

# **ASHA NOMS**

SLP Healthcare Registry 2020

Treatment Taxonomy

## Cognition (18+) Treatment Aims and Targets

### Aim 1: Improved Orientation

- Establishing orientation to self
- Establishing orientation to others
- Establishing orientation to location/date/time

### Aim 2: Increased Attention

- Establishing attention
- Increased capacity for maintaining attention
- Increased capacity for selective attention
- Increased capacity for divided attention
- Increased capacity for alternating attention
- Increased frequency of self-regulated use of external stimuli for attention
- Increased frequency of self-regulated use of internal stimuli/strategies for attention

### Aim 3: Improved Memory

- Increased capacity for encoding/retrieval
- Increased working memory
- Increased immediate memory
- Increased short-term memory
- Increased long-term memory
- Increased prospective memory
- Increased frequency of self-regulated use of external stimuli for memory
- Increased frequency of self-regulated use of internal stimuli/strategies for memory

### Aim 4: Improved Executive Functioning

- Increased capacity for goal setting
- Increased capacity for planning
- Increased capacity for implementation of plan
- Increased capacity for monitoring
- Increased capacity for problem solving/reasoning
- Increased capacity for organization/sequencing
- Increased capacity for self-regulation

### Aim 5: Improved Awareness and Performance

- Increased safety awareness/insight
- Increased deficit awareness
- Increased processing speed
- Increased cognitive endurance

## Speech Intelligibility (ages 18+) Treatment Aims and Targets

### Aim 1: Increased Intelligibility

- Increased respiratory support for speech
- Increased strength of articulators
- Increased accuracy of articulation
- Increased accuracy of error perception
- Increased loudness
- Decreased rate
- Improved velopharyngeal function for speech
- Improved posture for speech
- Improved caregiver listening skills
- Increased intelligibility in adverse listening/speaking situations
- Increased use of compensatory or speech-facilitation strategies
- Increased use of self-monitoring skills

### Aim 2: Increased Comprehensibility

- Increased comprehensible words/messages per minute
- Increased use of supplementary strategies
- Increased comprehensibility in adverse listening/speaking situations

### Aim 3: Increased Efficiency

- Maximized breath groups
- Increased intelligible words/units of meaning per minute
- Improved communication repair strategies
- Increased use of alerting signals
- Increased speech fluency
- Increased speech initiations

### Aim 4: Increased Naturalness

- Improved loudness control and loudness variation
- Increased pitch variability
- Improved velopharyngeal function
- Improved use/control of prosody
- Improved rate control

## Spoken Language Comprehension (18+) Treatment Aims and Targets

### Aim 1: Increased Auditory Comprehension

- Increased use of written modality to facilitate auditory comprehension
- Increased comprehension and inferencing of implicit information
- Increased ability to make semantic associations
- Increased use of visual stimuli to support comprehension
- Increased use of semantic associations to support comprehension
- Increased comprehension of syntax in subject-verb-object sentences
- Increased comprehension of syntax in passive sentences
- Increased comprehension of syntax in complex sentences (e.g., object-cleft)
- Increased comprehension of narrative discourse
- Increased comprehension of prosodic intent and emotional tone

### Aim 2: Increased Comprehension-Monitoring of Spoken Language

- Increased recognition of the internal signs or feeling of comprehension breakdowns
- Increased recognition of nonverbal signals that there is a communication breakdown
- Increased requesting of clarifications or modifications (e.g., slow rate, speak up)

## Spoken Language Expression (ages 18+) Treatment Aims and Targets

### Aim 1: Increased Use of Expressive Language for Communication

- Improved use of semantic concepts and lexical retrieval
- Improved use of syntactic sentence structures
- Improved use of grammatical morphemes
- Improved phonology
- Increased quantity of output
- Improved conversation/discourse abilities

### Aim 2: Expressive Language Efficiency

- Increased rate
- Increased content over time (information units per minute)
- Decreased perseverations

