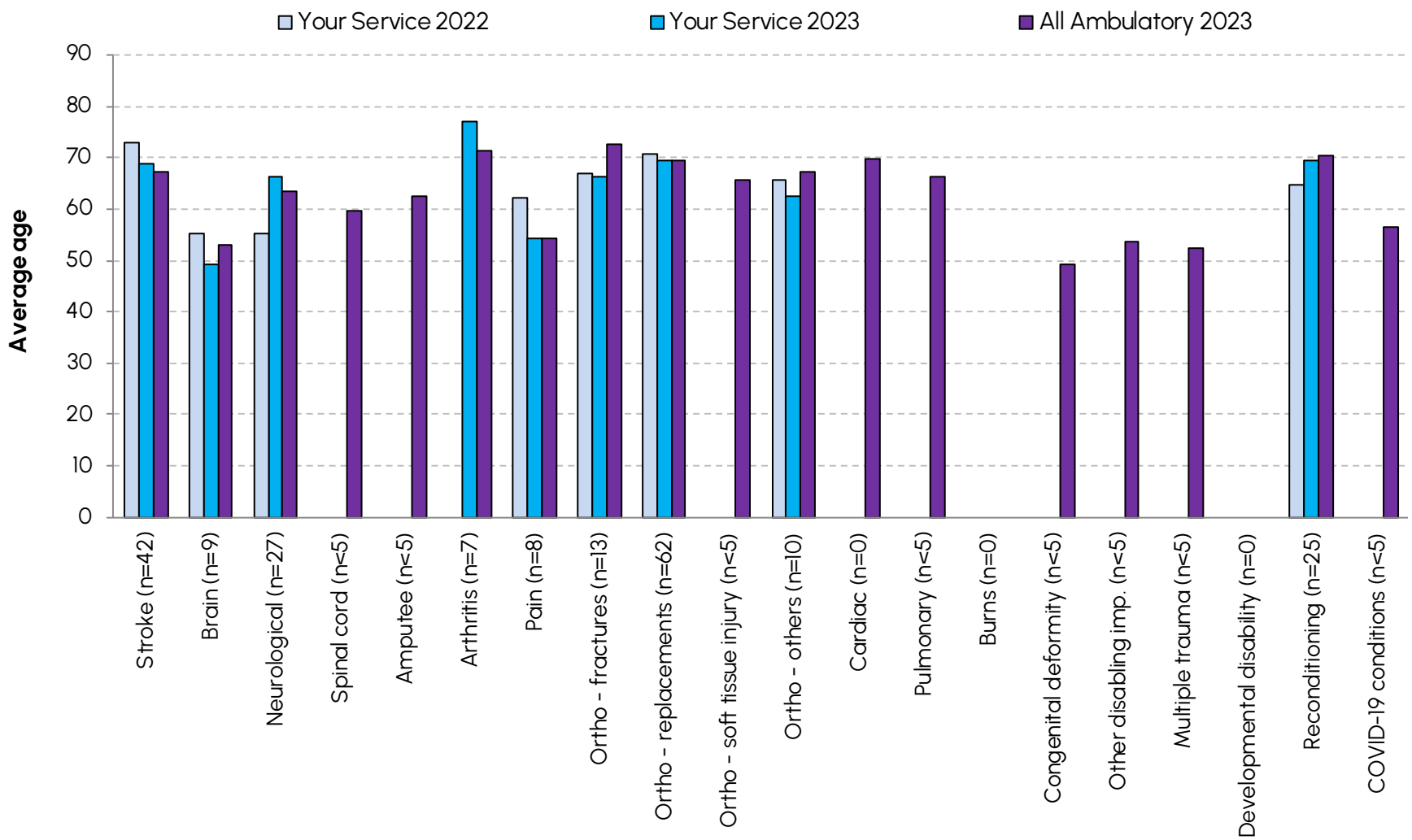
First direct care rehabilitation episode by episode source



First direct care rehabilitation episode by episode source

	Your Service 2022				Your Service 2023				All Ambulatory 2023			
Impairment group	No.	Primary admission	Subsequent admission	Missing	No.	Primary admission	Subsequent admission	Missing	No.	Primary admission	Subsequent admission	Missing
Referred by GP	15	12	3	0	22	16	6	0	497	406	89	2
Referred by therapist	20	13	7	0	22	11	11	0	473	281	192	0
Referred directly from specialist rooms	21	13	8	0	33	24	9	0	705	506	199	0
Referred from ED	1	1	0	0	1	1	0	0	20	16	4	0
Referred from acute specialist unit	10	6	4	0	6	4	2	0	244	228	16	0
Referred from acute inpatient care same hospital	73	64	9	0	76	58	18	0	2,518	1,937	578	3
Referred from acute inpatient care different hospital	10	10	0	0	12	9	3	0	495	373	121	1
Referred from sub-acute care same service	47	19	28	0	40	13	27	0	1,735	639	1,094	2
Referred from sub-acute care different service	8	2	6	0	4	0	4	0	165	96	69	0
Missing	2	1	0	1	3	2	0	1	26	9	6	11
All episodes	**207**	**141**	**65**	**1**	**219**	**138**	**80**	**1**	**6,878**	**4,491**	**2,368**	**19**

Age by impairment group



Age by impairment group

	Your Service 2022			Your Service 2023			All Ambulatory 2023		
Impairment group	**No.**	**Mean age**	**(95% CI)**	**No.**	**Mean age**	**(95% CI)**	**No.**	**Mean age**	**(95% CI)**
Stroke	45	72.9	(68.8 – 77.1)	42	68.7	(64.5 – 73.0)	1,572	67.1	(66.4 – 67.8)
Brain	10	55.2	(45.8 – 64.6)	9	49.2	(41.2 – 57.2)	242	53.0	(50.8 – 55.3)
Neurological	14	55.1	(44.4 – 65.8)	27	66.4	(60.8 – 72.0)	509	63.5	(62.0 – 65.0)
Spinal cord	4	60.8	(33.5 – 88.0)	4	63.5	(52.6 – 74.4)	104	59.6	(56.7 – 62.6)
Amputee	4	60.8	(57.7 – 63.8)	1	69.0		162	62.5	(60.6 – 64.4)
Arthritis	2	83.0	(67.3 – 98.7)	7	77.0	(72.4 – 81.6)	90	71.5	(69.3 – 73.7)
Pain	5	62.2	(44.8 – 79.6)	8	54.1	(41.8 – 66.5)	120	54.3	(51.1 – 57.6)
Ortho - fractures	7	67.0	(56.2 – 77.8)	13	66.3	(55.8 – 76.8)	299	72.7	(71.0 – 74.3)
Ortho - replacements	73	70.6	(68.3 – 72.8)	62	69.3	(66.9 – 71.7)	2,474	69.3	(69.0 – 69.7)
Ortho - soft tissue injury	3	62.7	(42.4 – 83.0)	1	77.0		19	65.6	(55.0 – 76.3)
Ortho - others	9	65.7	(59.4 – 71.9)	10	62.4	(54.9 – 69.9)	308	67.3	(65.7 – 69.0)
Cardiac	0	—		0	—		41	69.8	(66.0 – 73.7)
Pulmonary	3	66.3	(47.0 – 85.7)	4	70.0	(58.8 – 81.2)	48	66.4	(62.0 – 70.7)
Burns	0	—		0	—		1	—	
Congenital deformity	1	74.0		1	64.0		5	49.2	(27.2 – 71.2)
Other disabling imp.	3	48.7	(21.4 – 76.0)	2	72.5	(55.8 – 89.2)	104	53.6	(49.9 – 57.4)
Multiple trauma	1	21.0		1	21.0		28	52.3	(45.6 – 58.9)
Developmental disability	0	—		0	—		3	—	
Reconditioning	22	64.7	(56.8 – 72.5)	25	69.3	(62.2 – 76.4)	693	70.3	(69.2 – 71.4)
COVID-19 conditions	0	—		1	32.0		22	56.6	(49.0 – 64.3)
Missing or excluded	1			2			56		
All episodes	**207**	**67.1**	**(65.0 – 69.2)**	**219**	**66.8**	**(64.8 – 68.7)**	**6,878**	**67.0**	**(66.7 – 67.4)**

NDIS funding status at episode end

	Your Service 2022		Your Service 2023		All Ambulatory 2023 (AU)	
Episode source	**No.**	**%**	**No.**	**%**	**No.**	**%**
Accepted - on a plan	8	4.2	8	3.9	212	3.4
Accepted - waiting	1	0.5	0	—	52	0.8
Awaiting eligibility determination	6	3.2	6	2.9	213	3.4
Eligible - hasn't applied	9	4.7	7	3.4	196	3.1
Eligible - NDIS not yet available in the region	0	—	0	—	7	0.1
Not eligible / not relevant	166	87.4	184	89.8	5,569	89.1
Missing	17		14		33	
All episodes (AU)	**207**		**219**		**6,282**	

Staff type by impairment group

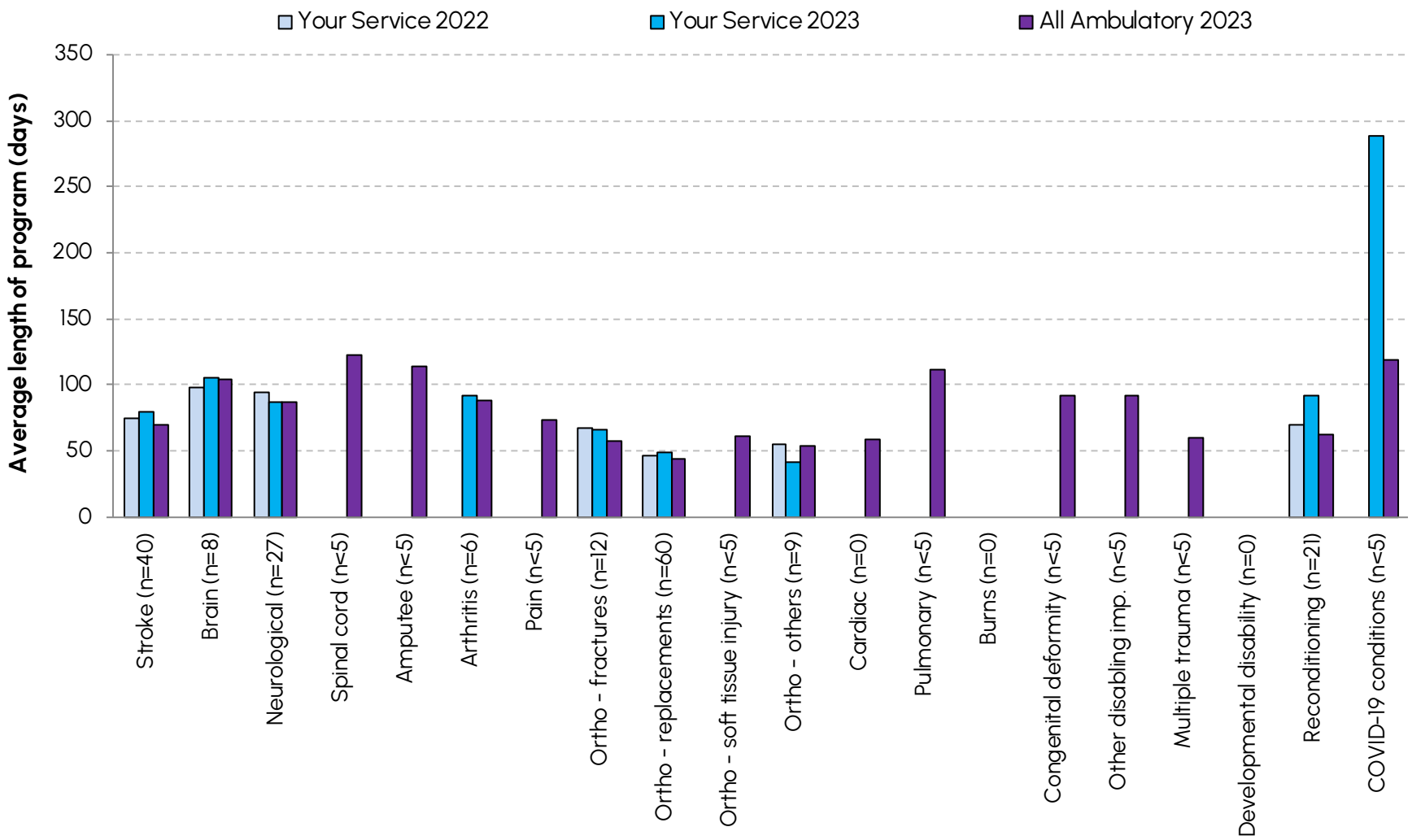
Percentage of patients receiving treatment from this staff type	Physiotherapist	Hydrotherapist	Occupational Therapist	Exercise Physiologist	Therapy Aide	Medical Officer	Registered Nurse	Enrolled Nurse	Speech Pathologist	Social Worker	Dietician	Psychologist	Neuro-psychologist	Other Staff Type
Impairment group														
Stroke (n=41)	80.5	2.4	85.4	12.2	36.6	22.0	9.8	9.8	43.9	43.9	12.2	9.8	2.4	39.0
Brain (n=7)	71.4	14.3	85.7	28.6	42.9	57.1	0.0	0.0	71.4	42.9	0.0	14.3	42.9	42.9
Neurological (n=28)	92.9	10.7	85.7	39.3	17.9	21.4	17.9	10.7	50.0	35.7	25.0	3.6	0.0	25.0
Spinal cord (n=4)	100.0	25.0	100.0	75.0	50.0	25.0	25.0	0.0	0.0	50.0	0.0	0.0	0.0	25.0
Amputee (n=1)	100.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0
Arthritis (n=7)	100.0	28.6	57.1	28.6	14.3	28.6	14.3	0.0	0.0	0.0	28.6	0.0	0.0	14.3
Pain (n=8)	100.0	12.5	100.0	12.5	12.5	12.5	12.5	0.0	0.0	0.0	12.5	75.0	0.0	12.5
Ortho - fractures (n=13)	92.3	30.8	38.5	30.8	61.5	23.1	23.1	7.7	0.0	30.8	0.0	0.0	7.7	46.2
Ortho - replacements (n=62)	98.4	67.7	82.3	16.1	37.1	27.4	9.7	0.0	0.0	0.0	11.3	0.0	0.0	3.2
Ortho - soft tissue injury (n=1)	100.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ortho - others (n=10)	90.0	30.0	50.0	40.0	50.0	40.0	10.0	0.0	0.0	0.0	20.0	10.0	0.0	0.0
Cardiac (n=0)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pulmonary (n=4)	100.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0	0.0	50.0
Burns (n=0)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congenital deformity (n=1)	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0
Other disabling imp. (n=2)	100.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0
Multiple trauma (n=1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Developmental disability (n=0)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Reconditioning (n=25)	100.0	16.0	64.0	56.0	40.0	40.0	12.0	0.0	8.0	24.0	16.0	12.0	0.0	16.0
COVID-19 conditions (n=1)	100.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0

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

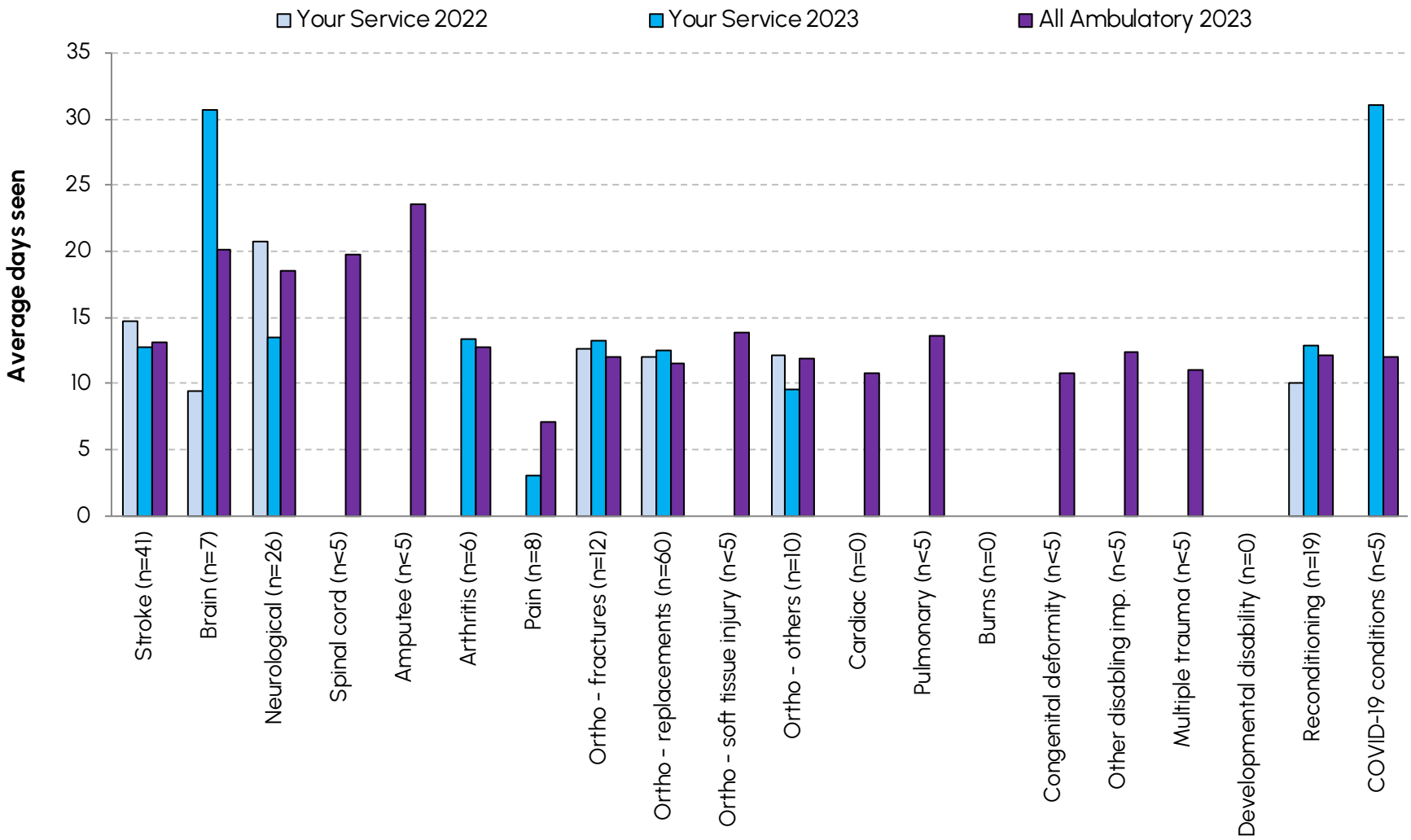
Length of program by impairment group



Length of program by impairment group

	Your Service 2022			Your Service 2023			All Ambulatory 2023		
Impairment group	No.	Mean LOP	Trimmed data range*	No.	Mean LOP	Trimmed data range*	No.	Mean LOP	Trimmed data range*
Stroke	44	74.1	(22 – 253)	40	80.0	(18 – 178)	1,485	69.8	(15 – 173)
Brain	10	97.6		8	105.0		229	104.2	(23 – 245)
Neurological	12	94.3		27	87.0	(37 – 216)	472	86.7	(20 – 217)
Spinal cord	4	—		4	—		83	122.4	(28 – 323)
Amputee	3	—		1	—		144	114.2	(26 – 313)
Arthritis	2	—		6	91.7		86	88.8	(27 – 166)
Pain	2	—		1	—		72	73.8	(22 – 218)
Ortho - fractures	7	67.3		12	65.8		280	57.0	(20 – 107)
Ortho - replacements	72	45.8	(15 – 98)	60	49.1	(26 – 100)	2,403	43.5	(20 – 84)
Ortho - soft tissue injury	3	—		1	—		19	60.8	
Ortho - others	8	54.4		9	41.2		285	54.2	(16 – 111)
Cardiac	0	—		0	—		41	59.1	(20 – 120)
Pulmonary	3	—		4	—		43	111.7	(43 – 185)
Burns	0	—		0	—		0	—	
Congenital deformity	1	—		1	—		5	91.4	
Other disabling imp.	3	—		1	—		94	92.1	(27 – 231)
Multiple trauma	1	—		1	—		26	60.4	(19 – 126)
Developmental disability	0	—		0	—		3	—	
Reconditioning	19	70.3		21	92.1	(37 – 275)	613	62.8	(21 – 140)
COVID-19 conditions	0	—		1	—		22	119.3	(49 – 221)
Missing or excluded	13			22			495		
All episodes	**207**	**70.3**	**(15 – 215)**	**219**	**74.6**	**(21 – 191)**	**6,878**	**63.7**	**(19 – 166)**

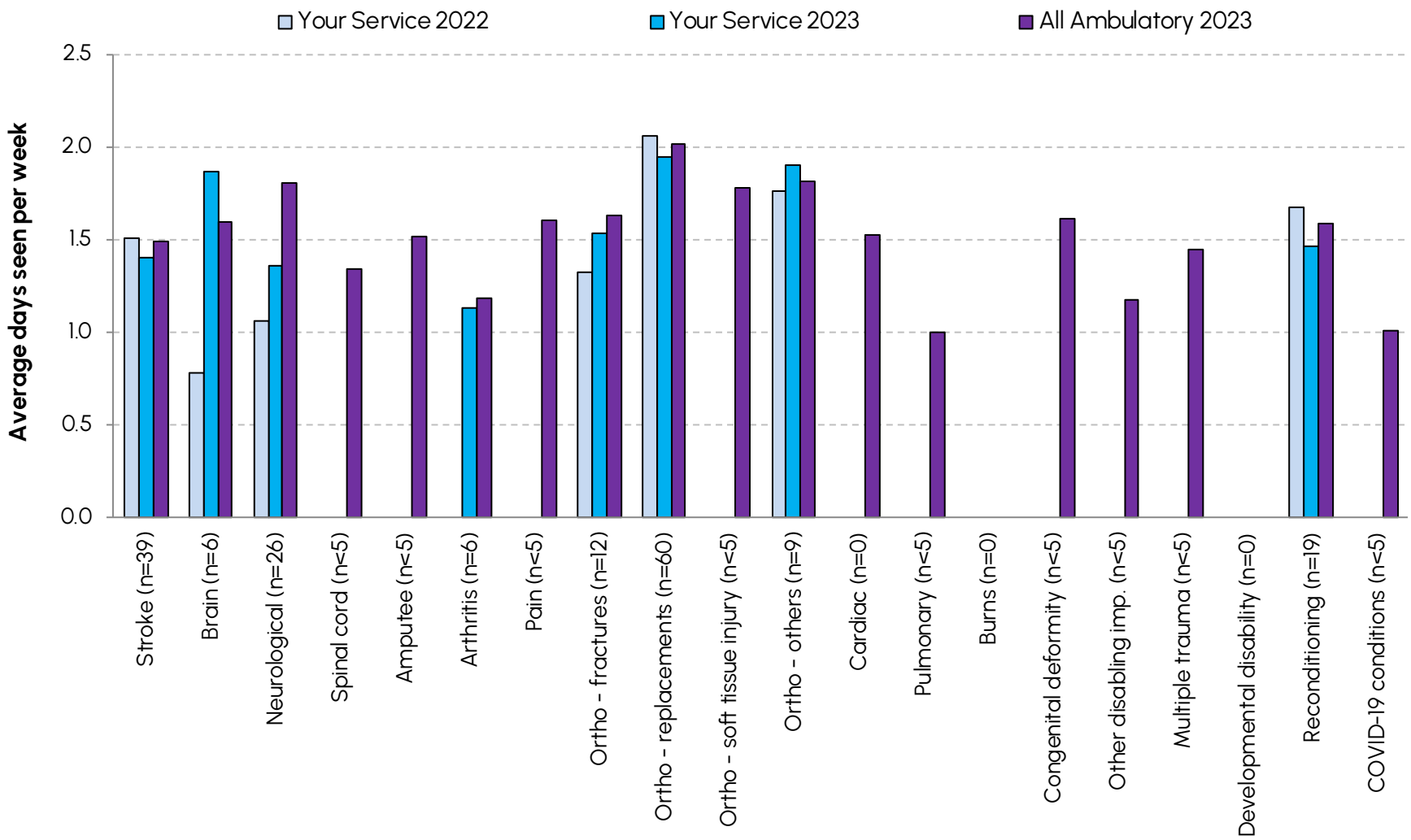
Days seen by impairment group



Days seen by impairment group

	Your Service 2022			Your Service 2023			All Ambulatory 2023		
Impairment group	No.	Mean days seen	Trimmed data range*	No.	Mean days seen	Trimmed data range*	No.	Mean days seen	Trimmed data range*
Stroke	40	14.7	(2 – 32)	41	12.7	(2 – 31)	1,446	13.1	(2 – 33)
Brain	7	9.4		7	30.7		196	20.1	(4 – 78)
Neurological	13	20.7		26	13.5	(7 – 24)	454	18.5	(3 – 33)
Spinal cord	1	—		4	—		98	19.8	(4 – 63)
Amputee	3	—		1	—		128	23.5	(4 – 67)
Arthritis	2	—		6	13.3		86	12.8	(3 – 23)
Pain	4	—		8	3.0		112	7.2	(1 – 20)
Ortho - fractures	7	12.6		12	13.3		272	12.0	(4 – 22)
Ortho - replacements	73	12.1	(5 – 20)	60	12.5	(7 – 20)	2,423	11.5	(6 – 20)
Ortho - soft tissue injury	3	—		1	—		19	13.9	
Ortho - others	9	12.1		10	9.6		292	11.9	(3 – 22)
Cardiac	0	—		0	—		40	10.8	(6 – 20)
Pulmonary	3	—		4	—		43	13.6	(5 – 24)
Burns	0	—		0	—		0	—	
Congenital deformity	1	—		1	—		5	10.8	
Other disabling imp.	3	—		1	—		86	12.3	(4 – 27)
Multiple trauma	1	—		1	—		26	11.0	(4 – 25)
Developmental disability	0	—		0	—		2	—	
Reconditioning	20	10.1	(2 – 22)	19	12.9		583	12.1	(4 – 21)
COVID-19 conditions	0	—		1	—		19	12.1	
Missing or excluded	17			17			567		
All episodes	**207**	**13.1**	**(2 – 27)**	**219**	**13.1**	**(2 – 24)**	**6,878**	**12.7**	**(3 – 27)**

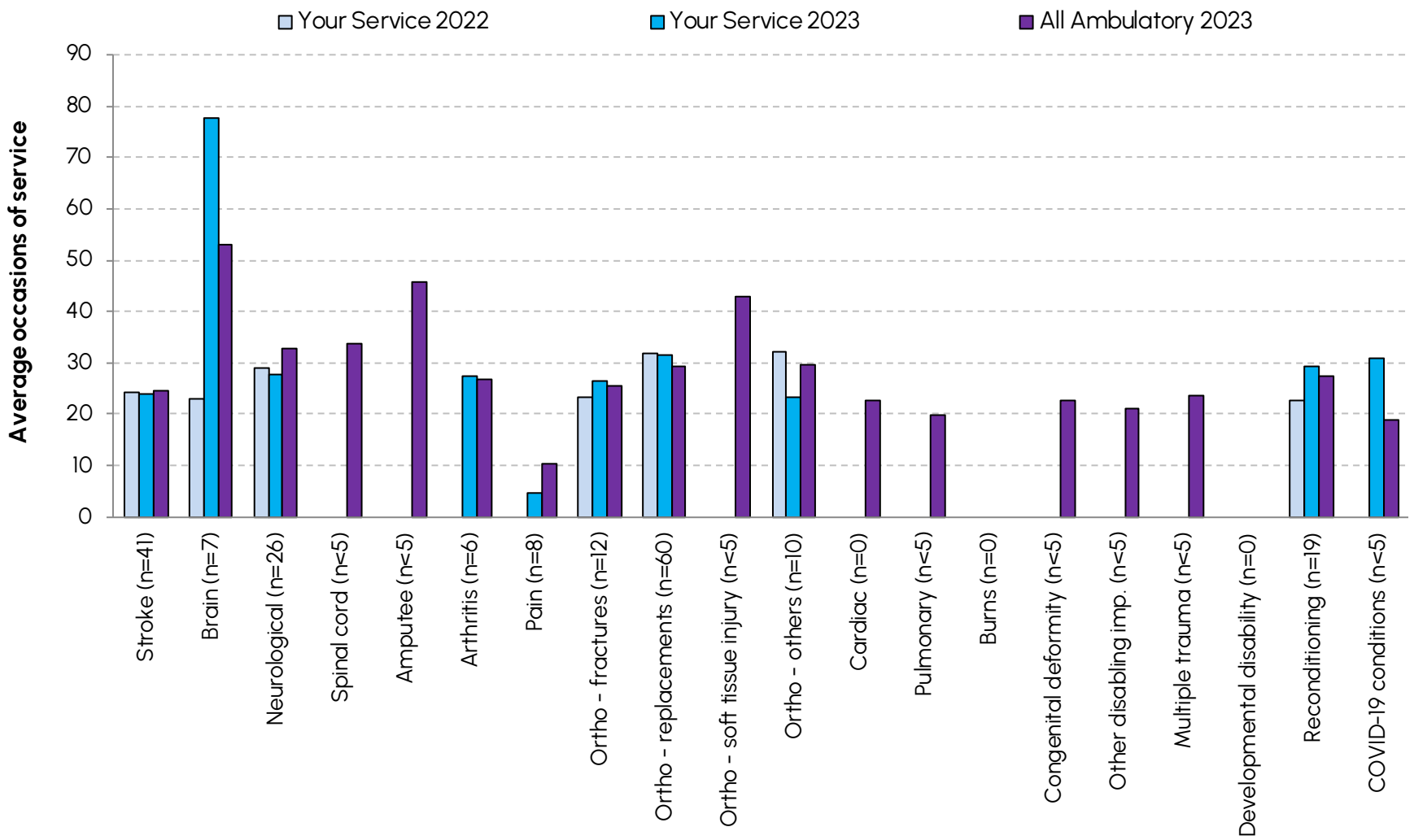
Days seen per elapsed week by impairment group



Days seen per elapsed week by impairment group

	Your Service 2022			Your Service 2023			All Ambulatory 2023		
Impairment group	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	39	1.5	(0.4 – 2.8)	39	1.4	(0.5 – 3.5)	1,406	1.5	(0.4 – 3.2)
Brain	7	0.8		6	1.9		194	1.6	(0.4 – 3.0)
Neurological	11	1.1		26	1.4	(0.5 – 2.4)	442	1.8	(0.4 – 2.8)
Spinal cord	1	—		4	—		81	1.3	(0.3 – 2.7)
Amputee	2	—		1	—		120	1.5	(0.3 – 3.3)
Arthritis	2	—		6	1.1		85	1.2	(0.3 – 2.3)
Pain	2	—		1	—		68	1.6	(0.3 – 2.5)
Ortho - fractures	7	1.3		12	1.5		267	1.6	(0.7 – 2.6)
Ortho - replacements	72	2.1	(1.1 – 3.0)	60	1.9	(1.1 – 3.0)	2,399	2.0	(1.1 – 3.0)
Ortho - soft tissue injury	3	—		1	—		19	1.8	
Ortho - others	8	1.8		9	1.9		279	1.8	(0.9 – 2.7)
Cardiac	0	—		0	—		40	1.5	(0.6 – 2.5)
Pulmonary	3	—		4	—		43	1.0	(0.3 – 2.1)
Burns	0	—		0	—		0	—	
Congenital deformity	1	—		1	—		5	1.6	
Other disabling imp.	3	—		1	—		84	1.2	(0.2 – 2.7)
Multiple trauma	1	—		1	—		26	1.4	(0.6 – 2.6)
Developmental disability	0	—		0	—		2	—	
Reconditioning	19	1.7		19	1.5		569	1.6	(0.5 – 2.5)
COVID-19 conditions	0	—		1	—		19	1.0	
Missing or excluded	26			28			749		
All episodes	**207**	**1.6**	**(0.4 – 2.8)**	**219**	**1.6**	**(0.5 – 2.7)**	**6,878**	**1.7**	**(0.5 – 3.0)**

