

Adults in Healthcare

Inpatient Rehab

National Data Report 2018 – 2022

Confidentiality and Proprietary Information

This document and the data herein are the copyrighted property of the American Speech-Language-Hearing Association (ASHA) and are distributed by the National Center for Evidence-Based Practice in Communication Disorders of ASHA. Use of this information without the written permission of ASHA is prohibited.



Table of Contents

INTRODUCTION	3
REPORT HIGHLIGHTS	4
SECTION I – ALL PATIENTS: PATIENT CHARACTERISTICS	
Race/Ethnicity	6
Age	
Primary Medical Diagnosis	7
SLP Diagnosis	7
Setting Previous to Current Admission	
SLP Services in the Previous Setting	8
Primary Funding Source	8
SECTION II – STROKE PATIENTS	
Average Amount of Treatment Time by Service Delivery Model	
Functional Communication Measures Treated	
FCM Progress	11-14
Average Length of Stay	
Primary Reason for Discharge	15
Continued SLP Treatment Recommended at Discharge	
Patient Setting Subsequent to Discharge	
Average Number of Sessions per Week	
Length of Typical Session	17
SECTION III – BRAIN INJURY PATIENTS	
Average Amount of Treatment Time by Service Delivery Model	19
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	
SECTION IV - PATIENTS WITH RESPIRATORY DISEASES	
Average Amount of Treatment Time 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	35
SECTION V - PATIENTS WITH OTHER NEUROLOGICAL DISORDERS	
Average Amount of Treatment Time by Service Delivery Model	37
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	44
APPENDIX	45
Introduction to Functional Communication Measures (FCMs)	
Sample Adults in Health Care FCM	
Definitions	48-52

3

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 2018 and 2022. The data enclosed give a detailed look at patient characteristics and service delivery patterns of 22,486 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 https://www.asha.org/NOMS.

Suggested Citation

American Speech-Language-Hearing Association. (2023). National Outcomes Measurement System (NOMS): Adults in Healthcare–Inpatient Rehab National Data Report 2023. https://www.asha.org/NOMS.

REPORT HIGHLIGHTS

- Almost 90% 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 respiratory diseases (23.4%), cerebrovascular disease (17.2%), CNS diseases (12.2%) or mental disorders (11.3%) (p. 7).
- The majority of patients had an SLP diagnosis of cognitive-communication disorder (57.0%) or dysphagia (48.8%) (p. 7).
- Most patients (46.2%) did not receive SLP services before being admitted to 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	71.9%
Black or African American	9.9%
Hispanic or Latino	4.9%
Asian	1.9%
Native Hawaiian or Other Pacific Islander	0.3%
American Indian or Alaska Native	0.2%
Unknown	5.9%

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

Figure 1: Age of Patients

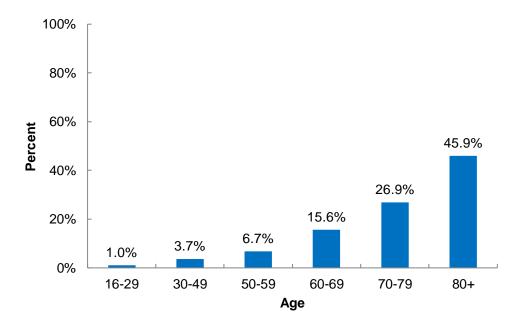
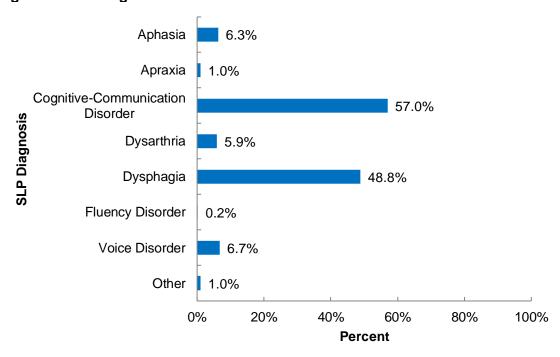


Table 2: Medical Diagnoses

Medical Diagnosis	Percent
Respiratory Diseases	23.4%
Cerebrovascular Disease	17.2%
CNS Diseases	12.2%
Mental Disorders	11.3%
Hemorrhage/Injury	8.2%
Other Neoplasm	3.5%
Head Injury	3.2%
Encephalopathy	2.2%
Occlusion/TIA	0.9%
Anoxia	0.3%
Neoplasm Lip/Pharynx	0.1%
Neoplasm Larynx	0.1%
All Others	63.4%

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 85.1% 5.7% Home 4.9% Inpatient Rehab 2.0% Skilled Nursing **Assisted Living** 1.2% 0.2% Subacute Other 0.5% Unknown 0.4% **TOTAL** 100%

Figure 3: Did Patient Receive SLP Services in Previous Setting?