## Swallowing (ages 18+) Treatment Aims and Targets

### Aim 1: Improved Airway Protection

- Increased area of vocal fold contact
- Increased tightness of vocal fold adduction closure during swallow
- Increased duration of laryngeal closure during swallowing
- Earlier onset of upper airway closure in relation to bolus position
- Earlier initiation of pharyngeal response in relation to bolus entry into pharynx
- Increased percentage of swallows followed by post-swallow expiration
- Increased epiglottic inversion
- Improved oral hygiene

### Aim 2: Increased Percentage of Bolus Entering Digestive System

- Prolonged duration of UES opening during swallow
- Increased traction forces on anterior UES during pharyngeal phase of swallow
- Increased diameter of UES opening during the pharyngeal swallow
- Increased compliance of UES during swallowing
- Decreased pharyngeal residue

### Aim 3: Increased Bolus Propulsive Forces

- Increased contractile strength of tongue
- Increased lingual propulsive force during swallow
- Increased propulsion force of pharyngeal constrictors
- Decreased loss of intrabolus pressure to velopharyngeal incompetence

### Aim 4: Increased Oral Efficiency

- Increased anterior oral containment
- Increased posterior oral containment
- Increased strength of lip closure
- Increased integrity of posterior oral linguavelar/linguopalatal valve during oral preparatory stage
- Decreased oral residue
- Exploitation of gravity to increase control of oral contents

### Aim 5: Improved Respiratory-Swallow Coordination & Pulmonary-Swallow Interaction

- Increased lung volume present at swallow onset
- Increased post-swallow expiratory/cough pressure
- Increased speed of onset of post-swallow cough

### Aim 6: Improved Functional Swallow Endurance

- Increased oral intake

## Voice (ages 18+) Treatment Aims and Targets

### Aim 1: Improved Posture/Alignment

- Improved shoulder and neck alignment
- Improved chin posture
- Improved atlanto-occipital alignment

### Aim 2: Modify Vocal and Musculoskeletal Effort

- Widen thyrohyoid space at rest
- Increased lateral cartilage movement at rest
- Increased lateral hyoid bone movement at rest
- Lowered thyroid cartilage at rest
- Lowered position of hyoid bone at rest
- Decreased resting tension of neck, tongue, orofacial or postural muscles
- Increased strength of true vocal fold abduction/adduction
- Increased range of motion of true vocal fold abduction/adduction
  
- Decreased fatigue over exercise
- Maintain widened thyrohyoid space during voicing
- Maintain lower thyroid cartilage or hyoid bone during voicing
- Decreased strained vocal quality
- Increased loudness range
- Increased pitch range
- Modify habitual pitch
- Modify habitual loudness
- Increased duration of voicing

### Aim 3: Improved Source-Related Voice Quality

- Decreased breathiness
- Decreased roughness
- Decreased strain
- Modify breathiness in volitional voicing tasks
- Modify roughness in volitional voicing tasks
- Modify strain in volitional voicing tasks
- Decreased roughness or breathiness in skilled voicing tasks

### Aim 4: Improved Resonance

- Increased strength of the velopharyngeal port
- Modify nasality
- Modify placement

### Aim 5: Improved Respiratory Function/Respiratory-Voicing Coordination

- Increased strength of respiratory muscles
- Increased respiratory control
- Modify voicing onset
- Modify respiratory support
- Modify breathing pattern

### Aim 6: Improved Naturalness or Prosody

- Improved intonation (pitch and loudness)
- Improved rhythm of speech-related activities (stress and breathing patterns)
- Improved rate (syllables or repetitions per time period)

### Aim 7: Decreased Pain, Soreness, Discomfort/Improve Vocal Health

- Improved vocal conservation
- Modify lifestyle (e.g., decrease smoking, manage reflux)
- Reduced pain, soreness, or discomfort at rest
- Reduced pain, discomfort, soreness during voicing
- Increased knowledge and/or affect related to vocal health