



CHRISTOPHER & DANA
REEVE FOUNDATION

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Healthcare Professionals Knowledge Study

Topline Results – December 30, 2021

Research Overview



Survey Instrument

The questionnaire was developed by Ipsos in collaboration with the Foundation. Survey length was about 10 minutes and included approximately 15 questions including the qualifying and demographic questions.

Notes:

- The data are presented in graphic and tabular format detailing the number of respondents who answered each question.
- Sample sizes may vary due to skip logic or data cleaning.
- Data for some charts may not equal 100% due to rounding. Net values (e.g., top 2 box) may not match individual percentages due to rounding.



Data Collection

A total of n=1,001 responses were collected from August 31st to September 7th, 2021, via an online survey.



Sample

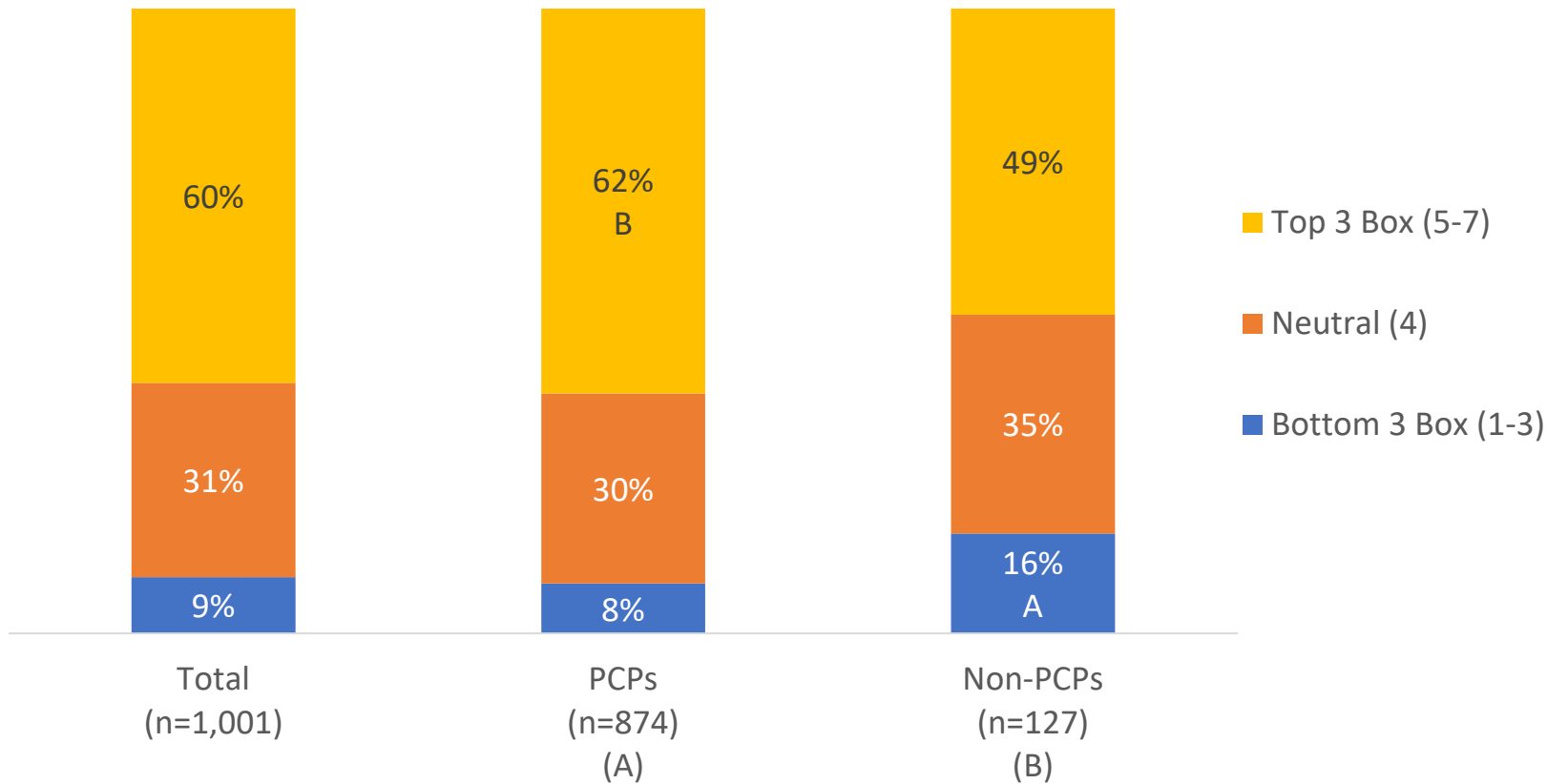
Qualified respondents were medical professionals aged 18 to 64 working as either Primary Care Physicians (PCPs), RNs, NPs, PAs, Occupational, Physical, or Respiratory Therapists.