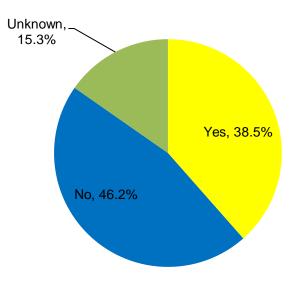


Table 4: Primary Funding Source

Primary Funding Source	Percent
Medicare – Part A	55.5%
Managed Care Plans	22.1%
Medicare – Part B	4.4%
Commercial Fee-for-Service	3.0%
Medicare – Part C/Advantage	2.6%
Medicaid (fee-for-service)	2.3%
Medicaid (managed care)	1.6%
Self-Pay	0.3%
Veteran's Administration	0.2%
Unknown	8.0%
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	7.4
Group	5.0
Training/Consultation	3.2
All Patients	7.4

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	51.9%
Memory	45.0%
Problem Solving	40.0%
Attention	15.0%
Spoken Language Expression	14.6%
Spoken Language Comprehension	12.6%
Motor Speech	5.8%
Voice Following Tracheostomy	5.6%
Voice	2.2%
Reading	0.7%
Pragmatics	0.6%
Augmentative-Alternative Communication	0.5%
Writing	0.4%
Fluency	0.2%
Alaryngeal Communication	0.1%

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

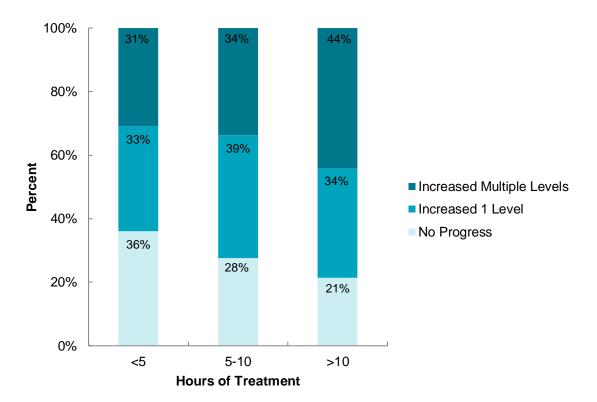
Progress in Top Four FCMs

Swallowing

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

Progress	Percent	Sessions	Time (hr)
No Progress	31.0%	7.5	4.4
Increase 1 Level	34.8%	8.9	5.2
Increase Multiple Levels	34.2%	9.7	5.8
TOTAL	100%	8.8	5.1

Figure 4: FCM Progress by Hours of Treatment Time

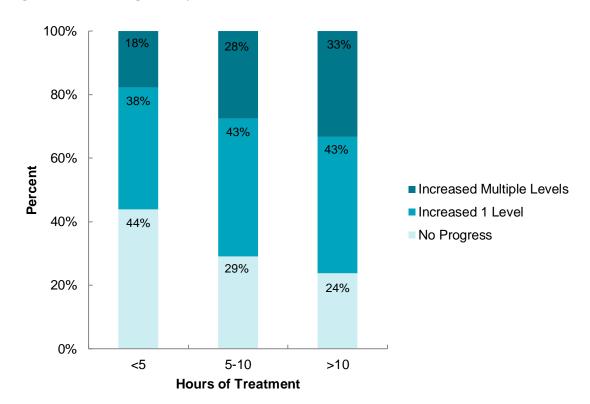


Memory

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

Progress	Percent	Sessions	Time (hr)
No Progress	35.4%	5.3	3.1
Increase 1 Level	40.8%	6.6	4.0
Increase Multiple Levels	23.8%	7.7	4.6
TOTAL	100%	6.5	3.9

Figure 5: FCM Progress by Hours of Treatment Time

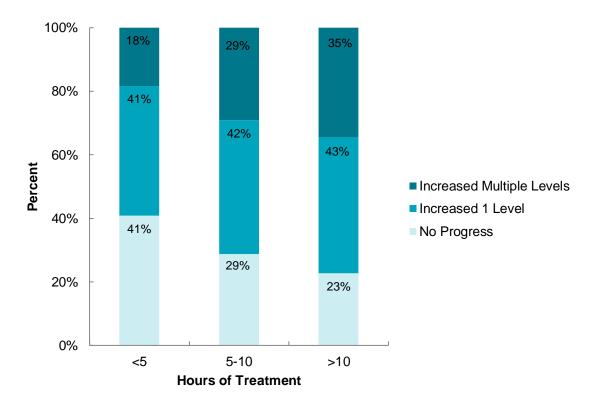


Problem Solving

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

Progress	Percent	Sessions	Time (hr)
No Progress	34.7%	4.6	2.7
Increase 1 Level	40.9%	6.2	3.6
Increase Multiple Levels	24.5%	7.0	4.1
TOTAL	100%	5.9	3.5

