



Adults in Healthcare

Inpatient Rehab

National Data Report 2012 – 2016

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INTRODUCTION

The information contained in this report is based on the data collected from the American Speech-Language-Hearing Association’s National Outcomes Measurement System (NOMS). The NOMS Adult Healthcare component utilizes the Functional Communication Measures (FCMs), a series of seven-point scales, to assess functional change in communication and swallowing abilities over time (see the appendix for a full list of FCMs and a sample seven-point scale).

This report summarizes findings from national data collected in inpatient rehabilitation treatment settings between 2012 and 2016. The data enclosed give a detailed look at patient characteristics and service delivery patterns of 16,769 adults receiving speech-language pathology services.

NOMS data provide crucial information about speech-language pathology intervention. Health care, education, and insurance policy changes can be informed by these data. In addition, NOMS data justify the need for speech-language pathology services to be included in managed care systems and employee benefits packages. NOMS data also elucidate the impact of those services, including how certain service characteristics maximize results for consumers, other clinicians, administrators, and policymakers.

Healthcare facilities participating in NOMS have access to reports that summarize and compare their data to the rest of the country. If your facility is not currently participating in NOMS and you would like to find out more information, please visit our web site at <http://www.asha.org/NOMS>.

Suggested Citation

American Speech-Language-Hearing Association. (2019). *National Outcomes Measurement System: Adults in Healthcare–Inpatient Rehab National Data Report 2019*. Rockville, MD: National Center for Evidence-Based Practice in Communication Disorders.

REPORT HIGHLIGHTS

- Greater than 70% of patients who received speech and language services in the inpatient rehabilitation setting were 60 years old and older (p. 6).
- The majority of patients had a medical diagnosis of either cerebrovascular disease (28.2%), respiratory diseases (9.5%), mental disorders (8.8%) or CNS diseases (7.9%) (p. 7).
- The majority of patients had an SLP diagnosis of cognitive communication disorder (66.5%) or dysphagia (46.0%) (p. 7).
- Most patients (46.3%) did receive SLP services before being admitted into an inpatient rehabilitation facility (p. 8).
- Increases in number of sessions and hours of treatment for the top FCMs addressed resulted in more patients making progress (pp. 11-14, 20-23, 29-32, 38-41).
- Most patients received five or more therapy sessions per week for 31-45 minutes per session (pp. 17, 26, 35, 44).

SECTION I

PATIENT CHARACTERISTICS

- Race/Ethnicity
- Age
- Primary Medical Diagnosis
- SLP Diagnosis
- Setting Previous to Current Admission
- SLP Services in the Previous Setting
- Primary Funding Source

PATIENT CHARACTERISTICS

Table 1: Race/Ethnicity

Race/Ethnicity	Percent
White	77.4%
Black or African American	15.0%
Hispanic or Latino	3.5%
Asian	1.2%
American Indian or Alaska Native	0.5%
Native Hawaiian or Other Pacific Islander	0.3%
Unknown	2.2%

Percentages may total more than 100% because a patient may have selected multiple race/ethnicity categories.

Figure 1: Age of Patients

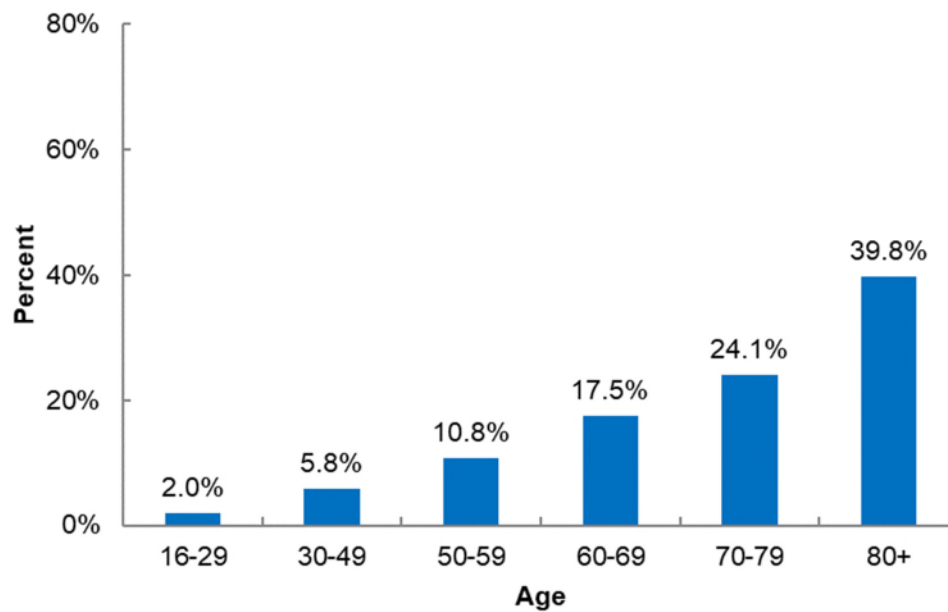
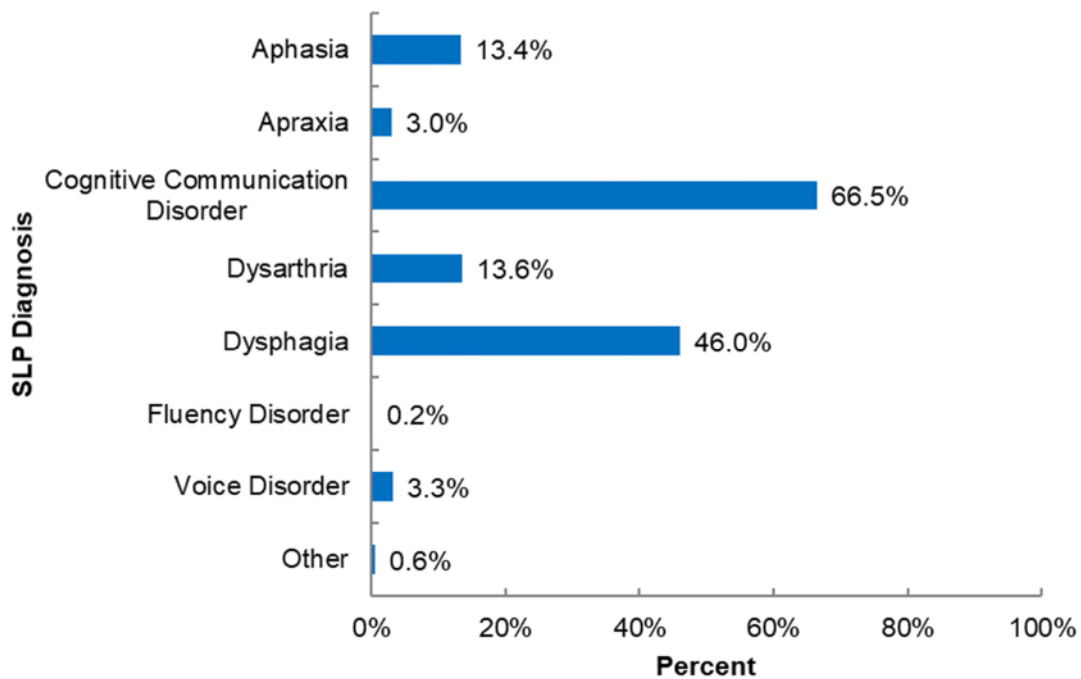


Table 2: Medical Diagnoses

Medical Diagnosis	Percent
Cerebrovascular Disease	28.2%
Respiratory Diseases	9.5%
Mental Disorders	8.8%
CNS Diseases	7.9%
Head Injury	5.7%
Other Neoplasm	5.2%
Occlusion/TIA	4.6%
Encephalopathy	2.7%
Hemorrhage/Injury	2.4%
Anoxia	0.5%
Neoplasm Lip/Pharynx	0.2%
Neoplasm Larynx	0.1%
All Others	41.2%

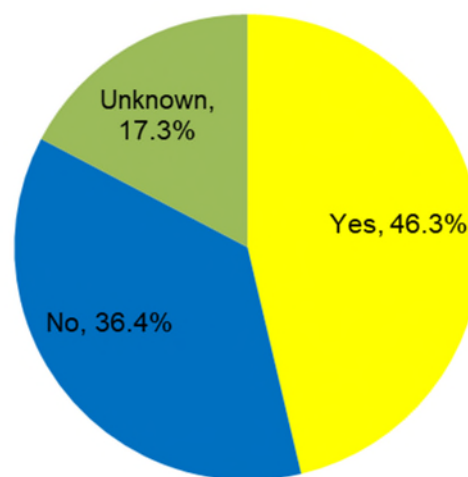
Percentages may total more than 100% because a patient may have multiple medical diagnoses.

Figure 2: SLP Diagnoses

Percentages may total more than 100% because a patient may have multiple SLP diagnoses.

Table 3: Previous Setting

Previous Setting	Percent
Acute Hospital	87.5%
Home	6.2%
Inpatient Rehab	2.1%
Skilled Nursing	1.7%
Assisted Living	0.7%
Subacute	0.6%
Other	0.9%
Unknown	0.3%
TOTAL	100%

Figure 3: Did Patient Receive SLP Services in Previous Setting?**Table 4: Primary Funding Source**

Primary Funding Source	Percent
Medicare – Part A	53.9%
Managed Care Plans	21.4%
Commercial Fee-for-Service	5.5%
Medicaid (managed care)	4.6%
Medicare – Part B	4.1%
Medicaid (fee-for-service)	1.7%
Self-Pay	1.1%
Veteran's Administration	0.3%
Medicare – Part C/Advantage	0.3%
Unknown	7.2%
TOTAL	100%

SECTION II

STROKE PATIENTS

Includes Patients Diagnosed with

- Cerebrovascular Disease
- Occlusion/TIA

- Average Amount of Treatment by Service Delivery Model
- Functional Communication Measures Treated
- FCM Progress
- Average Length of Stay
- Primary Reason for Discharge
- Continued SLP Treatment Recommended at Discharge
- Patient Setting Subsequent to Discharge
- Average Number of Sessions Per Week
- Length of Typical Session

STROKE PATIENTS

Table 5: Average Amount of Treatment by Service Delivery Model (in hours)

Service Delivery	Mean Hours
Individual	10.3
Group	5.2
Training/Consultation	*
All Patients	10.3

**Insufficient data.*

Mean for all patients may be reflective of data from patients who received services in more than one service delivery model.

Table 6: Functional Communication Measures Treated

FCM	Percent
Swallowing	46.5%
Memory	36.9%
Problem Solving	36.1%
Spoken Language Expression	33.9%
Spoken Language Comprehension	27.6%
Attention	22.3%
Motor Speech	21.9%
Reading	5.0%
Voice	2.2%
Writing	1.9%
Augmentative-Alternative Communication	1.7%
Pragmatics	1.3%
Voice Following Tracheostomy	1.0%
Fluency	0.3%
Alaryngeal Communication	<0.1%

Percentages may total more than 100% because a patient may have been scored on multiple FCMs.

Stroke Patients

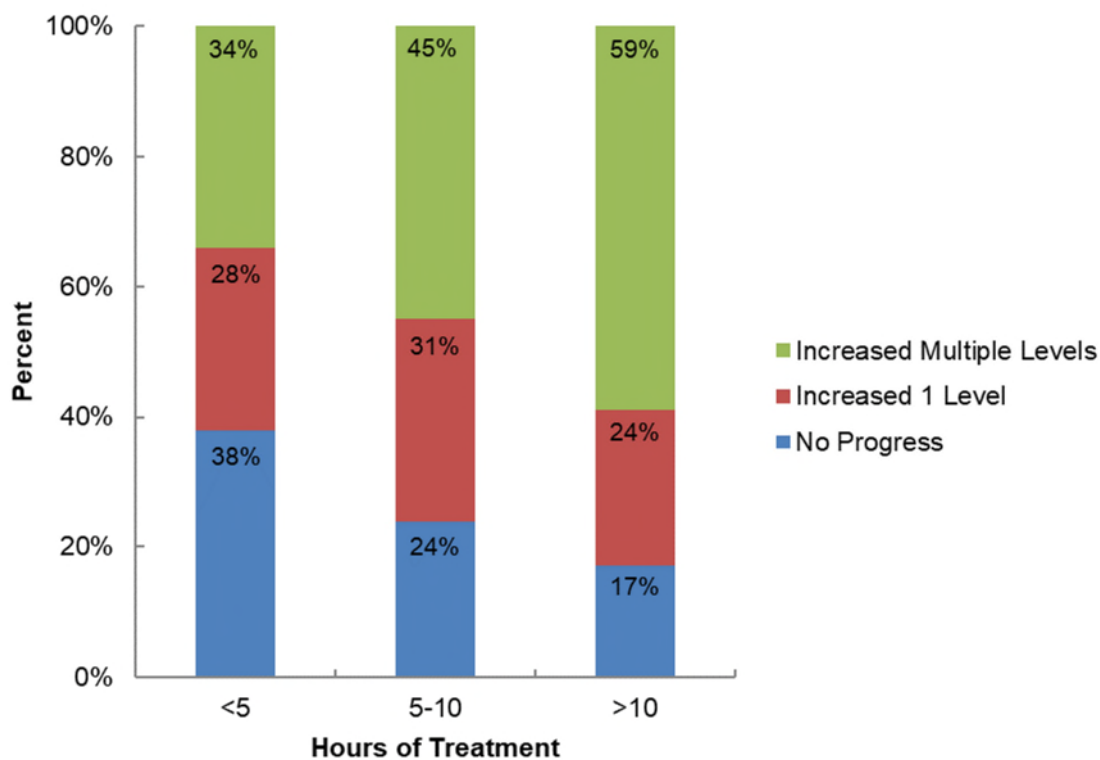
Progress in Top Four FCMs

Swallowing

Table 7: FCM Progress by Mean Number of Treatment Sessions and Treatment Time

Progress	Percent	Sessions	Time (hr)
No Progress	24.5%	7.6	4.8
Increase 1 Level	26.8%	9.1	5.9
Increase Multiple Levels	48.7%	10.2	6.5
TOTAL	100%	9.3	5.9