Key Findings

- Over half of healthcare professionals (60%) consider themselves to be fairly knowledgeable about SCI conditions, with PCPs rating their knowledge significantly higher than Non-PCPs (62% vs. 49%).
 - Two in three professionals report having regularly treated peripheral neuropathy and stroke patients in the past two years.
- All professionals report high awareness of the many challenges facing those living with SCI, although Non-PCPs appear more aware of the issues than PCPs.
- Pain, spasticity, and bladder management are the three SCI-related complications most often reported by healthcare professionals.
- When looking for treatment information, professionals rely on colleagues and peers and PubMed searches.
 - One in five professionals (21%) mention accessing spinal cord injury information from the National Institute of Neurological Disorders and Stroke (NINDS), making it the singular source mentioned most often.
- PCPs are significantly more likely than Non-PCPs to use telehealth when treating paralysis patients (45% vs. 27%), although both groups agree that it has become more common during COVID.

SCI Knowledge Overall

Over half of healthcare professionals consider themselves to be fairly knowledgeable about SCI conditions, with PCPs rating their knowledge significantly higher than Non-PCPs.



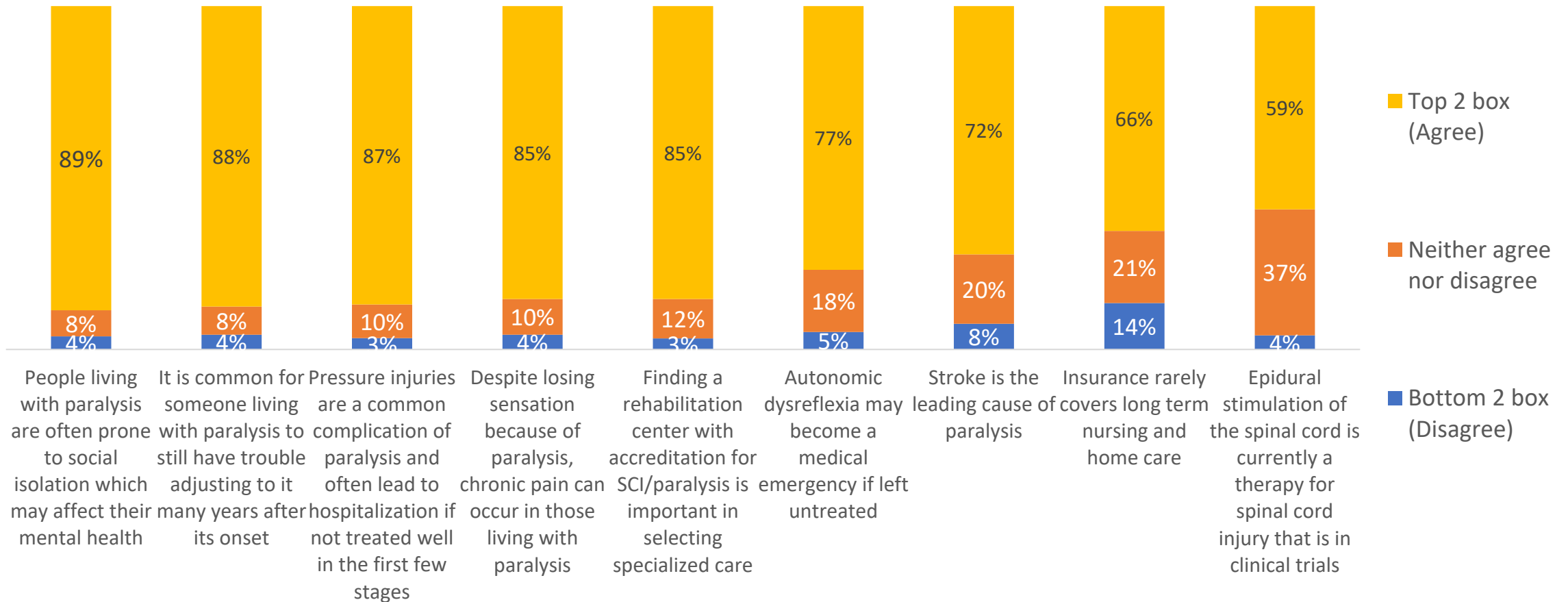
Treatment Frequency

Two in three healthcare professionals report having regularly treated peripheral neuropathy and stroke patients in the past two years.