Figure 6: FCM Progress by Hours of Treatment Time



Attention

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

Progress	Percent	Sessions	Time (hr)
No Progress	36.8%	4.2	2.5
Increase 1 Level	37.5%	5.2	3.2
Increase Multiple Levels	25.7%	6.3	4.0
TOTAL	100%	5.3	3.2

Figure 7: FCM Progress by Hours of Treatment Time

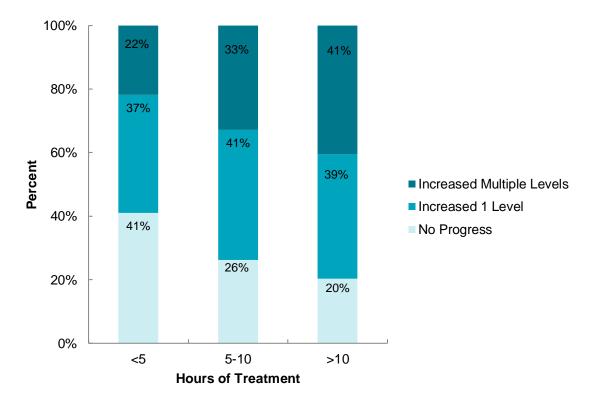


Table 11: Average Length of Stay (in days)

LOS	Mean
Length of Stay (days)	18.2

Table 12: Primary Reason for Discharge

Discharge Reason	Percent
Treatment Goals Met	43.2%
Patient Discharged to Another Level of Care	27.2%
Patient Progress Plateaued	13.6%
Change in Medical Condition	4.8%
Insurance Benefits Exhausted or Declined	4.2%
Patient Requested or Non-compliance	2.6%
Other	4.4%
TOTAL	100%

Table 13: Continued SLP Treatment Recommended at Discharge?

Recommended?	Percent
Yes	41.0%
No	59.0%
TOTAL	100%

Figure 8: Setting Subsequent to Discharge

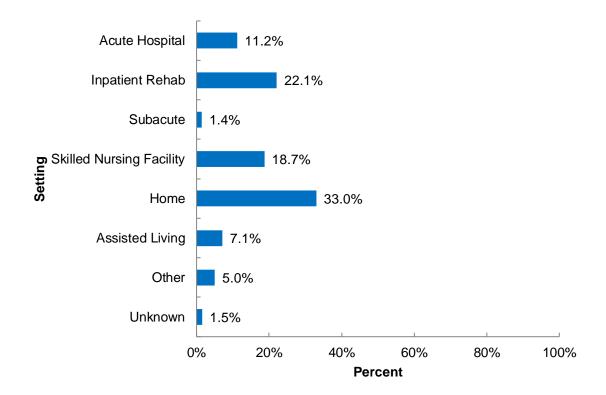


Figure 9: Average Number of Sessions per Week

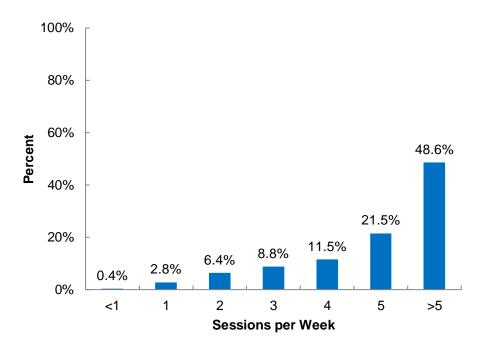
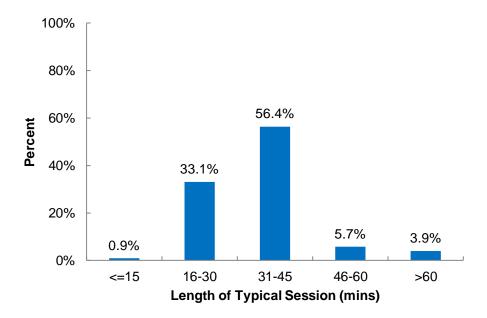


Figure 10: Length of Typical Session (in minutes)



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	8.8
Group	*
Training/Consultation	*
All Patients	8.8

^{*}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	52.7%
Swallowing	39.6%
Attention	17.4%
Spoken Language Expression	15.0%
Spoken Language Comprehension	13.5%
Motor Speech	2.7%
Voice	2.3%
Pragmatics	1.1%
Reading	0.7%
Voice Following Tracheostomy	0.7%
Augmentative-Alternative Communication	0.4%
Fluency	0.3%
Writing	0.2%
Alaryngeal Communication	0.0%