Figure 4: FCM Progress by Hours of Treatment Time



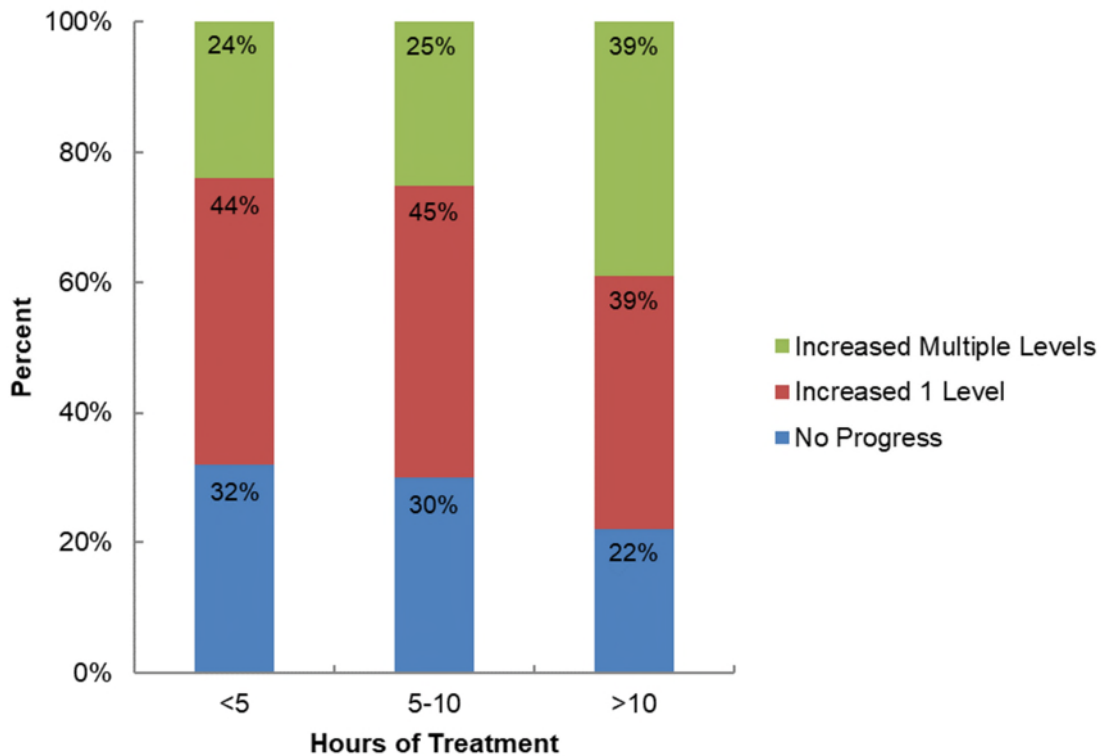
Stroke Patients

Memory

Table 8: FCM Progress by Mean Number of Treatment Sessions and Treatment Time

Progress	Percent	Sessions	Time (hr)
No Progress	28.0%	5.5	3.5
Increase 1 Level	42.7%	6.2	3.9
Increase Multiple Levels	29.3%	7.7	5.1
TOTAL	100%	6.5	4.1

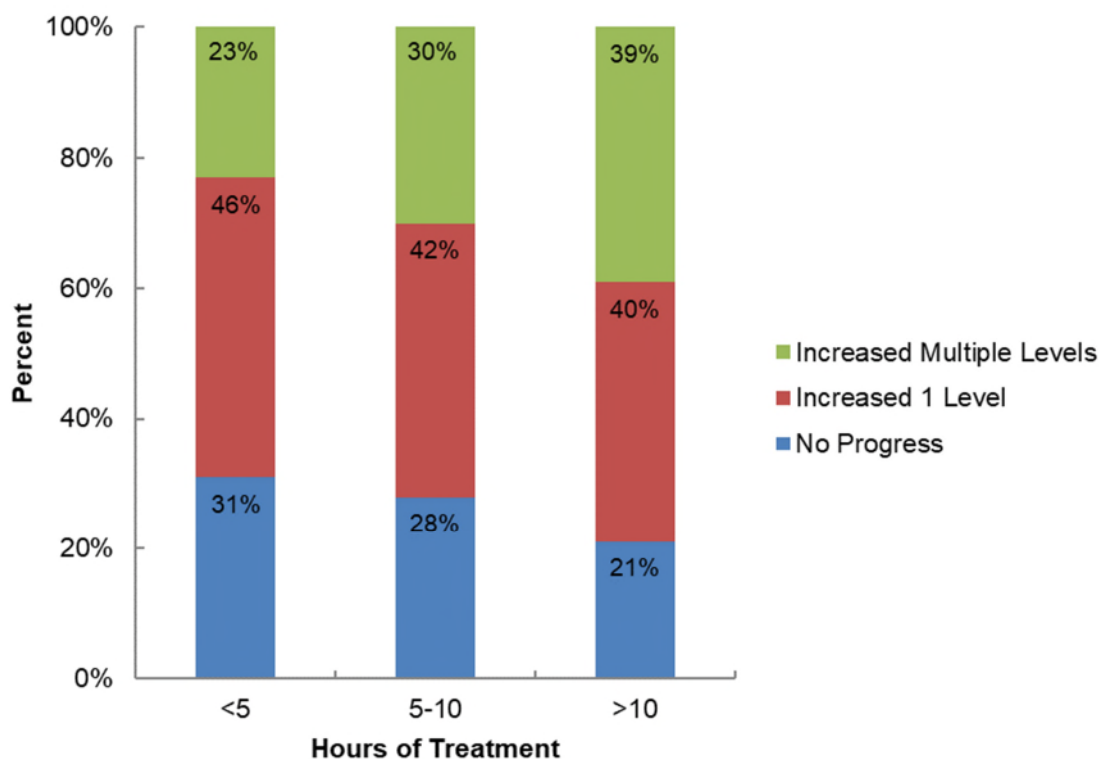
Figure 5: FCM Progress by Hours of Treatment Time



Stroke Patients

Problem Solving**Table 9: FCM Progress by Mean Number of Treatment Sessions and Treatment Time**

Progress	Percent	Sessions	Time (hr)
No Progress	26.8%	4.9	3.0
Increase 1 Level	42.5%	5.4	3.4
Increase Multiple Levels	30.7%	6.9	4.4
TOTAL	100%	5.7	3.6

Figure 6: FCM Progress by Hours of Treatment Time

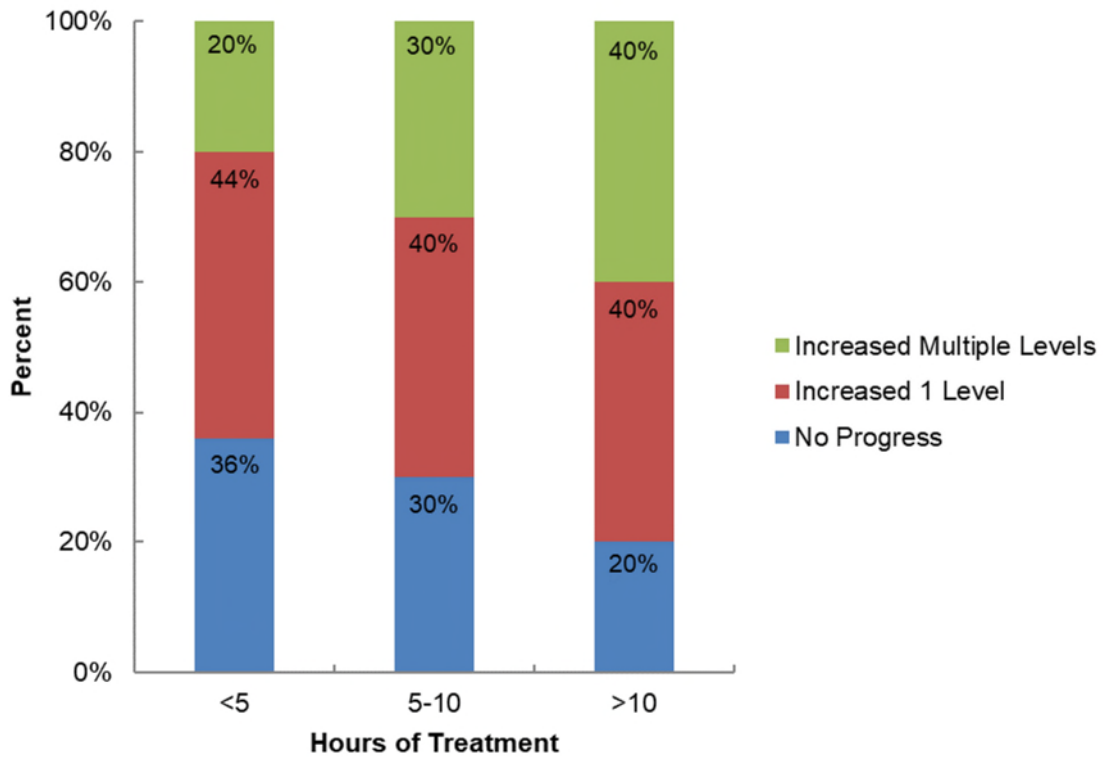
Stroke Patients

Spoken Language Expression

Table 10: FCM Progress by Mean Number of Treatment Sessions and Treatment Time

Progress	Percent	Sessions	Time (hr)
No Progress	28.1%	5.3	3.3
Increase 1 Level	40.9%	6.5	4.2
Increase Multiple Levels	31.0%	9.1	6.2
TOTAL	100%	7.0	4.5

Figure 7: FCM Progress by Hours of Treatment Time



*Stroke Patients***Table 11: Average Length of Stay (in days)**

LOS	Mean
Length of Stay (days)	19.5

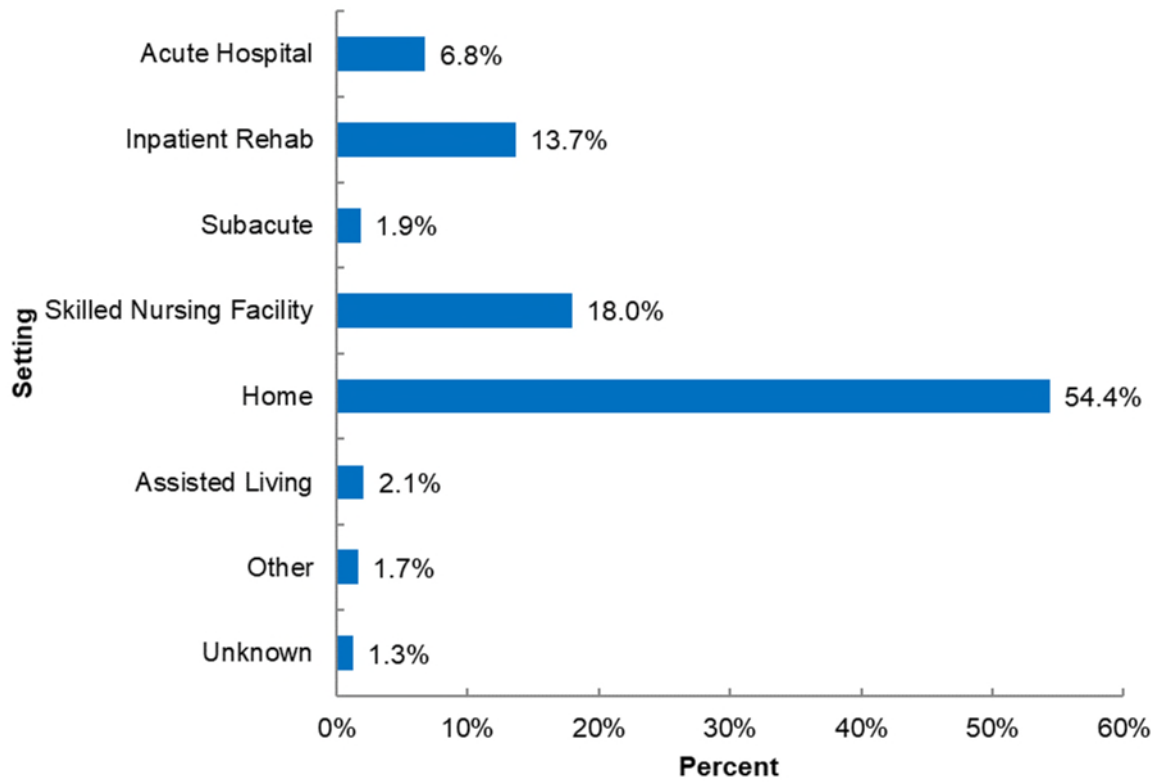
Table 12: Primary Reason for Discharge

Discharge Reason	Percent
Treatment Goals Met	50.4%
Patient Discharged to Another Level of Care	30.6%
Patient Progress Plateaued	7.0%
Insurance Benefits Exhausted or Declined	3.5%
Change in Medical Condition	3.3%
Patient Requested or Non-compliance	1.8%
Other	3.3%
TOTAL	100%

Table 13: Continued SLP Treatment Recommended at Discharge?