	Total (n=1,001)	PCPs (n=874) (A)	Non-PCPs (n=127) (B)
Treated often/regularly in last 24 months			
Peripheral Neuropathy	69%	68%	74%
Stroke	63%	63%	65%
Brain Injury	44%	43%	49%
Multiple Sclerosis (MS)	39%	39%	39%
Spinal Cord Injury (SCI)	35%	36%	32%
Cerebral Palsy (CP)	32%	32%	29%
Arteriovenous Malformation	20%	20%	21%
Brachial Plexus Injury	20%	20%	15%
Spinal Muscular Atrophy	18%	17%	20%
Guillain-Barré syndrome	17%	17%	16%
Neurofibromatosis	17%	17%	13%
Spina Bifida	16%	16%	15%
Spinal Tumors	15%	15%	13%
Lou Gehrig`s Disease (ALS)	13%	13%	15%
Transverse Myelitis	12%	13%	12%
Acute Flaccid Myelitis	12%	12%	9%
Post-Polio Syndrome	11%	11%	8%
Friedreich`s Ataxia	9%	9%	2%

Paralysis-Related Statements - Overall

Healthcare professionals report high awareness of the many challenges facing those living with SCI.



Paralysis-Related Statements – By Group

Non-PCPs are generally more aware of SCI-related health challenges facing those with paralysis than PCPs are.

Statement	People living with paralysis are often prone to social isolation which may affect their mental health.		It is common for someone living with paralysis to still have trouble adjusting to it many years after its onset.		Pressure injuries are a common complication of paralysis and often lead to hospitalization if not treated well in the first few stages.		Despite losing sensation because of paralysis, chronic pain can occur in those living with paralysis.		Finding a rehabilitation center with accreditation for SCI/paralysis is important in selecting specialized care.	
	PCPs (n=874) (A)	Non-PCPs (n=127) (B)	PCPs (n=874) (A)	Non-PCPs (n=127) (B)	PCPs (n=874) (A)	Non-PCPs (n=127) (B)	PCPs (n=874) (A)	Non-PCPs (n=127) (B)	PCPs (n=874) (A)	Non-PCPs (n=127) (B)
Top 2 Box (Agree)	87%	98% A	86%	96% A	86%	95% A	84%	93% A	84%	95% A
Neither Agree nor Disagree	9% B	2%	9%	4%	11% B	4%	11%	6%	13% B	5%
Bottom 2 box (Disagree)	4% B	-	5% B	-	4%	1%	5%	2%	4% B	-
Statement	Autonomic dysreflexia may become a medical emergency if left untreated.		Stroke is the leading cause of paralysis.		Insurance rarely covers long term nursing and home care.		Epidural stimulation of the spinal cord is currently a therapy for spinal cord injury that is in clinical trials.			
	77%	79%	73%	70%	66%	64%	60%	54%		
	18%	21%	20%	22%	21%	21%	36%	43%		
	6% B	1%	7%	8%	13%	16%	4%	3%		

Q4. Below, you will find a list of statements related to various paralysis conditions. Please let us know how much you agree with each statement, using a scale from 1 to 5 where 5 means Completely Agree and 1 means Completely Disagree.? Base: All respondents
Columns A/B show statistically significant differences at the 95% interval.

Complications – Part 1

Pain, spasticity, and bladder management are the three SCI-related complications most often reported by healthcare professionals.