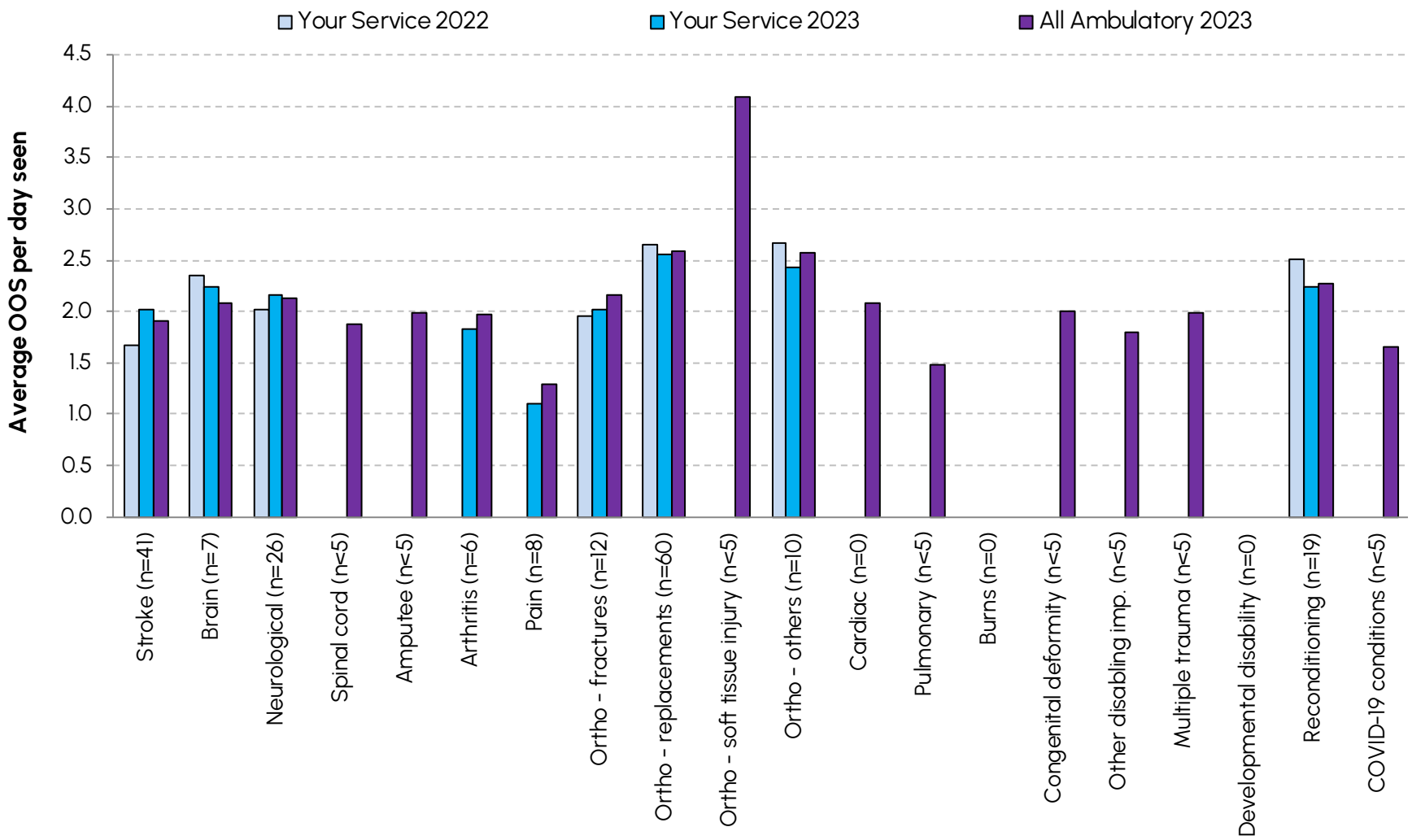
Occasions of service by impairment group



Occasions of service by impairment group

	Your Service 2022			Your Service 2023			All Ambulatory 2023		
Impairment group	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	40	24.4	(3 – 53)	41	24.0	(6 – 55)	1,440	24.4	(3 – 66)
Brain	7	23.1		7	77.6		196	52.9	(6 – 226)
Neurological	13	29.0		26	27.7	(11 – 54)	454	32.6	(6 – 60)
Spinal cord	1	—		4	—		98	33.8	(7 – 102)
Amputee	3	—		1	—		128	45.9	(7 – 132)
Arthritis	2	—		6	27.5		86	26.8	(4 – 60)
Pain	4	—		8	4.8		112	10.4	(1 – 36)
Ortho - fractures	7	23.4		12	26.5		272	25.7	(7 – 54)
Ortho - replacements	73	31.8	(12 – 60)	60	31.5	(10 – 60)	2,424	29.4	(10 – 57)
Ortho - soft tissue injury	3	—		1	—		19	42.8	
Ortho - others	9	32.2		10	23.4		292	29.5	(6 – 60)
Cardiac	0	—		0	—		40	22.8	(7 – 44)
Pulmonary	3	—		4	—		43	20.0	(6 – 33)
Burns	0	—		0	—		0	—	
Congenital deformity	1	—		1	—		5	22.6	
Other disabling imp.	3	—		1	—		86	21.0	(6 – 45)
Multiple trauma	1	—		1	—		26	23.7	(6 – 80)
Developmental disability	0	—		0	—		2	—	
Reconditioning	20	22.6	(3 – 39)	19	29.4		583	27.4	(7 – 57)
COVID-19 conditions	0	—		1	—		19	18.7	
Missing or excluded	17			17			572		
All episodes	**207**	**27.3**	**(5 – 60)**	**219**	**28.6**	**(4 – 60)**	**6,878**	**27.8**	**(5 – 60)**

Occasions of service per day seen by impairment group



Occasions of service per day seen by impairment group

	Your Service 2022			Your Service 2023			All Ambulatory 2023		
Impairment group	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	40	1.7	(1.0 – 3.0)	41	2.0	(1.0 – 3.4)	1,440	1.9	(1.0 – 3.5)
Brain	7	2.4		7	2.2		196	2.1	(1.0 – 3.9)
Neurological	13	2.0		26	2.2	(1.1 – 3.0)	454	2.1	(1.0 – 3.1)
Spinal cord	1	—		4	—		98	1.9	(1.0 – 3.2)
Amputee	3	—		1	—		128	2.0	(1.1 – 3.0)
Arthritis	2	—		6	1.8		86	2.0	(1.0 – 3.0)
Pain	4	—		8	1.1		112	1.3	(1.0 – 3.0)
Ortho - fractures	7	2.0		12	2.0		272	2.2	(1.0 – 3.0)
Ortho - replacements	73	2.7	(1.0 – 3.1)	60	2.6	(1.0 – 3.0)	2,423	2.6	(1.0 – 3.0)
Ortho - soft tissue injury	3	—		1	—		19	4.1	
Ortho - others	9	2.7		10	2.4		292	2.6	(1.0 – 3.0)
Cardiac	0	—		0	—		40	2.1	(1.2 – 3.0)
Pulmonary	3	—		4	—		43	1.5	(1.0 – 2.8)
Burns	0	—		0	—		0	—	
Congenital deformity	1	—		1	—		5	2.0	
Other disabling imp.	3	—		1	—		86	1.8	(1.0 – 2.8)
Multiple trauma	1	—		1	—		26	2.0	(1.0 – 3.0)
Developmental disability	0	—		0	—		2	—	
Reconditioning	20	2.5	(1.0 – 3.0)	19	2.2		583	2.3	(1.0 – 3.0)
COVID-19 conditions	0	—		1	—		19	1.7	
Missing or excluded	17			17			573		
All episodes	**207**	**2.2**	**(1.0 – 3.0)**	**219**	**2.2**	**(1.0 – 3.0)**	**6,878**	**2.3**	**(1.0 – 3.0)**

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

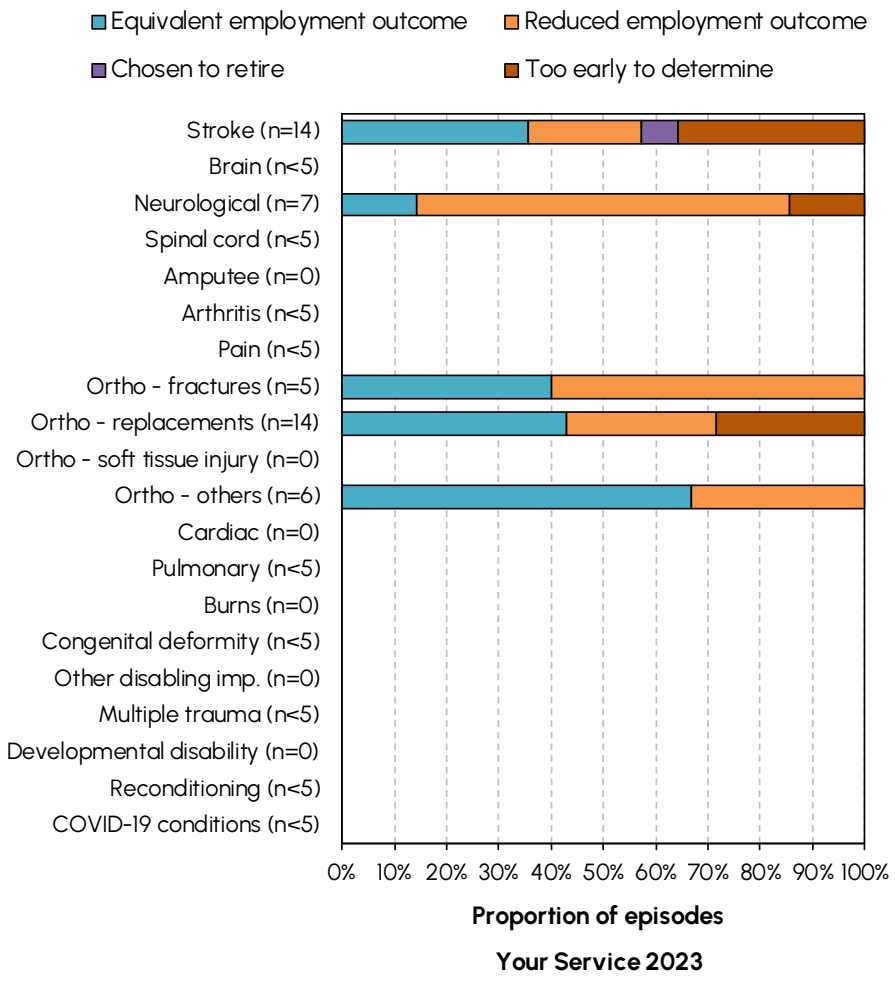
- a different job due to reduced function

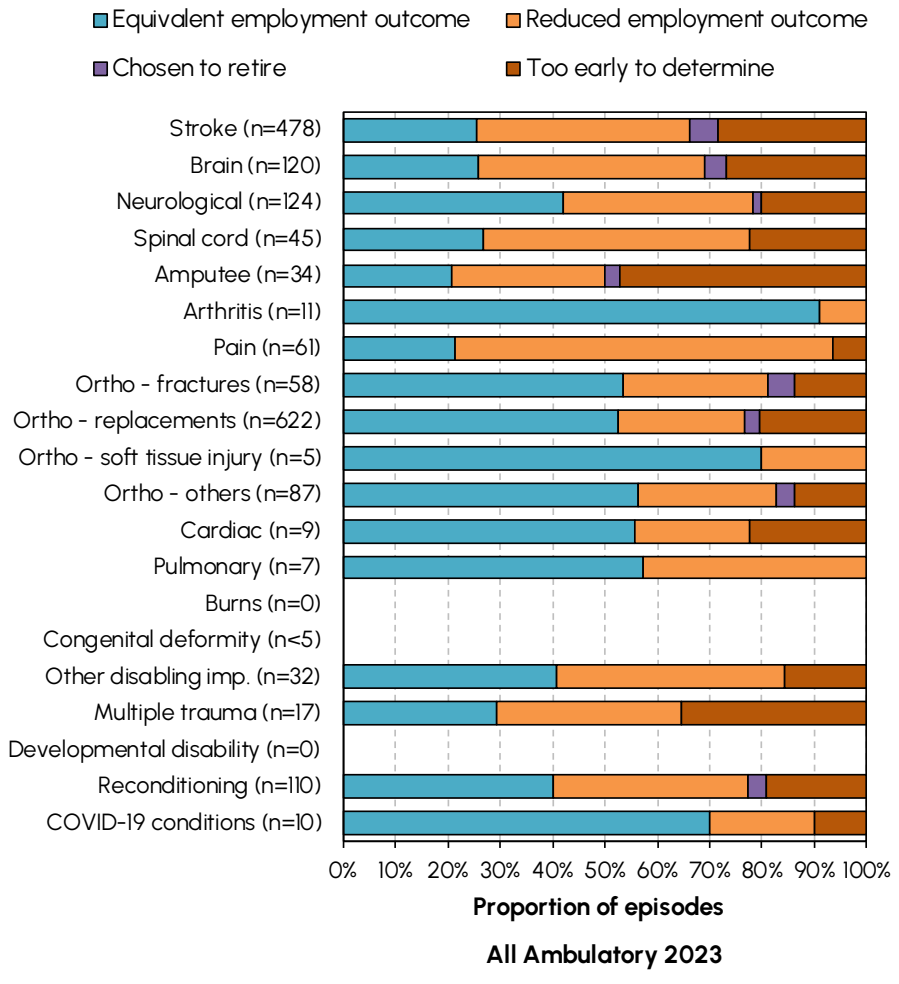
  or

- 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





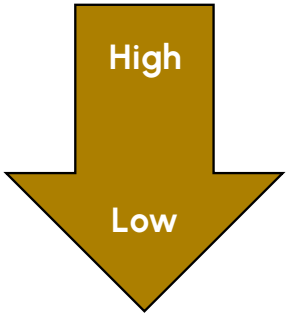
Employment outcomes by impairment group

	Your Service 2022		Your Service 2023		All Ambulatory 2023	
Impairment group	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	6	16.7	14	35.7	478	25.5
Brain	4	75.0	3	0.0	120	25.8
Neurological	7	42.9	7	14.3	124	41.9
Spinal cord	1	0.0	1	0.0	45	26.7
Amputee	0	—	0	—	34	20.6
Arthritis	0	—	1	100.0	11	90.9
Pain	2	0.0	4	25.0	61	21.3
Ortho - fractures	2	50.0	5	40.0	58	53.4
Ortho - replacements	15	53.3	14	42.9	622	52.4
Ortho - soft tissue injury	0	—	0	—	5	80.0
Ortho - others	4	50.0	6	66.7	87	56.3
Cardiac	0	—	0	—	9	55.6
Pulmonary	0	—	1	100.0	7	57.1
Burns	0	—	0	—	0	—
Congenital deformity	0	—	1	100.0	2	—
Other disabling imp.	2	50.0	0	—	32	40.6
Multiple trauma	1	0.0	1	100.0	17	29.4
Developmental disability	0	—	0	—	0	—
Reconditioning	4	75.0	1	100.0	110	40.0
COVID-19 conditions	0	—	1	100.0	10	70.0
Missing or excluded	159		160		5,056	
All episodes	**207**	**45.8**	**219**	**40.7**	**6,878**	**40.1**

Independence outcomes by impairment group

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

Independence is ranked using the following order:



Private residence & no carer needed

Private residence & carer needed

Supported living

Residential aged care

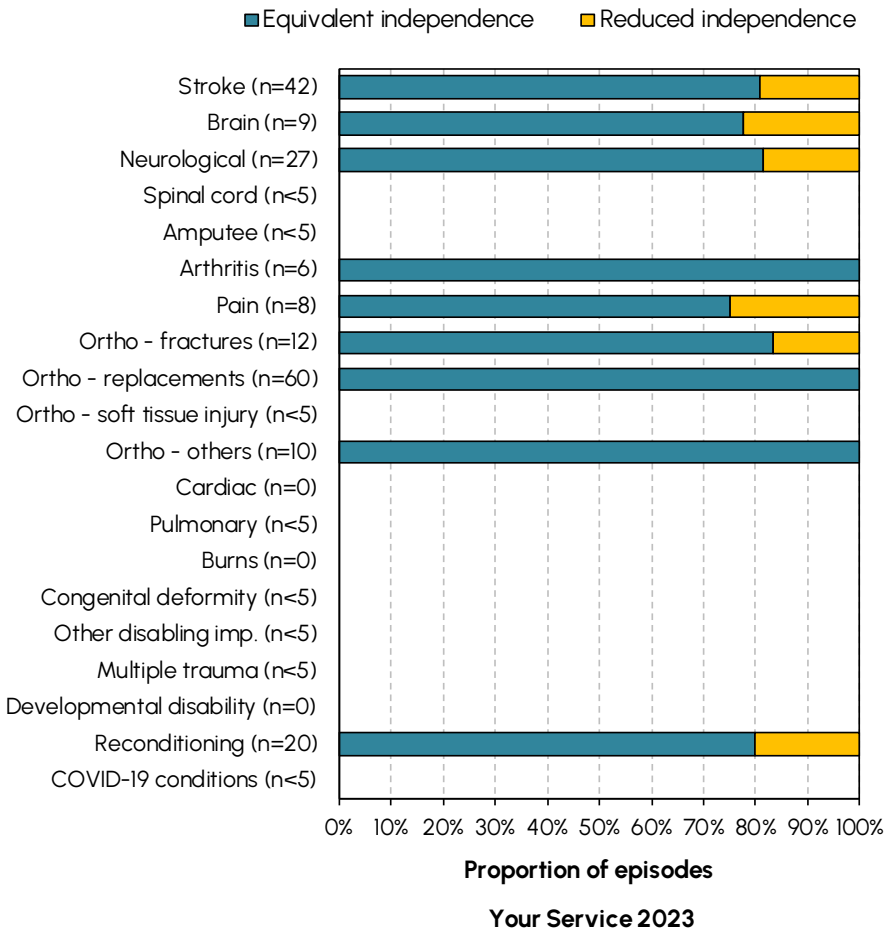
A patient is defined as having 'equivalent independence' when:

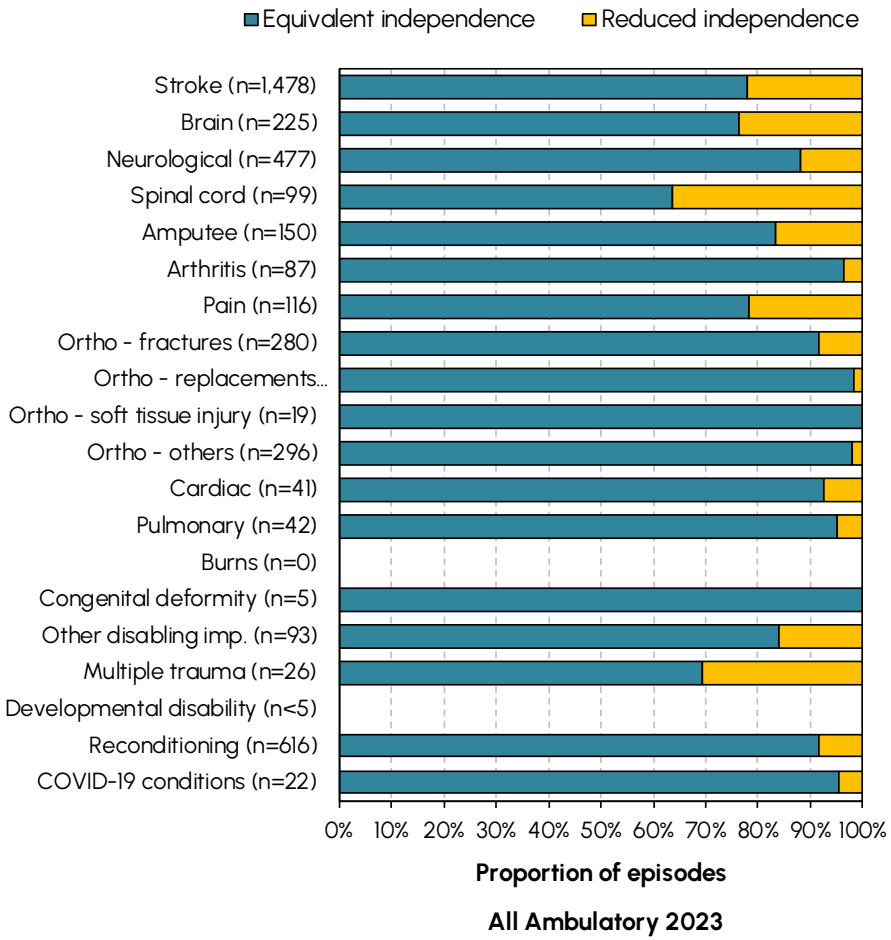
- independence after the rehabilitation episode was the same or greater than prior to rehabilitation.

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

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

Independence outcomes by impairment group

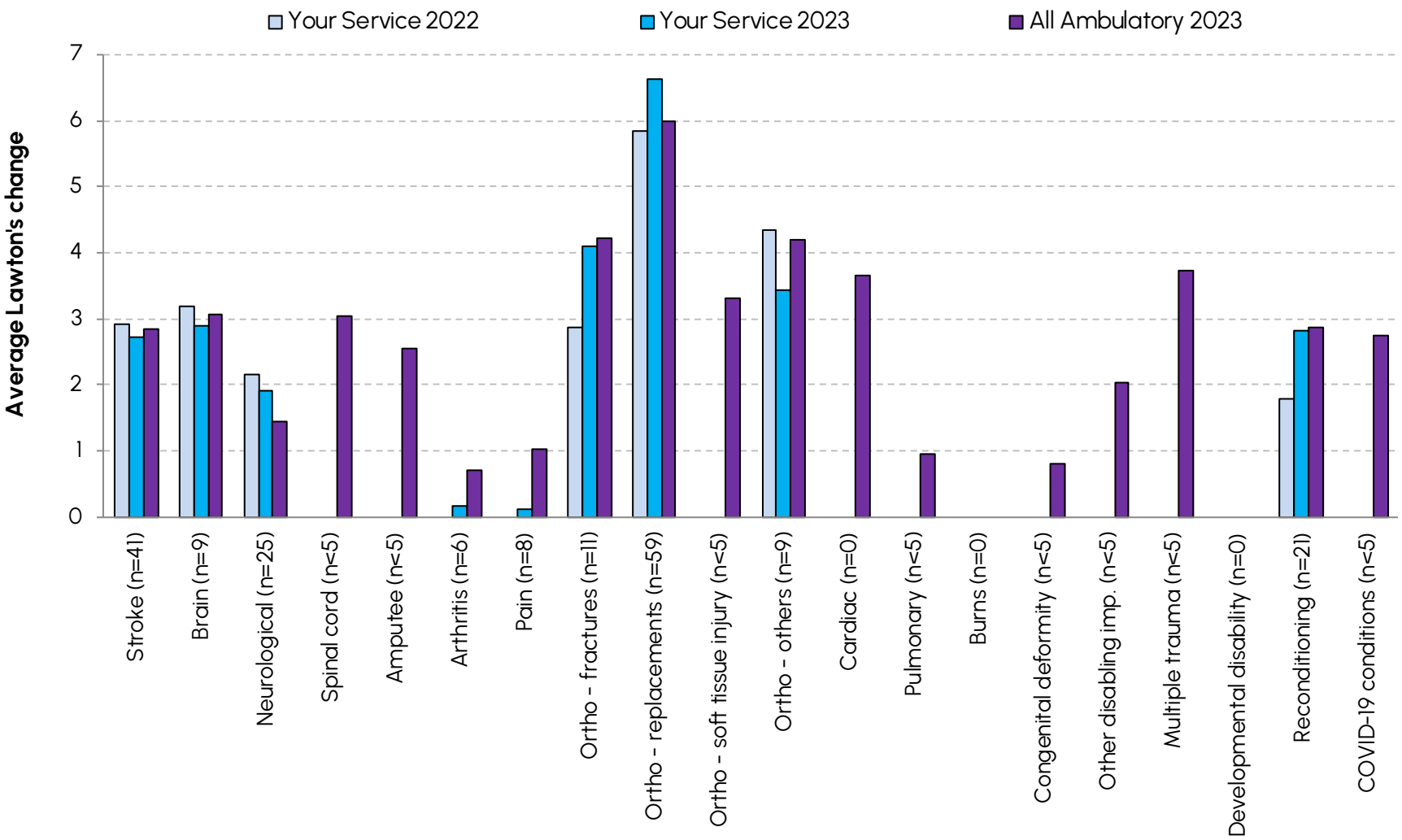




Independence outcomes by impairment group

	Your Service 2022		Your Service 2023		All Ambulatory 2023	
Impairment group	No.	Equivalent independence outcome (%)	No.	Equivalent independence outcome (%)	No.	Equivalent independence outcome (%)
Stroke	42	64.3	42	81.0	1,478	77.9
Brain	10	90.0	9	77.8	225	76.4
Neurological	13	76.9	27	81.5	477	88.1
Spinal cord	4	100.0	4	75.0	99	63.6
Amputee	4	75.0	1	0.0	150	83.3
Arthritis	2	100.0	6	100.0	87	96.6
Pain	4	75.0	8	75.0	116	78.4
Ortho - fractures	7	85.7	12	83.3	280	91.8
Ortho - replacements	73	100.0	60	100.0	2,414	98.3
Ortho - soft tissue injury	3	66.7	1	100.0	19	100.0
Ortho - others	9	88.9	10	100.0	296	98.0
Cardiac	0	—	0	—	41	92.7
Pulmonary	3	100.0	4	100.0	42	95.2
Burns	0	—	0	—	0	—
Congenital deformity	1	100.0	1	100.0	5	100.0
Other disabling imp.	3	100.0	1	100.0	93	83.9
Multiple trauma	1	0.0	1	100.0	26	69.2
Developmental disability	0	—	0	—	3	—
Reconditioning	20	90.0	20	80.0	616	91.7
COVID-19 conditions	0	—	1	100.0	22	95.5
Missing or excluded	8		12		411	
All episodes	**207**	**86.4**	**219**	**88.0**	**6,878**	**89.6**

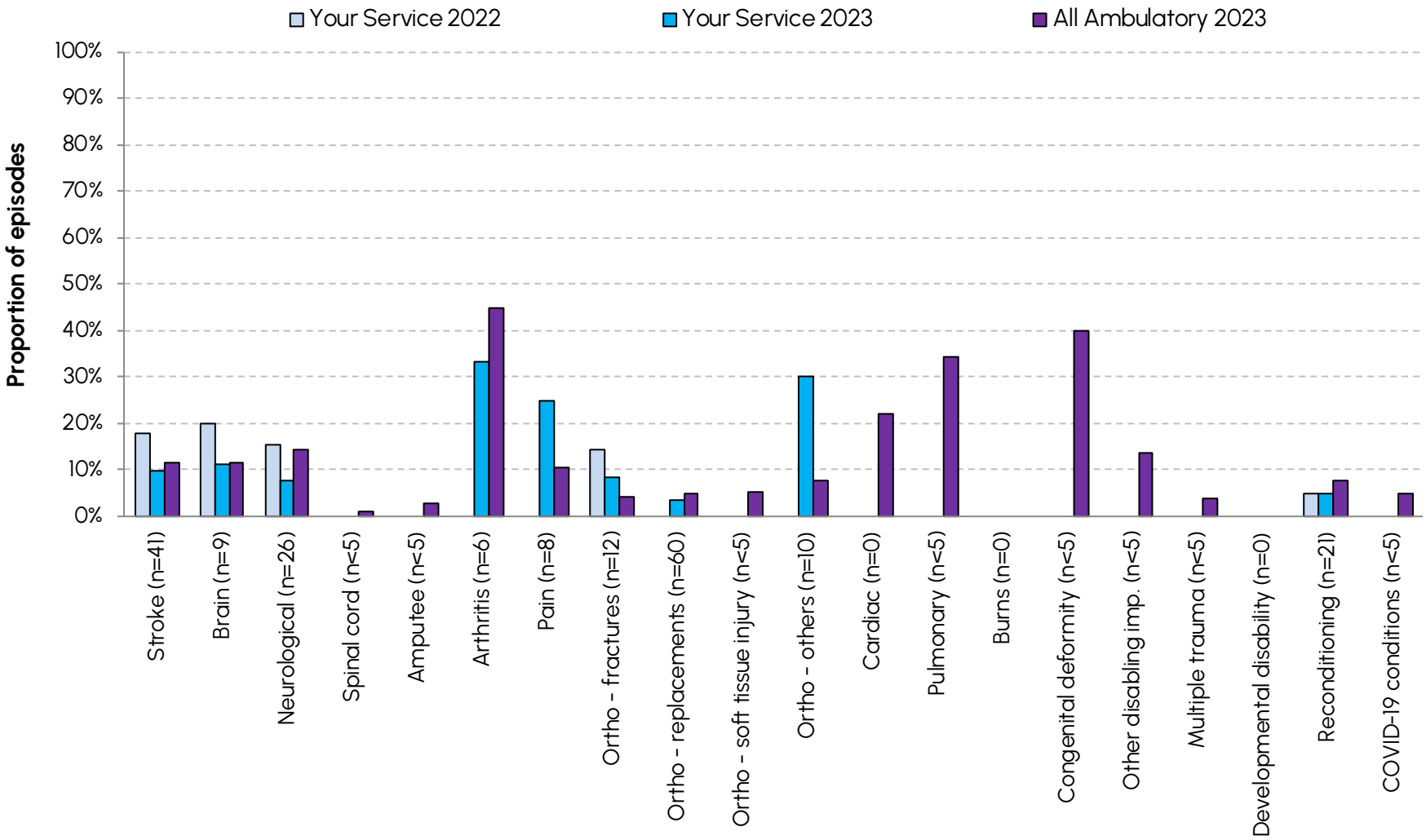
Lawton's score change by impairment



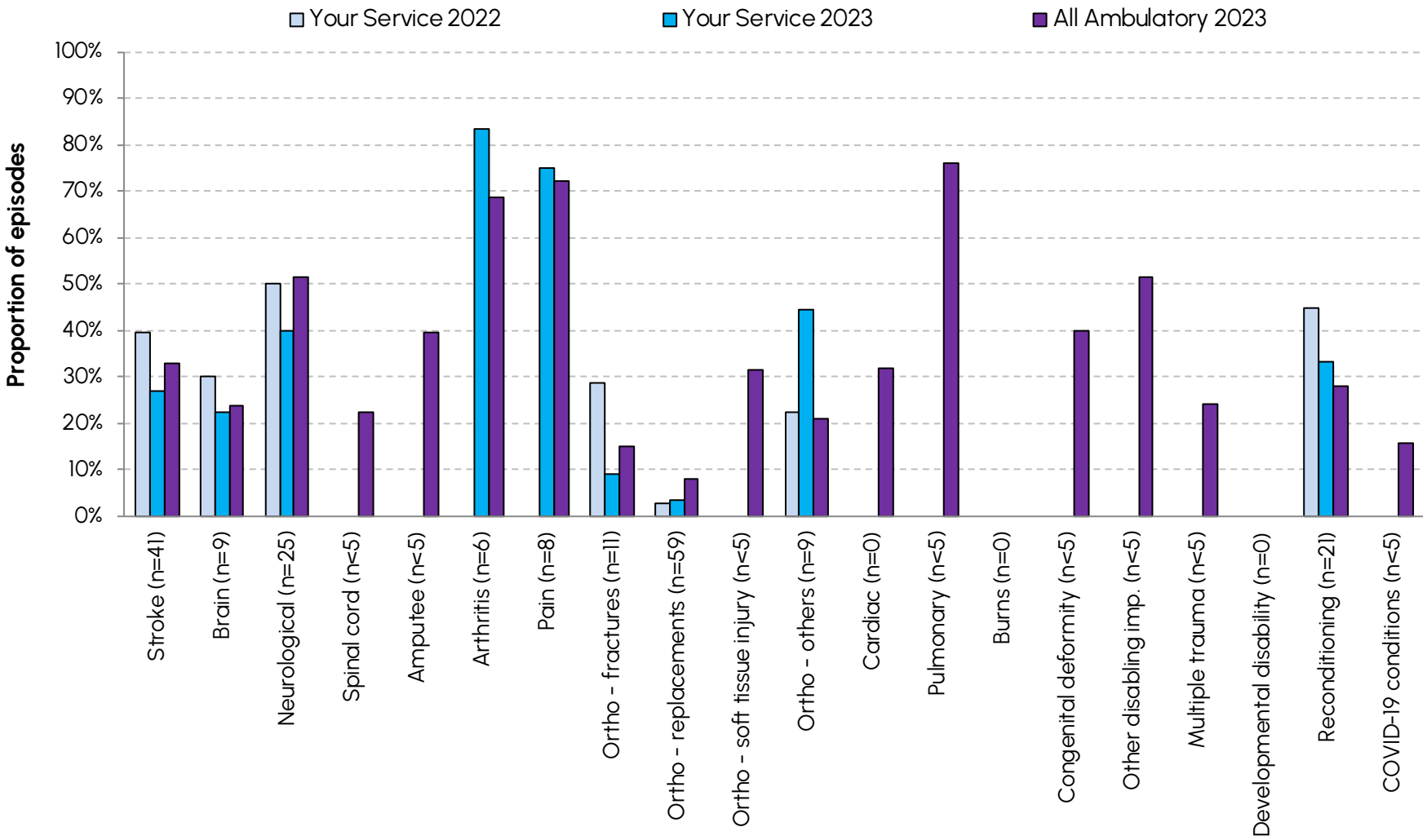
Lawton's score change by impairment

	Your Service 2022		Your Service 2023		All Ambulatory 2023	
Impairment group	No.	Avg. Lawton's change	No.	Avg. Lawton's change	No.	Avg. Lawton's change
Stroke	43	2.9	41	2.7	1,480	2.8
Brain	10	3.2	9	2.9	224	3.1
Neurological	12	2.2	25	1.9	452	1.4
Spinal cord	4	4.3	4	4.8	99	3.0
Amputee	4	2.5	1	0.0	146	2.5
Arthritis	1	0.0	6	0.2	83	0.7
Pain	3	0.0	8	0.1	108	1.0
Ortho - fractures	7	2.9	11	4.1	280	4.2
Ortho - replacements	70	5.8	59	6.6	2,383	6.0
Ortho - soft tissue injury	3	3.0	1	0.0	19	3.3
Ortho - others	9	4.3	9	3.4	287	4.2
Cardiac	0	—	0	—	41	3.7
Pulmonary	1	3.0	4	0.0	25	1.0
Burns	0	—	0	—	0	—
Congenital deformity	1	4.0	1	3.0	5	0.8
Other disabling imp.	2	0.0	1	0.0	89	2.0
Multiple trauma	1	7.0	1	0.0	25	3.7
Developmental disability	0	—	0	—	3	—
Reconditioning	20	1.8	21	2.8	611	2.9
COVID-19 conditions	0	—	1	2.0	19	2.7
Missing or excluded	16		17		518	
All episodes	**207**	**3.9**	**219**	**3.6**	**6,878**	**4.0**