Recommended?	Percent
Yes	69.2%
No	30.8%
TOTAL	100%

Stroke Patients

Figure 8: Setting Subsequent to Discharge

Stroke Patients

Figure 9: Average Number of Sessions per Week

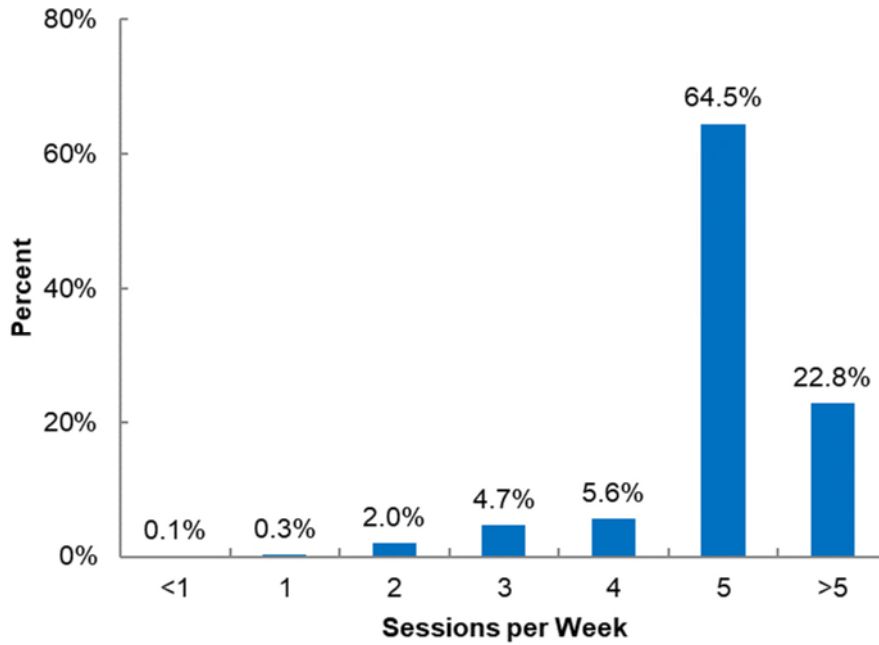
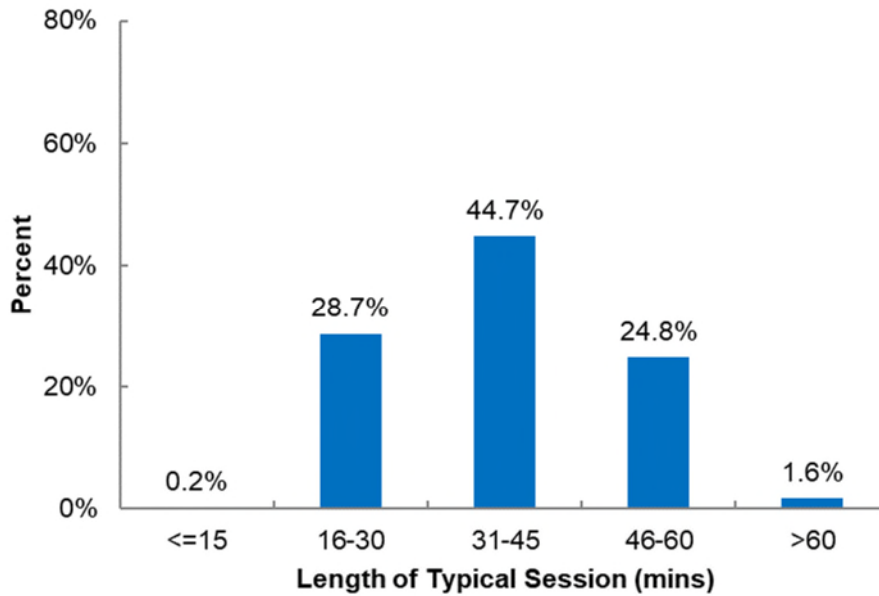


Figure 10: Length of Typical Session (in minutes)



SECTION III

BRAIN INJURY PATIENTS

Includes Patients Diagnosed with

- Head Injury
- Hemorrhage/Injury

- Average Amount of Treatment by Service Delivery Model
- Functional Communication Measures Treated
- FCM Progress
- Average Length of Stay
- Primary Reason for Discharge
- Continued SLP Treatment Recommended at Discharge
- Patient Setting Subsequent to Discharge
- Average Number of Sessions Per Week
- Length of Typical Session

BRAIN INJURY PATIENTS

Table 14: Average Amount of Treatment by Service Delivery Model (in hours)

Service Delivery	Mean Hours
Individual	8.9
Group	*
Training/Consultation	*
All Patients	9.0

**Insufficient data.*

Mean for all patients may be reflective of data from patients who received services in more than one service delivery model.

Table 15: Functional Communication Measures Treated

FCM	Percent
Memory	57.8%
Problem Solving	50.9%
Swallowing	40.3%
Attention	34.6%
Spoken Language Comprehension	25.1%
Spoken Language Expression	24.3%
Motor Speech	7.6%
Reading	4.5%
Voice	3.0%
Pragmatics	2.8%
Voice Following Tracheostomy	2.2%
Writing	1.1%
Augmentative-Alternative Communication	0.7%
Fluency	0.2%
Alaryngeal Communication	0.2%

Percentages may total more than 100% because a patient may have been scored on multiple FCMs.

Brain Injury Patients

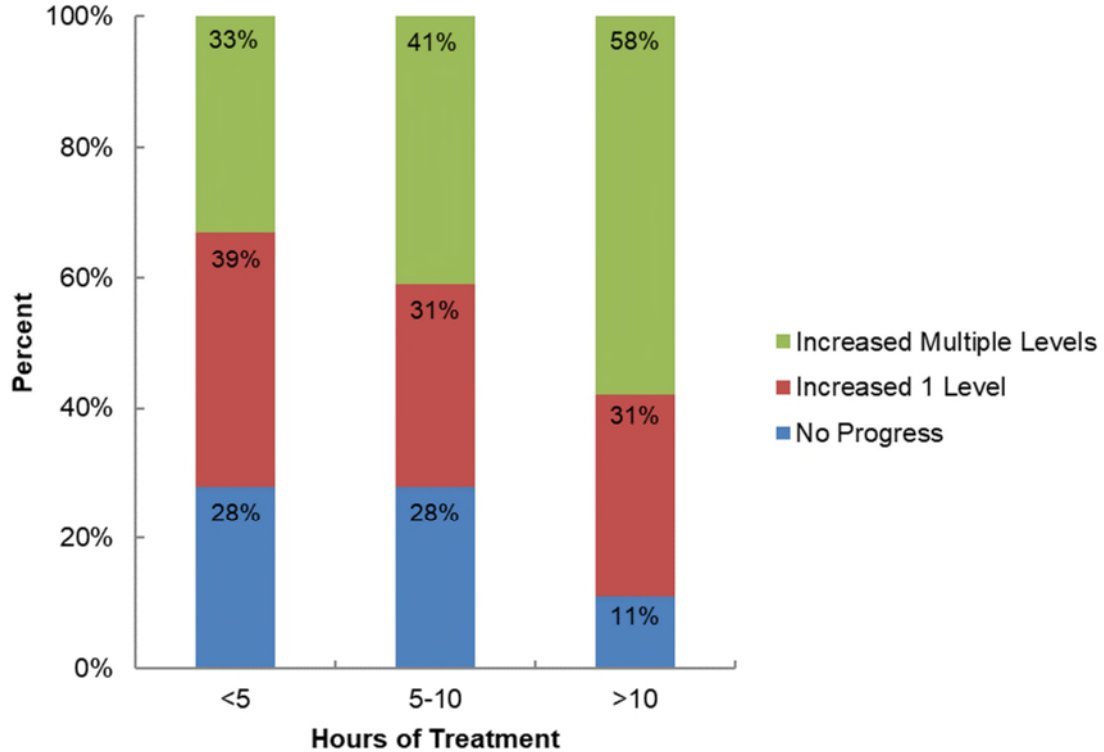
Progress in Top Four FCMs

Memory

Table 16: FCM Progress by Mean Number of Treatment Sessions and Treatment Time

Progress	Percent	Sessions	Time (hr)
No Progress	23.0%	5.2	3.2
Increase 1 Level	34.0%	6.2	3.7
Increase Multiple Levels	43.0%	6.2	4.2
TOTAL	100%	6.0	3.8

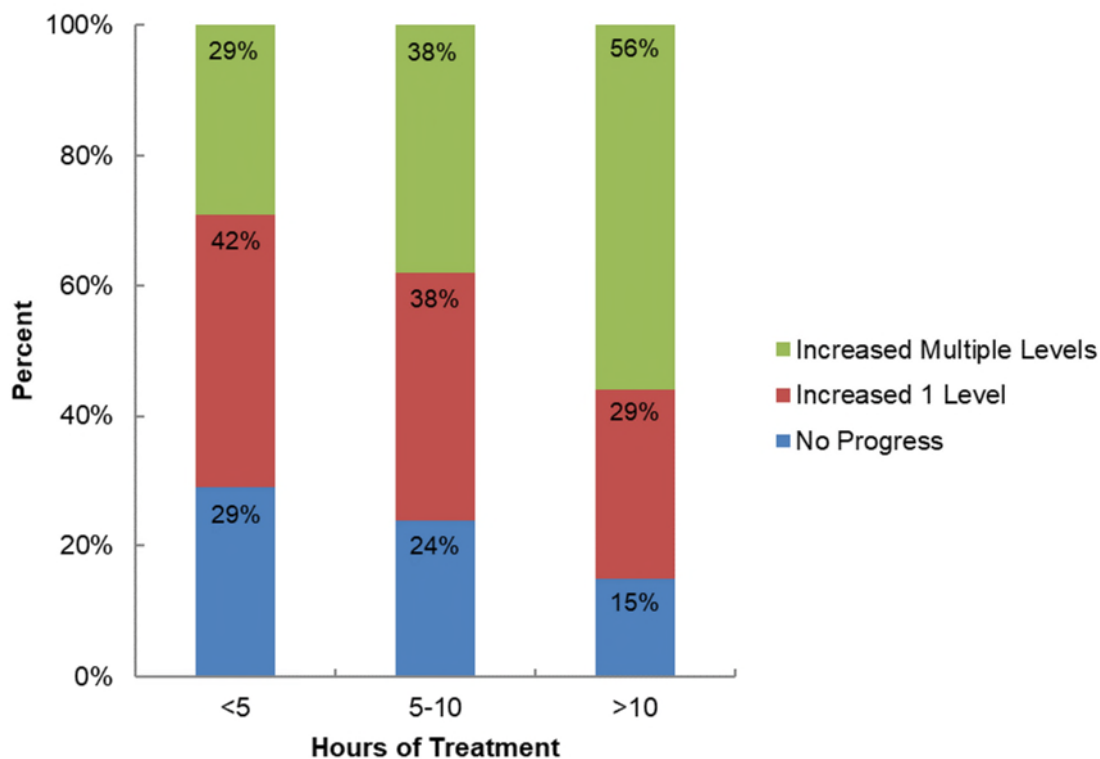
Figure 11: FCM Progress by Hours of Treatment Time



Brain Injury Patients

Problem Solving**Table 17: FCM Progress by Mean Number of Treatment Sessions and Treatment Time**

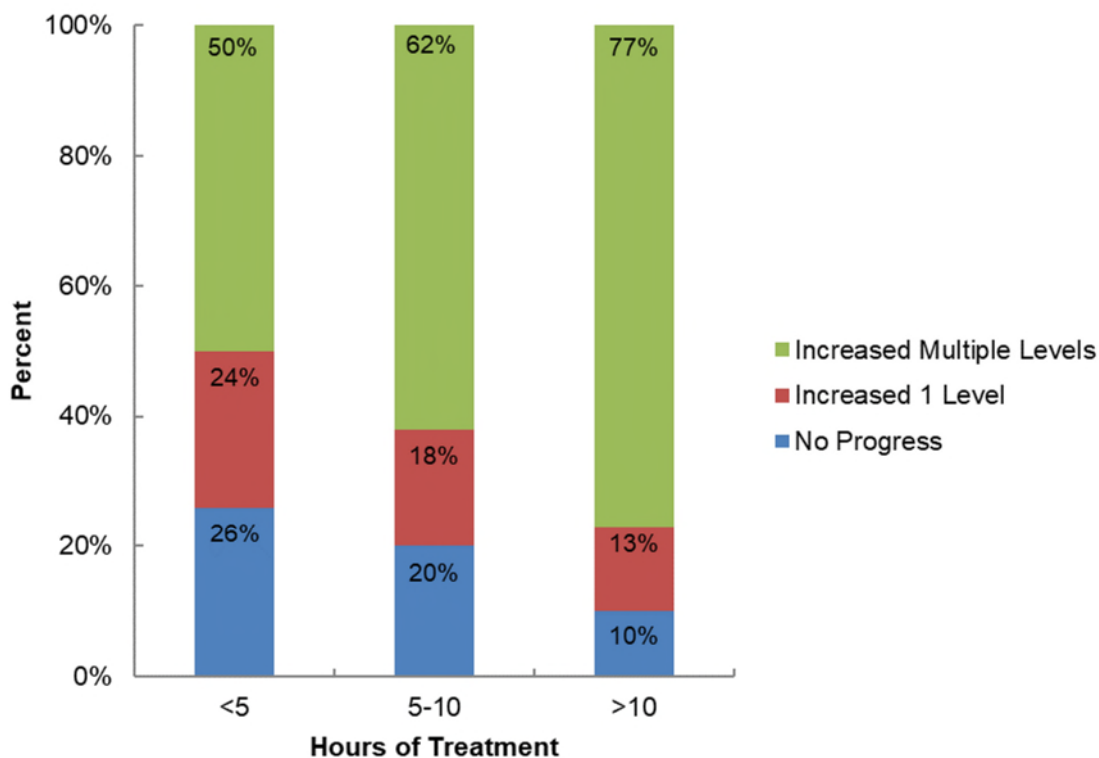
Progress	Percent	Sessions	Time (hr)
No Progress	22.9%	4.4	2.8
Increase 1 Level	36.3%	5.3	3.3
Increase Multiple Levels	40.8%	5.4	3.9
TOTAL	100%	5.1	3.4