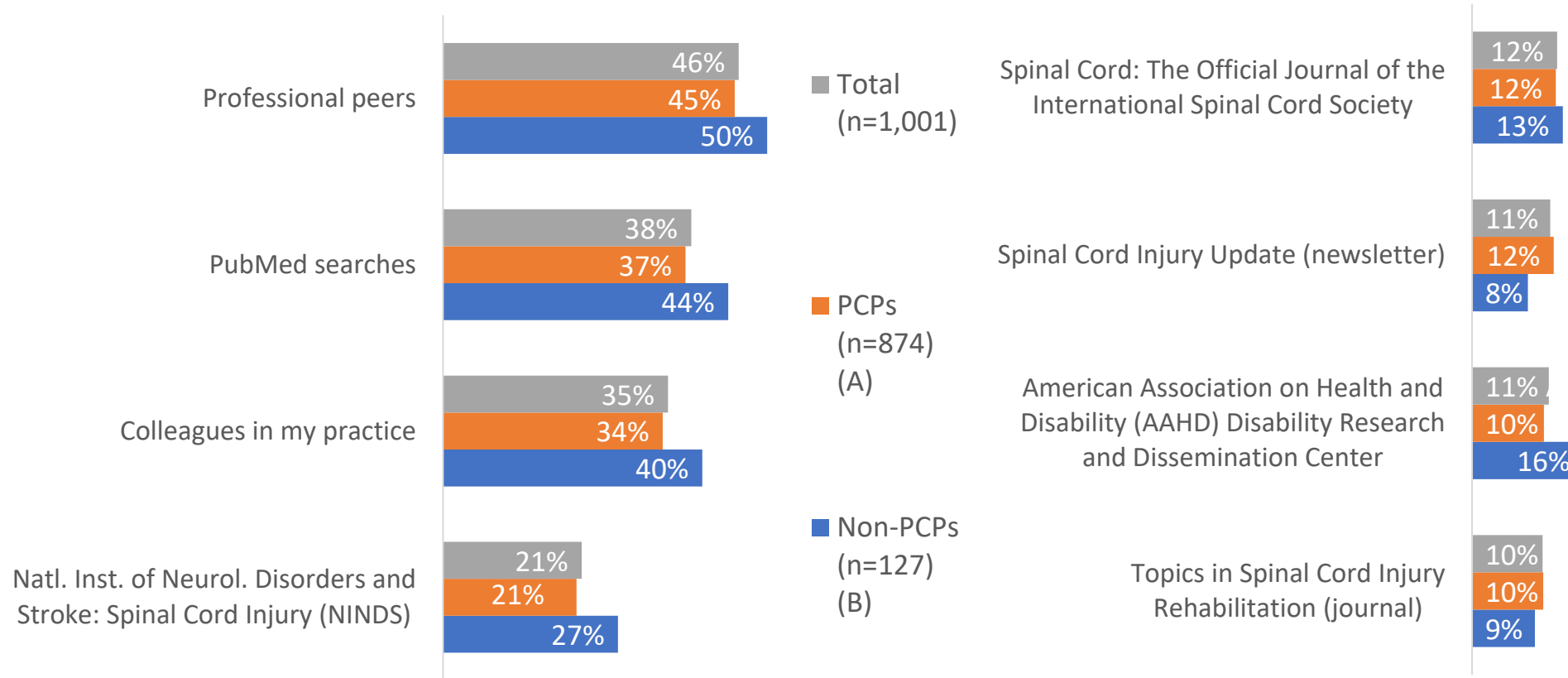
Bladder management	29%	8%	3%	32%	32%	15%	25%	27%	42%
Skin care (i.e. Pressure injuries)	21%	14%	15%	28%	29%	12%	25%	29%	19%
Autonomic dysreflexia/dysfunction	24%	14%	19%	33%	23%	27%	32%	29%	33%
Bowel management	27%	12%	6%	28%	28%	13%	20%	25%	29%
Pulmonary issues	34%	16%	8%	17%	21%	15%	38%	42%	13%
Cardiovascular	12%	35%	8%	17%	9%	22%	14%	14%	10%
Aging process	5%	12%	6%	19%	12%	17%	7%	21%	18%
Deep Vein Thrombosis (DVT)	17%	15%	5%	20%	10%	6%	17%	10%	8%
Sepsis	15%	5%	4%	12%	10%	8%	12%	11%	9%
Syringomyelia	13%	5%	3%	5%	4%	10%	5%	6%	5%
Heterotopic Ossification (HO)	4%	3%	4%	4%	3%	7%	5%	6%	4%

Complications – Part 2

	Neurofibromatosis	Peripheral Neurop.	Post-Polio Syndrome	Stroke	Spina Bifida	Spinal Cord Injury (SCI)	Spinal Muscular Atrophy	Spinal Tumors	Transverse Myelitis
Pain	41%	74%	28%	29%	30%	44%	26%	53%	48%
Spasticity	16%	7%	46%	42%	32%	40%	38%	33%	32%
Bladder management	12%	7%	15%	34%	40%	51%	25%	34%	35%
Skin care (i.e. Pressure injuries)	25%	36%	13%	35%	29%	39%	26%	21%	21%
Autonomic dysreflexia/dysfunction	17%	14%	16%	24%	17%	34%	23%	24%	28%
Bowel management	9%	4%	18%	28%	38%	50%	24%	32%	32%
Pulmonary issues	12%	4%	16%	15%	12%	25%	31%	14%	14%
Cardiovascular	13%	8%	8%	38%	9%	18%	13%	8%	10%
Aging process	17%	10%	19%	28%	10%	9%	14%	10%	9%
Deep Vein Thrombosis (DVT)	7%	6%	6%	21%	7%	17%	11%	14%	11%
Sepsis	6%	8%	7%	8%	10%	14%	7%	10%	13%
Syringomyelia	7%	3%	7%	3%	16%	11%	9%	20%	13%
Heterotopic Ossification (HO)	9%	3%	5%	2%	5%	6%	9%	8%	7%

Sources of Treatment Information

Professional peers and practice colleagues, along with searches in PubMed are the major sources of treatment information, followed by condition-specific sources.