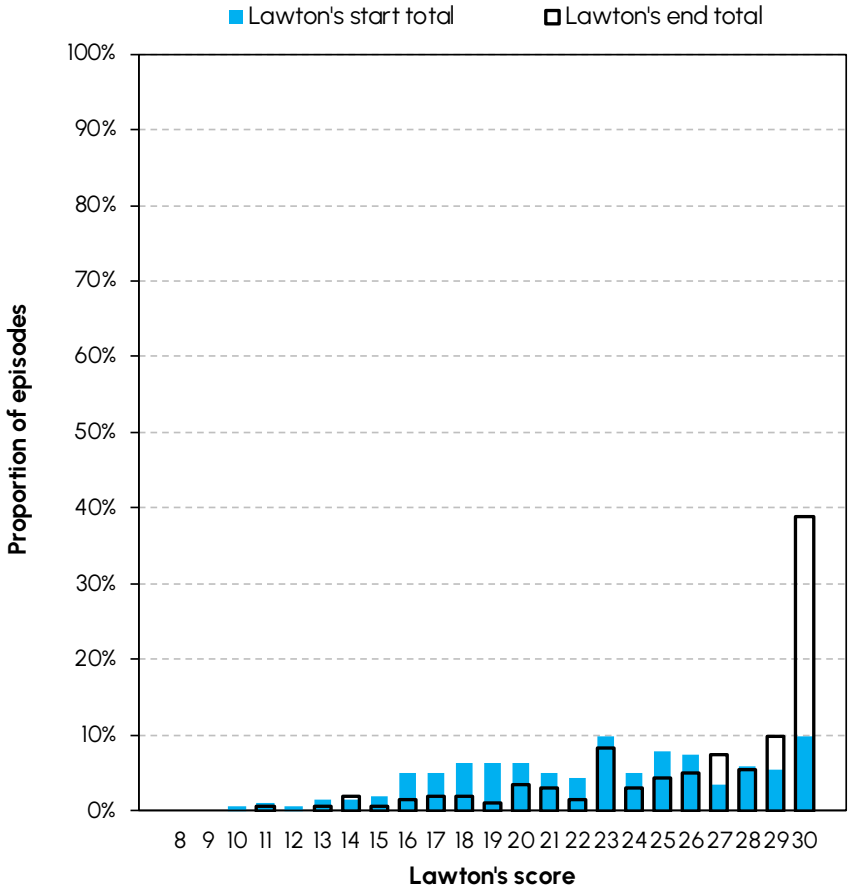
Episodes with a Lawton's start score of 30 by impairment group

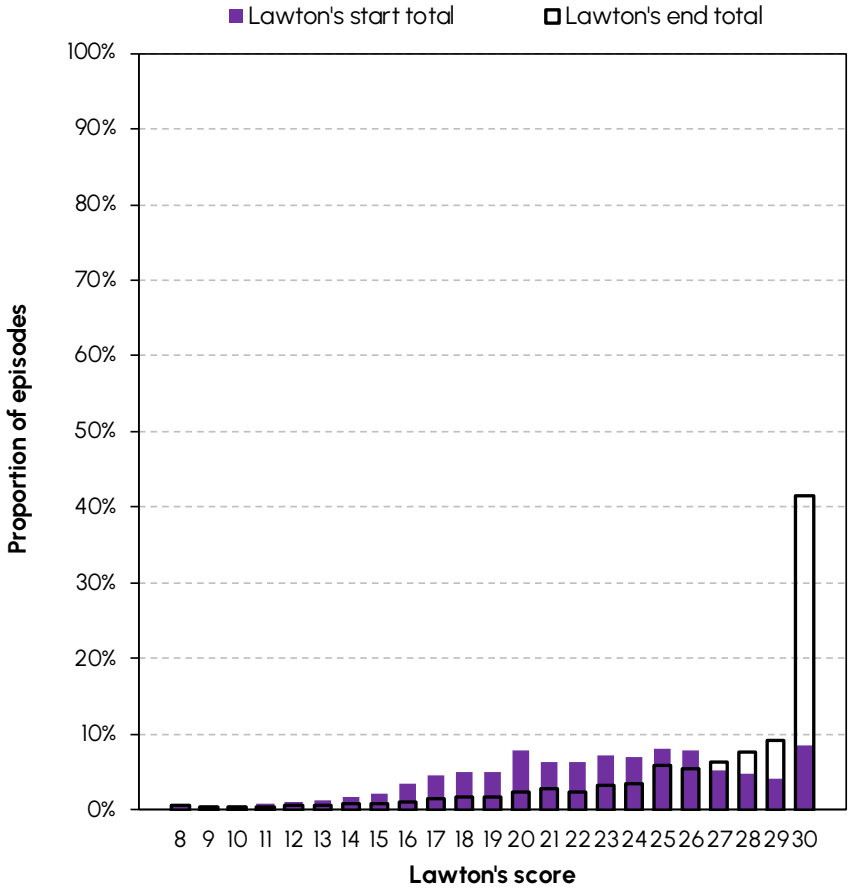


Episodes with no change in Lawton's score by impairment group



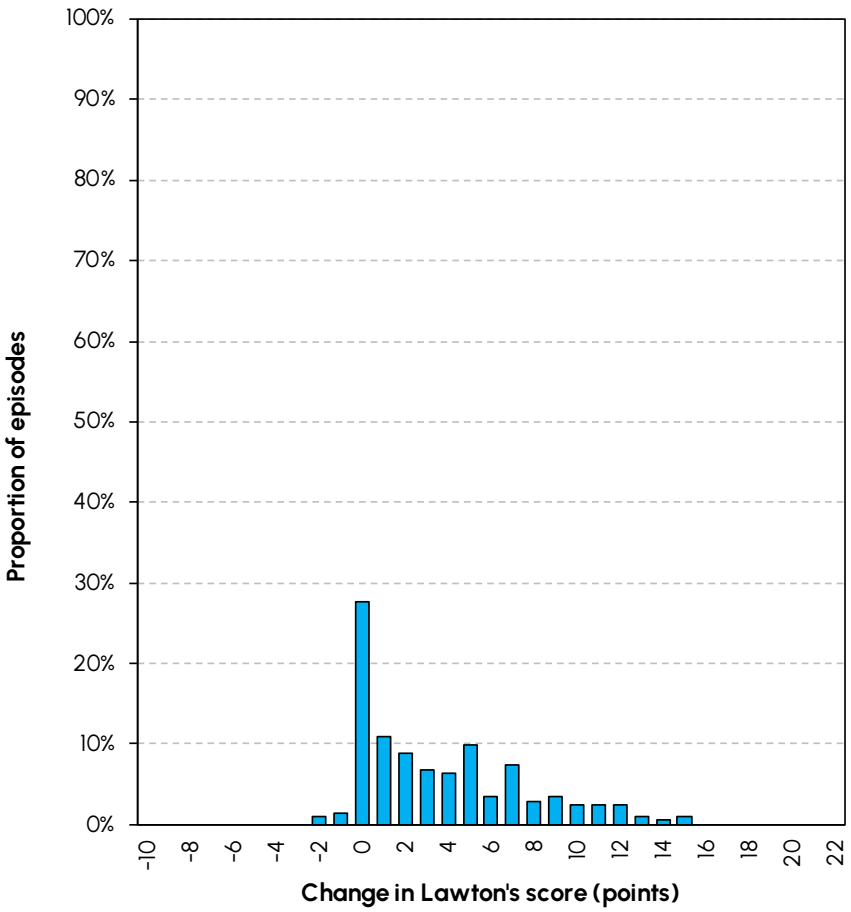
Lawton's start and end total – all episodes



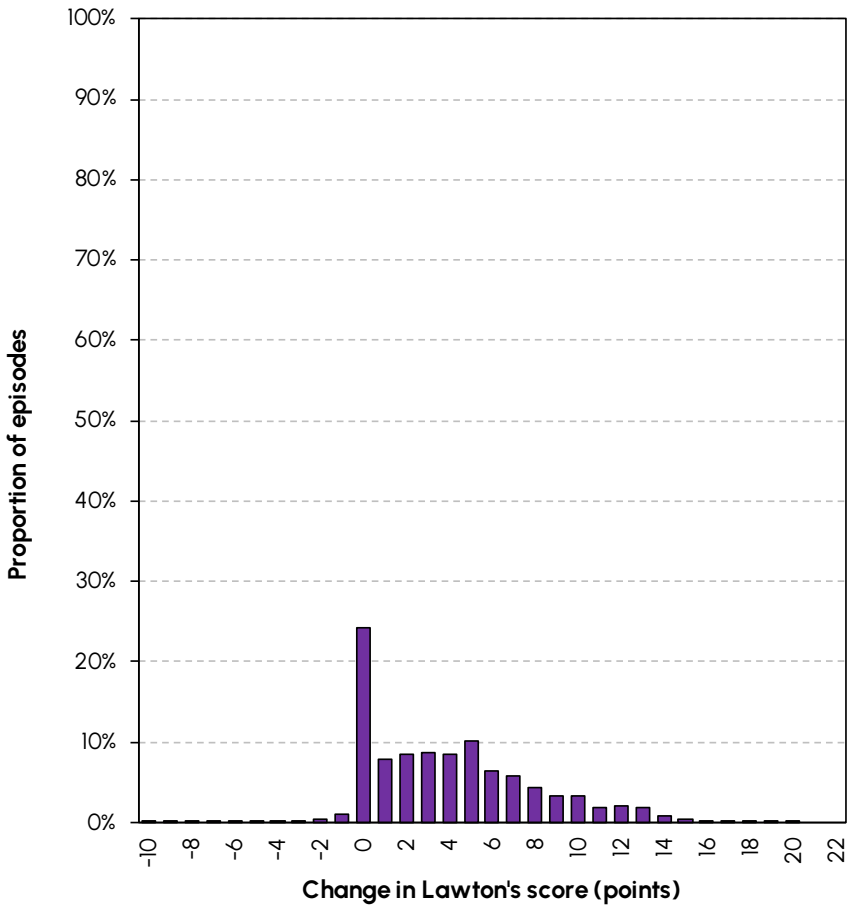


Change in Lawton's score – all episodes

Your Service 2023 (n=203)

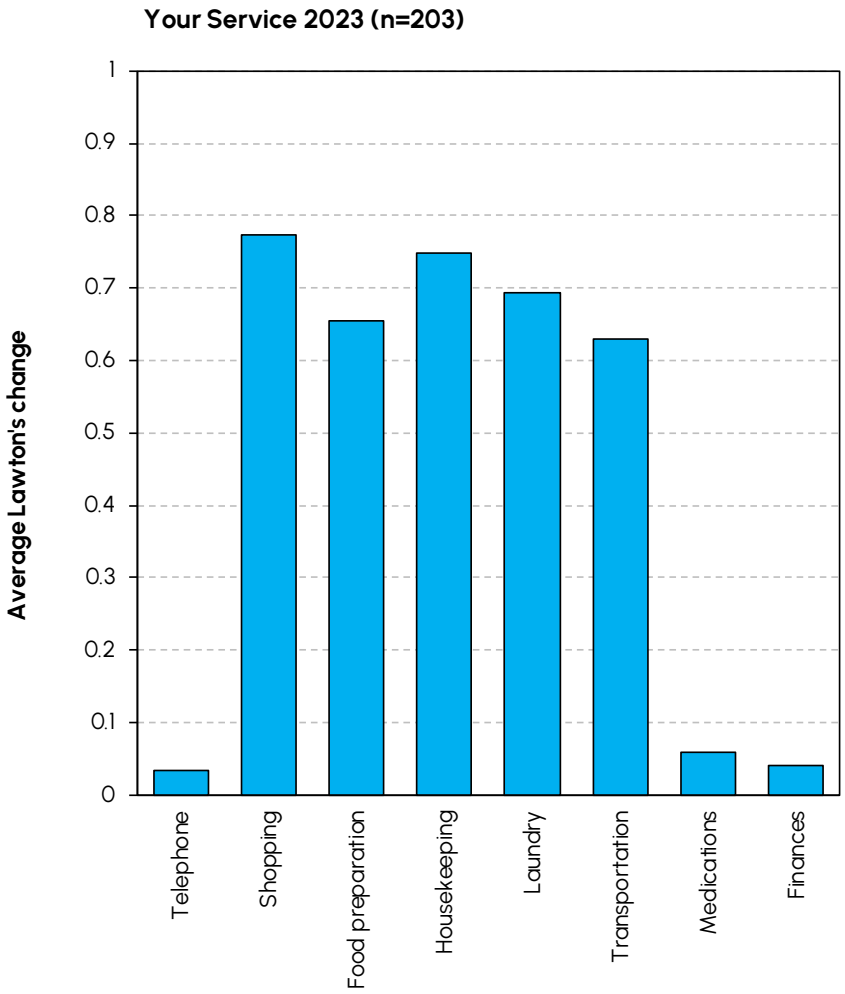


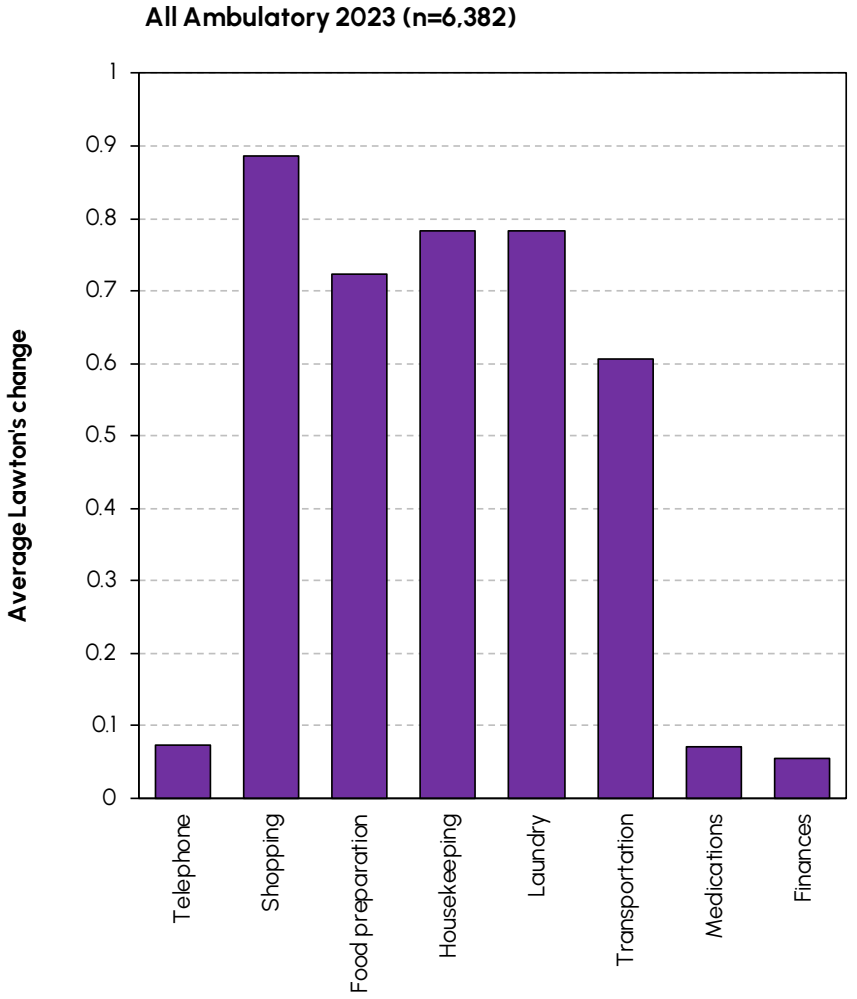
All Ambulatory 2023 (n=6,382)



Note: 4 episode(s) had a Lawton's change score < -10.

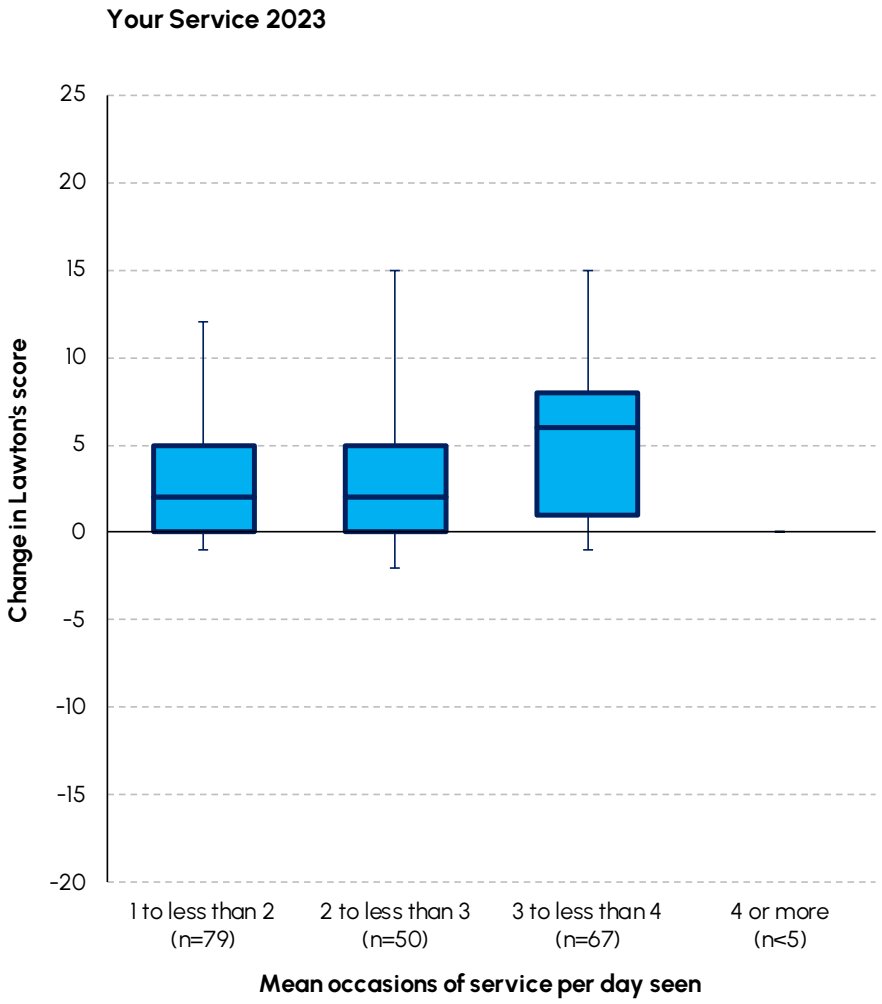
Change in Lawton's item scores – all episodes

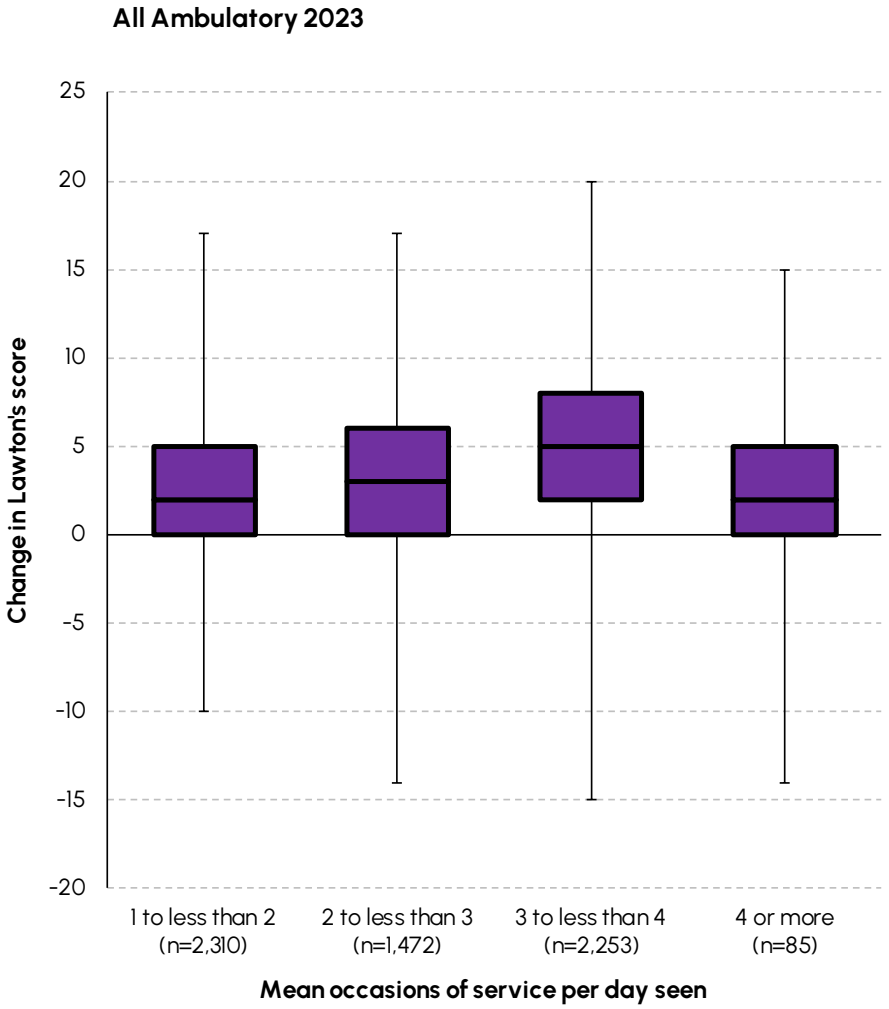




Note: 4 episode(s) had a Lawton's change score < -10.

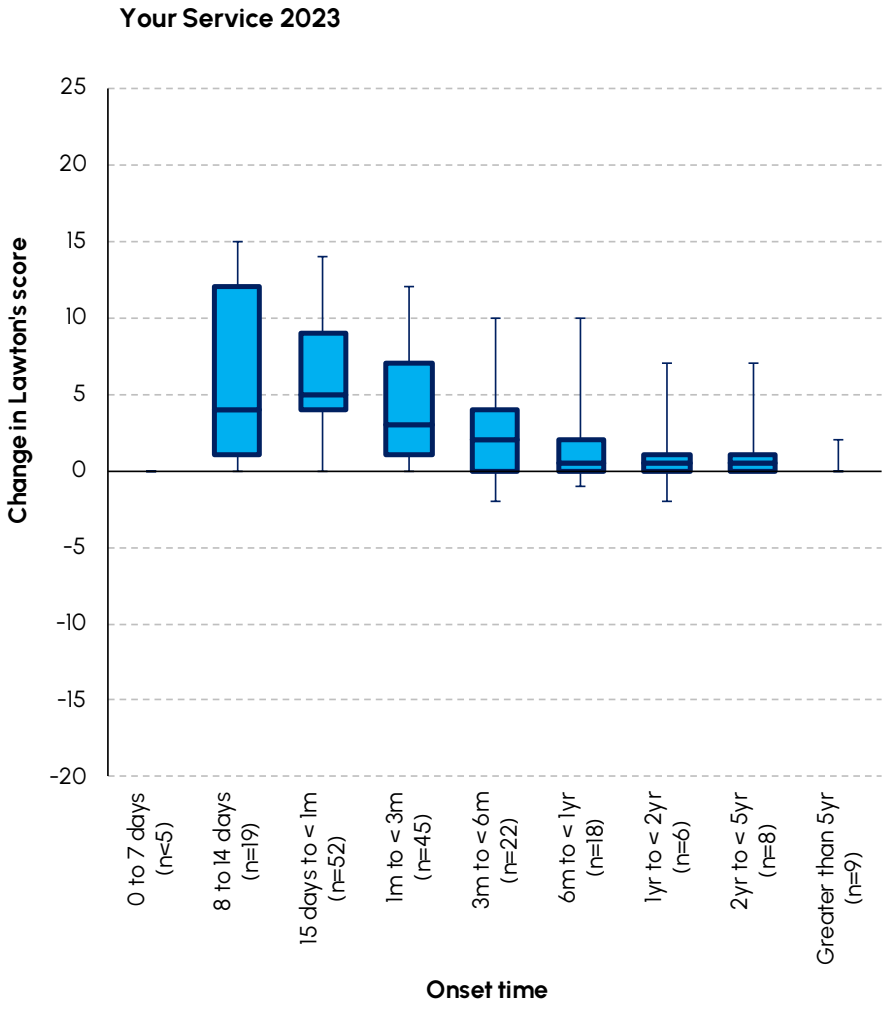
Change in Lawton's score by OOS/day seen – all episodes

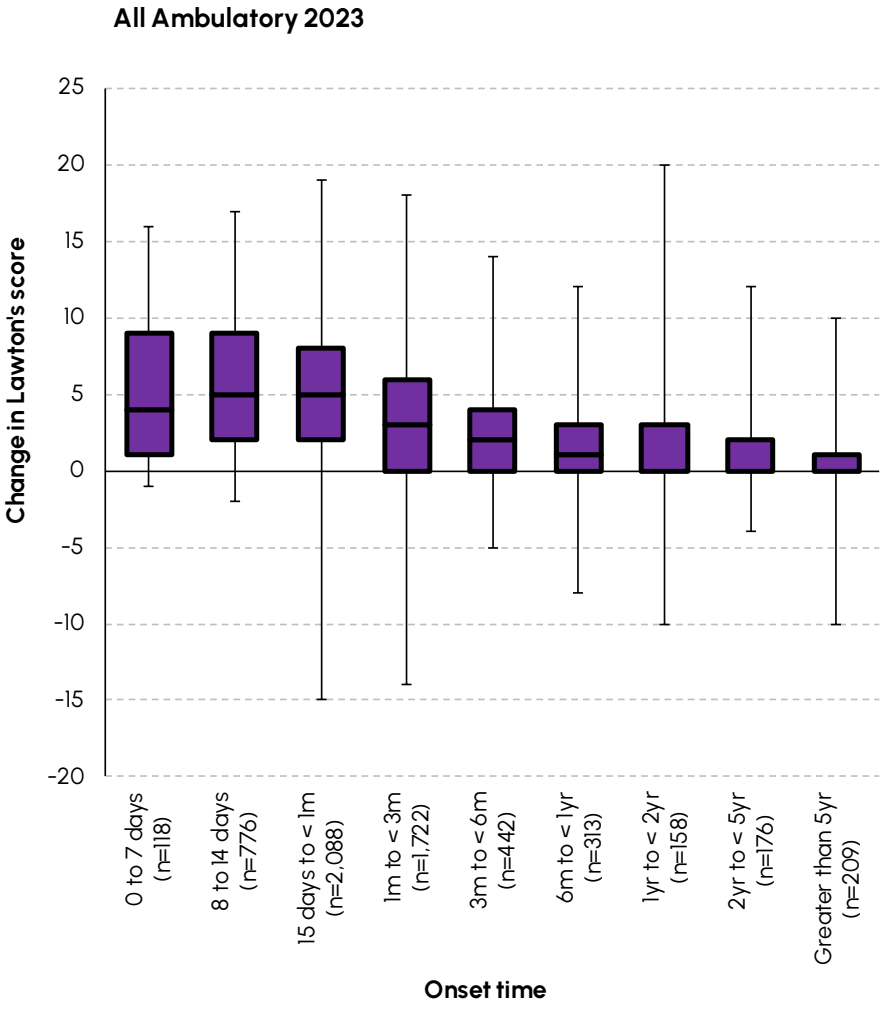




NOTE: To understand how to interpret these figures please refer to Appendix 3

Change in Lawton's score by onset time – all episodes





NOTE: To understand how to interpret these figures please refer to Appendix 3

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:

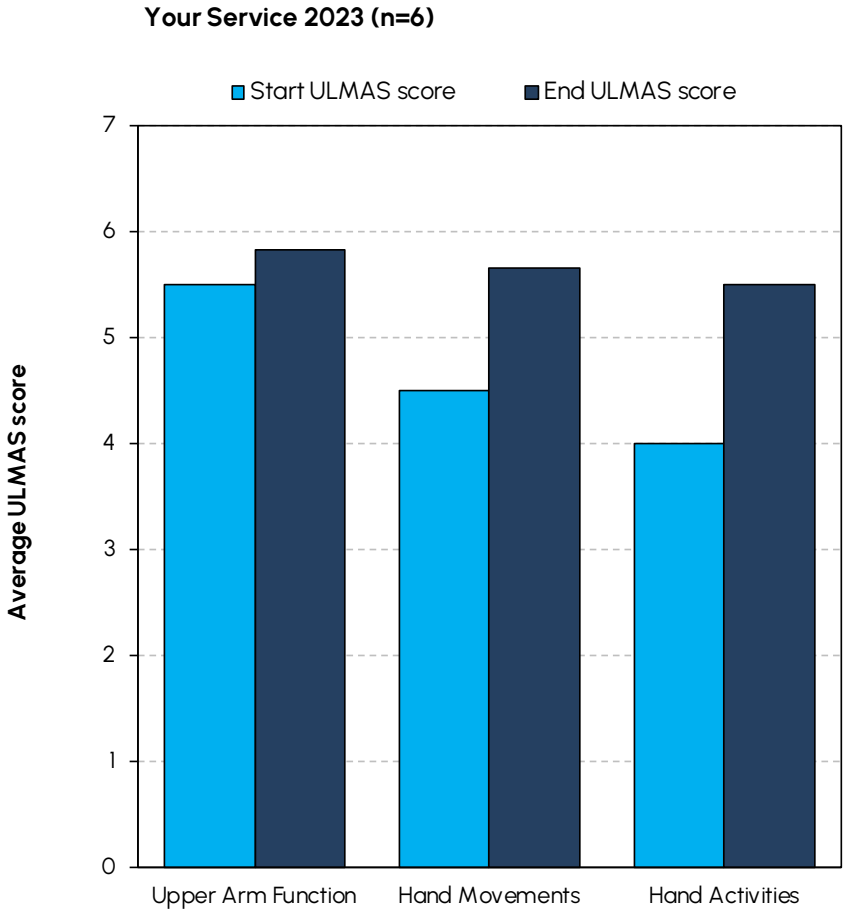
- Upper Limb Motor Assessment Scale (UL-MAS)
- Timed 10 Metre Walk Test
- Mayo-Portland Adaptability Inventory-4 (MPAI-4)
- De Morton Mobility Index (DEMMI)
- Timed Up and Go

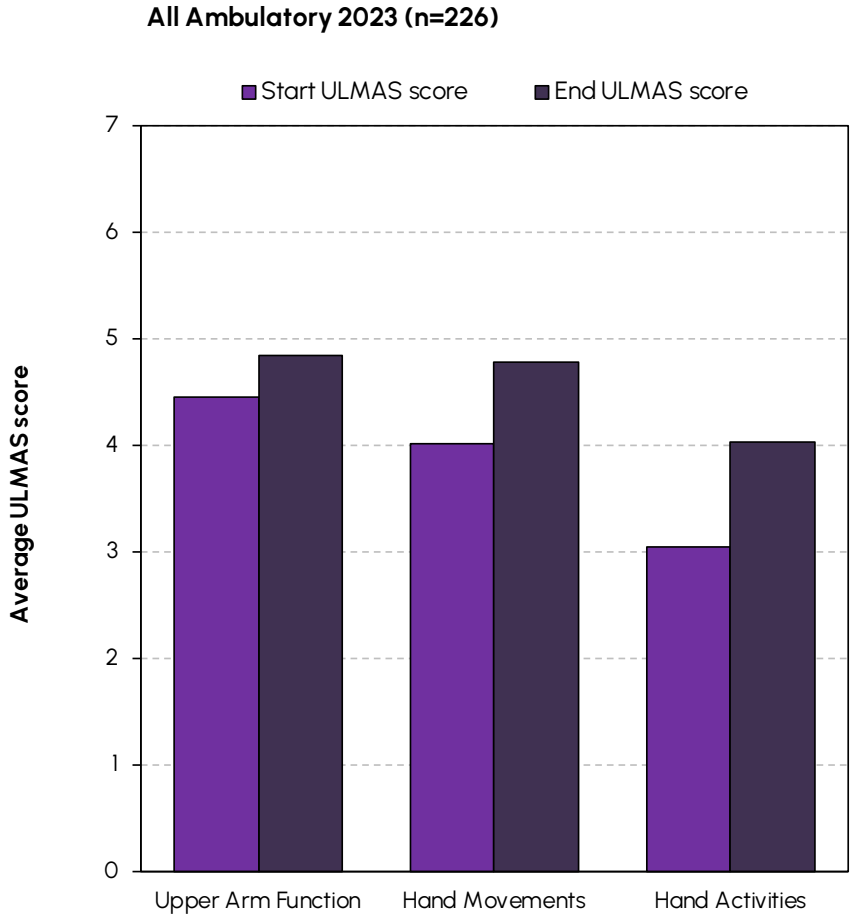
Upper Limb Motor Assessment Scale (UL-MAS)

- 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.