Figure 12: FCM Progress by Hours of Treatment Time

Brain Injury Patients

Swallowing**Table 18: FCM Progress by Mean Number of Treatment Sessions and Treatment Time**

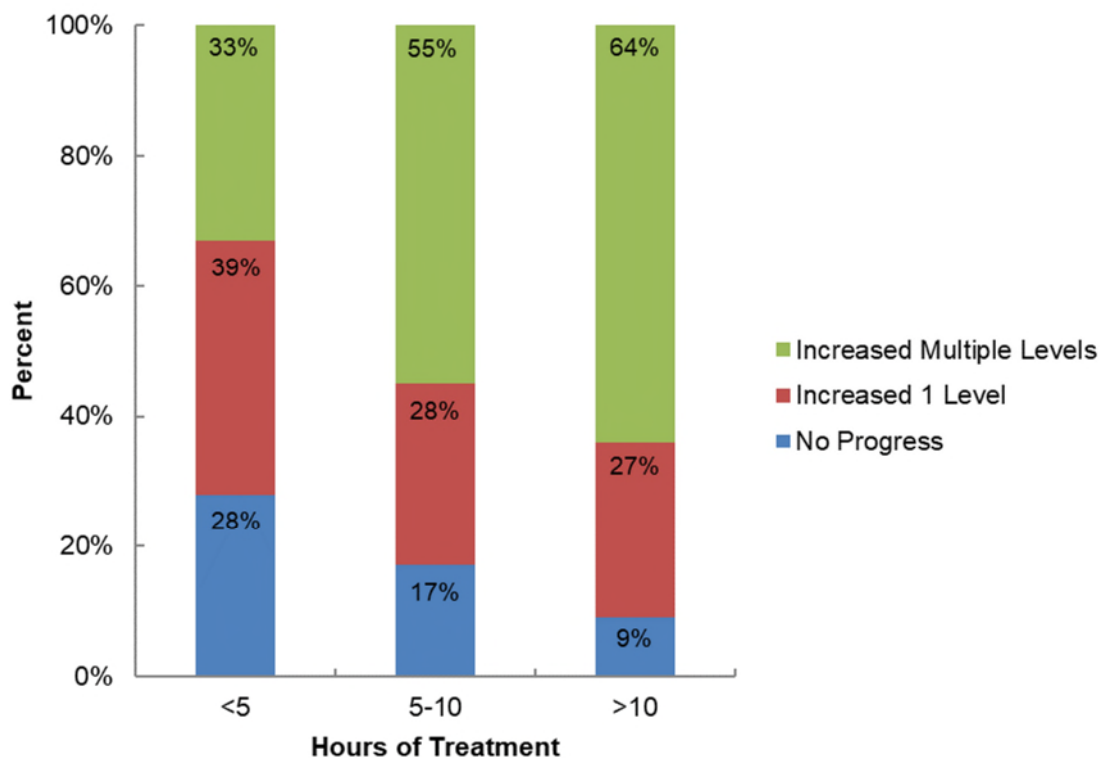
Progress	Percent	Sessions	Time (hr)
No Progress	18.1%	6.4	3.9
Increase 1 Level	18.1%	7.8	4.7
Increase Multiple Levels	63.9%	6.5	4.3
TOTAL	100%	6.7	4.3

Figure 13: FCM Progress by Hours of Treatment Time

Brain Injury Patients

Attention**Table 19: FCM Progress by Mean Number of Treatment Sessions and Treatment Time**

Progress	Percent	Sessions	Time (hr)
No Progress	17.0%	3.9	2.5
Increase 1 Level	30.9%	5.2	3.2
Increase Multiple Levels	52.2%	4.8	3.5
TOTAL	100%	4.7	3.3

Figure 14: FCM Progress by Hours of Treatment Time

*Brain Injury Patients***Table 20: Average Length of Stay (in days)**

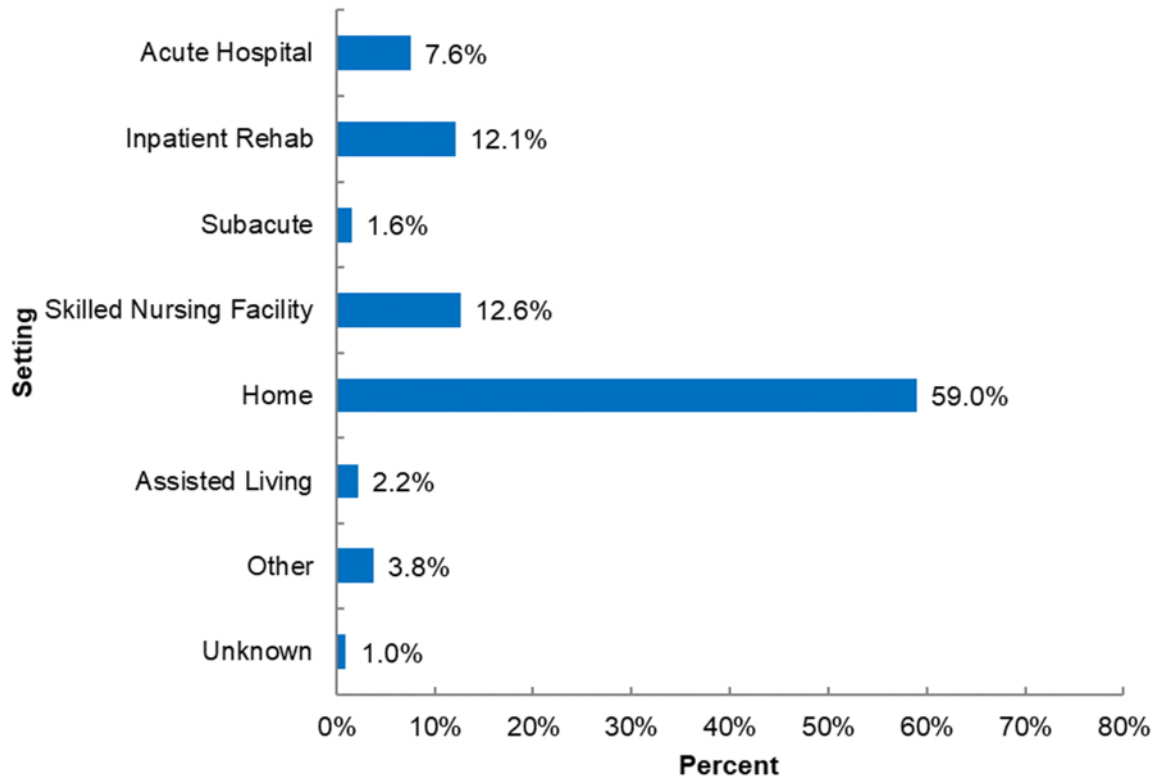
LOS	Mean
Length of Stay (days)	18.2

Table 21: Primary Reason for Discharge

Discharge Reason	Percent
Treatment Goals Met	51.6%
Patient Discharged to Another Level of Care	29.6%
Patient Progress Plateaued	7.2%
Insurance Benefits Exhausted or Declined	3.5%
Change in Medical Condition	2.8%
Patient Requested or Non-compliance	1.9%
Other	3.4%
TOTAL	100%

Table 22: Continued SLP Treatment Recommended at Discharge?

Recommended?	Percent
Yes	68.2%
No	31.8%
TOTAL	100%

*Brain Injury Patients***Figure 15: Setting Subsequent to Discharge**

Brain Injury Patients

Figure 16: Average Number of Sessions per Week

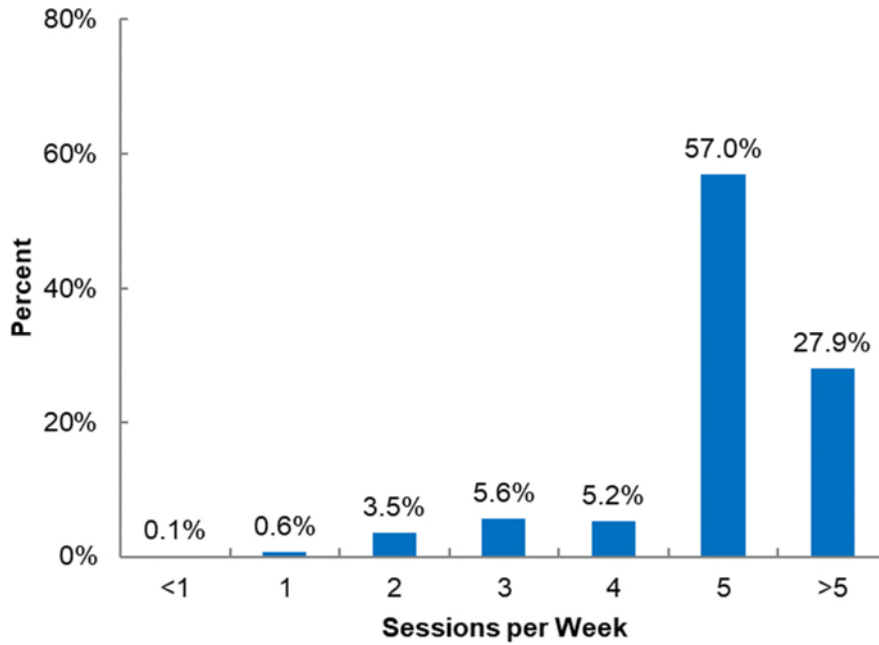
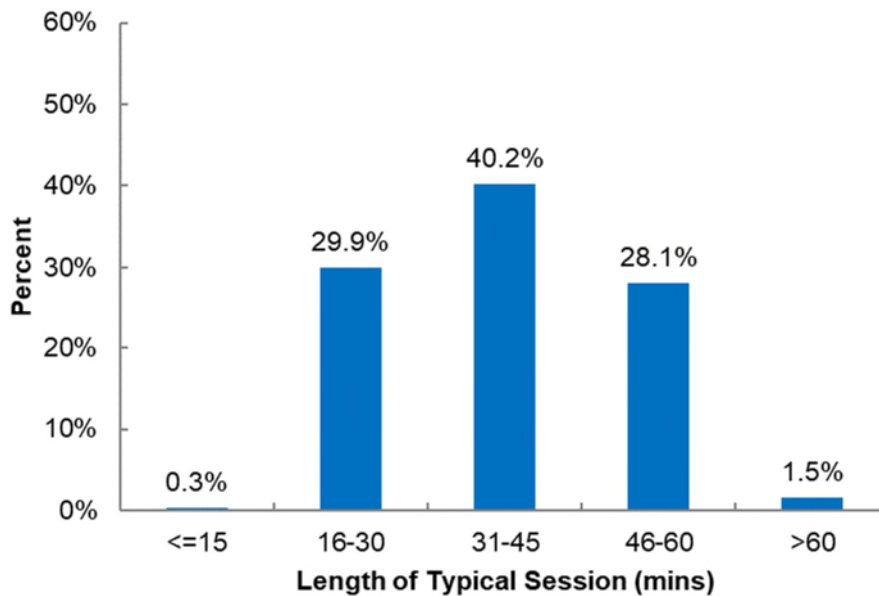


Figure 17: Length of Typical Session (in minutes)



SECTION IV

PATIENTS WITH RESPIRATORY DISEASES

- Average Amount of Treatment by Service Delivery Model
- Functional Communication Measures Treated
- FCM Progress
- Average Length of Stay
- Primary Reason for Discharge
- Continued SLP Treatment Recommended at Discharge
- Patient Setting Subsequent to Discharge
- Average Number of Sessions Per Week
- Length of Typical Session

RESPIRATORY PATIENTS

Table 23: Average Amount of Treatment by Service Delivery Model (in hours)

Service Delivery	Mean Hours
Individual	9.0
Group	*
Training/Consultation	*
All Patients	9.0

**Insufficient data.*

Mean for all patients may be reflective of data from patients who received services in more than one service delivery model.