Note: All sources with at least 10% total mentions are listed here.

Christopher & Dana Reeve Foundation was mentioned as a source by 7% of professionals, and the Reeve-Irvine Research Center was mentioned by 4%.

Ease of CEU Access by Condition – Part 1

Finding CEU units for commonly treated conditions is seen as relatively uncomplicated. Non-PCPs have an easier time finding appropriate content than PCPs do.

	Total	PCPs (A)	Non-PCPs (B)		Total	PCPs (A)	Non-PCPs (B)		Total	PCPs (A)	Non-PCPs (B)
	Stroke				Spinal Cord Injury (SCI)				Cerebral Palsy (CP)		
<i>Base</i>	784	686	98		575	507	68		548	487	61
Very/somewhat easy	79%	77%	94% A		56%	53%	78% A		50%	47%	72% A
Neutral	14%	15% B	5%		28%	30% B	15%		31%	33% B	18%
Very/somewhat hard	7%	8% B	1%		17%	18% B	7%		19%	20%	10%
	Multiple Sclerosis (MS)				Brain Injury				Guillain-Barré syndrome		
<i>Base</i>	644	560	84		667	578	89		362	312	50
Very/somewhat easy	67%	65%	75%		55%	52%	74% A		50%	47%	72% A
Neutral	21%	20%	21%		29%	31% B	18%		29%	30%	20%
Very/somewhat hard	13%	15% B	4%		16%	17% B	8%		22%	24% B	8%
	Peripheral neuropathy				Lou Gehrig's Disease (ALS)				Spina Bifida		
<i>Base</i>	778	671	107		317	269	48		340	308	32
Very/somewhat easy	65%	64%	72%		55%	54%	60%		43%	41%	66% A
Neutral	24%	25%	21%		27%	27%	23%		35%	35%	28%
Very/somewhat hard	10%	11%	8%		19%	19%	17%		22%	24% B	6%

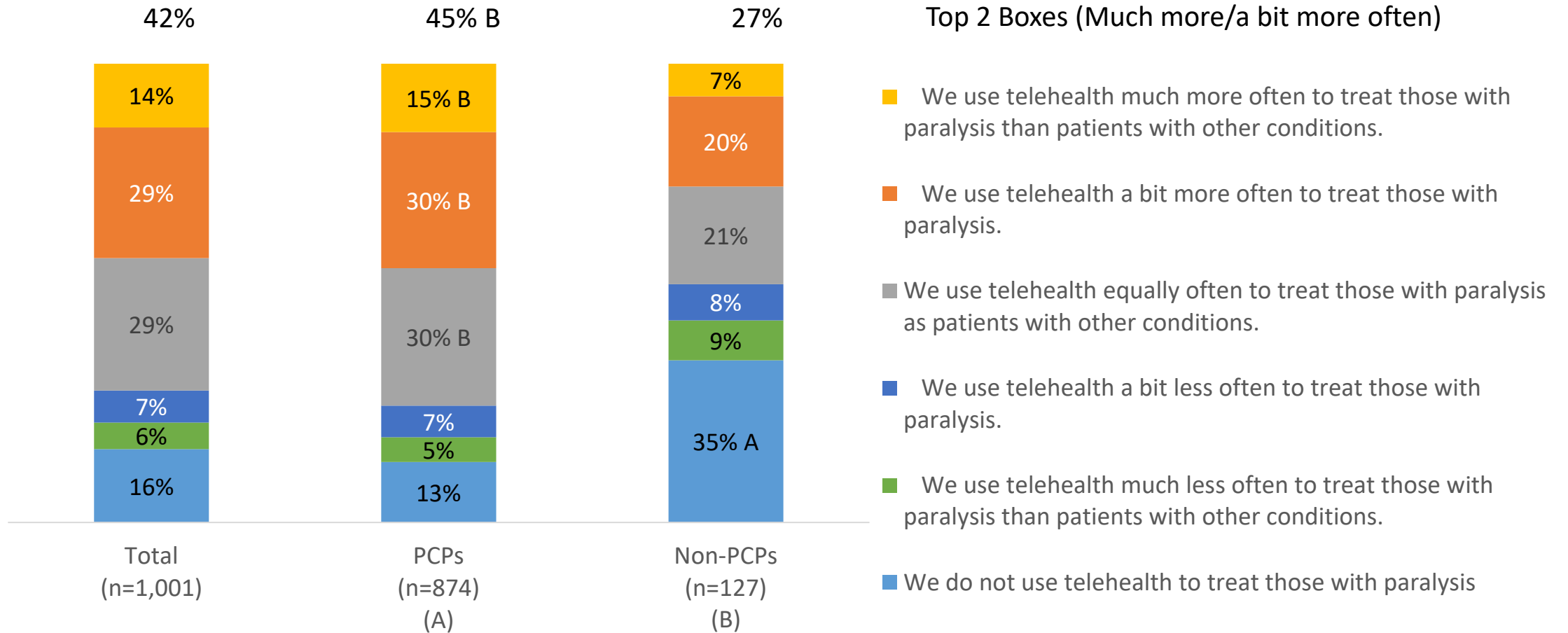
Ease of CEU Access by Condition – Part 2