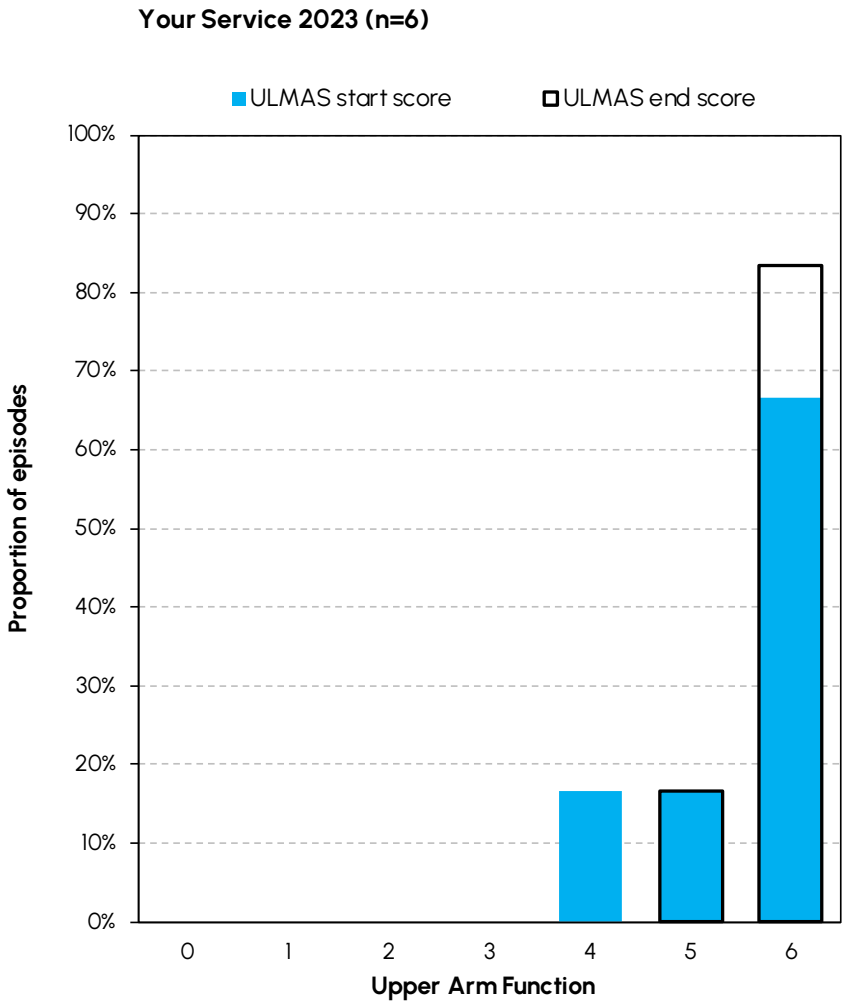
For further information refer to the AROC Ambulatory Data Dictionary V4.1 for Clinicians.

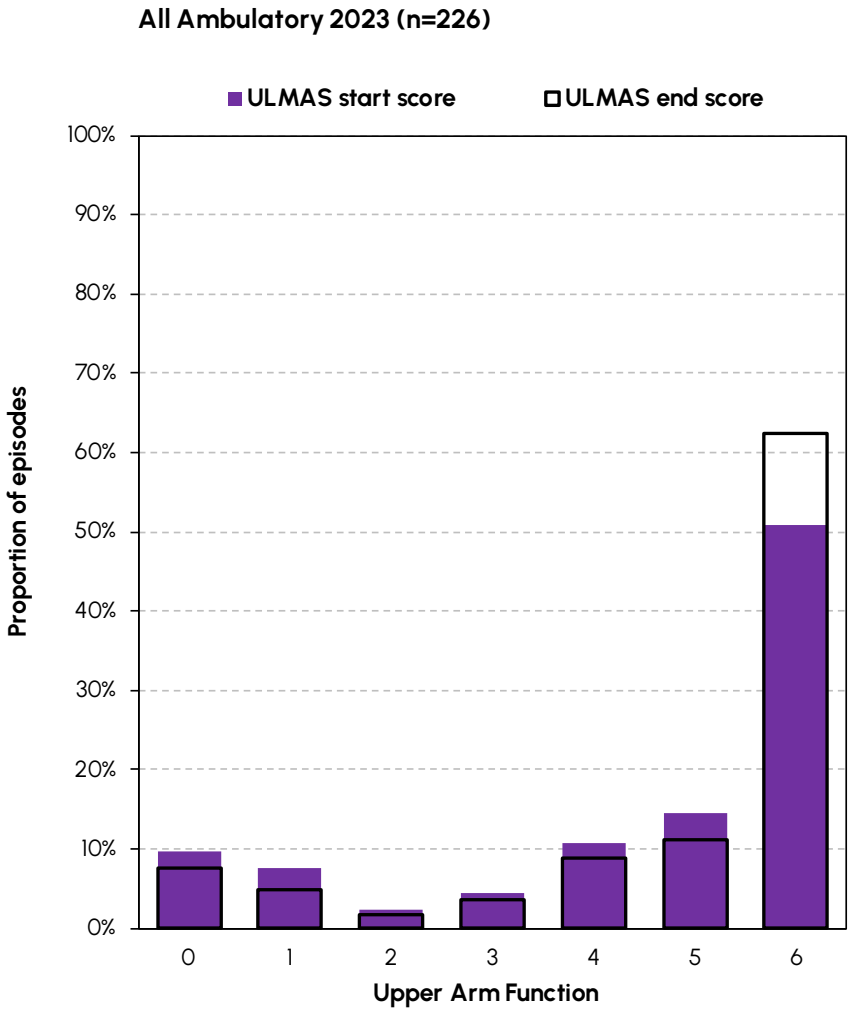
Average ULMAS start and end score by sub-group



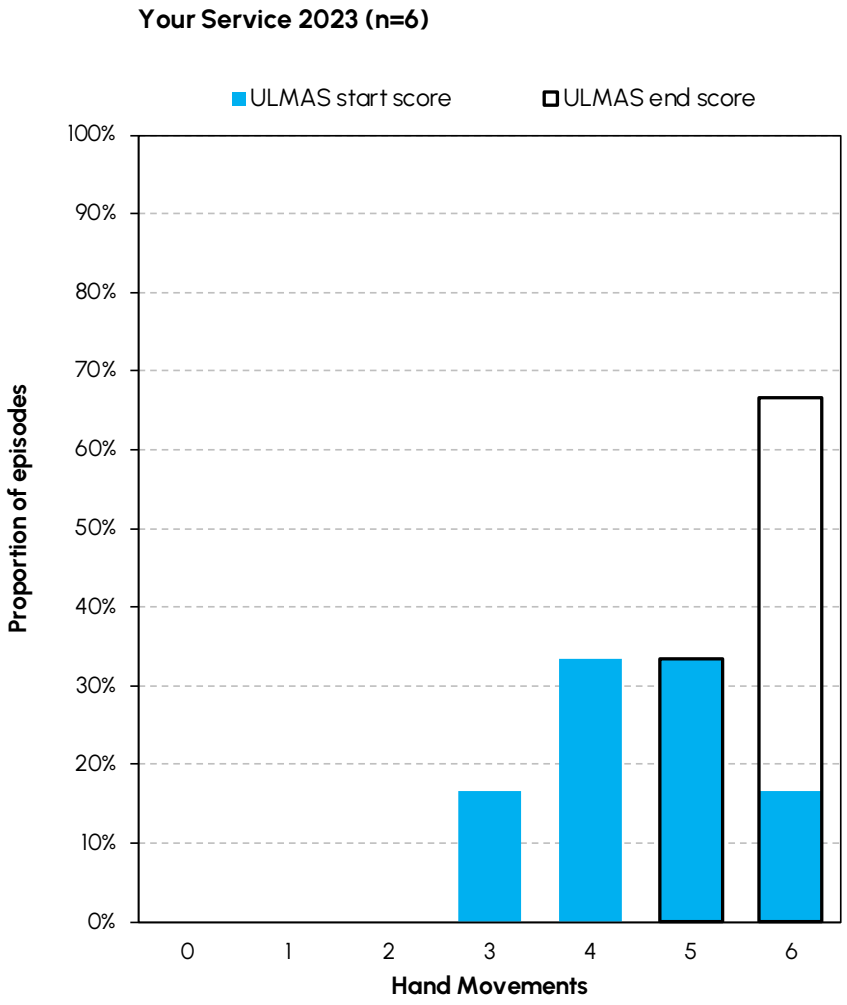


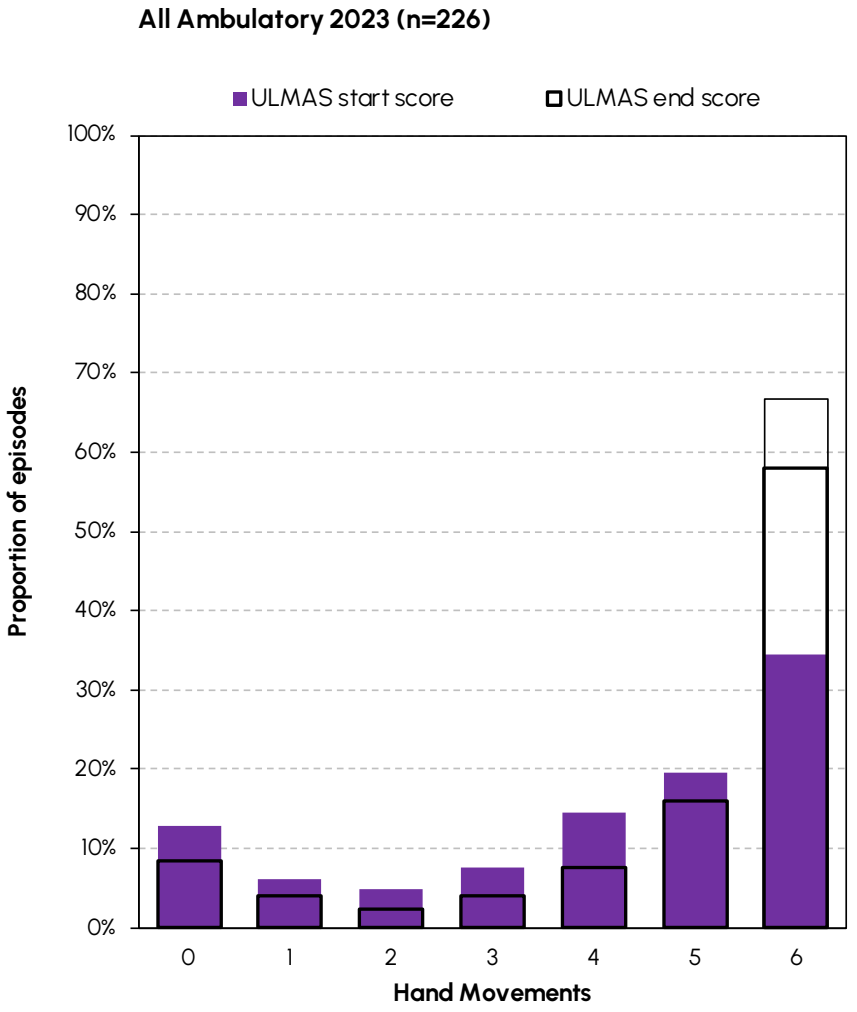
ULMAS start and end total – Upper arm function



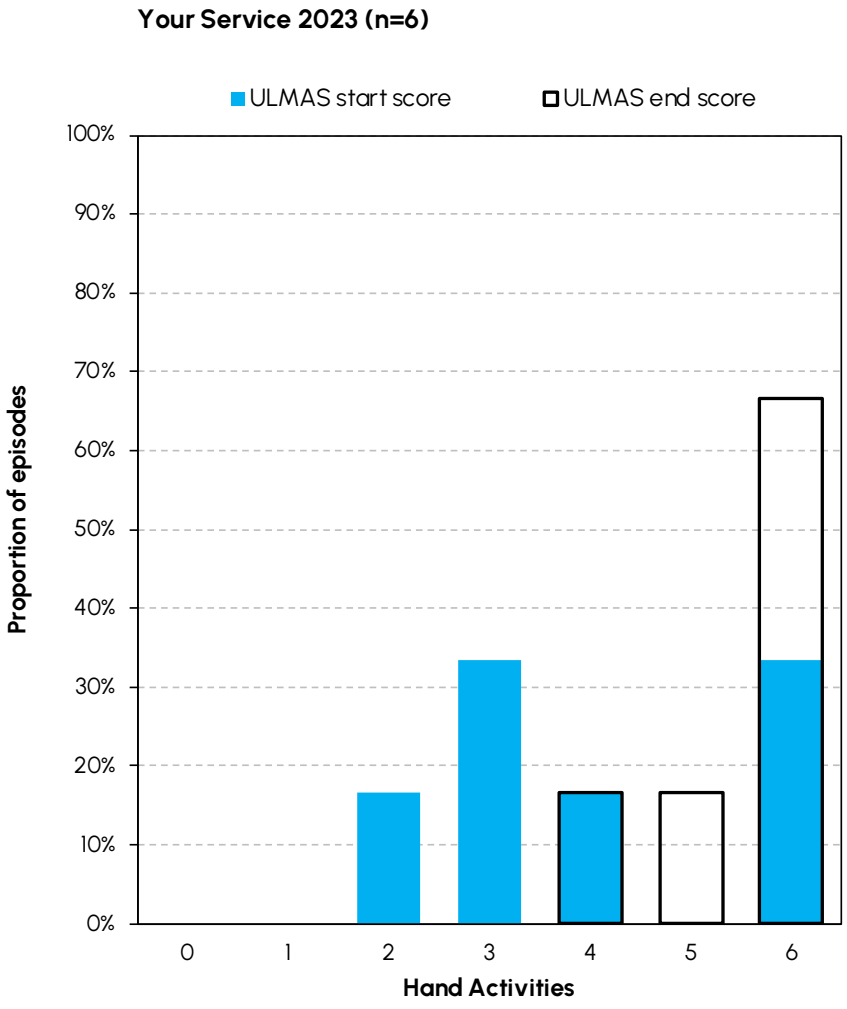


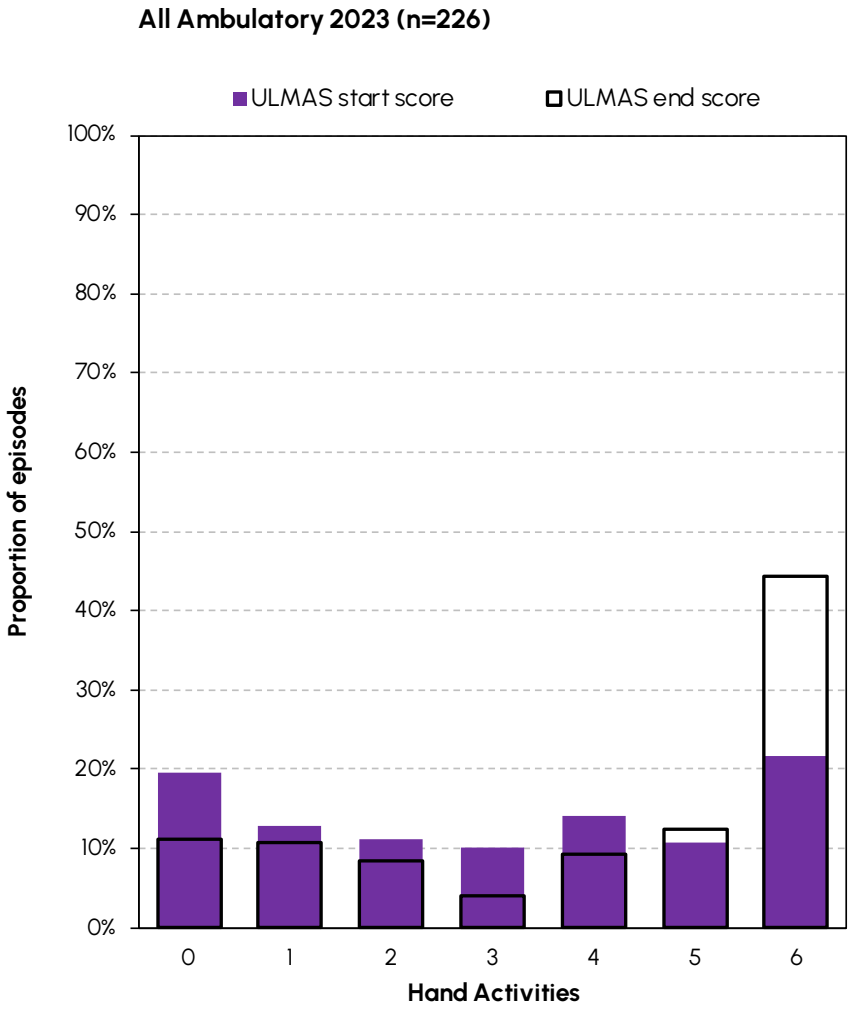
ULMAS start and end total – Hand movements



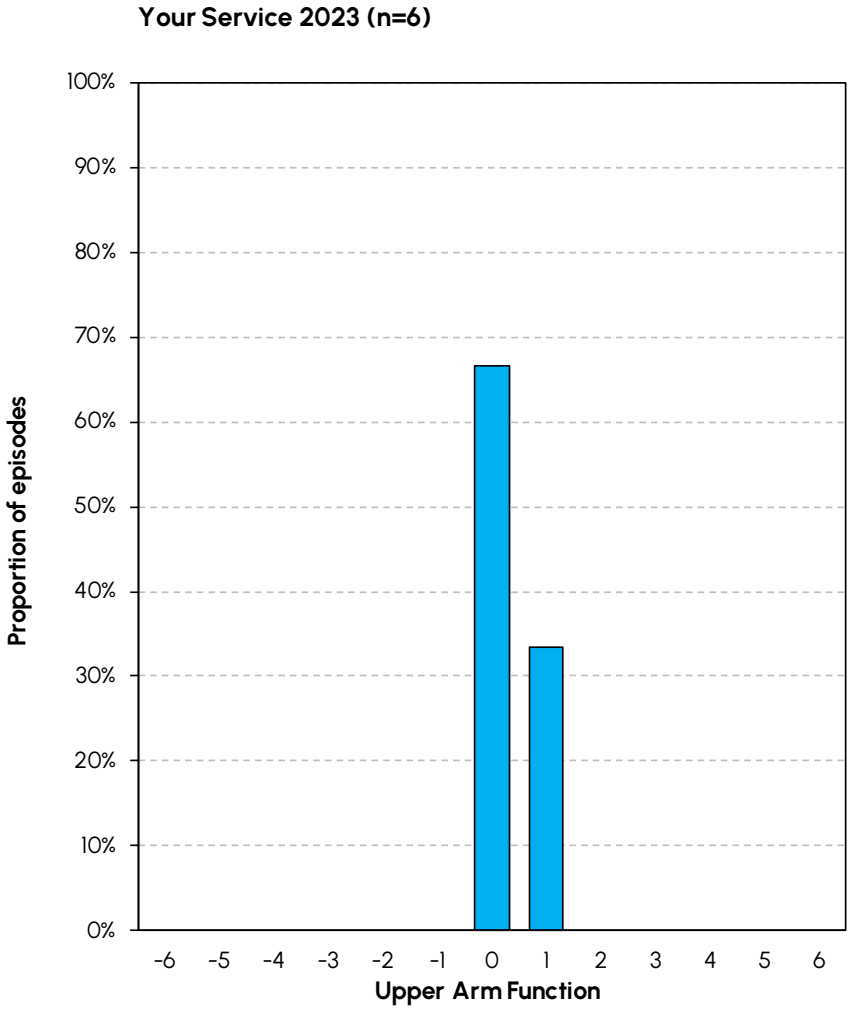


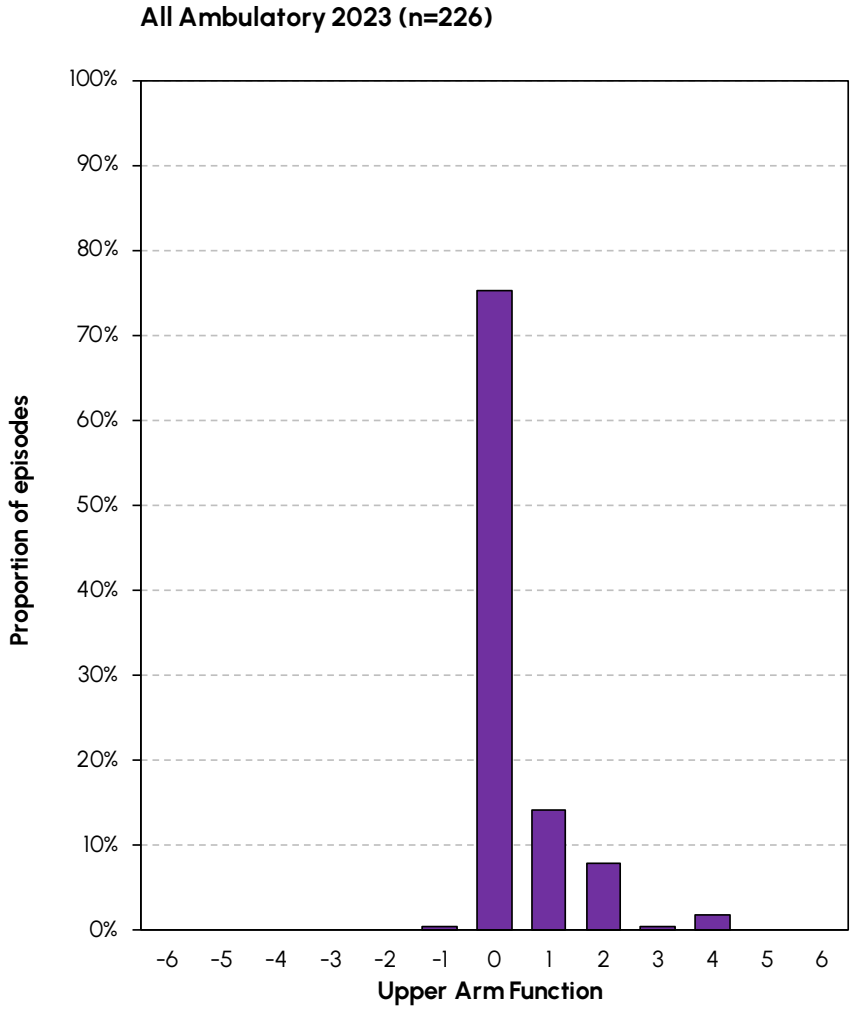
ULMAS start and end total – Hand activities



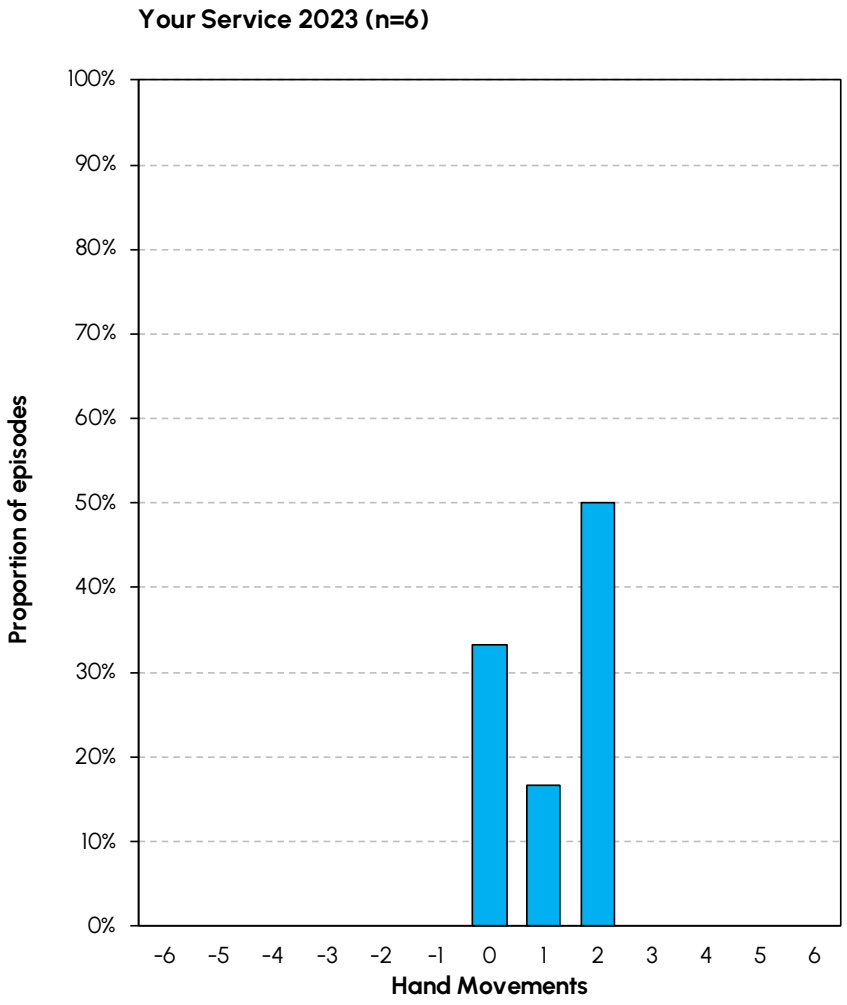


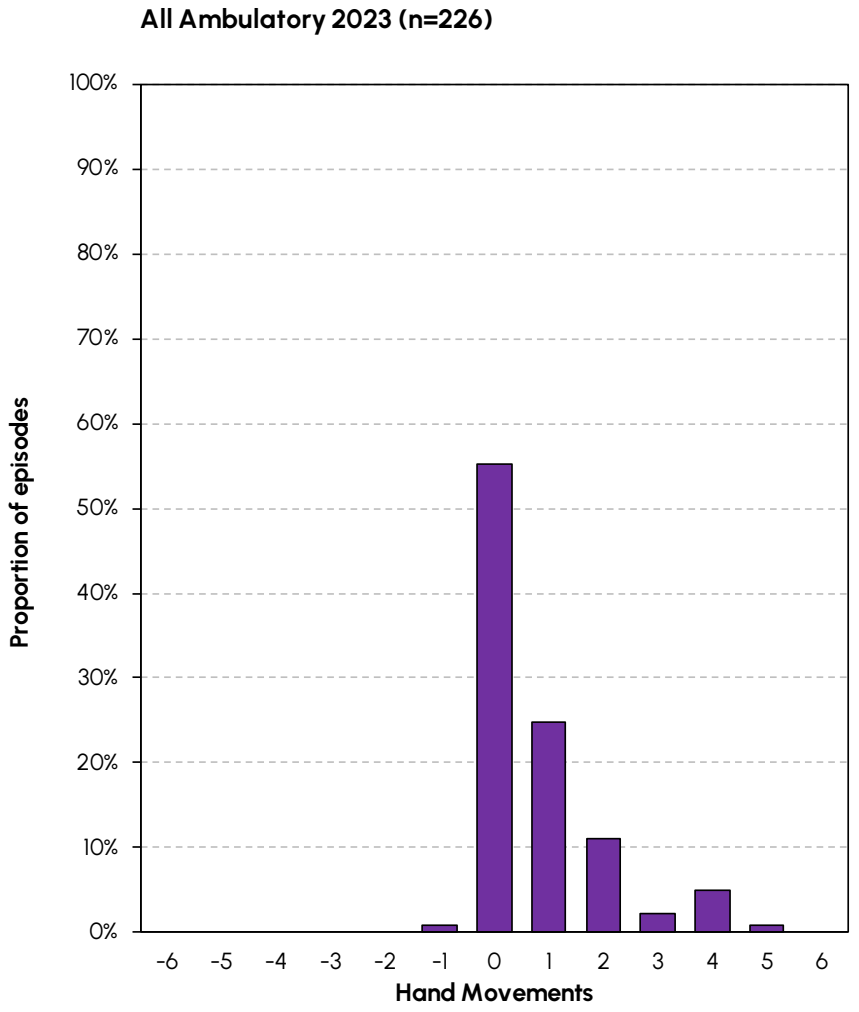
Change in ULMAS score – Upper arm function