Table 24: Functional Communication Measures Treated

FCM	Percent
Swallowing	78.1%
Memory	20.8%
Problem Solving	14.5%
Voice Following Tracheostomy	7.1%
Attention	5.4%
Spoken Language Expression	4.3%
Spoken Language Comprehension	3.5%
Voice	2.8%
Motor Speech	2.2%
Augmentative-Alternative Communication	0.6%
Reading	0.5%
Writing	0.3%
Pragmatics	0.1%
Fluency	0.1%
Alaryngeal Communication	-

Percentages may total more than 100% because a patient may have been scored on multiple FCMs.

Respiratory Patients

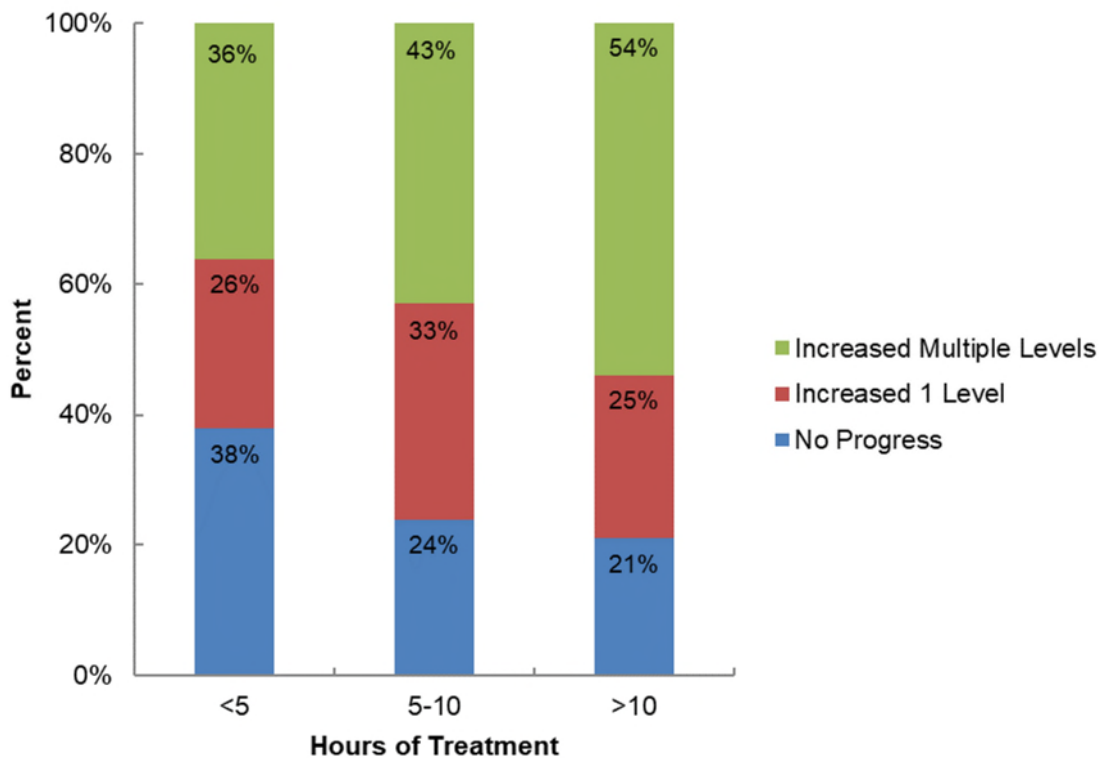
Progress in Top Four FCMs

Swallowing

Table 25: FCM Progress by Mean Number of Treatment Sessions and Treatment Time

Progress	Percent	Sessions	Time (hr)
No Progress	29.2%	8.7	5.4
Increase 1 Level	27.2%	10.8	7.1
Increase Multiple Levels	43.5%	13.1	8.5
TOTAL	100%	11.2	7.2

Figure 18: FCM Progress by Hours of Treatment Time



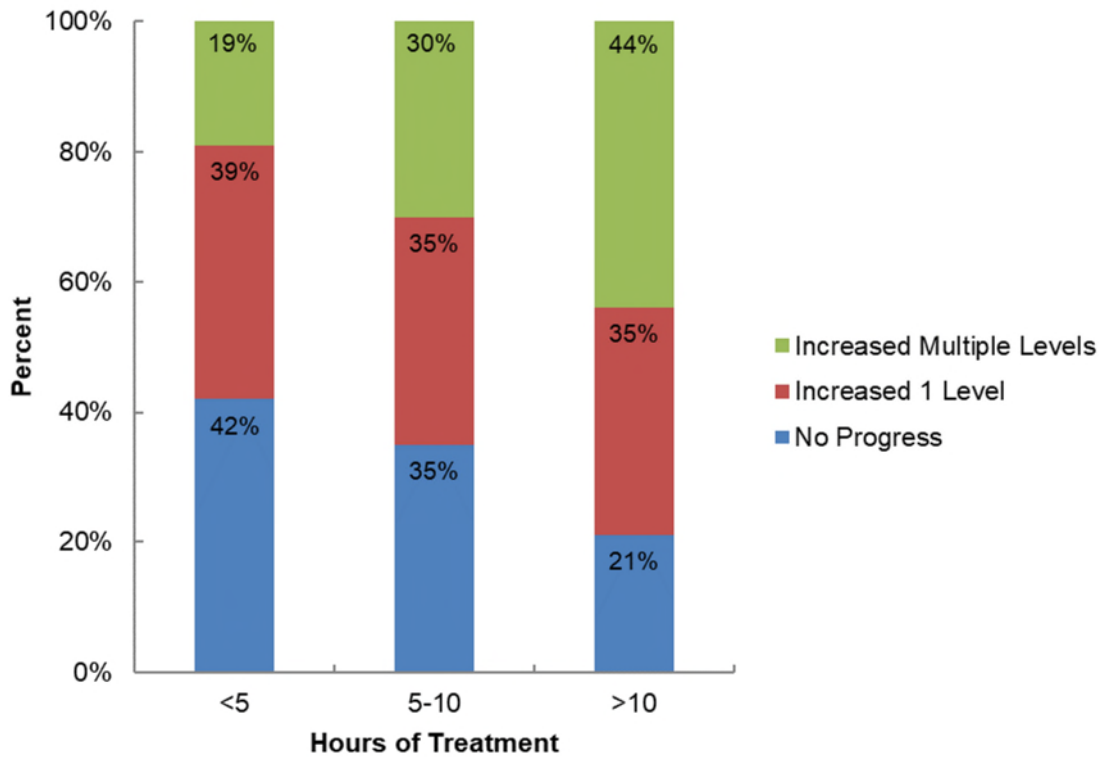
Respiratory Patients

Memory

Table 26: FCM Progress by Mean Number of Treatment Sessions and Treatment Time

Progress	Percent	Sessions	Time (hr)
No Progress	31.9%	6.6	4.0
Increase 1 Level	36.1%	9.0	5.8
Increase Multiple Levels	31.9%	12.1	8.1
TOTAL	100%	9.2	6.0

Figure 19: FCM Progress by Hours of Treatment Time



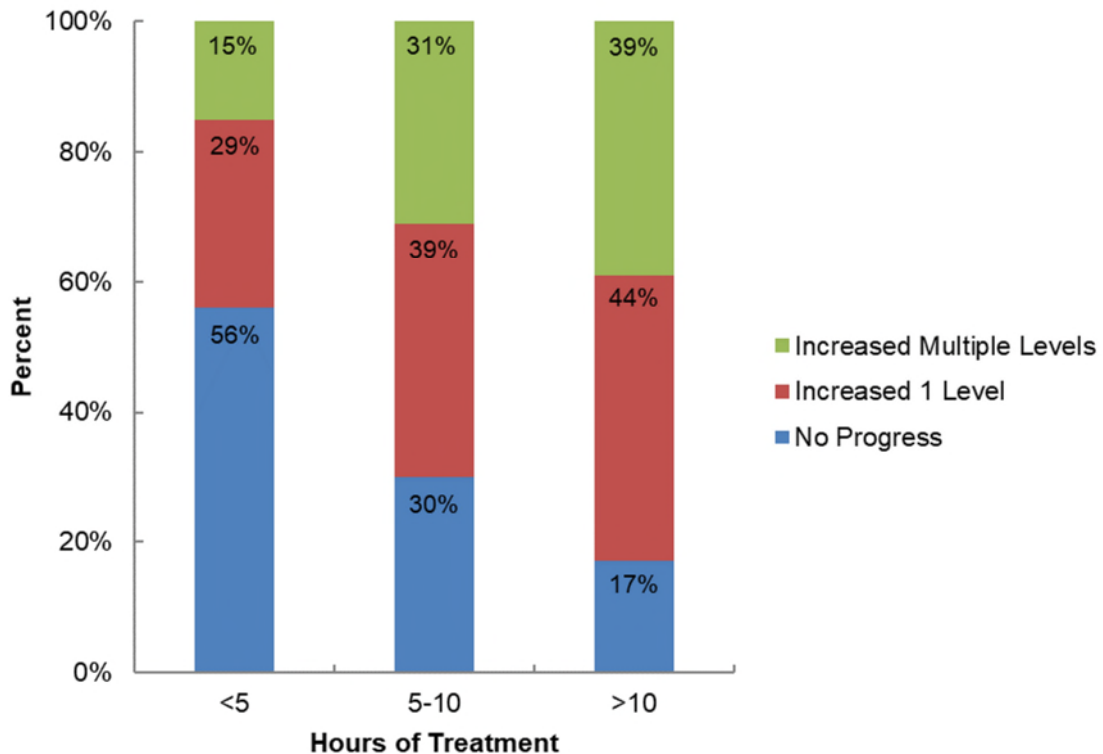
Respiratory Patients

Problem Solving

Table 27: FCM Progress by Mean Number of Treatment Sessions and Treatment Time

Progress	Percent	Sessions	Time (hr)
No Progress	33.3%	4.5	3.0
Increase 1 Level	38.1%	8.6	5.7
Increase Multiple Levels	28.6%	9.2	6.1
TOTAL	100%	7.4	4.9

Figure 20: FCM Progress by Hours of Treatment Time



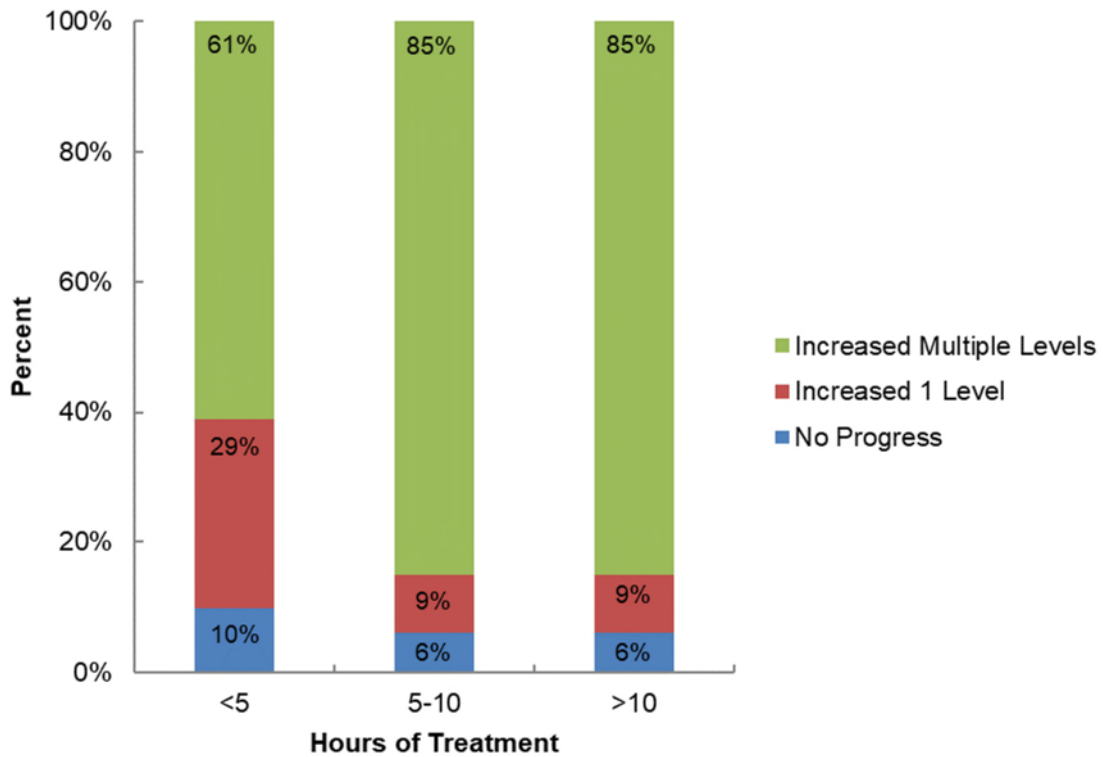
Respiratory Patients

Voice Following Tracheostomy

Table 28: FCM Progress by Mean Number of Treatment Sessions and Treatment Time

Progress	Percent	Sessions	Time (hr)
No Progress	8.0%	5.3	2.5
Increase 1 Level	15.9%	4.7	2.2
Increase Multiple Levels	76.1%	5.1	3.2
TOTAL	100%	5.1	3.0