For conditions seen less often, finding CEU units is equally challenging for PCPs and Non-PCPs.

	Total	PCPs (A)	Non-PCPs (B)		Total	PCPs (A)	Non-PCPs (B)		Total	PCPs (A)	Non-PCPs (B)
	Spinal Tumors				Spinal Muscular Atrophy				Transverse Myelitis		
<i>Base</i>	347	308	39		361	313	48		289	253	36
Very/somewhat easy	42%	40%	54%		36%	35%	42%		34%	34%	39%
Neutral	36%	36%	33%		33%	34%	29%		32%	31%	36%
Very/somewhat hard	23%	24%	13%		31%	31%	29%		34%	36%	25%
	Brachial Plexus Injury				Neurofibromatosis				Post-Polio Syndrome		
<i>Base</i>	415	371	44		376	338	38		259	228	31
Very/somewhat easy	40%	38%	52%		36%	35%	42%		33%	32%	42%
Neutral	32%	33%	23%		35%	34%	45%		27%	28%	26%
Very/somewhat hard	29%	29%	25%		29%	31% B	13%		40%	41%	32%
	Acute Flaccid Myelitis				Arteriovenous Malformation				Friedreich`s Ataxia		
<i>Base</i>	259	232	27		419	368	51		214	193	21
Very/somewhat easy	39%	39%	41%		35%	35%	37%		33%	32%	38%
Neutral	32%	32%	37%		37%	36%	41%		27%	26%	33%
Very/somewhat hard	29%	30%	22%		28%	29%	22%		40%	42%	29%

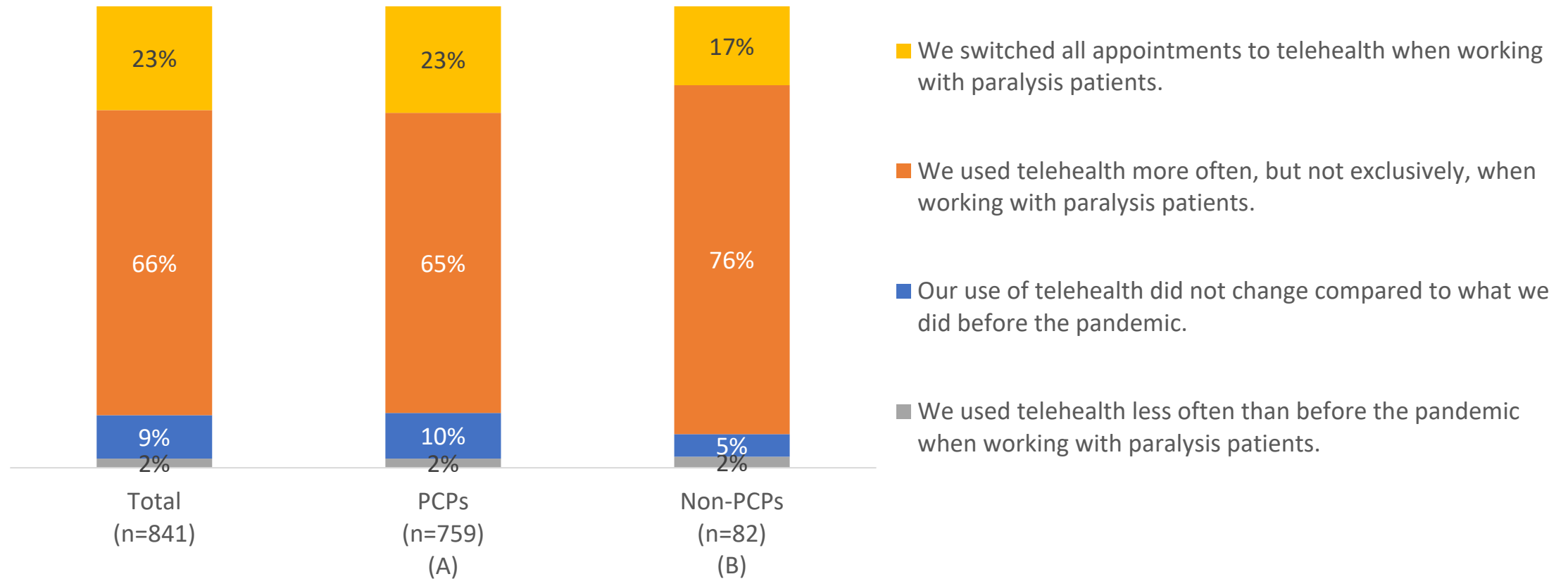
Telehealth Usage

PCPs use telehealth significantly more often to treat paralysis patients than those in other disciplines. Over one-third of Non-PCPs report not using telehealth with paralysis patients at all.