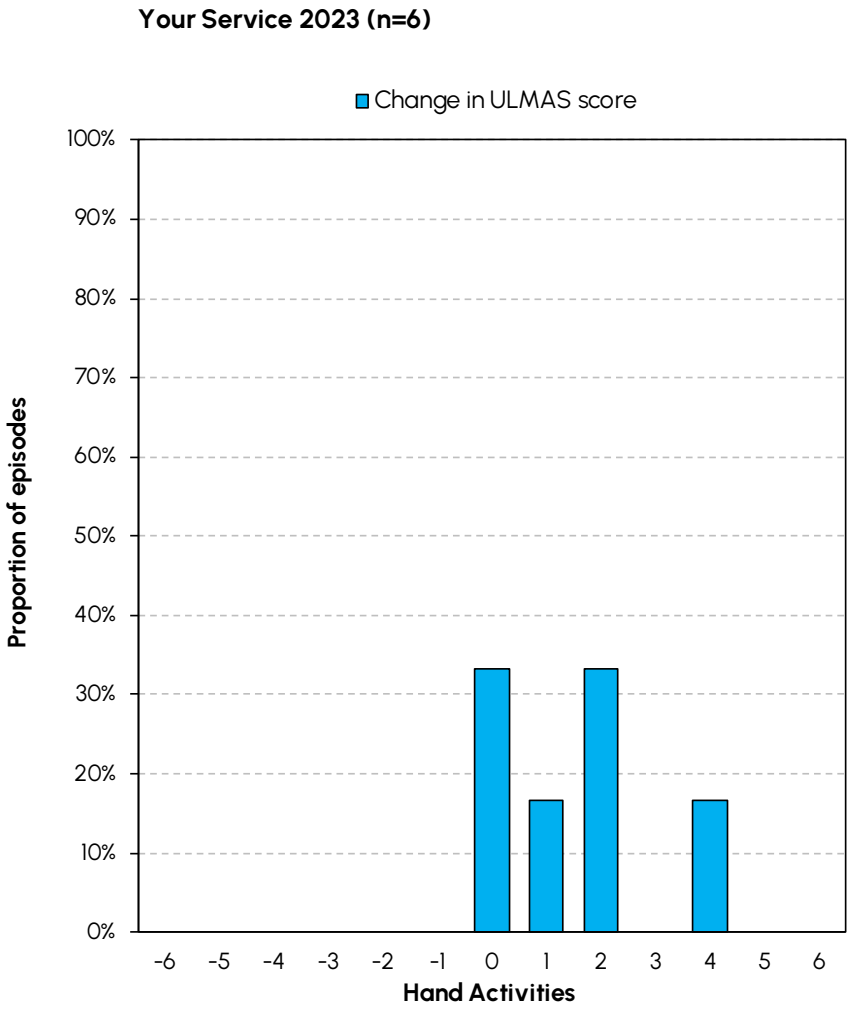


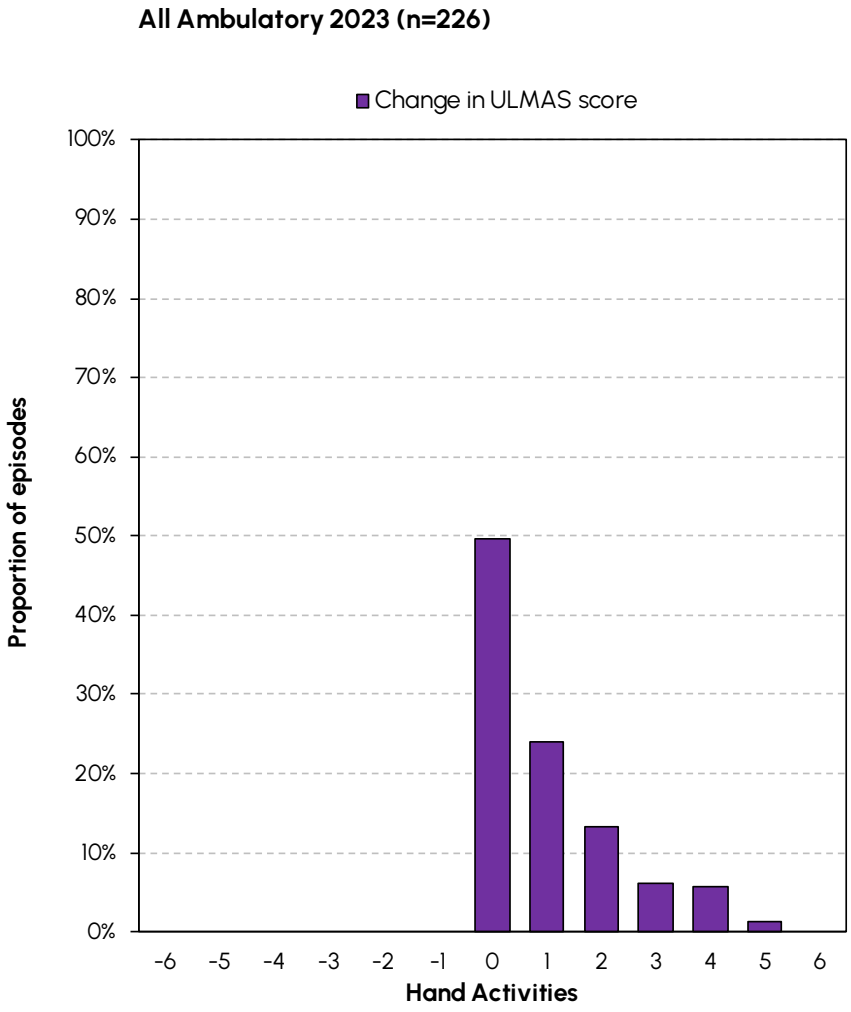
Change in ULMAS score – Hand movements



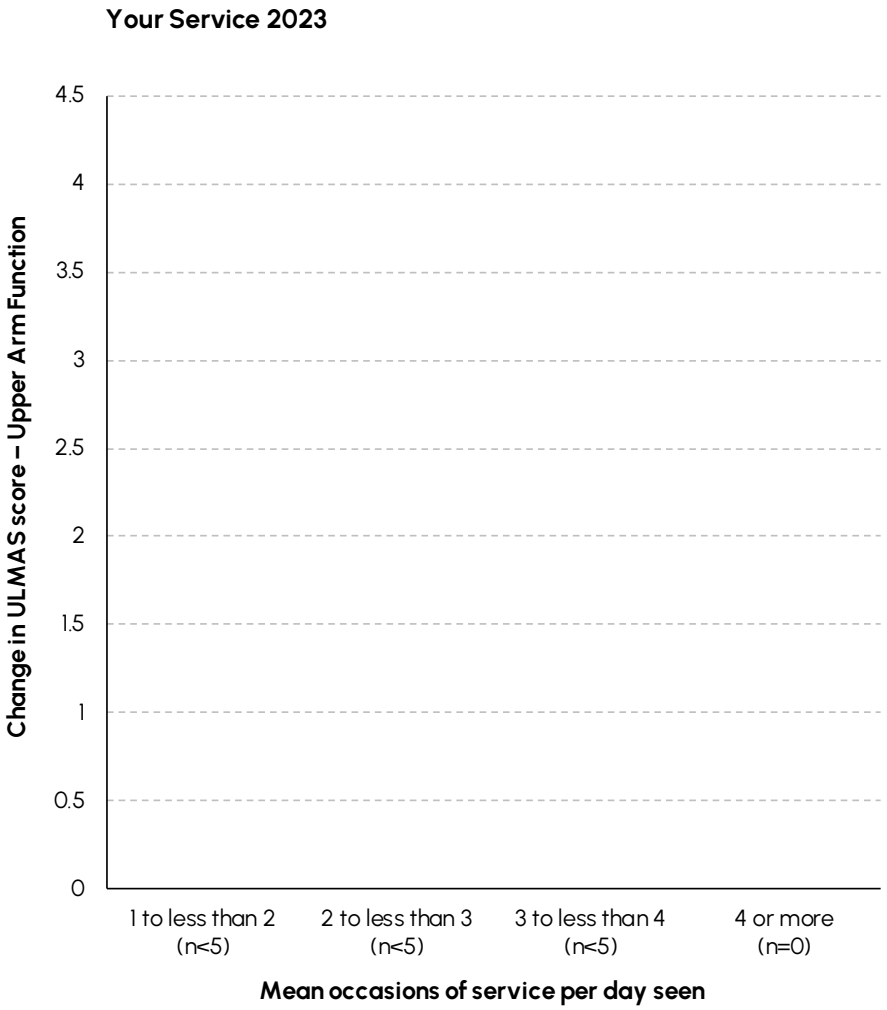


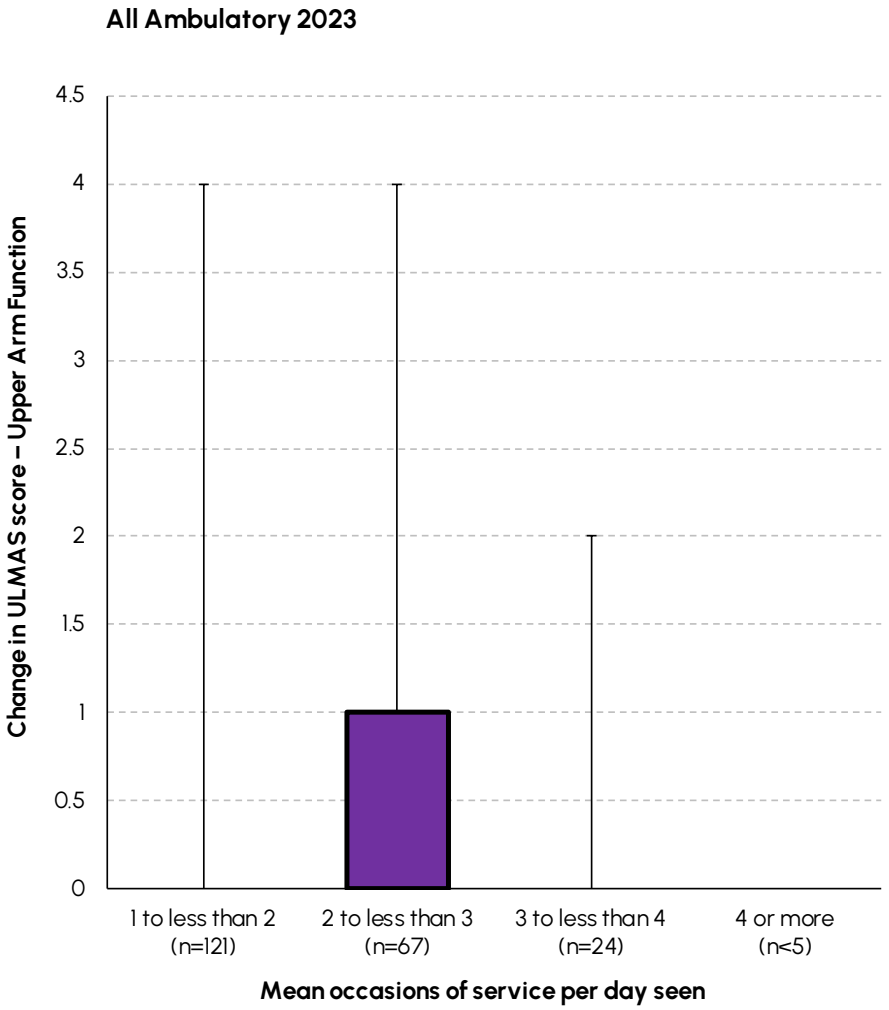
Change in ULMAS score – Hand activities





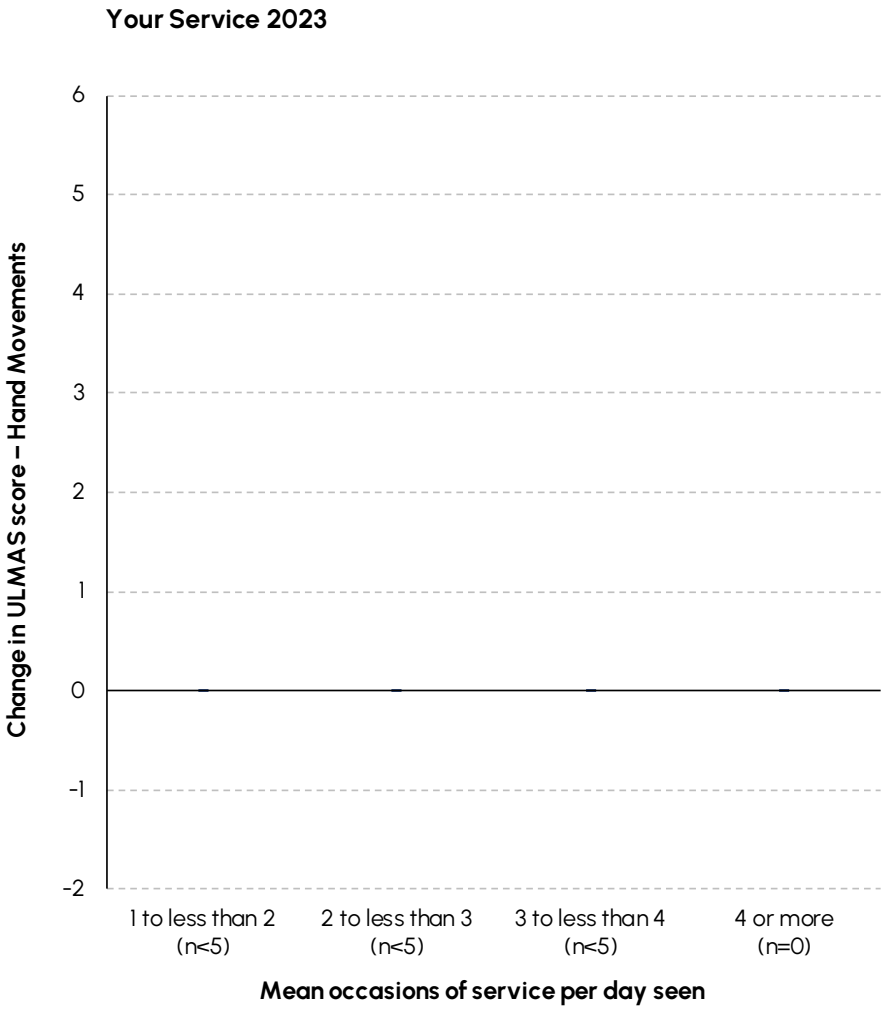
Change in ULMAS score by OOS/day seen – Upper arm function

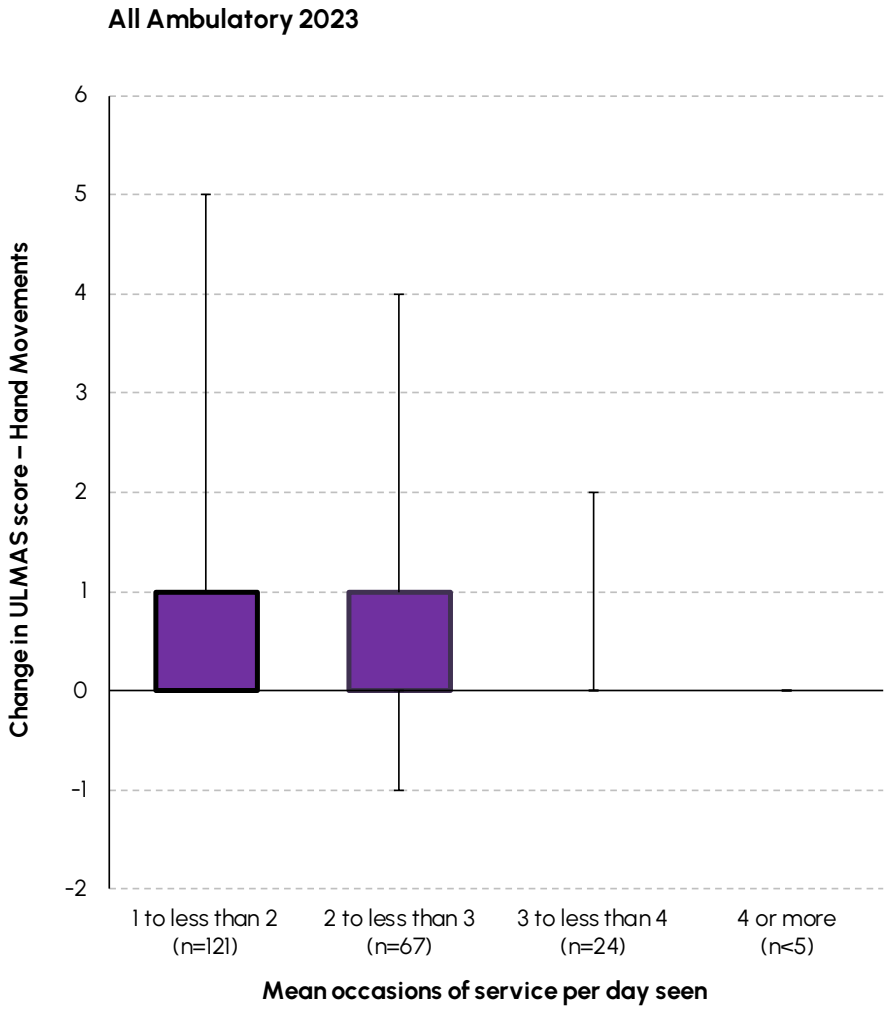




NOTE: To understand how to interpret these figures please refer to Appendix 3

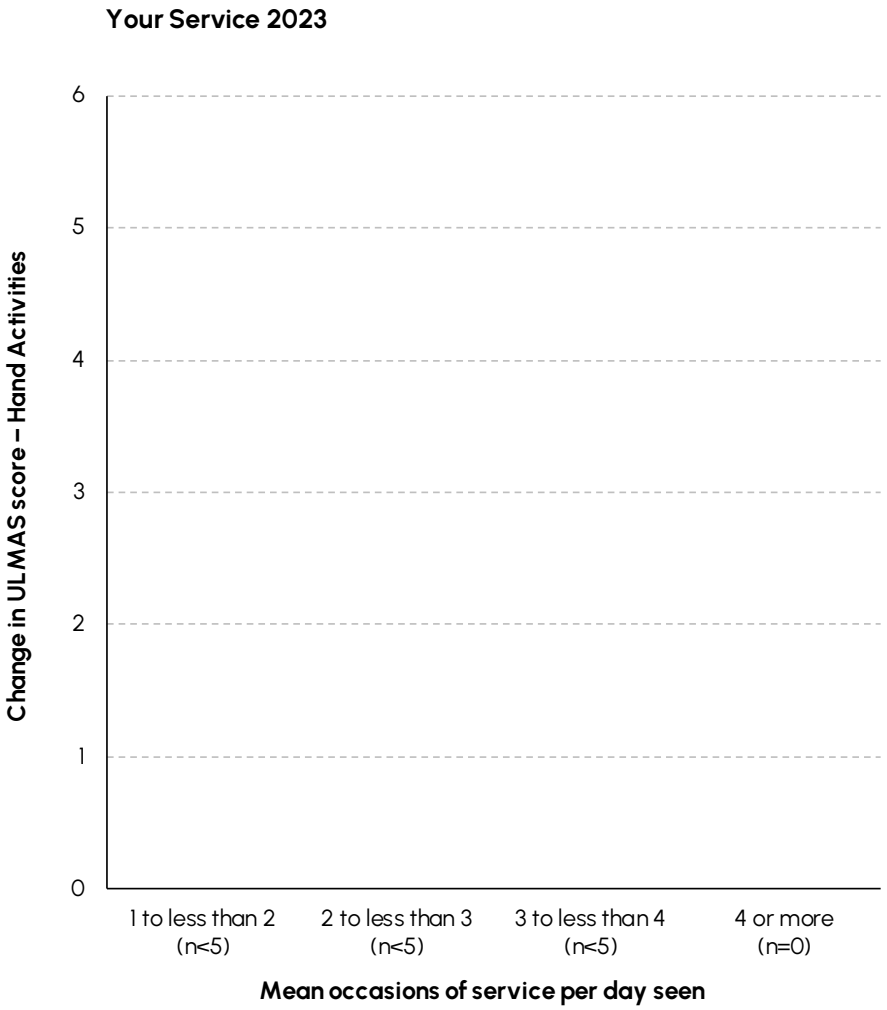
Change in ULMAS score by OOS/day seen – Hand movements

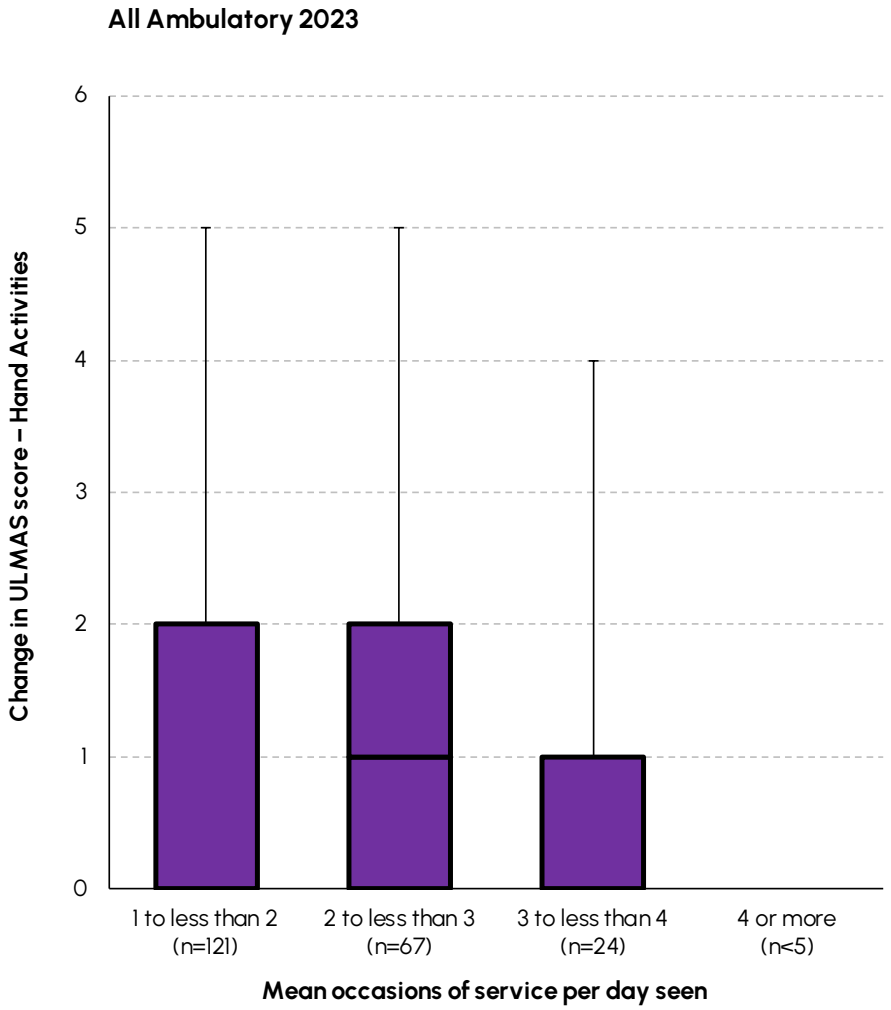




NOTE: To understand how to interpret these figures please refer to Appendix 3

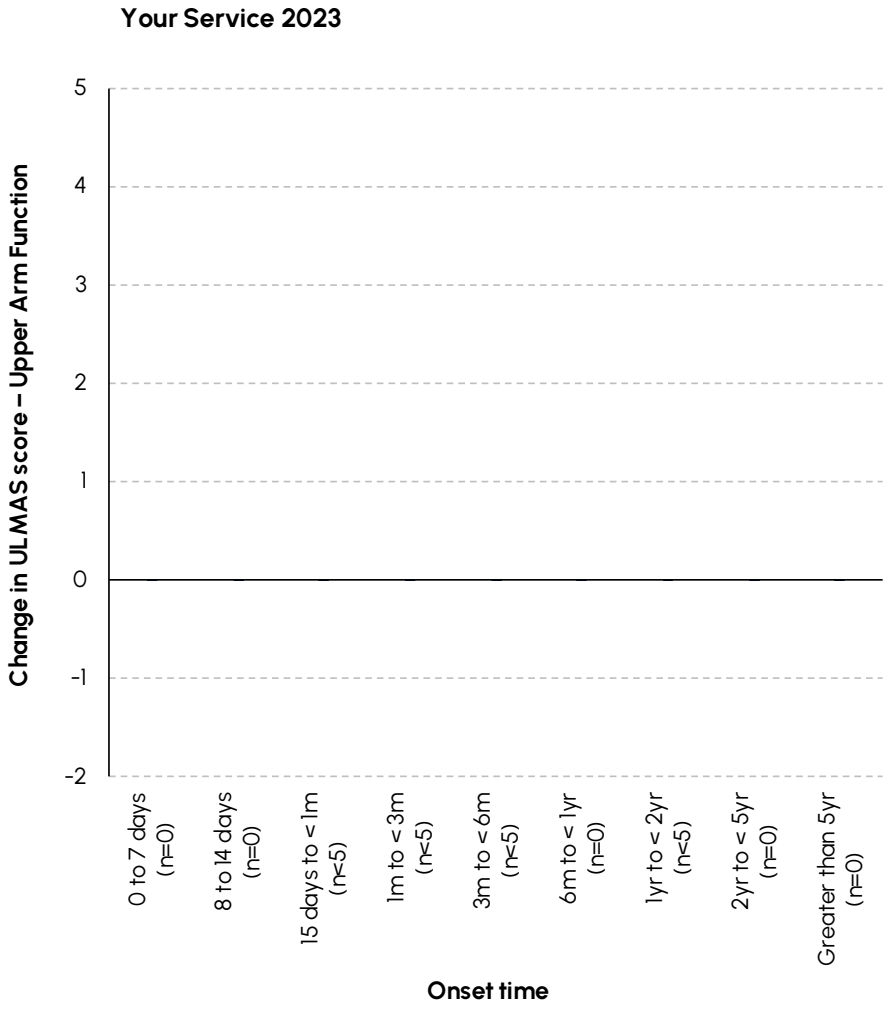
Change in ULMAS score by OOS/day seen – Hand activities

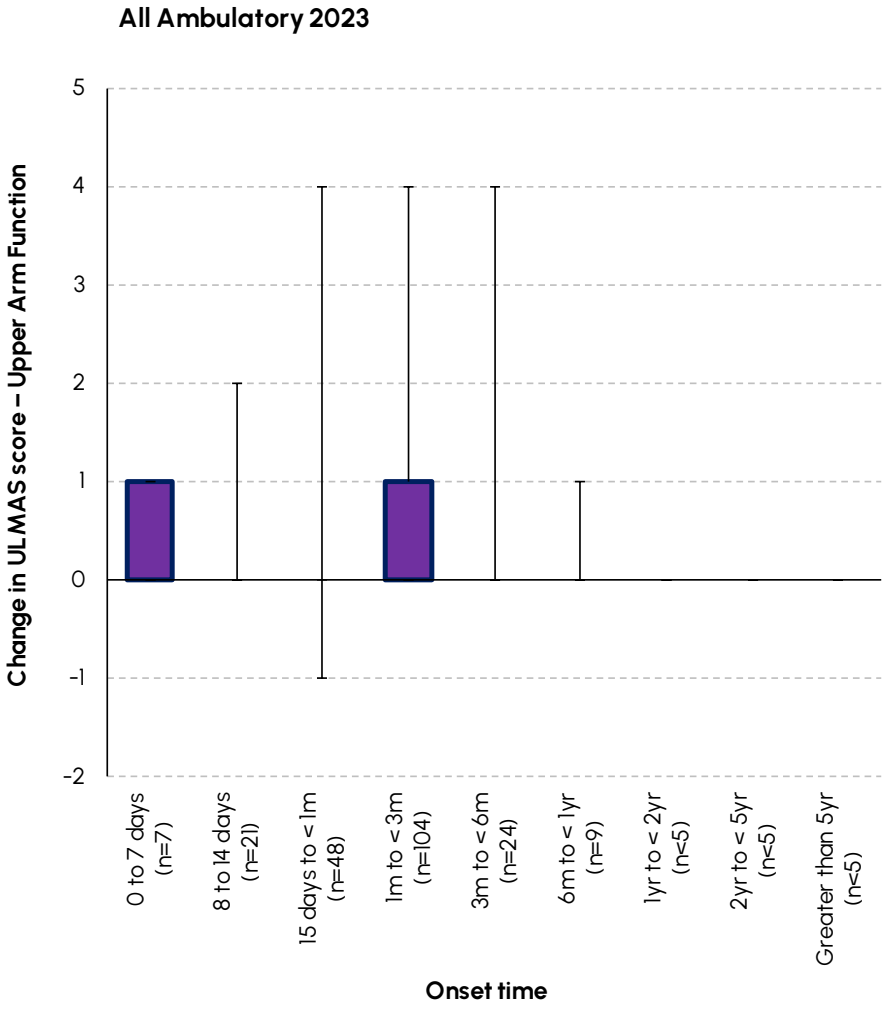




NOTE: To understand how to interpret these figures please refer to Appendix 3

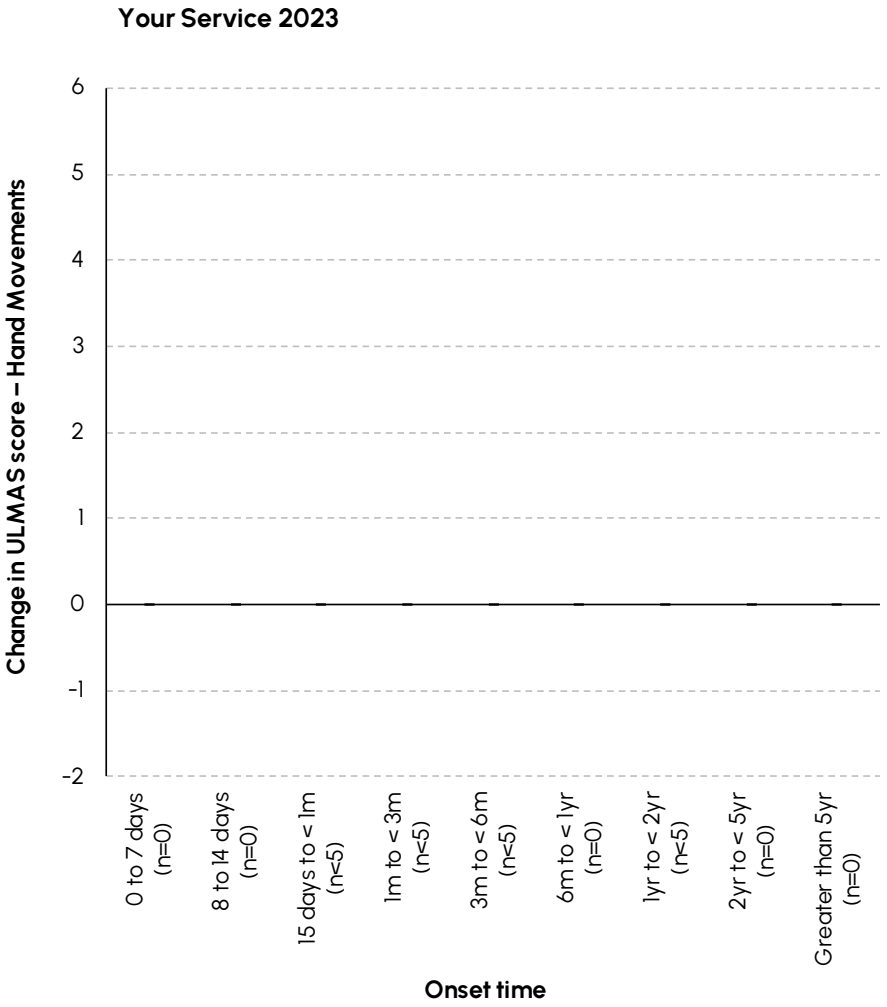
Change in ULMAS score by onset time – Upper arm function