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

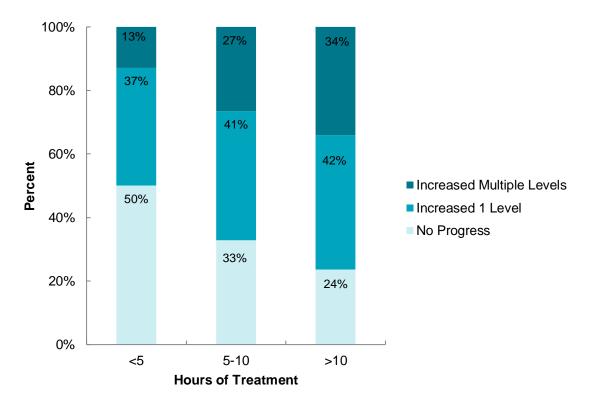
Progress in Top Four FCMs

Memory

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

Progress	Percent	Sessions	Time (hr)
No Progress	36.4%	5.7	3.4
Increase 1 Level	39.2%	7.4	4.5
Increase Multiple Levels	24.4%	9.1	5.5
TOTAL	100%	7.2	4.4

Figure 11: FCM Progress by Hours of Treatment Time

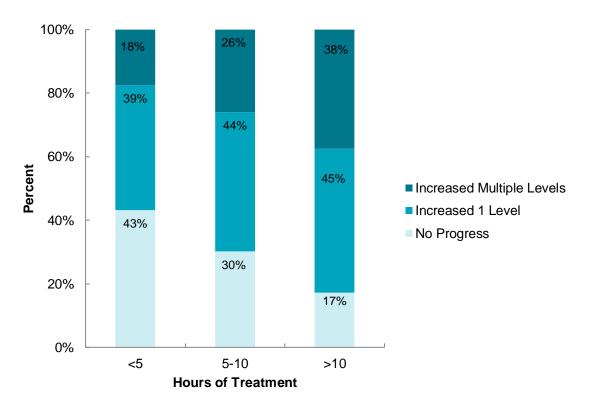


Problem Solving

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

Progress	Percent	Sessions	Time (hr)
No Progress	31.7%	4.9	2.9
Increase 1 Level	42.3%	7.0	4.1
Increase Multiple Levels	26.0%	8.2	5.0
TOTAL	100%	6.7	4.0

Figure 12: FCM Progress by Hours of Treatment Time

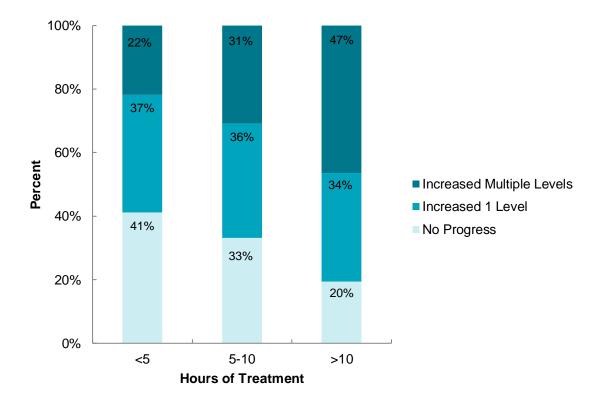


Swallowing

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

Progress	Percent	Sessions	Time (hr)
No Progress	32.6%	8.5	4.9
Increase 1 Level	35.3%	9.6	5.7
Increase Multiple Levels	32.1%	12.3	7.0
TOTAL	100%	10.1	5.8

Figure 13: FCM Progress by Hours of Treatment Time



Attention

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

Progress	Percent	Sessions	Time (hr)
No Progress	32.4%	3.9	2.4
Increase 1 Level	40.0%	6.1	3.8
Increase Multiple Levels	27.6%	8.7	5.3
TOTAL	100%	6.3	3.9

Figure 14: FCM Progress by Hours of Treatment Time

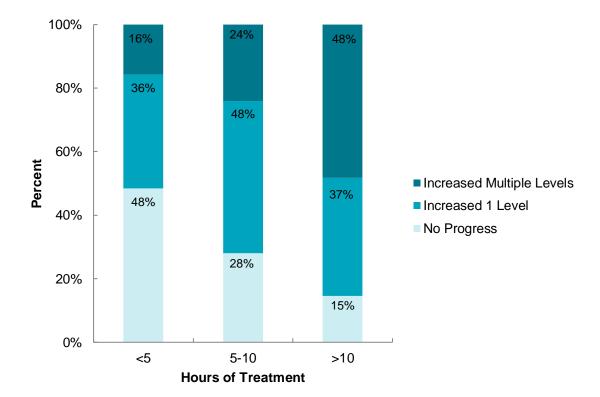


Table 20: Average Length of Stay (in days)

LOS	Mean
Length of Stay (days)	19.5

Table 21: Primary Reason for Discharge

Discharge Reason	Percent
Treatment Goals Met	41.9%
Patient Discharged to Another Level of Care	24.4%
Patient Progress Plateaued	17.6%
Insurance Benefits Exhausted or Declined	5.0%
Change in Medical Condition	3.9%
Patient Requested or Non-compliance	2.9%
Other	4.3%
TOTAL	100%

Table 22: Continued SLP Treatment Recommended at Discharge?