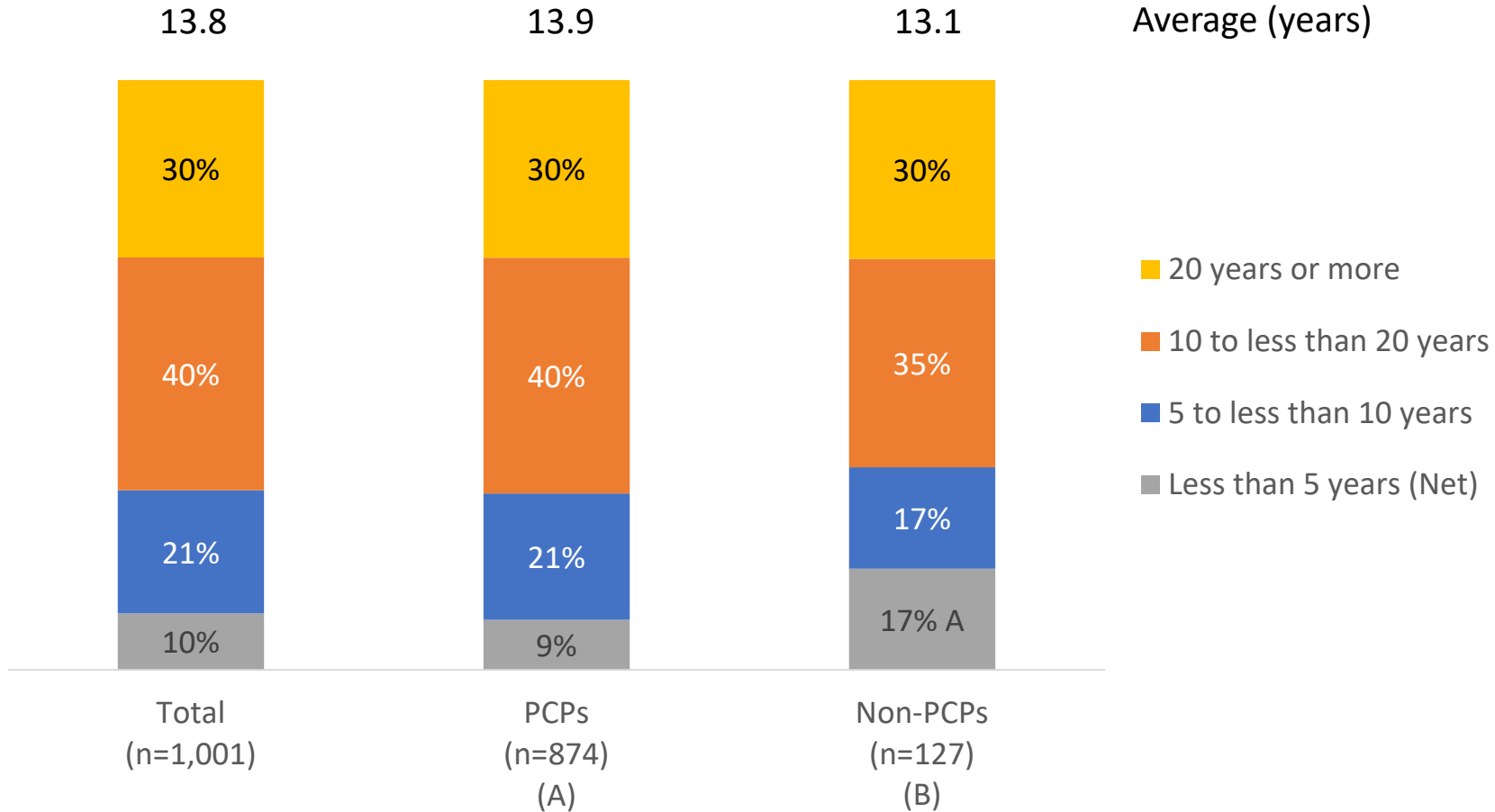
Telehealth During COVID

A large majority of medical professionals across disciplines report increasing the use of telehealth during COVID when working with paralysis patients.