Figure 21: FCM Progress by Hours of Treatment Time



*Respiratory Patients***Table 29: Average Length of Stay (in days)**

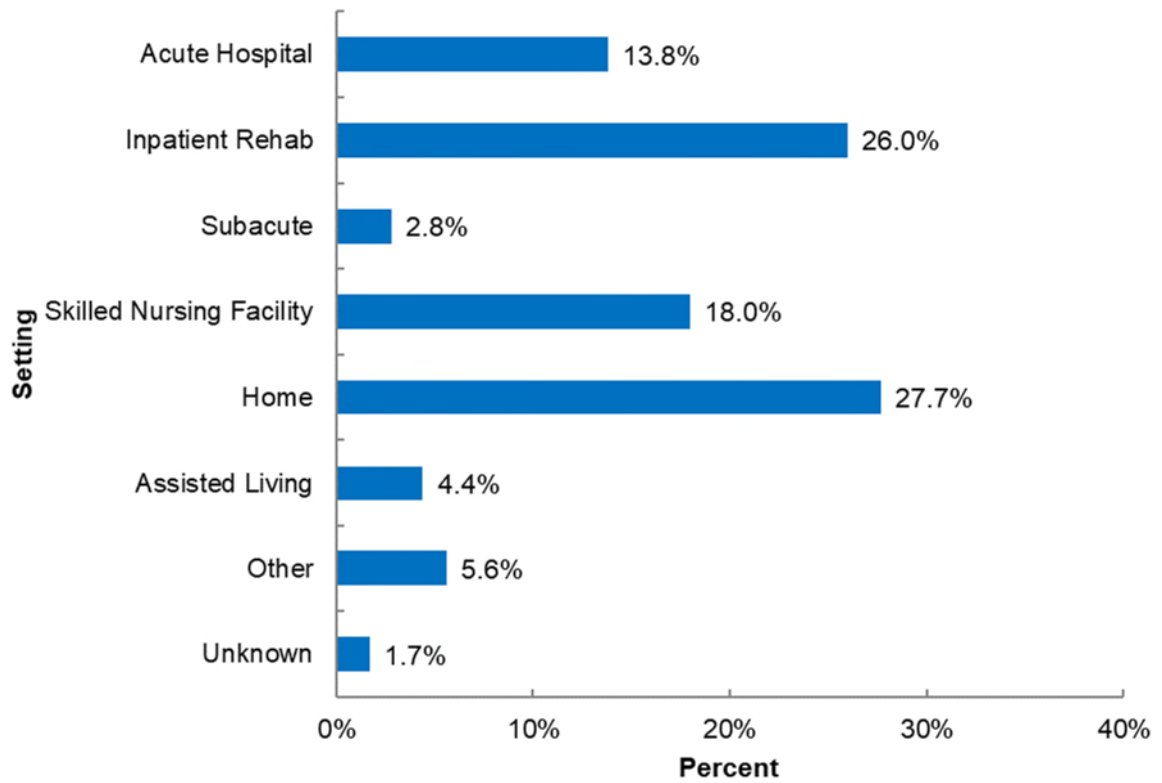
LOS	Mean
Length of Stay (days)	20.6

Table 30: Primary Reason for Discharge

Discharge Reason	Percent
Treatment Goals Met	53.4%
Patient Discharged to Another Level of Care	20.9%
Patient Progress Plateaued	9.7%
Change in Medical Condition	6.1%
Patient Requested or Non-compliance	2.6%
Insurance Benefits Exhausted or Declined	2.3%
Other	4.9%
TOTAL	100%

Table 31: Continued SLP Treatment Recommended at Discharge?

Recommended?	Percent
Yes	34.8%
No	65.2%
TOTAL	100%

*Respiratory Patients***Figure 22: Setting Subsequent to Discharge**

Respiratory Patients

Figure 23: Average Number of Sessions per Week

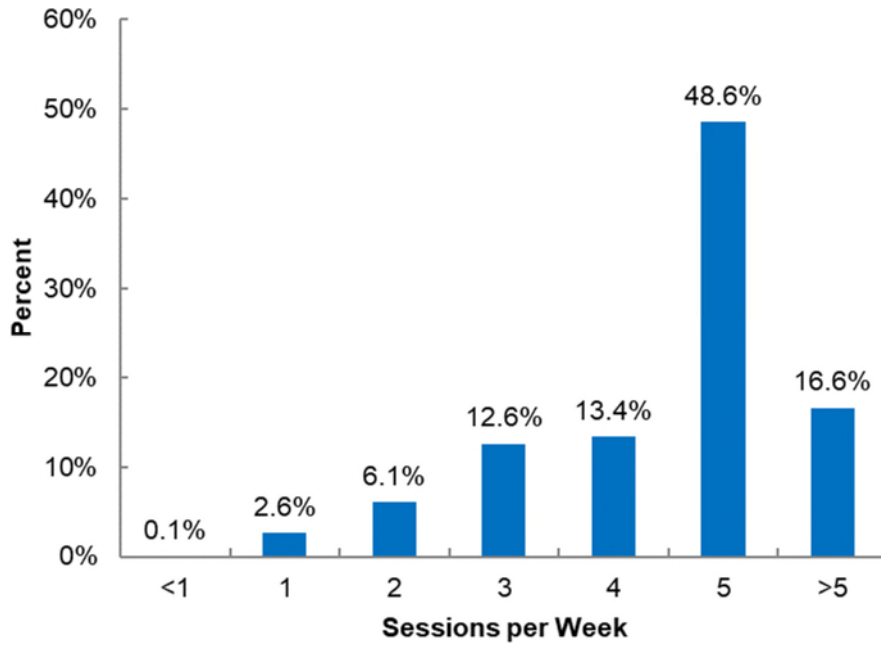
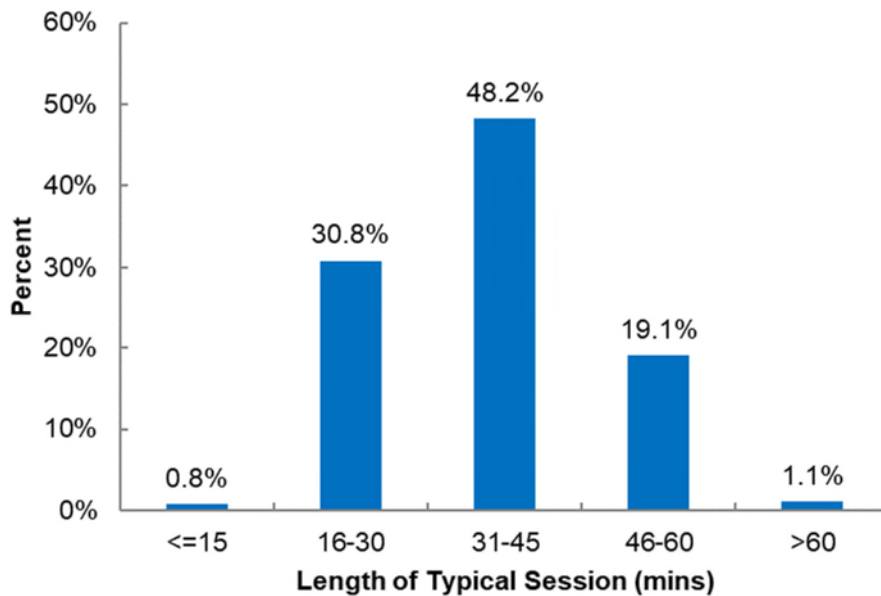


Figure 24: Length of Typical Session (in minutes)



SECTION V

PATIENTS WITH OTHER NEUROLOGICAL DISORDERS

Includes Patients Diagnosed with

- CNS Diseases
- Other Neoplasms
- Anoxia
- Mental Disorders
- Encephalopathy

- Average Amount of Treatment by Service Delivery Model
- Functional Communication Measures Treated
- FCM Progress
- Average Length of Stay
- Primary Reason for Discharge
- Continued SLP Treatment Recommended at Discharge
- Patient Setting Subsequent to Discharge
- Average Number of Sessions Per Week
- Length of Typical Session

PATIENTS WITH OTHER NEUROLOGICAL DISORDERS

Table 32: Average Amount of Treatment by Service Delivery Model (in hours)

Service Delivery	Mean Hours
Individual	8.7
Group	*
Training/Consultation	*
All Patients	8.7

**Insufficient data.*

Mean for all patients may be reflective of data from patients who received services in more than one service delivery model.

Table 33: Functional Communication Measures Treated

FCM	Percent
Memory	47.6%
Swallowing	36.4%
Problem Solving	33.7%
Spoken Language Expression	18.1%
Spoken Language Comprehension	16.6%
Attention	16.0%
Motor Speech	7.5%
Voice	3.1%
Reading	2.4%
Pragmatics	0.9%
Voice Following Tracheostomy	0.7%
Writing	0.5%
Augmentative-Alternative Communication	0.5%
Fluency	0.1%
Alaryngeal Communication	0.1%

Percentages may total more than 100% because a patient may have been scored on multiple FCMs.

Other Neurological Patients

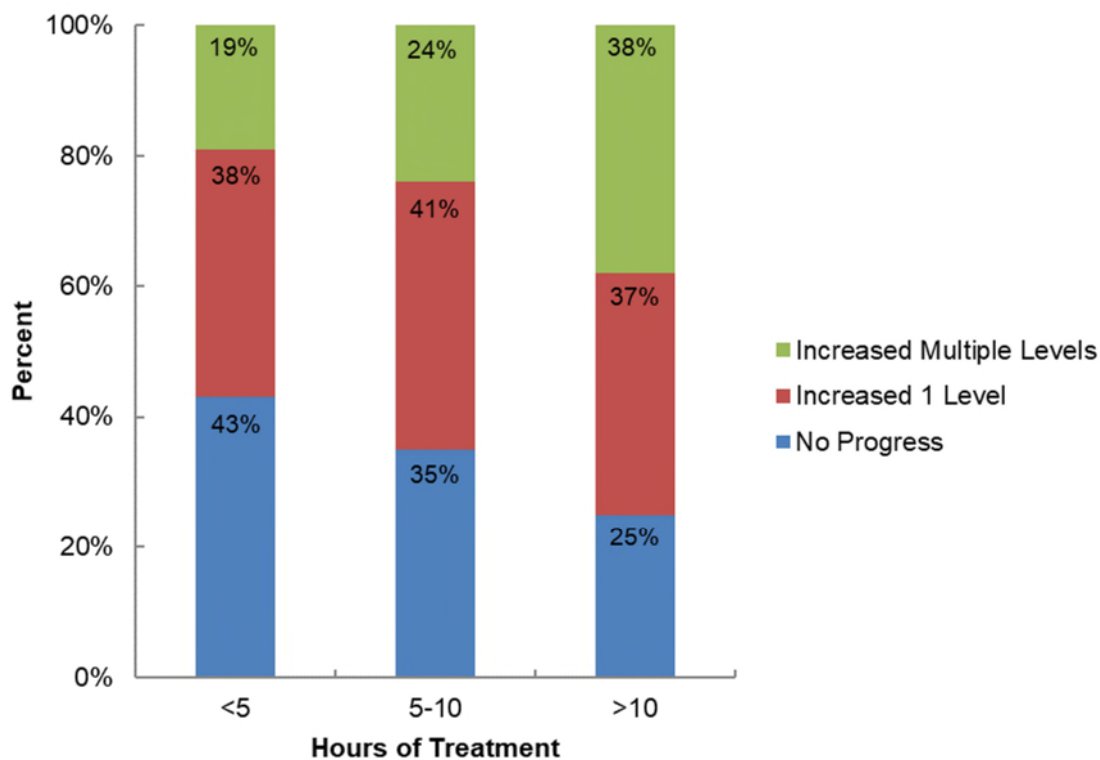
Progress in Top Four FCMs

Memory

Table 34: FCM Progress by Mean Number of Treatment Sessions and Treatment Time

Progress	Percent	Sessions	Time (hr)
No Progress	35.0%	6.2	4.0
Increase 1 Level	39.0%	8.3	5.1
Increase Multiple Levels	25.9%	10.0	6.6
TOTAL	100%	8.0	5.1