Recommended?	Percent
Yes	37.8%
No	62.2%
TOTAL	100%

Figure 15: Setting Subsequent to Discharge

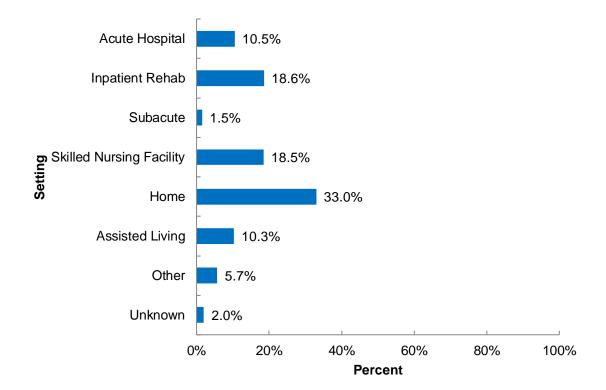


Figure 16: Average Number of Sessions per Week

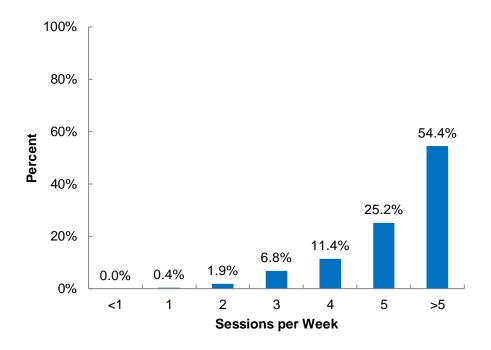
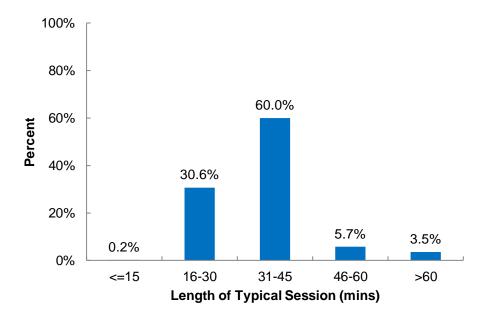


Figure 17: Length of Typical Session (in minutes)



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	6.0
Group	*
Training/Consultation	*
All Patients	6.0

^{*}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	71.2%
Memory	26.4%
Problem Solving	21.6%
Voice Following Tracheostomy	20.9%
Attention	6.8%
Spoken Language Comprehension	6.5%
Spoken Language Expression	6.4%
Voice	3.0%
Motor Speech	2.6%
Augmentative-Alternative Communication	0.7%
Reading	0.3%
Pragmatics	0.2%
Fluency	0.1%
Writing	0.1%
Alaryngeal Communication	<0.1%

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

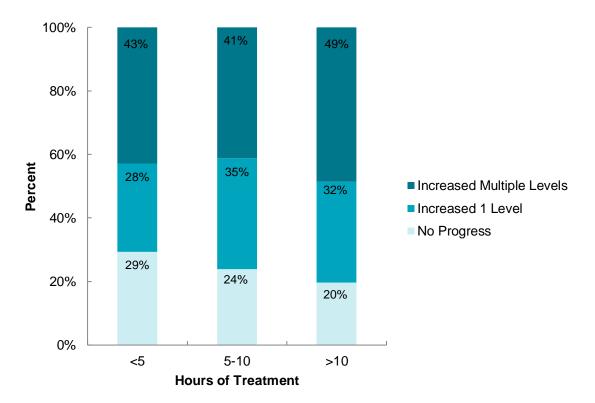
Progress in Top Four FCMs

Swallowing

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

Progress	Percent	Sessions	Time (hr)
No Progress	26.7%	7.0	4.1
Increase 1 Level	30.3%	8.2	4.7
Increase Multiple Levels	43.0%	8.1	4.6
TOTAL	100%	7.8	4.5

Figure 18: FCM Progress by Hours of Treatment Time

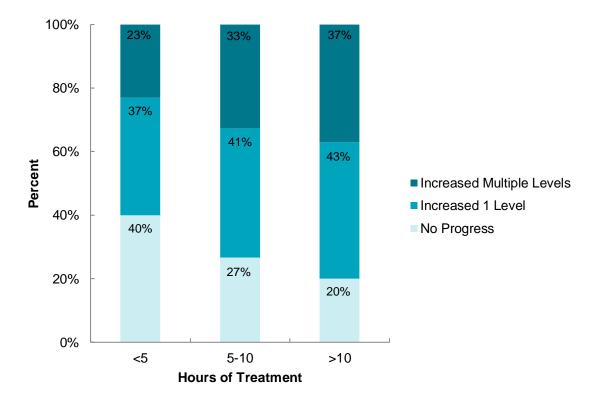


Memory

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

Progress	Percent	Sessions	Time (hr)
No Progress	31.3%	4.4	2.6
Increase 1 Level	39.4%	6.0	3.5
Increase Multiple Levels	29.3%	6.9	4.0
TOTAL	100%	5.8	3.4