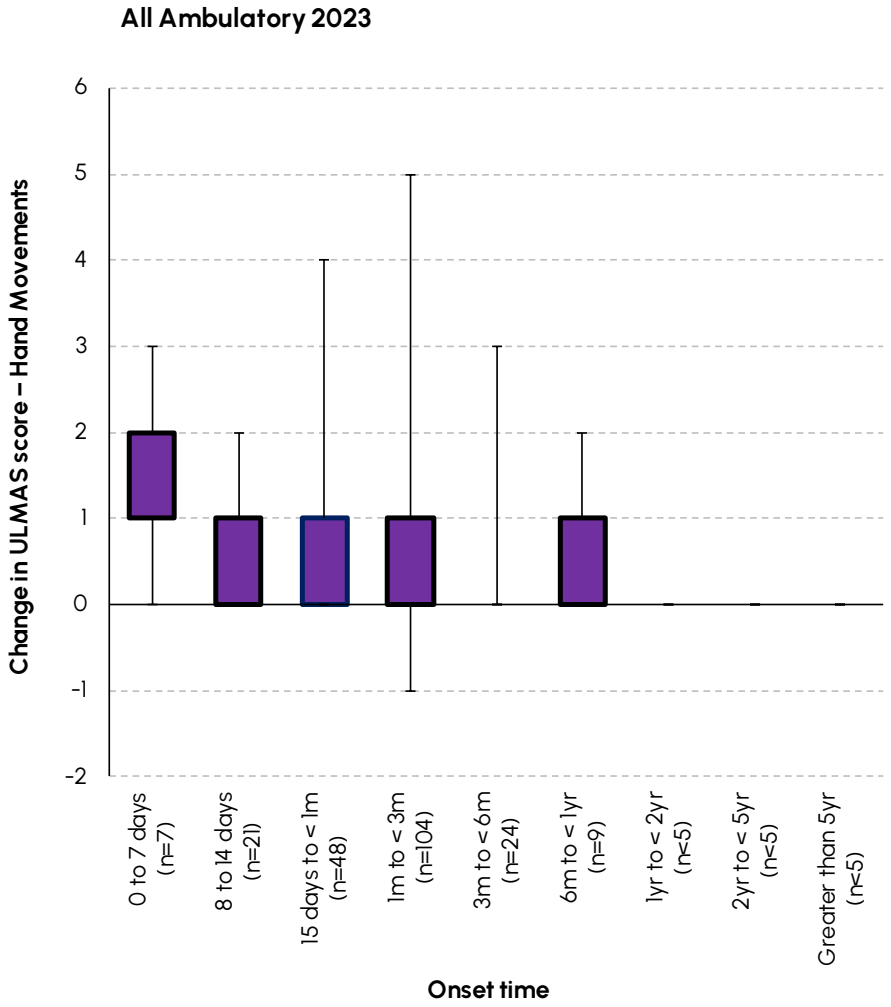




NOTE: To understand how to interpret these figures please refer to Appendix 3

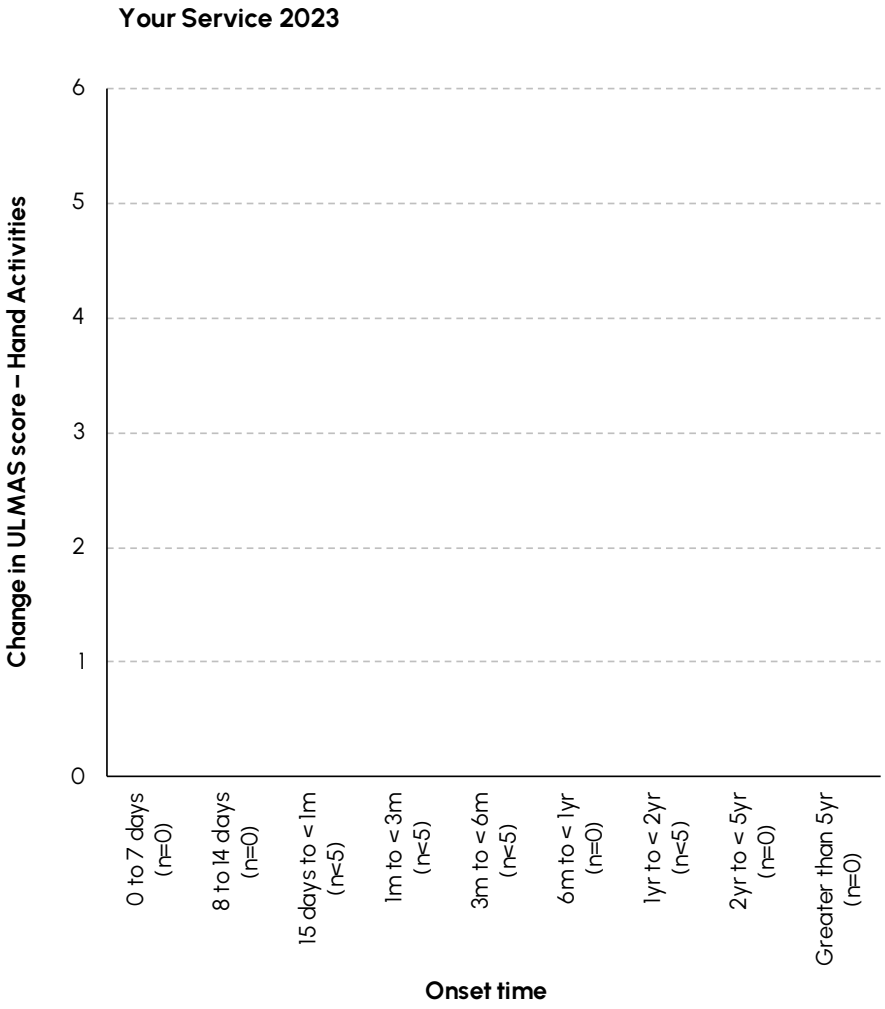
Change in ULMAS score by onset time – Hand movements

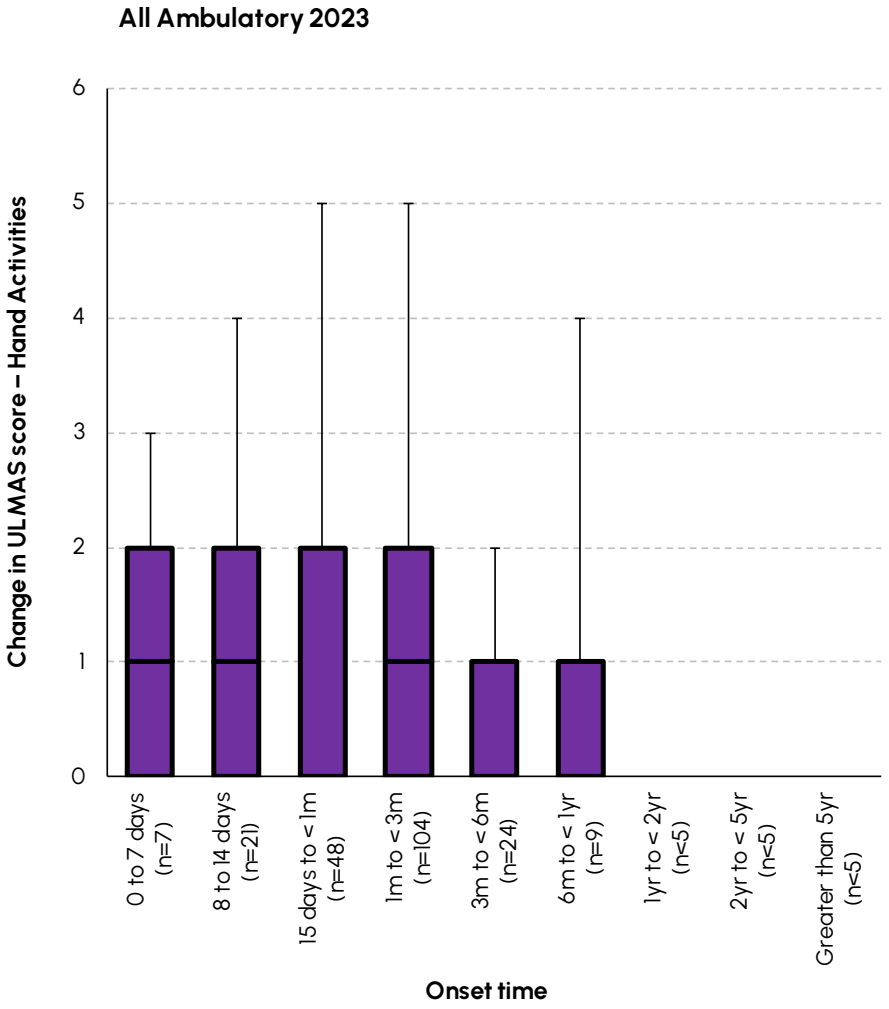




NOTE: To understand how to interpret these figures please refer to Appendix 3

Change in ULMAS score by onset time – Hand activities





NOTE: To understand how to interpret these figures please refer to Appendix 3

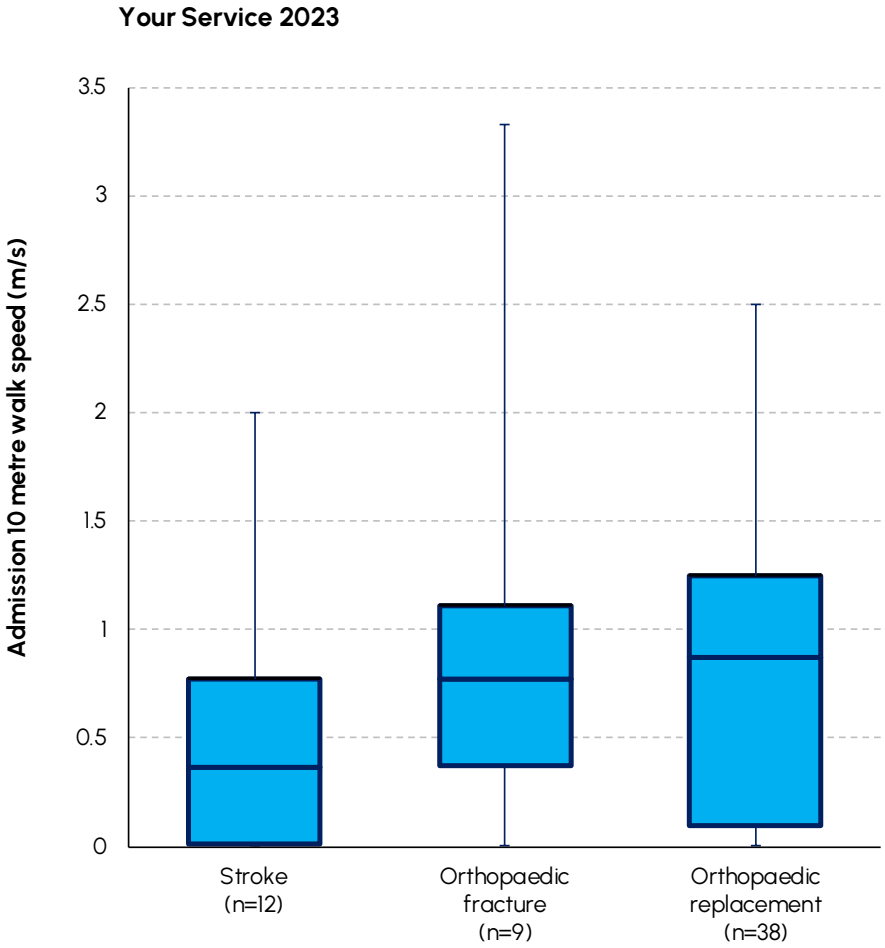
Timed 10 metre walk test

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:

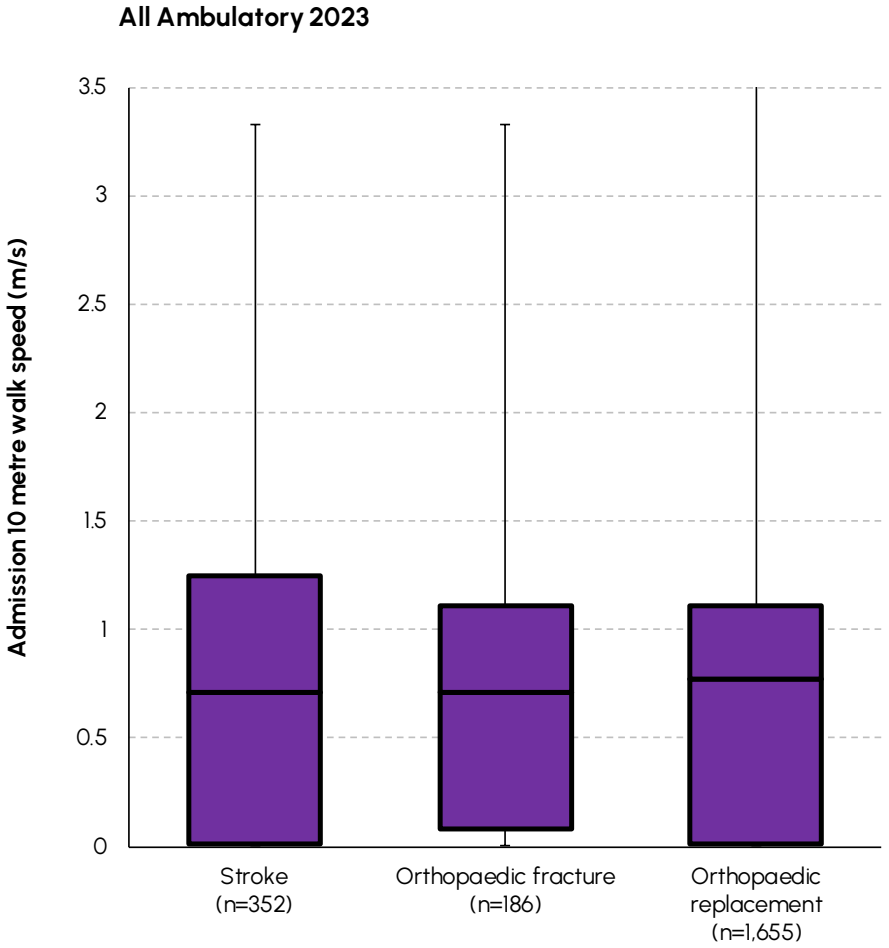
- Stroke
- Lower limb orthopaedic injury or joint replacement
- Amputation of lower limb (optional measure)

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

Admission timed 10 metre walk test speed by impairment



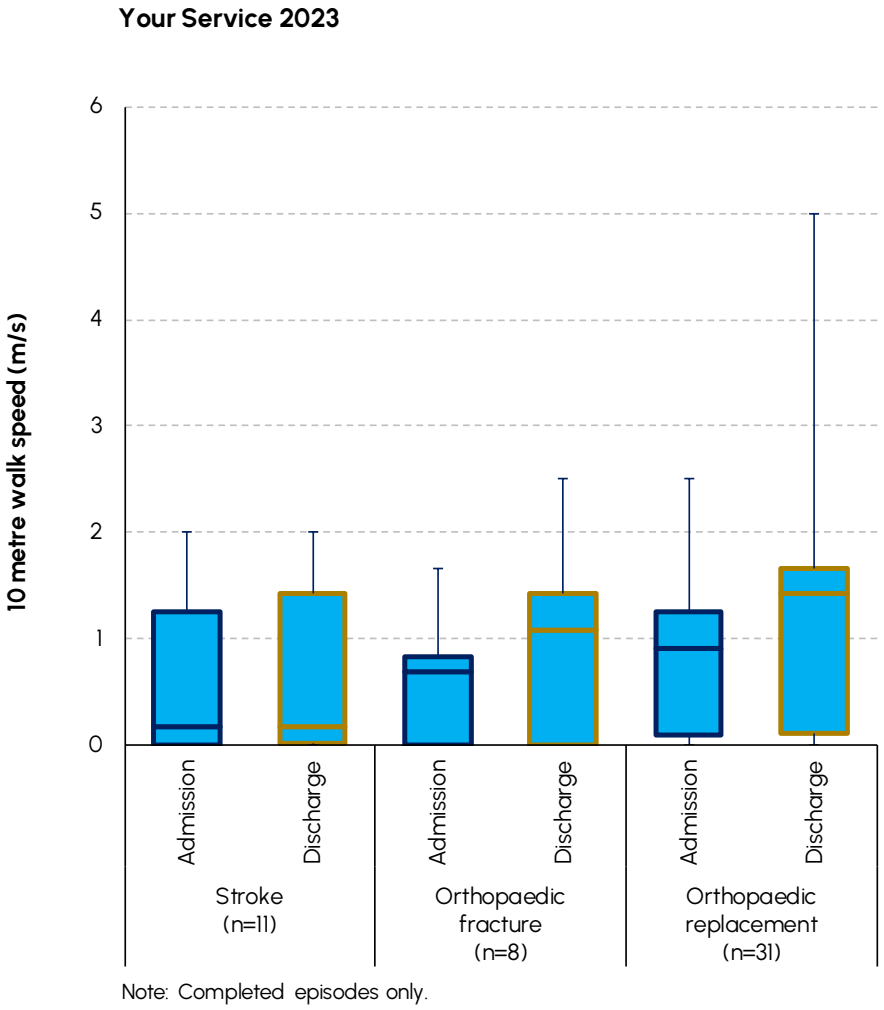
Note: All admissions.



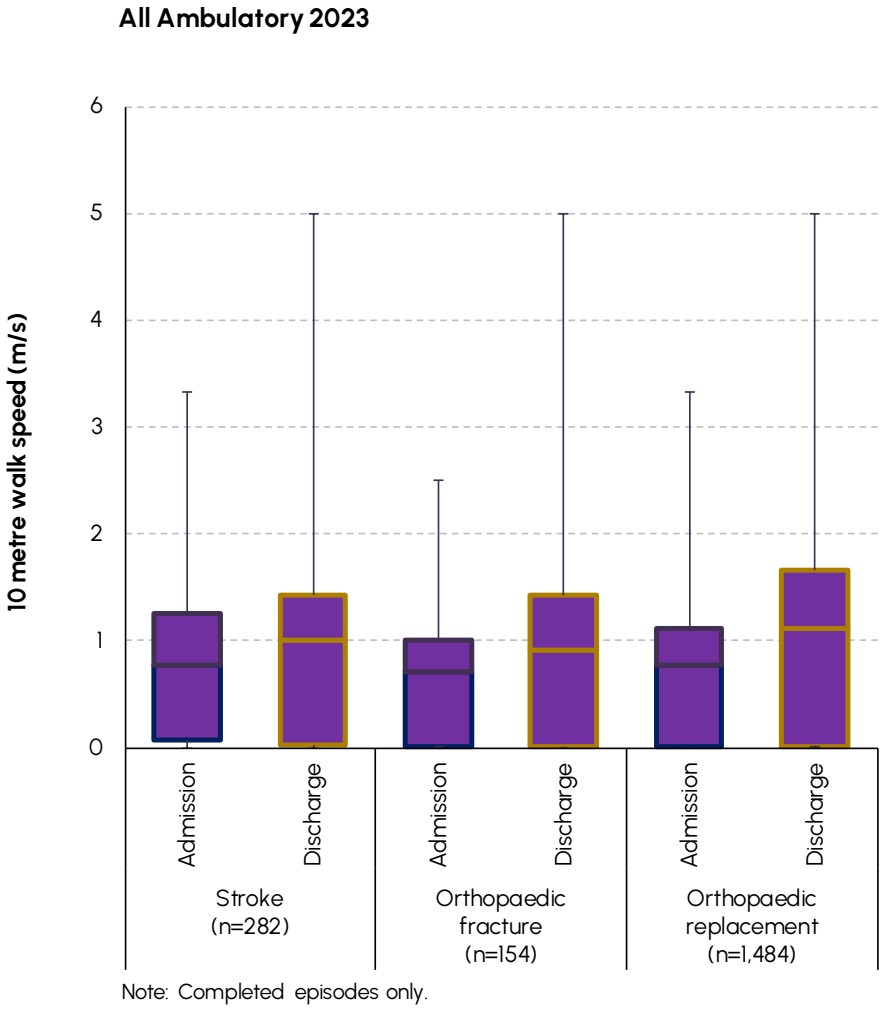
Note: All admissions.

NOTE: To understand how to interpret these figures please refer to Appendix 3

Admission and discharge timed 10 metre walk test speed by impairment



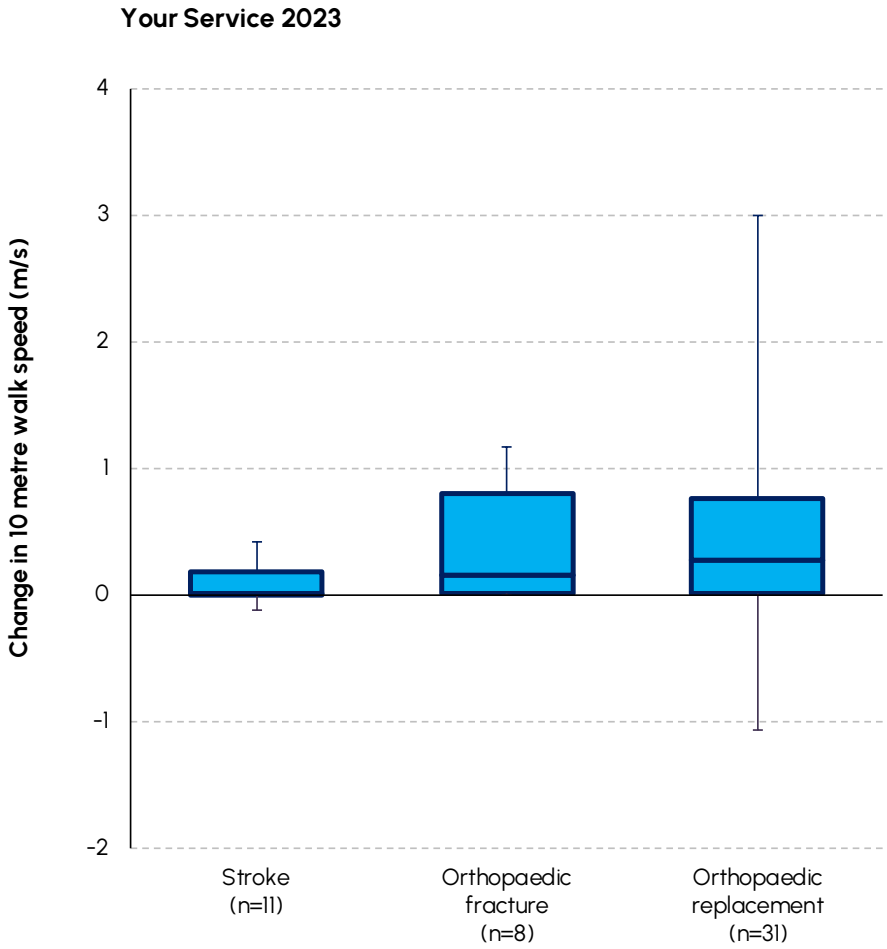
Note: Completed episodes only.



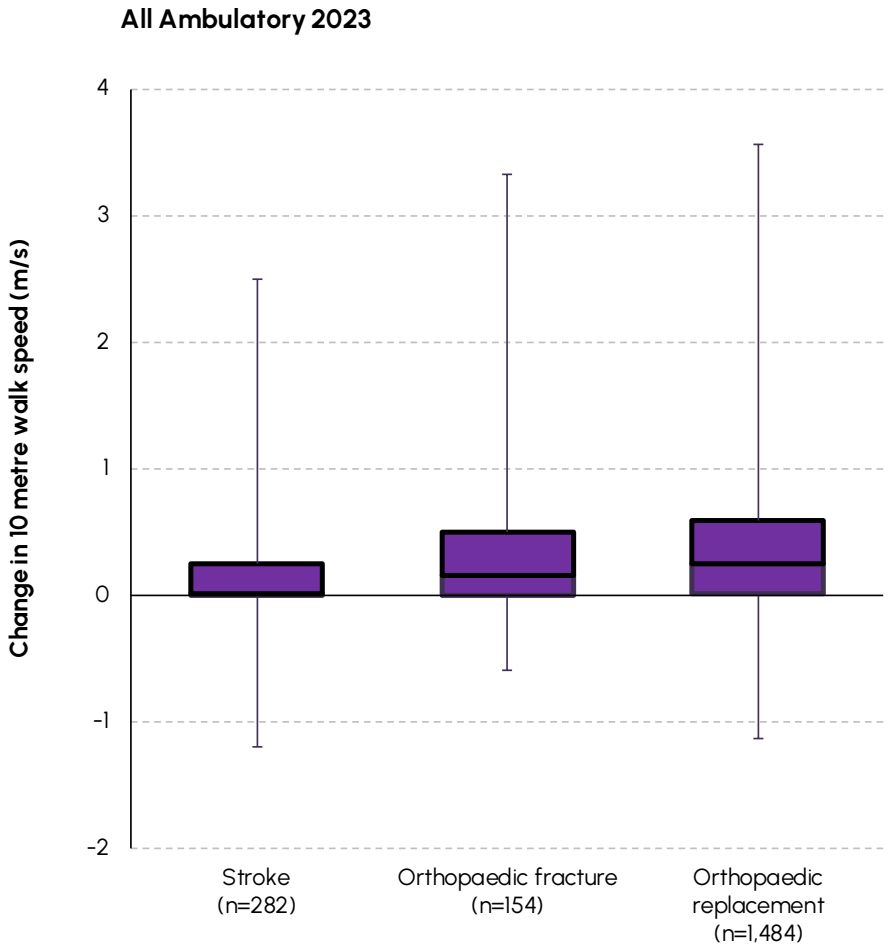
Note: Completed episodes only.

NOTE: To understand how to interpret these figures please refer to Appendix 3

Change in 10 metre walk speed by impairment



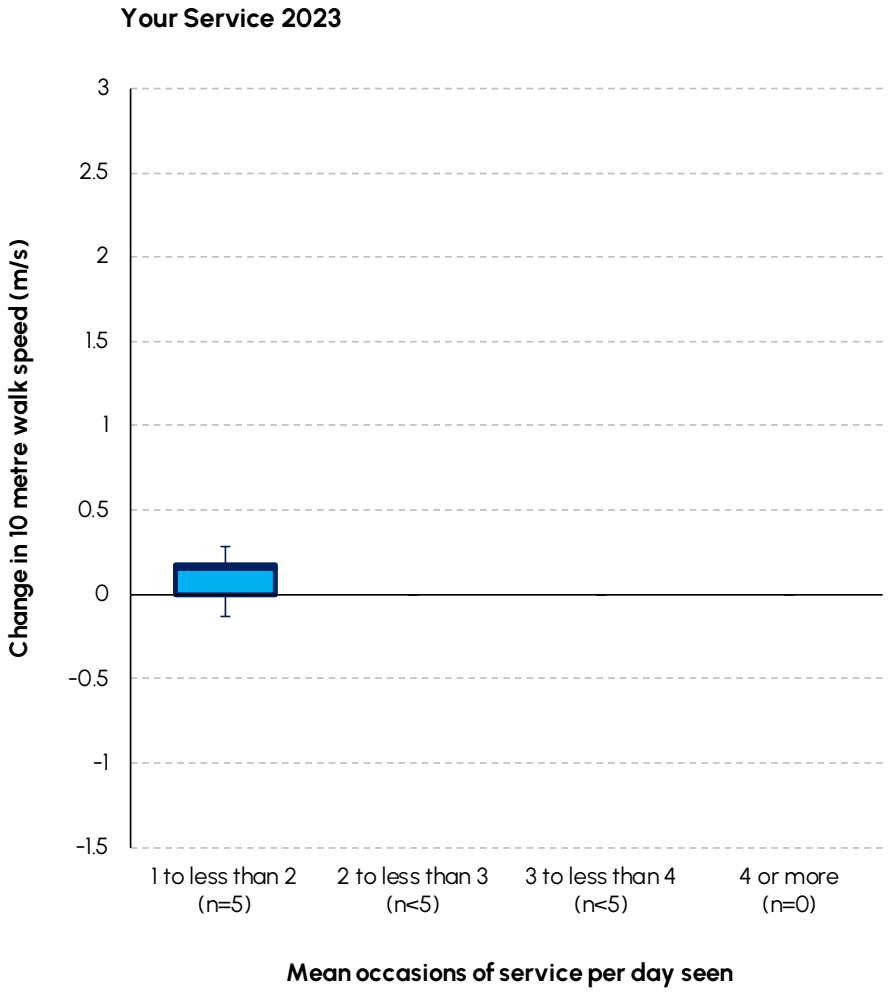
Note: Completed episodes only.

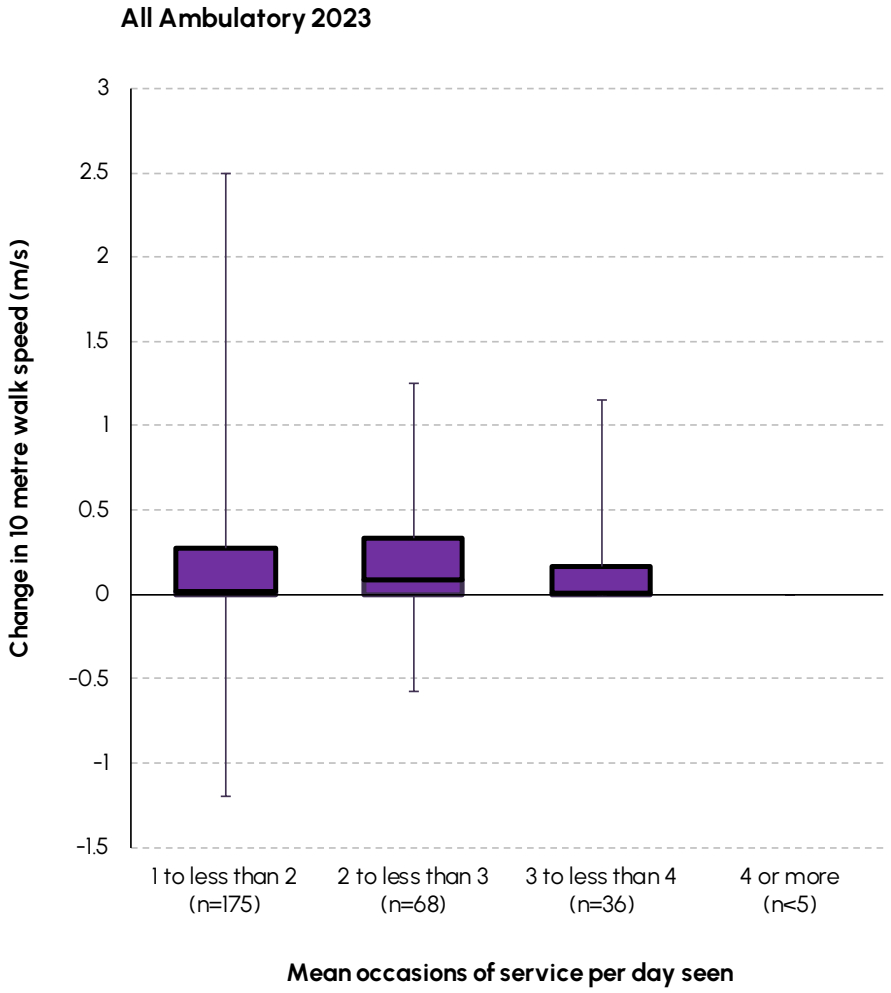


Note: Completed episodes only.