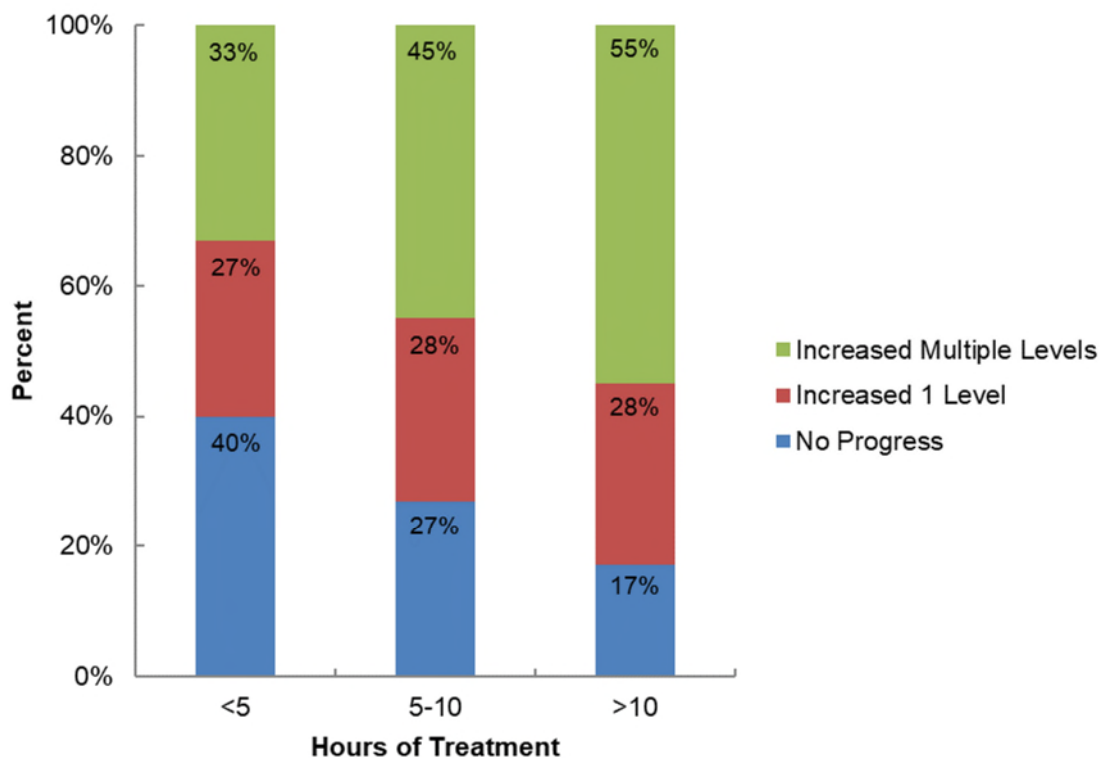
Figure 25: FCM Progress by Hours of Treatment Time



Other Neurological Patients

Swallowing**Table 35: FCM Progress by Mean Number of Treatment Sessions and Treatment Time**

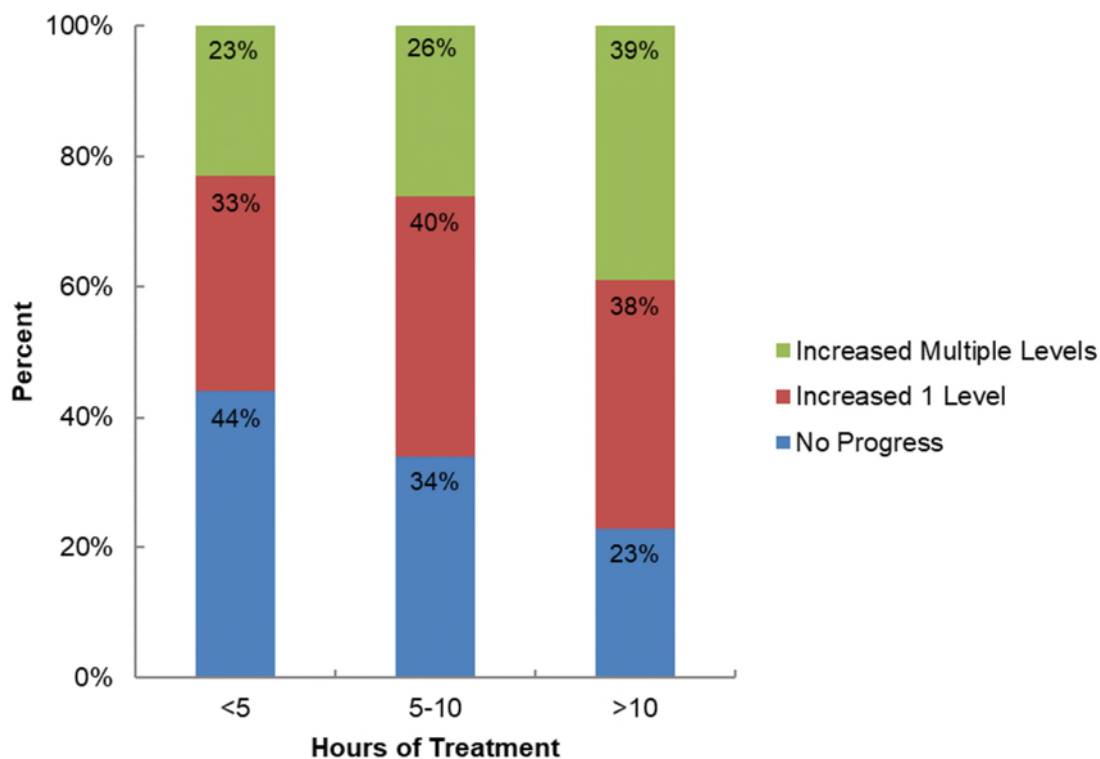
Progress	Percent	Sessions	Time (hr)
No Progress	28.0%	8.0	4.8
Increase 1 Level	27.6%	9.7	6.0
Increase Multiple Levels	44.4%	11.0	6.8
TOTAL	100%	9.8	6.0

Figure 26: FCM Progress by Hours of Treatment Time

Other Neurological Patients

Problem Solving**Table 36: FCM Progress by Mean Number of Treatment Sessions and Treatment Time**

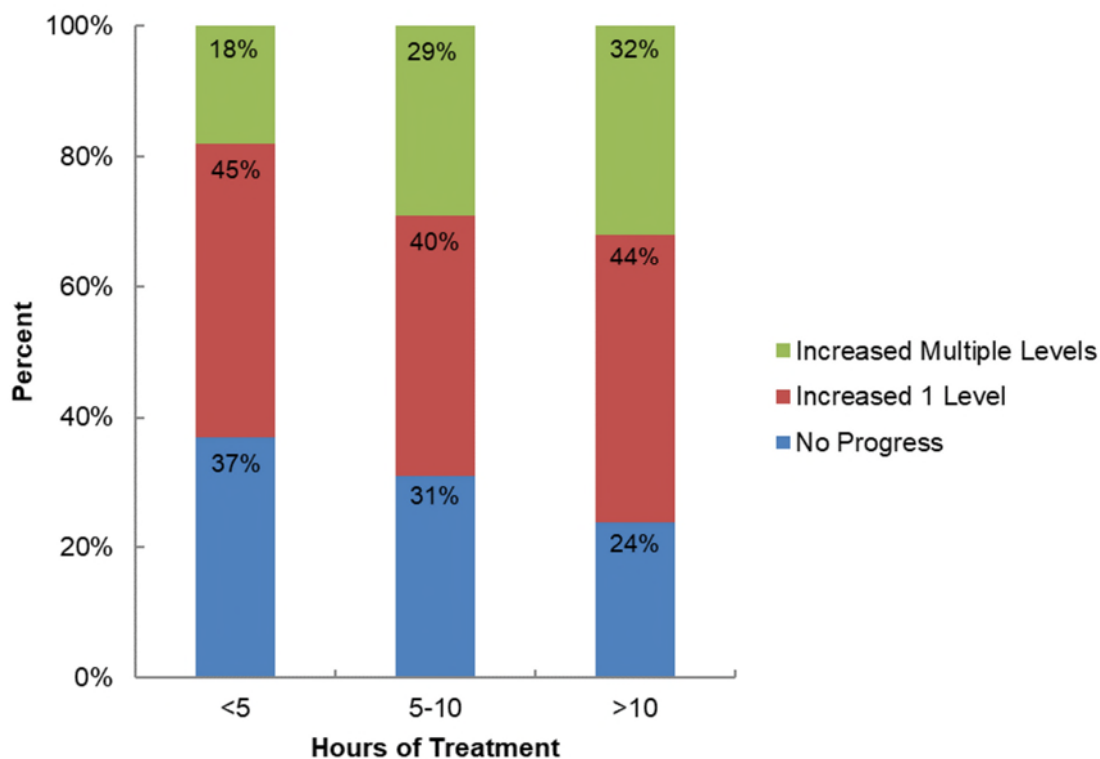
Progress	Percent	Sessions	Time (hr)
No Progress	34.8%	5.5	3.6
Increase 1 Level	36.9%	7.2	4.7
Increase Multiple Levels	28.3%	9.0	5.6
TOTAL	100%	7.1	4.6

Figure 27: FCM Progress by Hours of Treatment Time

Other Neurological Patients

Spoken Language Expression**Table 37: FCM Progress by Mean Number of Treatment Sessions and Treatment Time**

Progress	Percent	Sessions	Time (hr)
No Progress	31.4%	5.3	3.2
Increase 1 Level	43.1%	5.6	3.5
Increase Multiple Levels	25.4%	7.3	4.6
TOTAL	100%	5.9	3.7

Figure 28: FCM Progress by Hours of Treatment Time

*Other Neurological Patients***Table 38: Average Length of Stay (in days)**

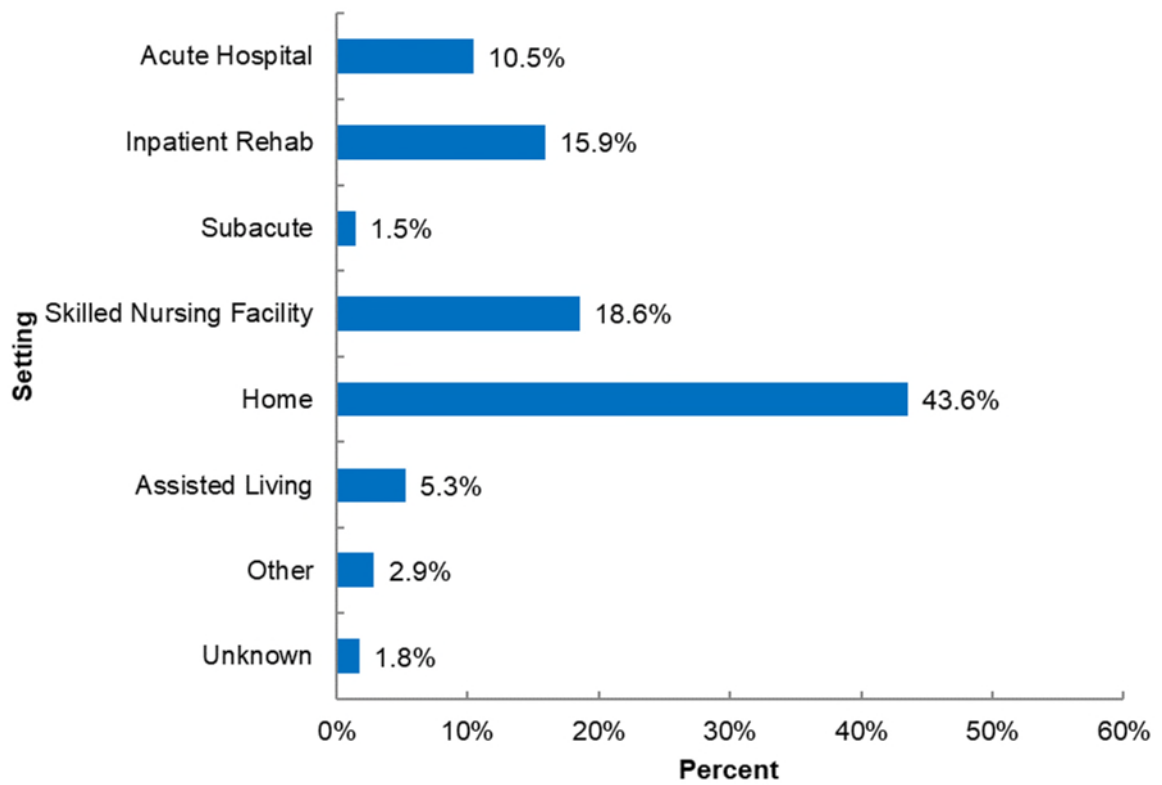
LOS	Mean
Length of Stay (days)	19.0

Table 39: Primary Reason for Discharge

Discharge Reason	Percent
Treatment Goals Met	50.7%
Patient Discharged to Another Level of Care	22.9%
Patient Progress Plateaued	12.0%
Change in Medical Condition	4.1%
Patient Requested or Non-compliance	3.3%
Insurance Benefits Exhausted or Declined	2.6%
Other	4.4%
TOTAL	100%

Table 40: Continued SLP Treatment Recommended at Discharge?