Figure 19: FCM Progress by Hours of Treatment Time

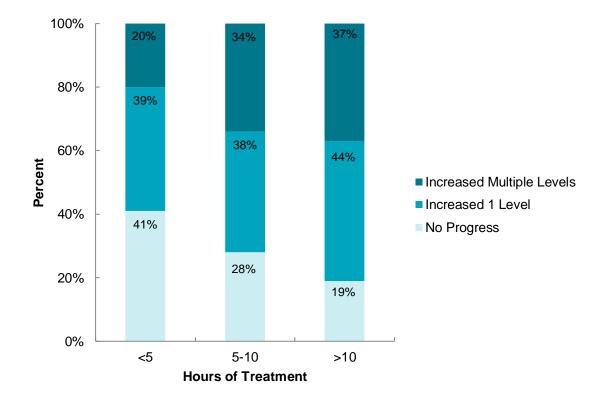


Problem Solving

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

Progress	Percent	Sessions	Time (hr)
No Progress	32.7%	3.7	2.2
Increase 1 Level	38.8%	5.5	3.2
Increase Multiple Levels	28.5%	6.0	3.5
TOTAL	100%	5.1	3.0

Figure 20: FCM Progress by Hours of Treatment Time



Voice Following Tracheostomy

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

Progress	Percent	Sessions	Time (hr)
No Progress	9.9%	3.4	1.8
Increase 1 Level	11.5%	4.6	2.2
Increase Multiple Levels	78.6%	4.3	2.3
TOTAL	100%	4.3	2.2

Figure 21: FCM Progress by Hours of Treatment Time

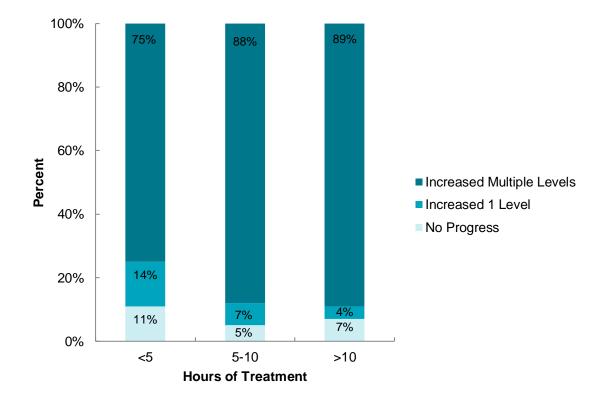


Table 29: Average Length of Stay (in days)

LOS	Mean
Length of Stay (days)	18.4

Table 30: Primary Reason for Discharge

Discharge Reason	Percent
Treatment Goals Met	44.0%
Patient Discharged to Another Level of Care	29.9%
Patient Progress Plateaued	10.9%
Change in Medical Condition	5.8%
Insurance Benefits Exhausted or Declined	3.1%
Patient Requested or Non-compliance	2.0%
Other	4.3%
TOTAL	100%

Table 31: Continued SLP Treatment Recommended at Discharge?