NOTE: To understand how to interpret these figures please refer to Appendix 3

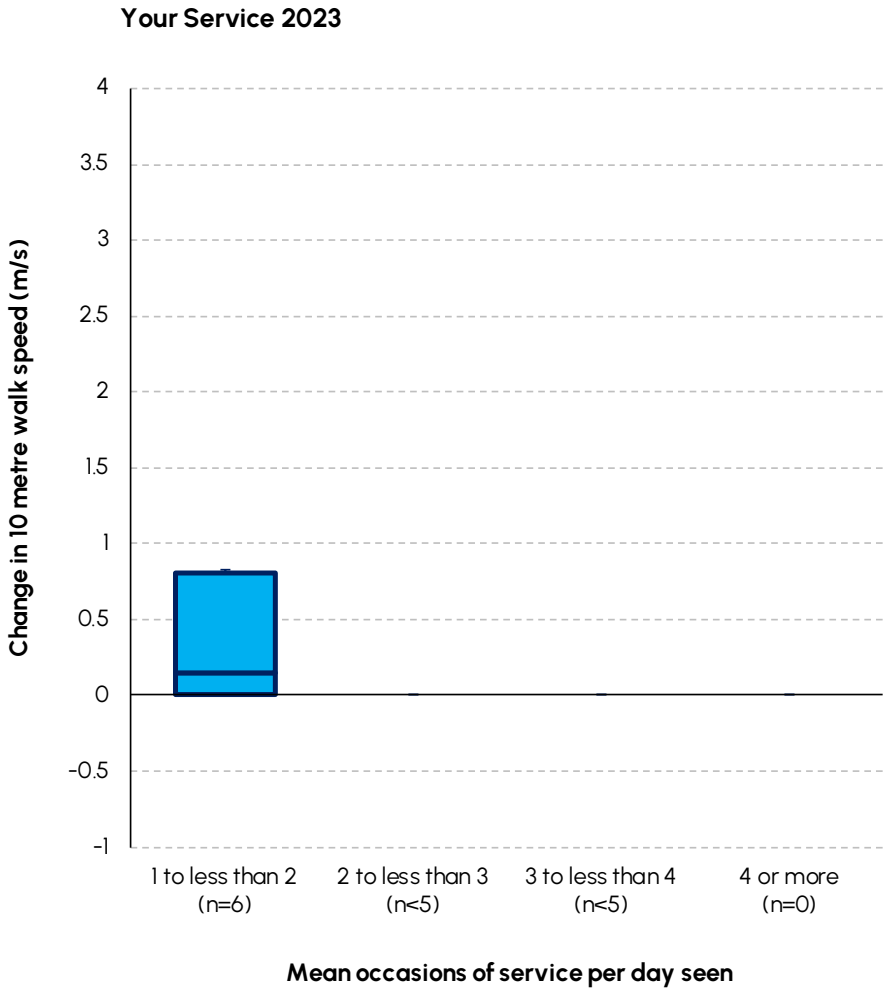
Change in 10 metre walk speed by OOS/day seen – Stroke

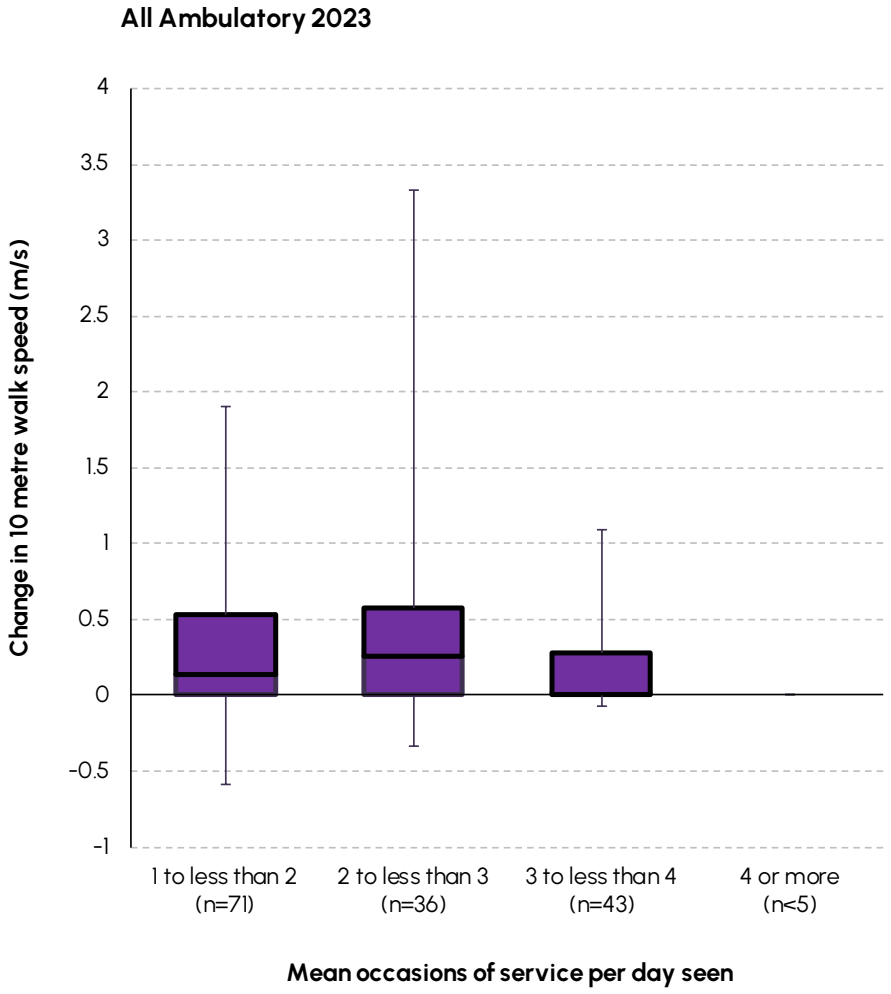




NOTE: To understand how to interpret these figures please refer to Appendix 3

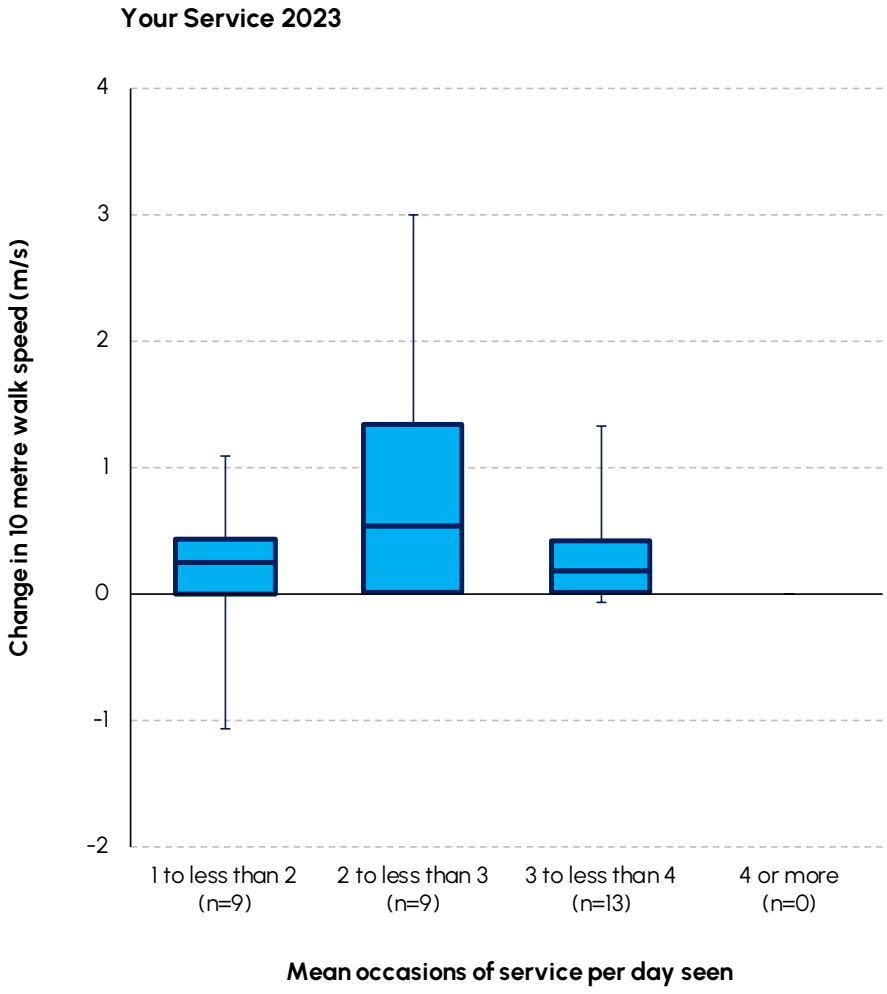
Change in 10 metre walk speed by OOS/day seen – Orthopaedic fractures

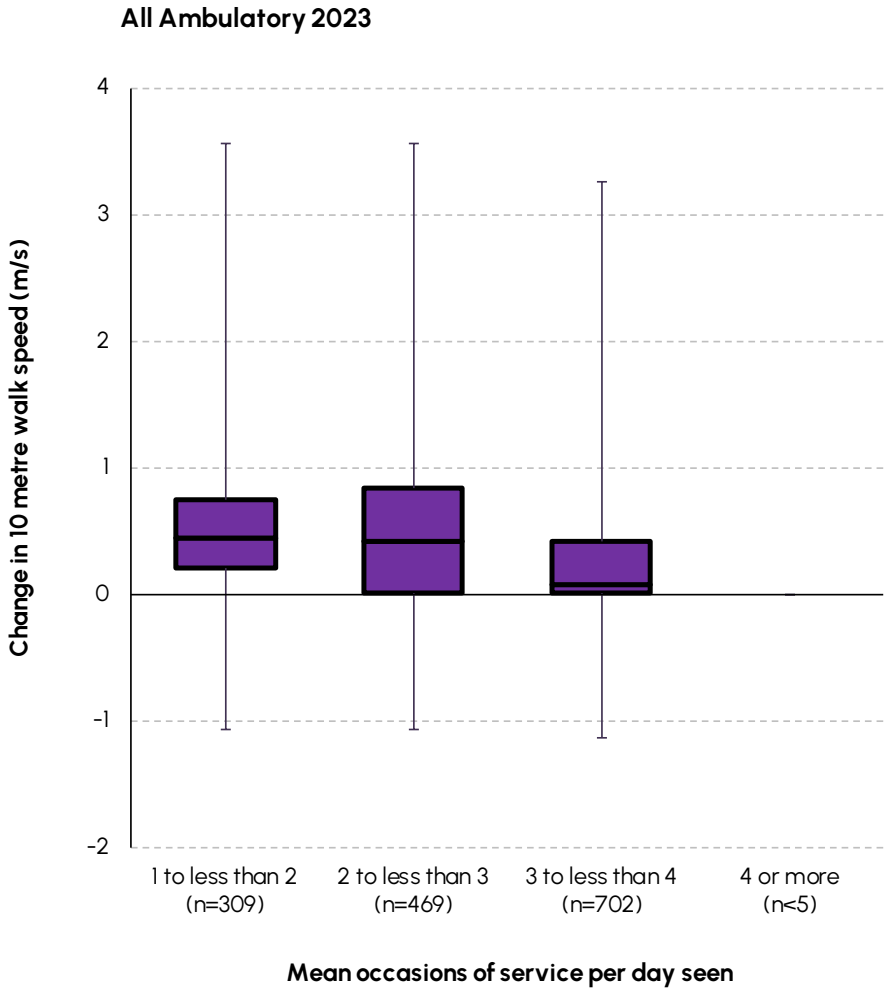




NOTE: To understand how to interpret these figures please refer to Appendix 3

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





NOTE: To understand how to interpret these figures please refer to Appendix 3

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.

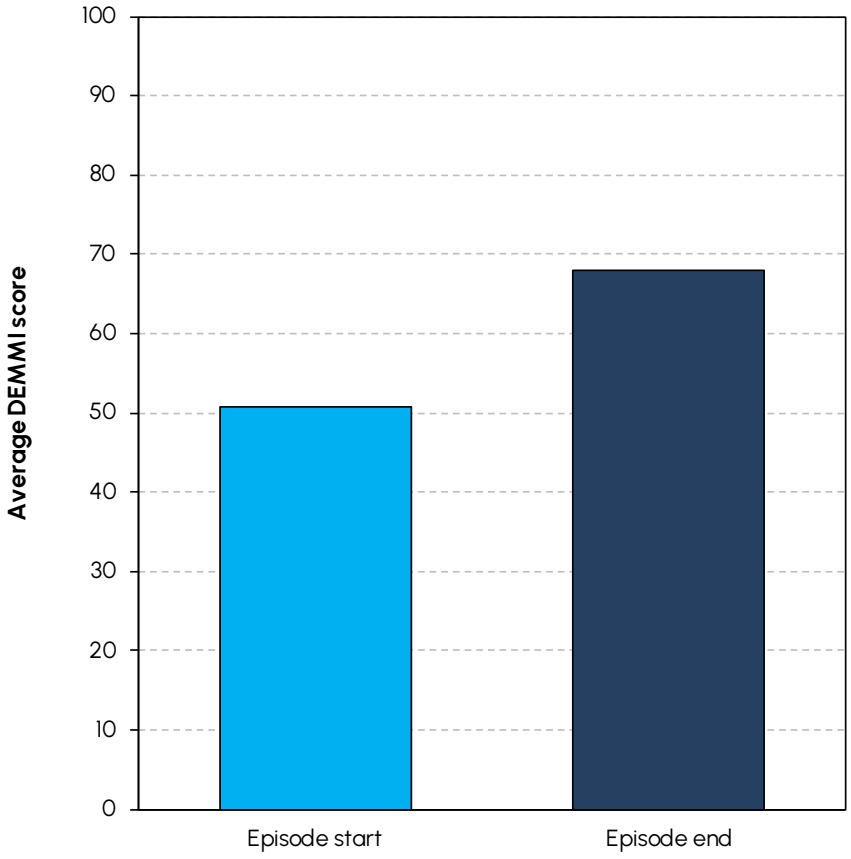
Only complete for rehabilitation episodes with AROC impairment codes:

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

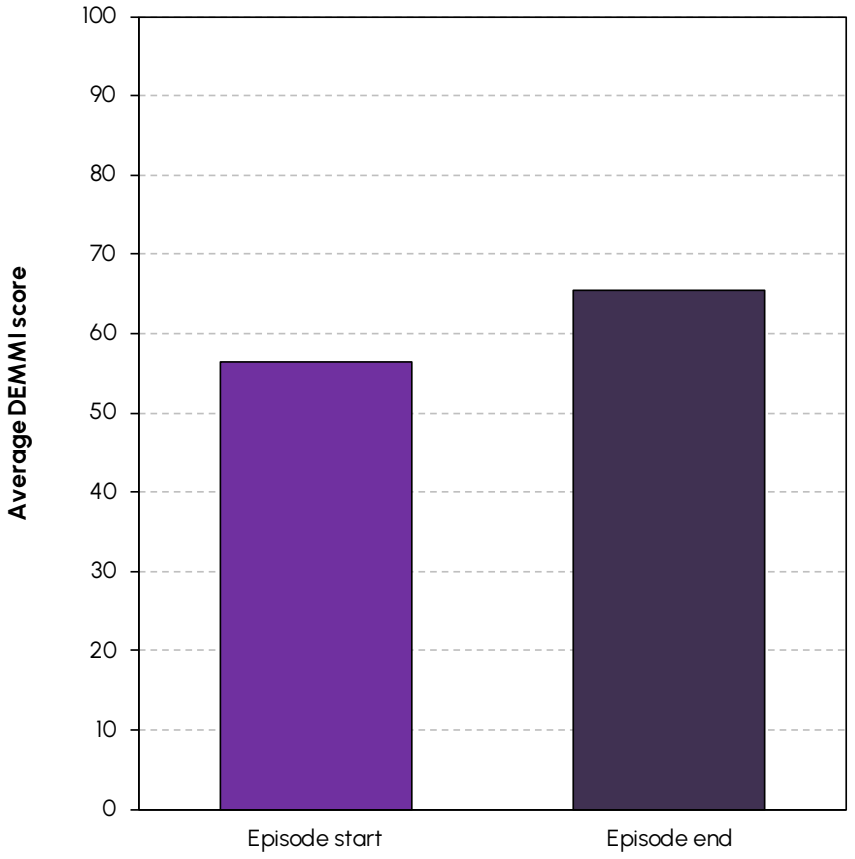
For further information refer to the AROC Ambulatory Data Dictionary V4.1 for Clinicians.

Average DEMMI start and end score

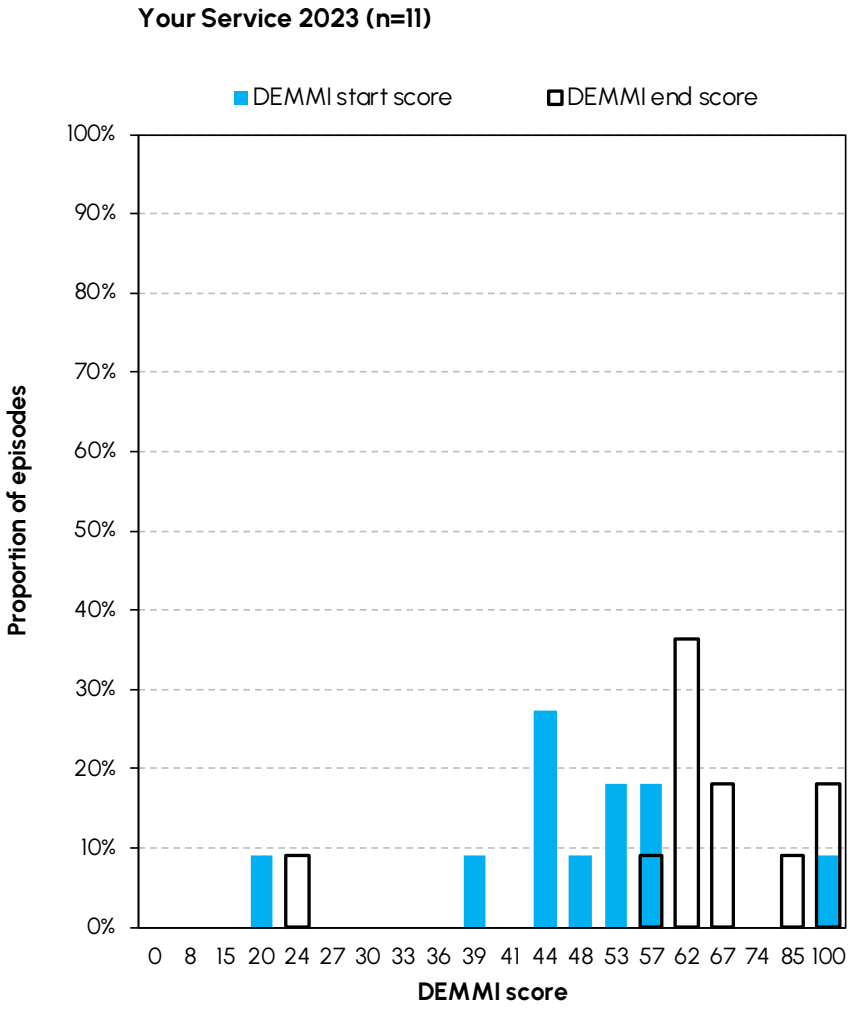
Your Service 2023 (n=11)

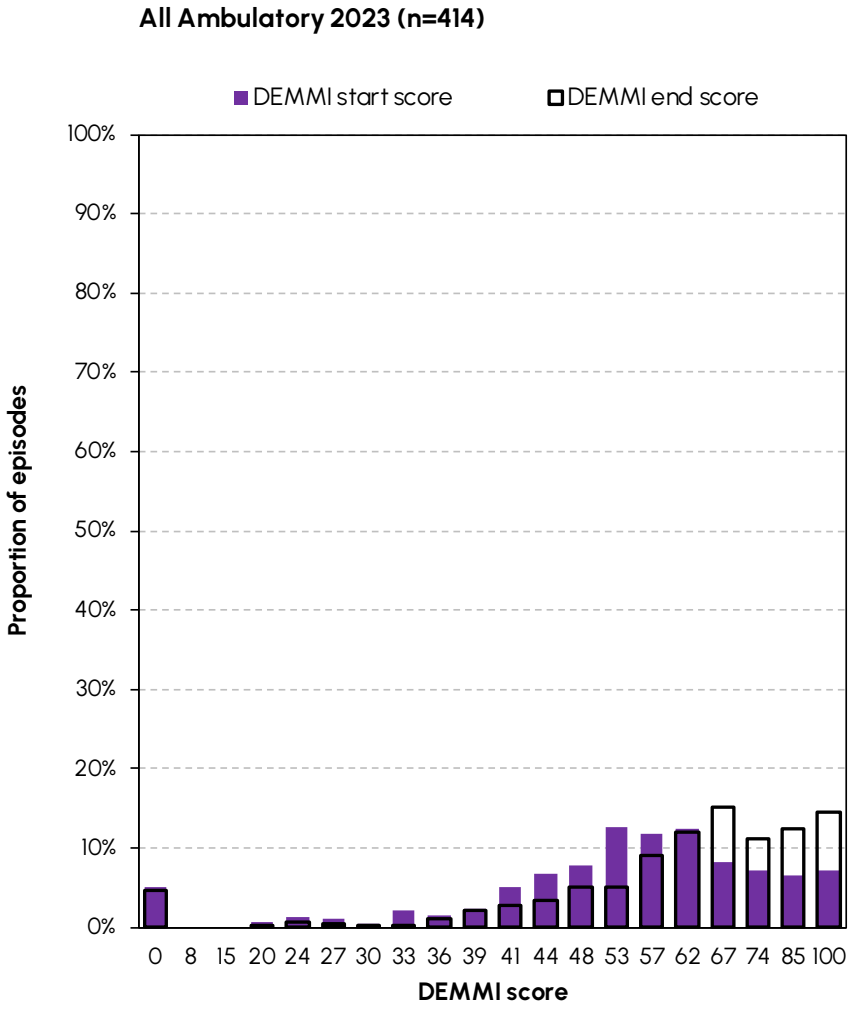


All Ambulatory 2023 (n=414)



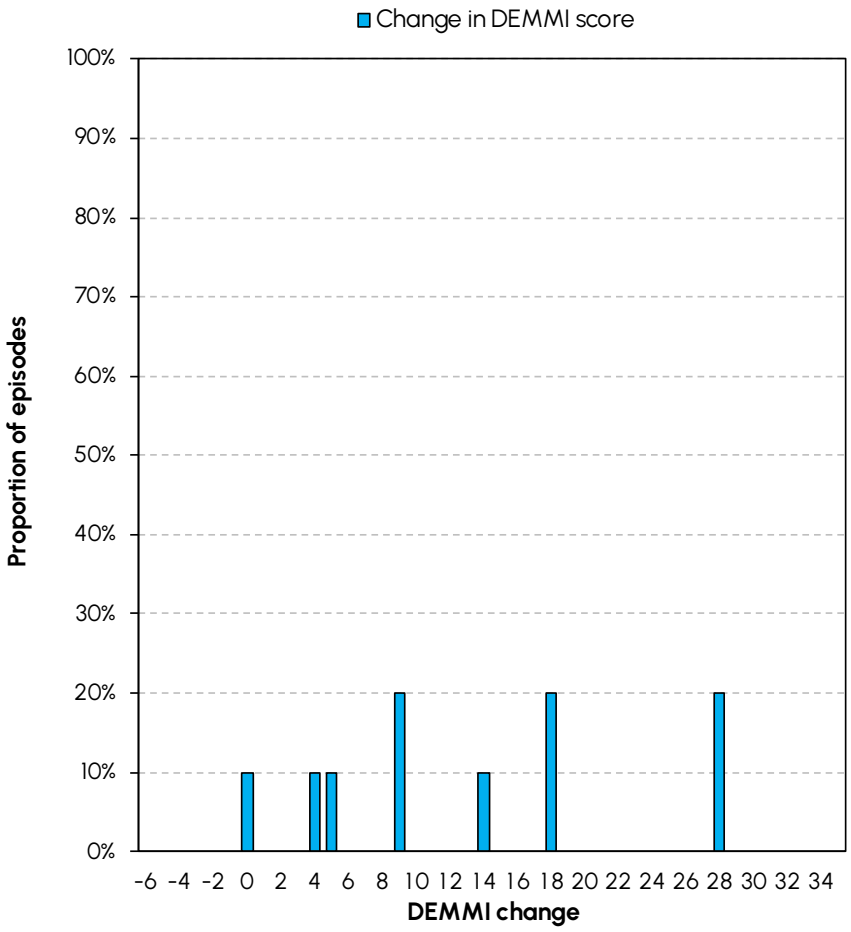
DEMMI start and end total – all episodes



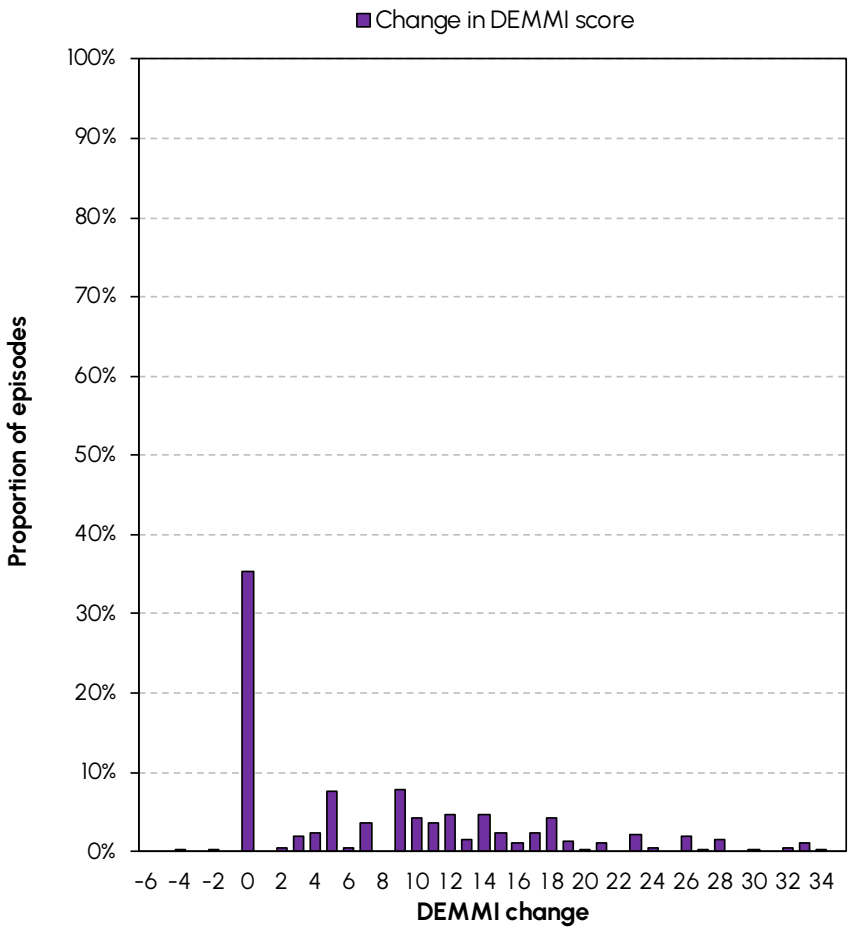


Change in DEMMI score – all episodes

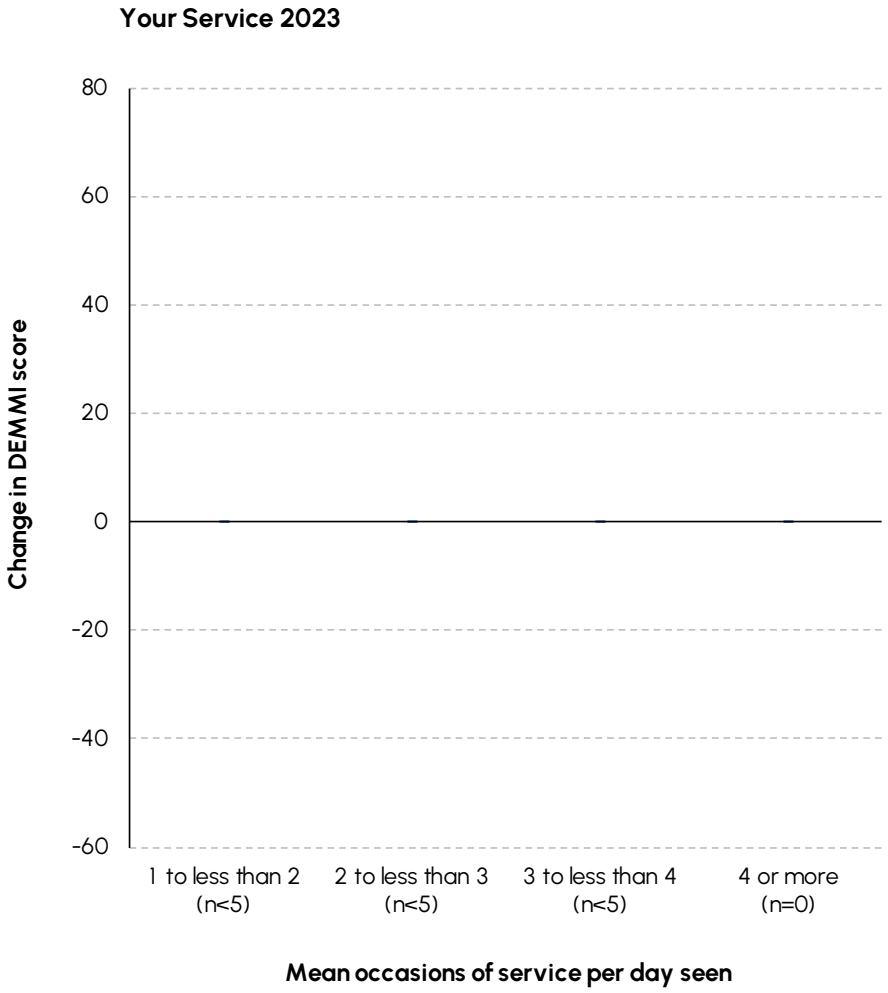
Your Service 2023 (n=11)