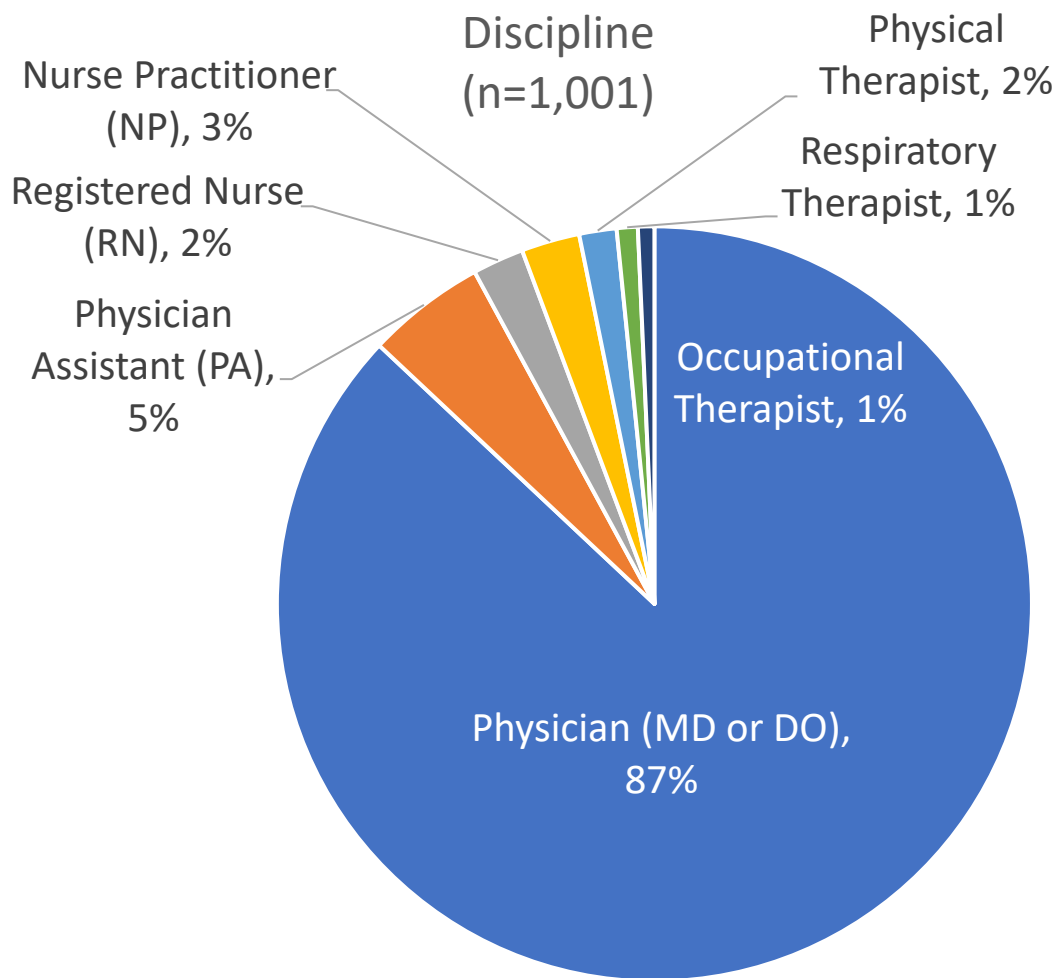


Professional Experience

Healthcare professionals included in the study are highly experienced, with an average of 14 years in their specialties. Non-PCPs have slightly less experience than PCPs.



Discipline & Specialty



Specialty	PCPs (n=874)	PAs (n=51)	Nurses (n=47)
Family medicine	43%	31%	21%
Internal medicine	16%	22%	17%
Neurology	14%	4%	6%
Pediatrics	4%	-	6%
General Practitioner	3%	12%	9%
Emergency medicine	3%	4%	9%
Physical medicine and rehabilitation	3%	2%	-
Surgery	3%	4%	-
Dermatology	2%	10%	6%
Psychiatry	2%	-	2%
Obstetrics and gynecology	2%	-	9%
Ophthalmology	1%	-	-
Radiation oncology	1%	-	-
Urology	1%	-	-
Allergy and immunology	1%	-	4%
Anesthesiology	1%	-	-
Preventive medicine	<1%	-	2%
Diagnostic radiology	<1%	-	2%
Medical genetics	<1%	-	-
Other specialty	2%	12%	6%

Specialty	Therapists (n=29)
Orthopedics	35%
Acute Care (Hospital)	14%
Critical Care	10%
All others	41%

Thank You