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

Figure 22: Setting Subsequent to Discharge

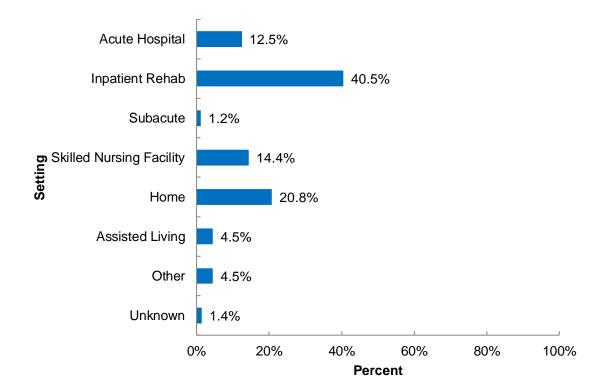


Figure 23: Average Number of Sessions per Week

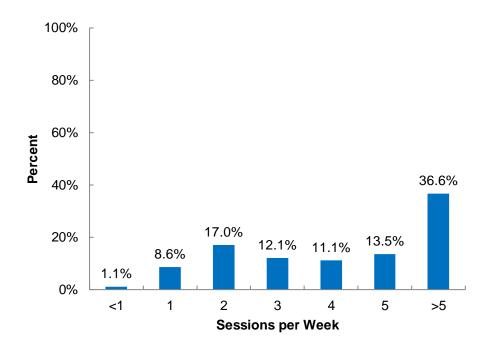
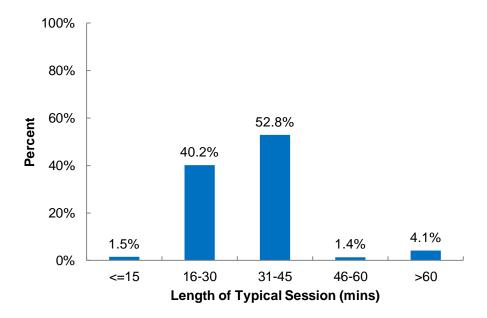


Figure 24: Length of Typical Session (in minutes)



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	8.1
Group	*
Training/Consultation	*
All Patients	8.1

^{*}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	50.1%
Swallowing	47.3%
Problem Solving	43.4%
Spoken Language Expression	16.7%
Spoken Language Comprehension	15.4%
Attention	13.8%
Motor Speech	5.9%
Voice	2.3%
Pragmatics	0.9%
Reading	0.7%
Voice Following Tracheostomy	0.5%
Augmentative-Alternative Communication	0.4%
Fluency	0.3%
Writing	0.3%
Alaryngeal Communication	<0.1%

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

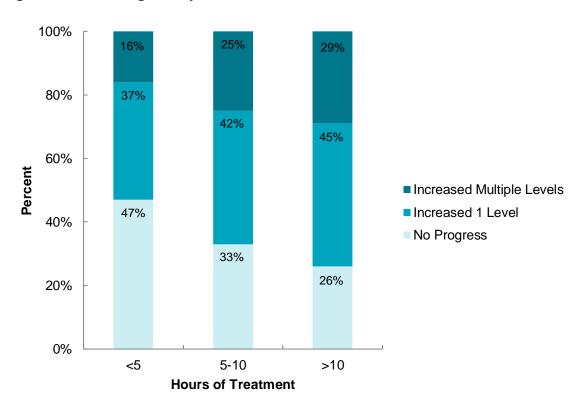
Progress in Top Four FCMs

Memory

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

Progress	Percent	Sessions	Time (hr)
No Progress	36.7%	5.3	3.1
Increase 1 Level	40.8%	6.8	4.1
Increase Multiple Levels	22.6%	7.7	4.6
TOTAL	100%	6.5	3.8

Figure 25: FCM Progress by Hours of Treatment Time

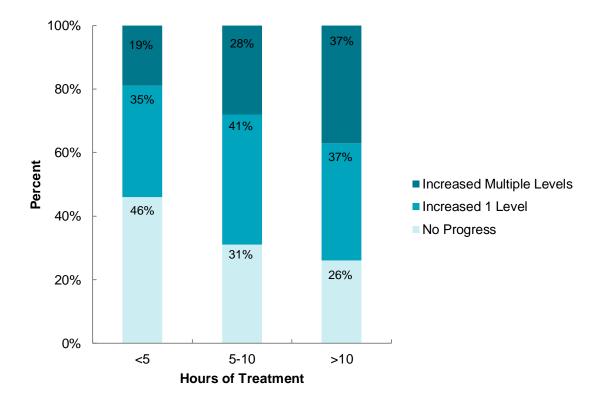


Swallowing

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

Progress	Percent	Sessions	Time (hr)
No Progress	35.6%	8.3	4.8
Increase 1 Level	37.5%	9.6	5.6
Increase Multiple Levels	26.9%	11.5	6.8
TOTAL	100%	9.7	5.6

Figure 26: FCM Progress by Hours of Treatment Time

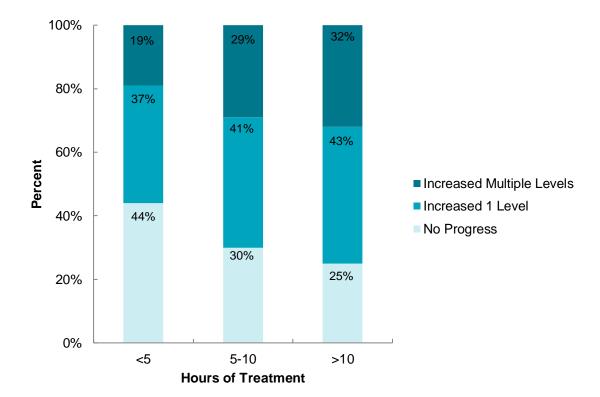


Problem Solving

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

Progress	Percent	Sessions	Time (hr)
No Progress	35.4%	4.6	2.7
Increase 1 Level	39.2%	6.2	3.7
Increase Multiple Levels	25.4%	7.3	4.2
TOTAL	100%	5.9	3.5