Recommended?	Percent
Yes	45.6%
No	54.4%
TOTAL	100%

*Other Neurological Patients***Figure 29: Setting Subsequent to Discharge**

Other Neurological Patients

Figure 30: Average Number of Sessions per Week

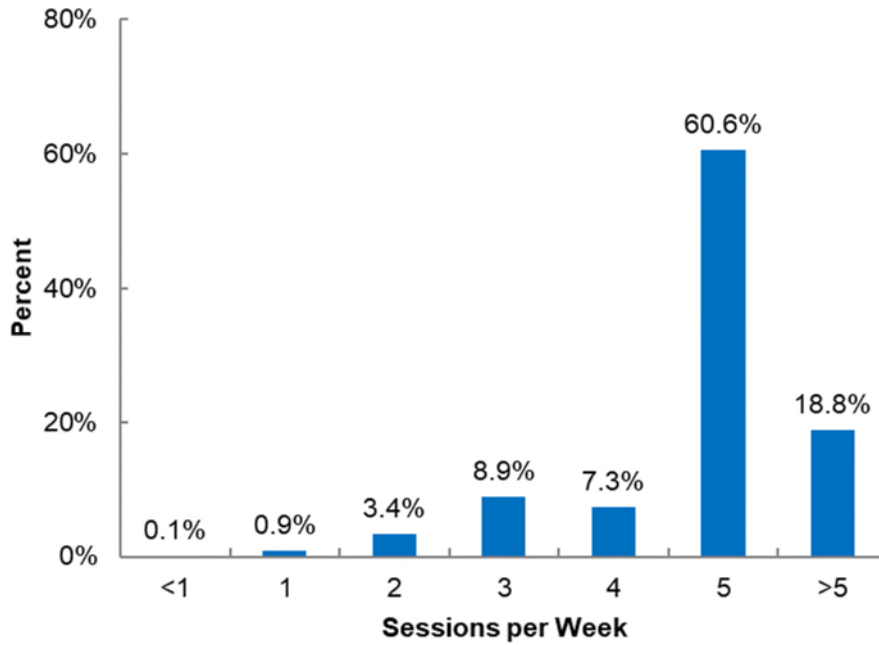
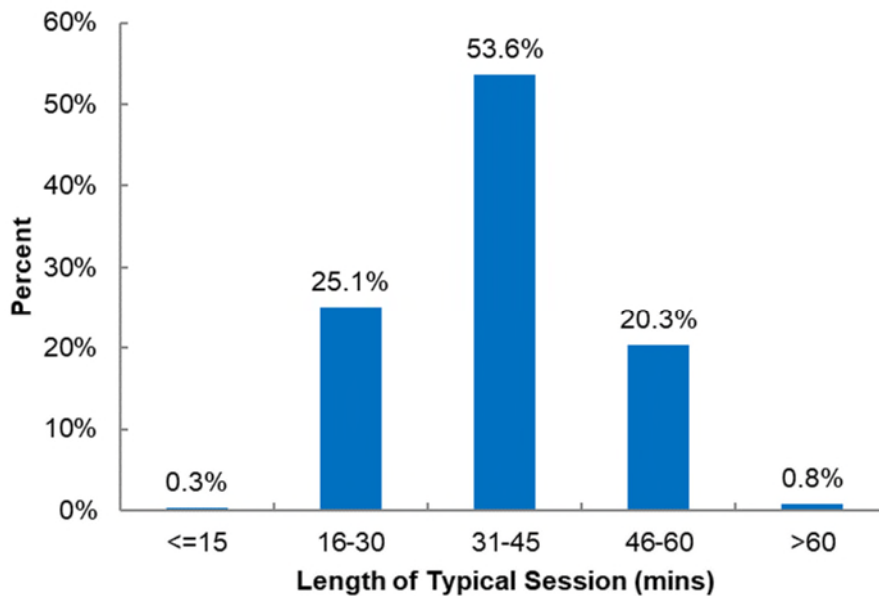


Figure 31: Length of Typical Session (in minutes)



APPENDIX

- Introduction to Functional Communication Measures (FCMs)
- Sample Adults in Health Care FCM
- Definitions
 - Service Delivery Model
 - Medical Diagnosis
 - Treatment Setting
 - Primary Reasons for Discharge
 - Primary Funding Sources

FUNCTIONAL COMMUNICATION MEASURES (FCM)

The Functional Communication Measures (FCMs) are a series of seven-point rating scales, ranging from least functional (Level 1) to most functional (Level 7). They have been developed by ASHA to describe the different aspects of a patient's functional communication and swallowing abilities over the course of speech-language pathology intervention. The following are the 15 FCMs used with the Adult Healthcare component of NOMS:

- Alaryngeal Communication
- Attention
- Augmentative-Alternative Communication
- Fluency
- Memory
- Motor Speech
- Pragmatics
- Problem Solving
- Reading
- Spoken Language Comprehension
- Spoken Language Expression
- Swallowing
- Voice
- Voice Following Tracheostomy
- Writing

These FCMs were designed to describe functional abilities over time from admission to discharge in various speech-language pathology treatment settings. They are not dependent upon administration of any particular formal or informal assessment measures, but are clinical observations provided by the speech-language pathologist of the patient's communication and/or swallowing abilities addressed by an individualized treatment plan.

Each level of the FCMs contain references to the intensity and frequency of the cueing method and use of compensatory strategies that are required to assist the patient in becoming functional and independent in various situations and activities.

SAMPLE ADULTS IN HEALTH CARE FCM

Spoken Language Comprehension

- LEVEL 1:** The individual is alert, but unable to follow simple directions or respond to yes/no questions, even with cues.
- LEVEL 2:** With consistent, maximal cues, the individual is able to follow simple directions, respond to simple yes/no questions in context, and respond to simple words or phrases related to personal needs.
- LEVEL 3:** The individual usually responds accurately to simple yes/no questions. The individual is able to follow simple directions out of context, although moderate cueing is consistently needed. Accurate comprehension of more complex directions/messages is infrequent.
- LEVEL 4:** The individual consistently responds accurately to simple yes/no questions and occasionally follows simple directions without cues. Moderate contextual support is usually needed to understand complex sentences/messages. The individual is able to understand limited conversations about routine daily activities with familiar communication partners.
- LEVEL 5:** The individual is able to understand communication in structured conversations with both familiar and unfamiliar communication partners. The individual occasionally requires minimal cueing to understand more complex sentences/messages. The individual occasionally initiates the use of compensatory strategies when encountering difficulty.
- LEVEL 6:** The individual is able to understand communication in most activities, but some limitations in comprehension are still apparent in vocational, avocational, and social activities. The individual rarely requires minimal cueing to understand complex sentences. The individual usually uses compensatory strategies when encountering difficulty.
- LEVEL 7:** The individual's ability to independently participate in vocational, avocational, and social activities are not limited by spoken language comprehension. When difficulty with comprehension occurs, the individual consistently uses a compensatory strategy.

DEFINITIONS USED IN NOMS DATA COLLECTION

Service Delivery Model

Individual and/or group treatment model

The speech-language pathologist provides direct treatment to the patient on a one-on-one basis and/or in a group treatment format (two or more patients). Includes patients receiving cotreatment provided by two disciplines, as well as patients who are receiving services simultaneously, but working on different activities.

Training and/or consultation model

Speech and language intervention is provided to the patient, family, caregiver, or other related health professional to establish/modify a home program and/or to complete patient/caregiver training. The patient must be present for a minimum of two sessions. Periodic training and/or consultation sessions may be provided in conjunction with the individual and/or group treatment model

Medical Diagnosis

Neoplasm Lip/Pharynx (140.00-149.99)	Malignant cancers of the lip, oral cavity, and pharynx
Other Neoplasm (150.00-160.99 & 162.00-239.99)	Malignant and benign tumors. In particular, ones relating to communication disorders include brain tumors, cancers of the head and neck, digestive track, esophagus, nasal cavities, middle ear, accessory sinuses, neoplasms of uncertain behavior. Do not include cancers of the mouth or larynx
Neoplasm Larynx (161.00-161.99)	Malignant cancer of the larynx (laryngectomy).
Mental Disorders (290.00-319.00)	Senile and presenile organic psychotic conditions, schizophrenia, amnesia, Korsakoff's syndrome (alcoholic or nonalcoholic induced), chronic psychotic conditions, mental retardation.
Anoxia (348.10)	Anoxia.
Encephalopathy (348.30)	Encephalopathy, unspecified.
CNS Diseases: (320.00-348.00 & 348.40-359.90)	Alzheimer's disease, Pick's disease, Parkinson's disease, Huntington's choreas, myoclonus, Friedreich's ataxia, cerebellar ataxias, multiple sclerosis, cerebral cysts, cerebral edema, myasthenia gravis, amyotrophic lateral sclerosis, pseudobulbar palsy, muscular dystrophies. Do not include anoxia or encephalopathy.
Cerebrovascular Disease (430.00-432.99 & 436.00-438.99)	Subarachnoid hemorrhage, intercerebral hemorrhage, CVA, Stroke, ill-defined cerebrovascular disease, non-ruptured cerebrovascular aneurysm, late effects of cerebrovascular disease involving speech and language deficits, dysphagia, apraxia.
Occlusion/TIA (433.00-435.90)	Cerebral thrombosis, cerebral embolism, unspecified cerebral artery occlusion, TIA.
Respiratory Diseases (460.00-519.99)	Bilateral or unilateral paralysis of the vocal cords or larynx, polyps, nodules, edema of the larynx, acute laryngitis and tracheitis.
Hemorrhage/Injury (852.00-852.99)	Subarachnoid, subdural, and extradural hemorrhage following injury from external causes.
Head Injury (854.00-854.99)	Intracranial injury of unspecified brain or head injury.

Treatment Setting

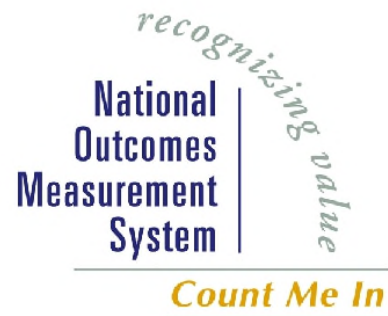
Acute Hospital	Inpatient care provided in an acute care medical facility.
Inpatient Rehab	Free standing rehabilitation hospitals and rehabilitation units in acute care hospitals that are designed to support intensive, interdisciplinary rehabilitation of disabling conditions.
Subacute	Subacute care is comprehensive, inpatient care designed for someone who has an acute illness, injury, or exacerbation of a chronic disease process. The care is provided immediately following, or in place of, acute hospitalization to treat one or more specific active complex conditions as part of a specifically defined program, regardless of the site. Subacute care is typically provided in a hospital or skilled nursing facility. Subacute care (usually between one and three hours of treatment per week) requires the coordinated services of an interdisciplinary team and is generally more intensive than skilled nursing care. Daily to weekly patient assessments and treatment plan reviews are required for a limited period until a condition is stabilized. (Source: AHCA, JCAHO, and Association of Hospital-Based Skilled Nursing Facilities, 1996). Use this category if your program is specifically defined as a subacute program for marketing purposes.
Skilled Nursing	<p>Skilled nursing, for purposes of NOMS, refers to both skilled nursing and intermediate or extended care units/facilities. Skilled nursing units are usually either hospital-based or exist in a long-term care facility and require skilled nursing care 24 hours a day. Rehab therapy services may be provided. Many of the patients may be reimbursed under Medicare, Part A (for the first 100 days) and then reimbursed under Medicaid or Medicare, Part B.</p> <p>Also refers to intermediate or extended care settings where 24-hour medical supervision is provided, but skilled nursing services are not required. Many of the patients may be reimbursed under Medicare, Part B.</p>
Home Health	Speech and language services are provided in the home.
Outpatient Rehab	Outpatient services provided in a hospital.
Comprehensive Outpatient Rehab	Coordinated, comprehensive outpatient diagnostic, therapeutic and rehabilitative services provided in a single location for injuries, disabilities, and sicknesses.
Day Treatment	A non-residential interdisciplinary rehabilitation program centered on community and vocational re-integration. Services are primarily provided in a structure group setting.
Assisted Living	A residential living facility within which limited medical care as well as assistance with personal care and activities of daily living is provided.
Office-Based	Any freestanding speech and hearing clinic or office-based private practice clinic.

Primary Reasons for Discharge

Treatment goals met	The speech and language treatment goals established in the patient's plan of care were met.
Patient discharge to another level of care	The patient is discharged from the facility to another setting or level of care <i>prior to</i> the completion of speech and language treatment at the current level of care.
Patient progress plateaued	Goals have not been met, but the patient is no longer making progress and does not appear to benefit from continued intervention at this time.
Change in medical condition	There is a change in medical condition impacting the patient's current communication and/or swallowing ability. This generally requires a change in the existing treatment plan. This category also used to indicate the death of a patient.
Insurance benefits exhausted or declined	Health insurance or funding source would not authorize additional funding or funding has reached maximum benefits.
Patient requested or noncompliance	The patient is discharged from the current level of care prior to the completion of treatment goals for any of the following reasons: lack of transportation, noncompliance with treatment program, AMA (against medical advice) discharge, family/patient request, attendance (break in treatment for five or more consecutive sessions). Rescheduled treatment sessions are not counted.

Primary Funding Sources

Medicare – Part A (Hospital Insurance)	Hospital insurance which covers inpatient care in hospitals and services provided in skilled nursing facilities, hospices, and home health care. Speech-language pathology services are covered in all of these settings.
Medicare – Part B (Medical Insurance)	Medical insurance which covers doctors' services, outpatient care, and some home health care. Physician approved evaluation and treatment to regain and strengthen speech and language skills, including cognitive and swallowing skills, may be provided.
Medicare – Part C/Advantage	Private insurance companies offer this insurance coverage which is a combination of Medicare Part A (hospital insurance) and Medicare Part B (medical insurance).
Medicaid (Fee-for-Service)	Services must be provided by any Medicaid-approved provider.
Medicaid (Managed Care)	Services must be provided only by provider(s) specified by the health plan(s) that have entered into a contract or subcontract arrangement with the state Medicaid agency.
Veteran's Administration	Services provided under the Veteran's Health Administration.
Commercial Fee-For-Service	The plan pays per visit or per procedure usually after a deductible has been met (e.g., Aetna, Blue Cross/Blue Shield, etc.)
Managed Care Plans	Providers are specified by the health plan (e.g., HMO, PPO, IPA, etc.)
Self-Pay	The caregiver or responsible party pays the full amount. No known insurance coverage was provided.



For more information about the National Outcomes Measurement System (NOMS), please visit our web site at <http://www.asha.org/NOMS>.