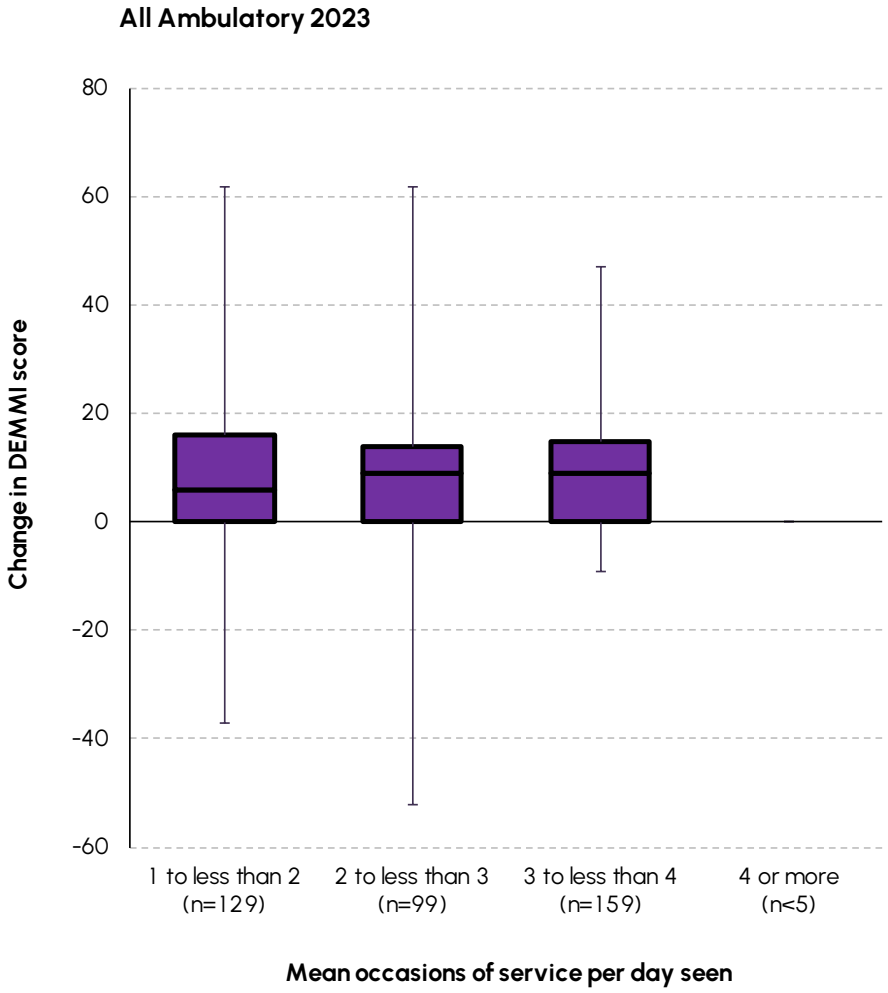


All Ambulatory 2023 (n=414)



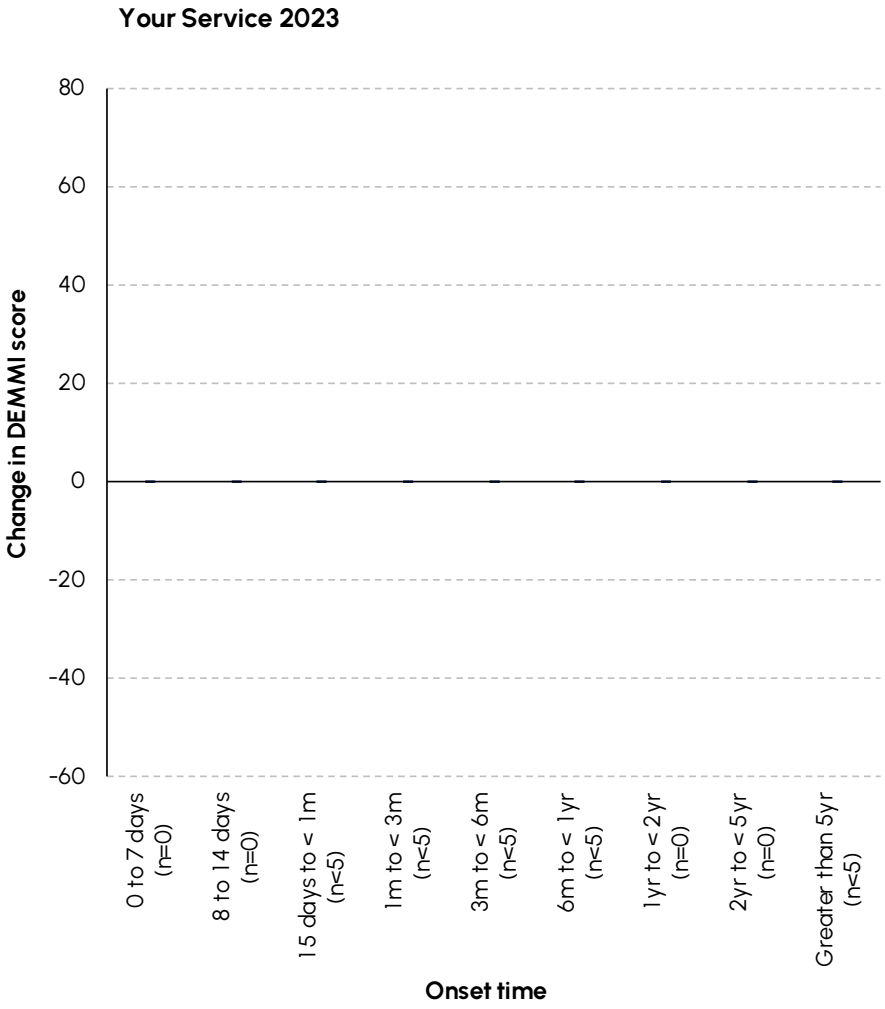
Change in DEMMI score by OOS/day seen – all episodes

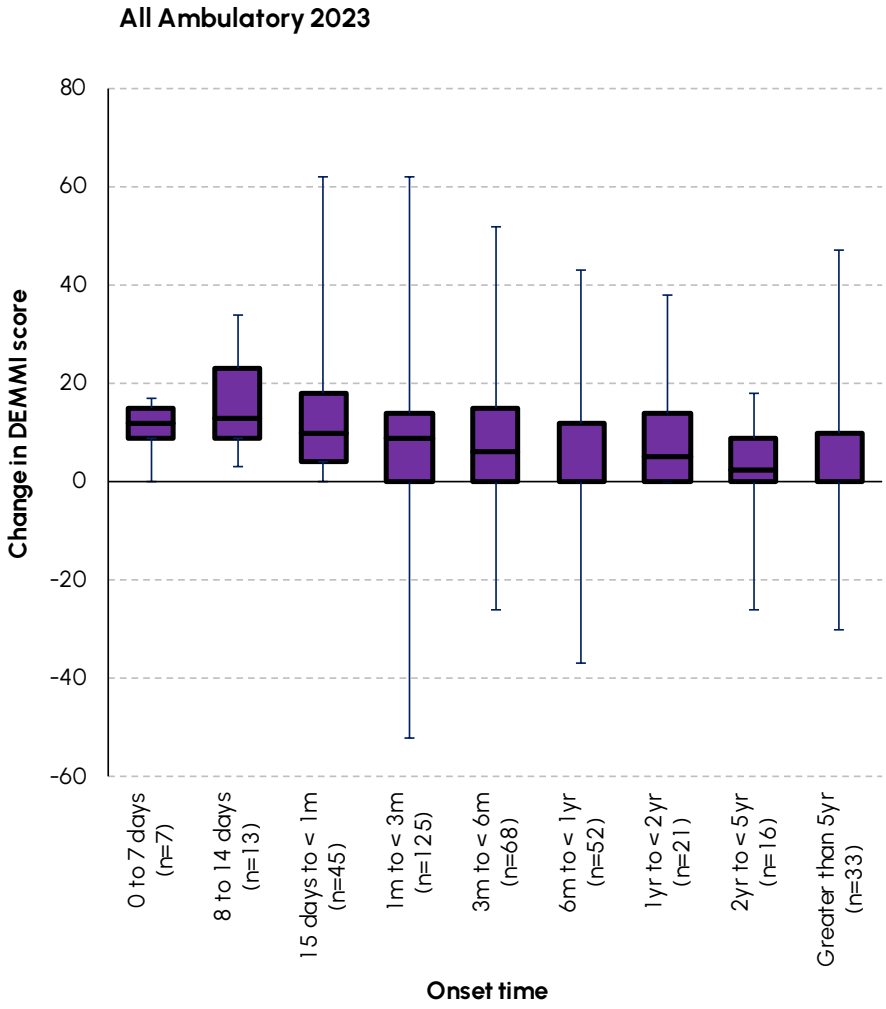




NOTE: To understand how to interpret these figures please refer to Appendix 3

Change in DEMMI score by onset time – all episodes





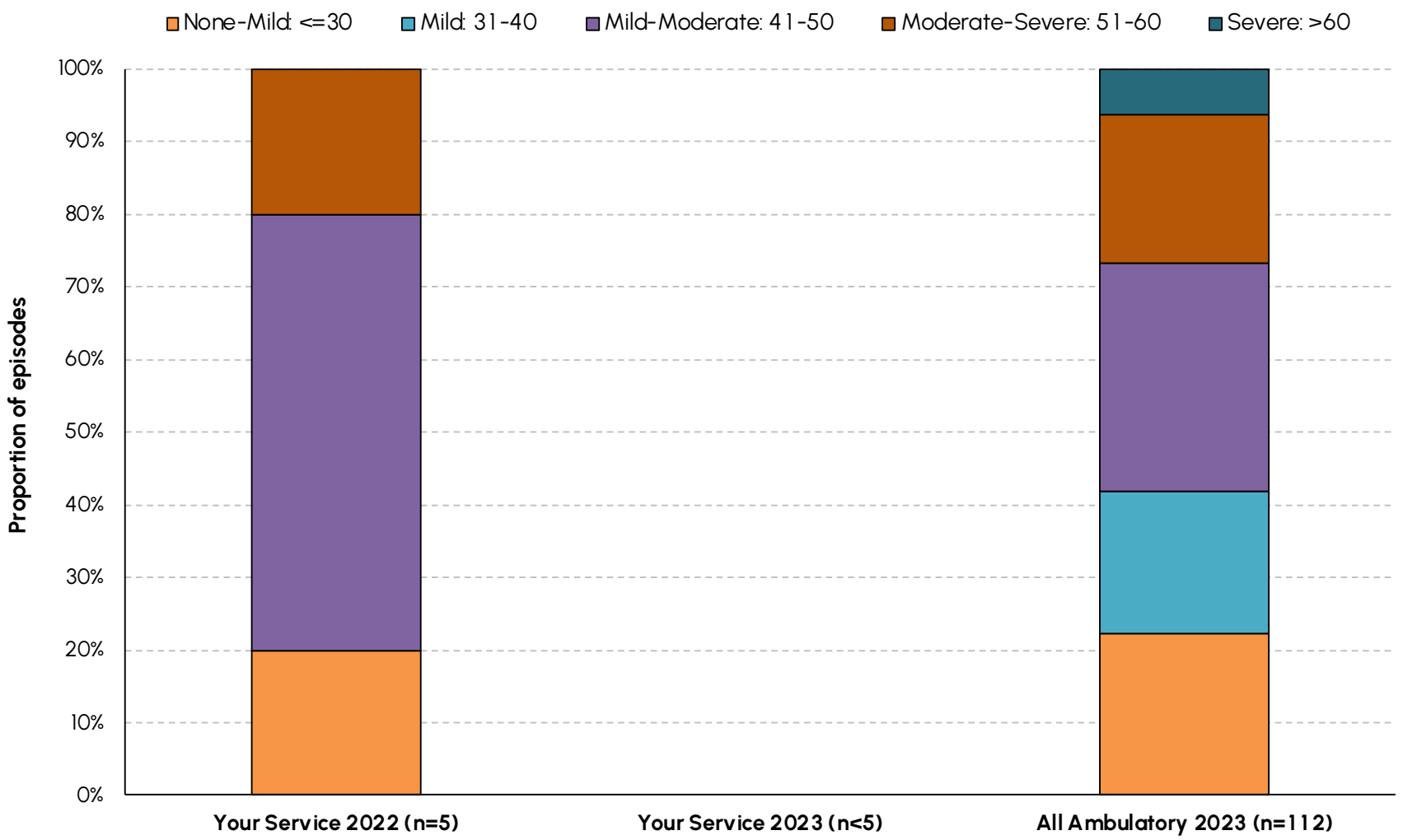
NOTE: To understand how to interpret these figures please refer to Appendix 3

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

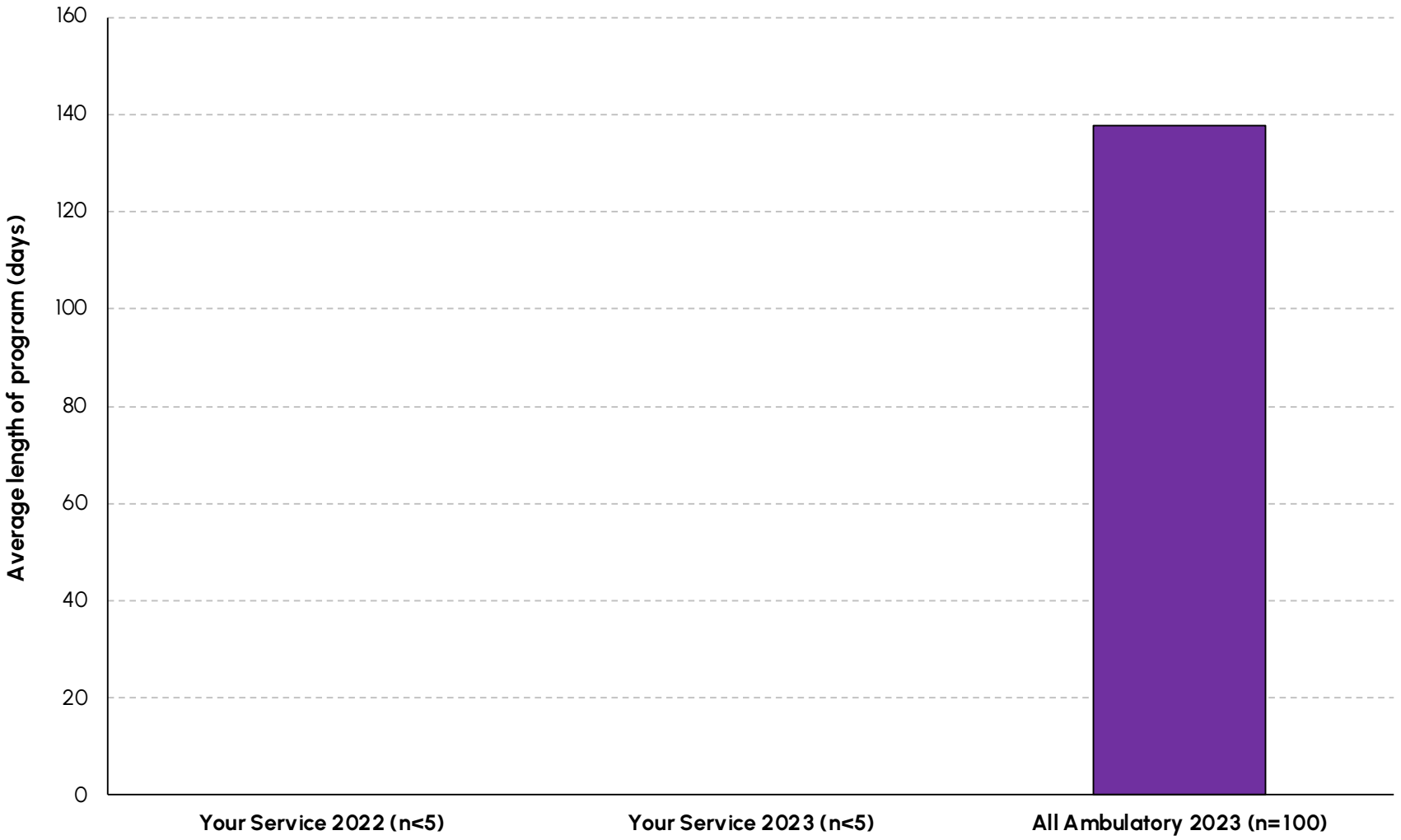
- This data item is collected in addition to the Australian Modified Lawton's IADL Scale for patients who may have functional impairment as a result of brain injury.
- The MPAI-4 was specifically designed for the evaluation of individuals during the post-acute period following ABI.
- The MPAI-4 consists 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

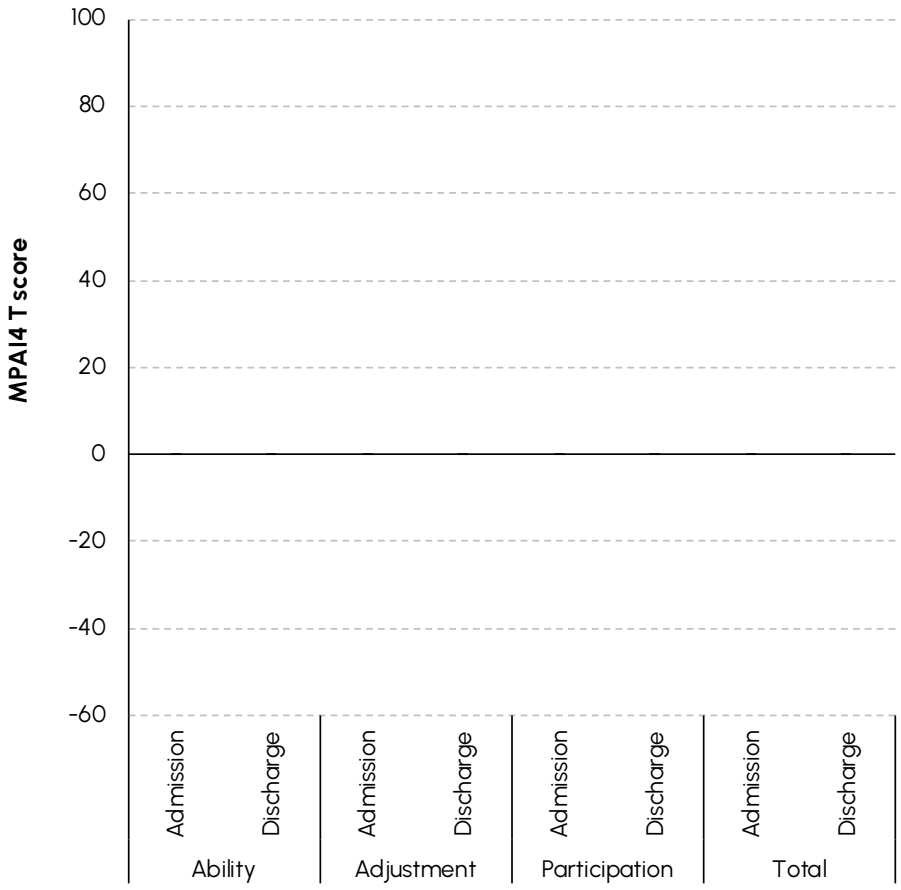


Average program length for episodes with submitted MPAI-4

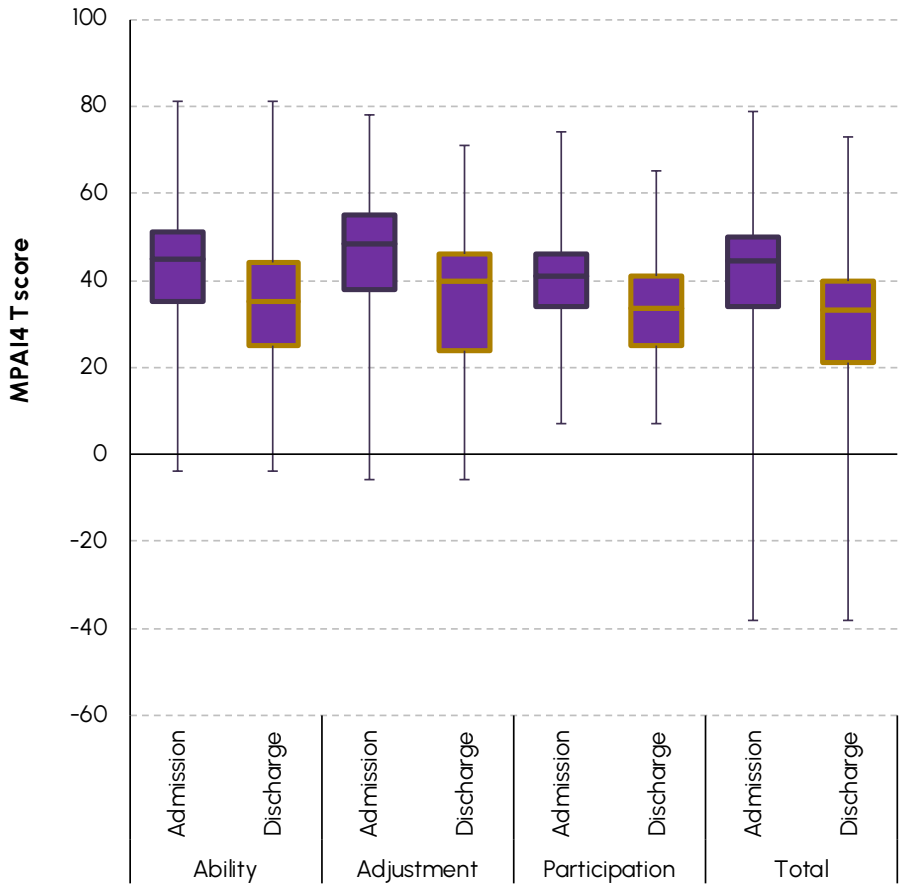


Admission and discharge T score distribution of spread by MPAI-4 index

Your Service 2023 (n<5)



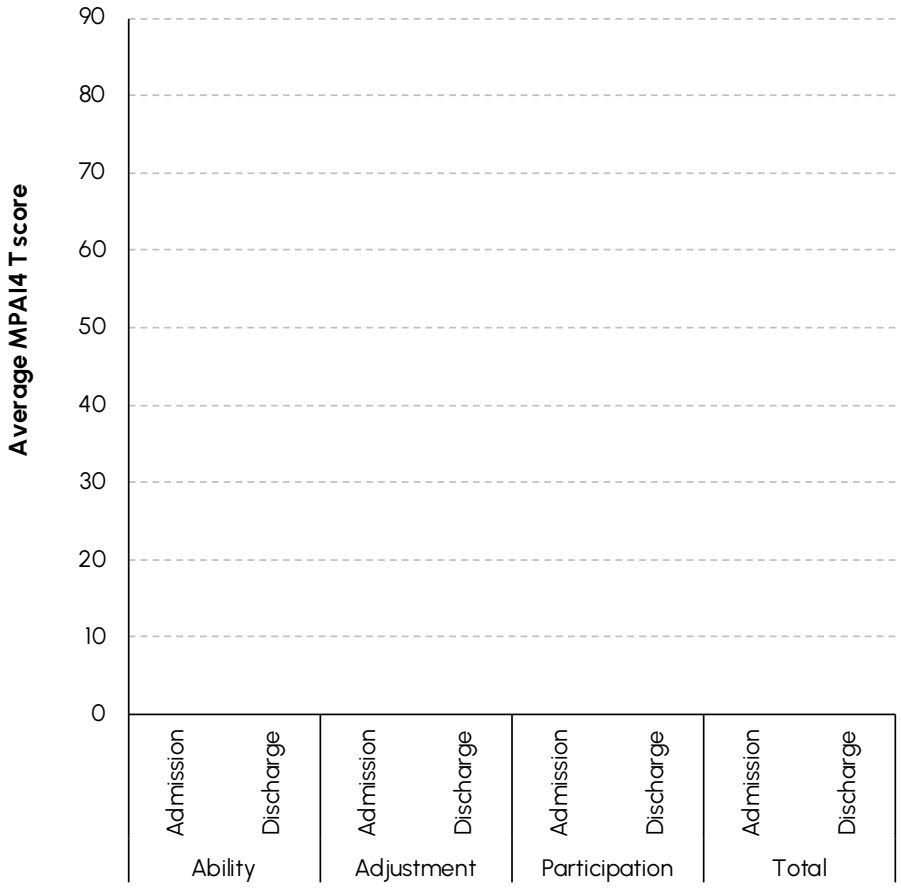
All Ambulatory 2023 (n=100)



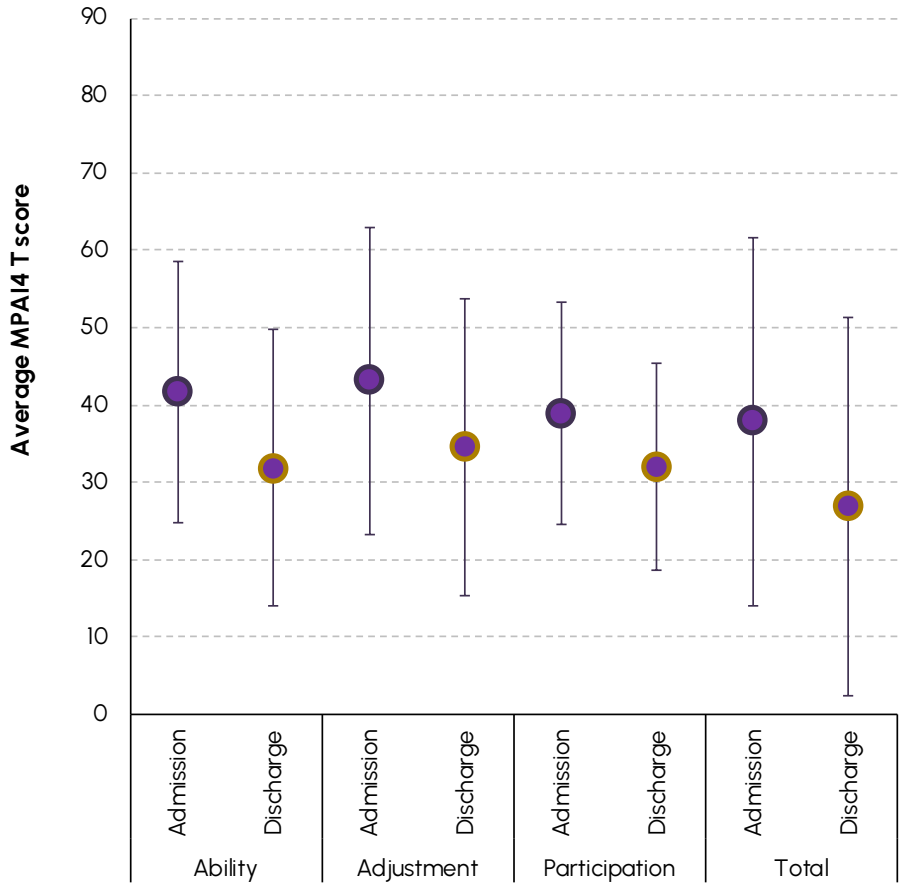
NOTE: To understand how to interpret these figures please refer to Appendix 3

Admission and discharge average T score by MPAI-4 index

Your Service 2023 (n<5)



All Ambulatory 2023 (n=100)



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.

Appendix 2: Definition of terms

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.

AROC Version 4 data set

The version 4 (V4) AROC dataset was introduced on 1 July 2012. V4 was designed as a bank of data items, combinations of which are used to describe 4 possible pathways of care (see the AROC website for more information about the different pathways). Version 4.1 was released on 1 July 2017 and introduced new ambulatory data items which are used in this report. NOTE: This report utilises only Pathway 4 data (ambulatory care).

COVID-19

The impact of COVID-19 on ambulatory rehabilitation following suspensions of elective surgeries, service closures, staffing issues, and fewer traumatic accidents was a decline in the number of ambulatory rehabilitation episodes in the couple of years during and post COVID compared to the years prior to COVID (adjusted for participating services).

The extent of the impact of COVID-19 on the demand for rehabilitation in both the inpatient or ambulatory settings are is still being realised. To identify patients who have had COVID-19 in the AROC data set services were asked to enter "COVID-19" in the patient comment field for those patients whose primary diagnosis is COVID-19 related (e.g. reconditioning, ICU-acquired weakness) as well as those with a secondary diagnosis where admission to rehabilitation is linked to having had COVID-19 (e.g. community stroke admissions associated with a hypercoagulable state secondary to COVID-19 disease). For those patients where COVID-19 was an 'incidental' condition this is not reported.

Appendix 2: Definition of terms

COVID-19 cont.

To enable comprehensive reporting of rehabilitation outcomes for these patients, the National COVID-19 rehabilitation adjunct data collection was created, in collaboration with the NSW Agency for Clinical Innovation's Rehabilitation Community of Practice. The potential sequelae of COVID-19 appear to be numerous, so the functional deficits of these patients that result in the need for rehabilitation can be quite varied. As such the national COVID-19 rehabilitation adjunct data collection covers all care settings – in-reach, inpatient and ambulatory – and services do not need to be an AROC member to participate. The national COVID-19 rehabilitation adjunct data collection is to be completed for **ALL** patients who have received a positive diagnosis of COVID-19 and are now participating in rehabilitation in any care setting. Where possible and appropriate, the National COVID-19 rehabilitation adjunct data will be linked with the AROC inpatient and/or ambulatory data collections.

This National COVID-19 rehabilitation adjunct data collection must be entered online at https://apps.ahsri.uow.edu.au/redcap/surveys/?s=DR4AE3FHAX
All relevant data items must be known prior to commencing data entry as there is no save and resume function. For convenience a data collection form is provided as an optional mechanism to collect the data (available here https://apps.ahsri.uow.edu.au/downloads/CovidCollection.pdf).

Days Seen

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

Elapsed time (Length of Program)

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.

Appendix 2: Definition of terms

Episode

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

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.

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 2: Definition of terms

Outcome Measure

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

Outcome Measure change

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

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.

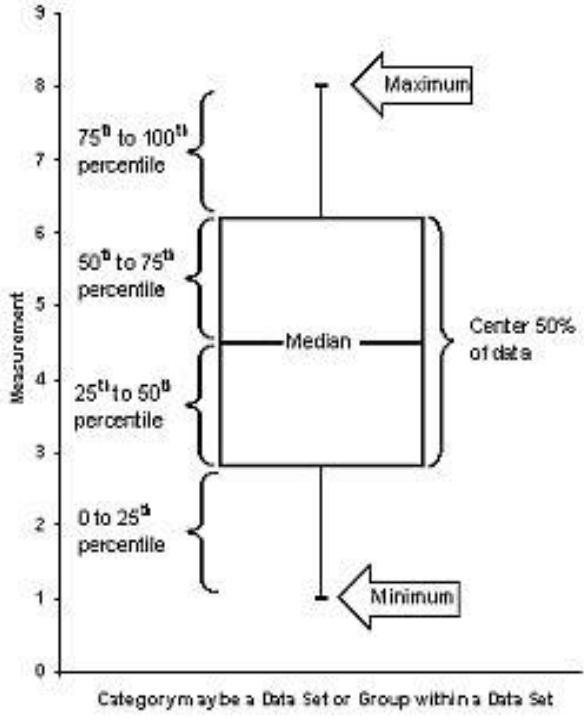
Valid Outcome Measure

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.

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 Reconditioning following surgery
16.2 Reconditioning following medical illness
16.3 Cancer rehabilitation

COVID-19 CONDITIONS

18.1 COVID-19 with pulmonary issues
18.2 COVID-19 with deconditioning
18.9 COVID-19 all other

Acknowledgements

- **AROC wish to acknowledge the valuable contributions made by:**
  - Members of the Management Advisory Group of the Australasian Rehabilitation Outcomes Centre.
  - The many staff from the rehabilitation services who have spent a great deal of time and care to collect, collate and correct the data, without whose considerable effort these reports would not be possible.

- **Disclaimer**

  AROC has made every effort to ensure that the data used in these reports are accurate. Data submitted to AROC are checked for anomalies and facilities are asked to re-submit data prior to the production of AROC reports. We have provided general guidelines on the interpretation of the information reported but would advise readers to use their professional judgement in considering all information contained in this report.

- **Suggested acknowledgement**

Anywhere Hospital AROC Ambulatory Report, January 2023 – December 2023. Australasian Rehabilitation Outcomes Centre (2024)

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