Figure 27: FCM Progress by Hours of Treatment Time



Spoken Language Expression

Table 37: FCM Progress by Mean Number of Treatment Sessions and Treatment Time

Progress	Percent	Sessions	Time (hr)
No Progress	35.9%	4.9	2.8
Increase 1 Level	38.8%	6.5	3.9
Increase Multiple Levels	25.2%	7.0	4.2
TOTAL	100%	6.1	3.6

Figure 28: FCM Progress by Hours of Treatment Time

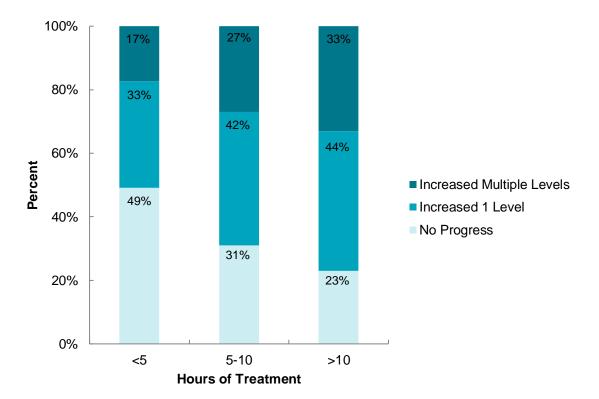


Table 38: Average Length of Stay (in days)

LOS	Mean
Length of Stay (days)	18.8

Table 39: Primary Reason for Discharge

Discharge Reason	Percent
Treatment Goals Met	38.4%
Patient Discharged to Another Level of Care	25.7%
Patient Progress Plateaued	19.1%
Change in Medical Condition	4.6%
Insurance Benefits Exhausted or Declined	4.5%
Patient Requested or Non-compliance	3.0%
Other	4.7%
TOTAL	100%

Table 40: Continued SLP Treatment Recommended at Discharge?

Recommended?	Percent
Yes	36.6%
No	63.4%
TOTAL	100%

Figure 29: Setting Subsequent to Discharge

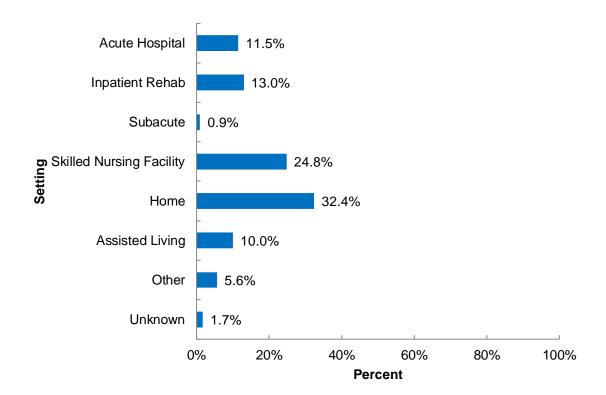


Figure 30: Average Number of Sessions per Week

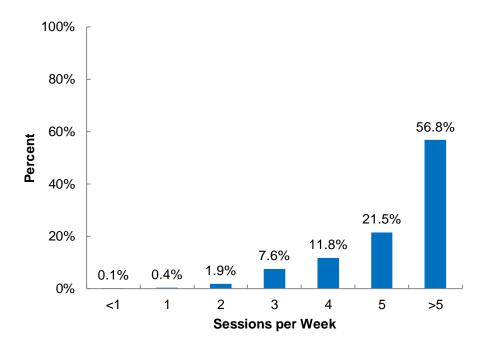
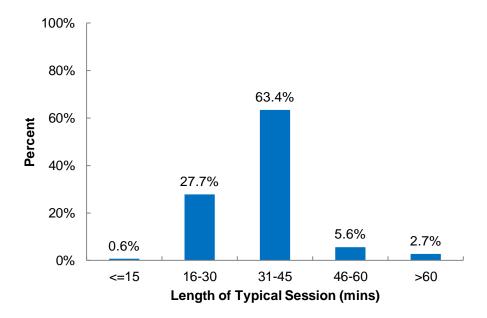


Figure 31: Length of Typical Session (in minutes)



APPENDIX

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

Outpatient Rehab

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 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.

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.

Home Health Speech and language services are provided in the home.

Outpatient Rehab Outpatient services provided in a hospital.

Comprehensive 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.

National Center for Evidence-Based Practice in Communication Disorders

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

Hospital insurance which covers inpatient care in Medicare - Part A (Hospital Insurance) hospitals and services provided in skilled nursing facilities, hospices, and home health care. Speechlanguage pathology services are covered in all of these settings. Medicare - Part B (Medical Medical insurance which covers doctors' services, Insurance) 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. Private insurance companies offer this insurance Medicare - Part C/Advantage 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 https://www.asha.org/NOMS.