

1 **Clinical Practice Guideline:** **Speech-Language Pathology/Speech Therapy**
2 **Guidelines**

3
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5
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7
8

Related Policies:
CPG 12: Medical Necessity Decision Assist
Guideline for Rehabilitative Care
CPG 111: Patient Assessments: Medical Necessity
Decision Assist Guideline for Evaluations and Re-
evaluations
CPG 135: Physical Therapy Medical
Policy/Guideline
CPG 155: Occupational Therapy Medical
Policy/Guideline
CPG 165: Autism Spectrum Disorder (ASD) –
Outpatient Rehabilitation Services (Speech,
Physical, and Occupational Therapy)

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1 DESCRIPTION

2
3 This document addresses Speech Language Pathology Services which may be delivered by
4 a Speech Language Pathologist acting within the scope of a professional license. This
5 document also addresses the processes associated with Medical Necessity Determinations
6 performed by American Specialty Health (ASH) Clinical Quality Evaluators (CQEs) on
7 services submitted for review.
8

9 The availability of coverage for rehabilitative and/or habilitative services will vary by
10 benefit design as well as by State and Federal regulatory requirements. Benefit plans may
11 include a maximum allowable rehabilitation benefit, either in duration of treatment or in
12 number of visits or in the conditions covered or type of services covered. When the
13 maximum allowable benefit is exhausted or if the condition or service are not covered,
14 coverage will no longer be provided even if the medical necessity criteria described below
15 are met.
16

17 GUIDELINES

18 1. PROVIDERS OF SPEECH LANGUAGE PATHOLOGY SERVICES

19 Covered, medically necessary rehabilitative or habilitative services must be delivered by a
20 qualified Speech Language Pathologist acting within the scope of their license as regulated
21 by the Federal and State governments. Some services may be performed by ancillary
22 providers (e.g., licensed speech language pathologist assistant) under the direction and
23 supervision of, and in collaboration with, a licensed Speech Language Pathologist;
24 however, generally, only those healthcare practitioners who hold an active license,
25 certification, or registration with the applicable state board or agency may provide such
26 services. Benefits for services provided by these ancillary healthcare providers may also
27 be dependent upon the patient's benefit contract language.
28

29 Aides and other nonqualified personnel are limited to provision of non-skilled services
30 such as preparing the individual, treatment area, equipment, or supplies; assisting a
31 qualified therapist or assistant; and transporting individuals.
32
33

34 Speech-language pathology services/speech therapy (ST) delivered by speech-language
35 pathologists (SLPs) provide for the identification, assessment and treatment of speech,
36 language and swallowing disorders in children and adults. ST services are designed to
37 develop, improve or restore speech and language functioning to allow for successful
38 communication. In addition, ST evaluates and manages swallowing dysfunction
39 (dysphagia) following disease (congenital or acquired), injury or trauma resulting in
40 physical or cognitive deficits/disorders. ST covers a wide range of services for all ages,
41 from birth to the elderly, and is provided in schools, outpatient facilities, hospitals, home
42 environments, rehabilitation centers, and nursing homes. Speech-language pathologists

1 (SLPs) work with individuals who have physical or cognitive deficits/disorders resulting
2 in difficulty communicating. Communication includes speech (articulation, voice, prosody,
3 fluency) and language (phonology, morphology, syntax, semantics, pragmatics, both
4 receptive and expressive language, including reading and writing). Often these treatments
5 are provided for adults and children who have previously learned how to read and write
6 but are subsequently diagnosed with neurologic impairments requiring speech therapy.
7 Speech language pathologists also provide services for individuals with dysphagia
8 (difficulty swallowing). Medically necessary speech therapy services must relate to a
9 written treatment plan of care and be of a level of complexity that requires the judgment,
10 knowledge and skills of a speech therapist to perform and/or supervise the services. The
11 plan of care for medically necessary speech therapy services is established by a licensed
12 speech language pathologist. The amount, frequency and duration of the therapy services
13 must be reasonable (within regional norms and commonly accepted practice patterns); the
14 services must be considered appropriate and needed for the treatment of the condition and
15 must not be palliative in nature. Thus, once therapeutic benefit has been achieved, or a
16 home exercise program could be used for further gains without the need for skilled speech
17 therapy, continuing speech therapy is not considered medically necessary.

18
19 A service is not considered a skilled therapy service merely because it is furnished by a
20 SLP or by a SLP assistant under the direct or general supervision, as applicable, of a
21 therapist. If a service can be self-administered or safely and effectively furnished by an
22 unskilled person, without the direct or general supervision, as applicable, of a SLP, the
23 service cannot be regarded as a skilled therapy service even though a SLP actually
24 furnishes the service. Similarly, the unavailability of a competent person to provide a non-
25 skilled service, notwithstanding the importance of the service to the patient, does not make
26 it a skilled service when a therapist furnishes the service.

27
28 Services that do not require the professional skills of a therapist to perform or supervise
29 are not medically necessary, even if they are performed or supervised by a SLP, physician
30 or NPP. Therefore, if a patient's therapy can proceed safely and effectively through a home
31 exercise program, self-management program, restorative nursing program or caregiver
32 assisted program, speech language pathology services are not indicated or medically
33 necessary. Speech therapy is used for both rehabilitation and habilitation. Skilled speech
34 language pathology services may be necessary to improve a patient's current condition, to
35 maintain the patient's current condition, or to prevent or slow further deterioration of the
36 patient's condition.

37
38 The plan of care for medically necessary speech language pathology services is established
39 by a licensed speech language pathologist. The amount, frequency and duration of the
40 speech language pathology services must be reasonable (within regional norms and
41 commonly accepted practice patterns); the services must be considered appropriate and
42 needed for the treatment of the condition and must not be palliative in nature. Thus, once

1 therapeutic benefit has been achieved, or a home exercise program could be used for further
 2 gains without the need for skilled physical therapy, continuing supervised speech language
 3 pathology is not considered medically necessary.

4
 5 Rehabilitative services are intended to improve, adapt or restore functions which have been
 6 impaired or permanently lost as a result of illness, injury, loss of a body part, or congenital
 7 abnormality involving goals an individual can reach in a reasonable period of time. If no
 8 improvement is documented after two weeks of treatment, an alternative treatment plan
 9 should be attempted. Treatment is no longer medically necessary when the individual stops
 10 progressing toward established goals.

11
 12 Habilitative services are defined by the National Association of Insurance Commissioners
 13 as “health care services that help a person keep, learn or improve skills and functioning for
 14 daily living.” Habilitative services are intended to maintain, develop or improve skills
 15 needed to perform activities of daily living (ADLs) or instrumental activities of daily living
 16 (IADLs) which have not (but normally would have) developed or which are at risk of being
 17 lost as a result of illness, injury, loss of a body part, or congenital abnormality. Examples
 18 include therapy for a child who is not walking at the expected age.

19
 20 Note: The availability of rehabilitative and/or habilitative benefits for speech language
 21 pathology services, state and federal mandates, and regulatory requirements should be
 22 verified and followed in addition to the benefit plan provisions and medical necessity
 23 criteria defined in this document.

24 25 **2. REHABILITATIVE SPEECH LANGUAGE PATHOLOGY SERVICES**

26 **Medically Necessary**

27 (1) Rehabilitative speech language pathology (SLP)/speech therapy (ST) services for the
 28 diagnosis and treatment of speech and language disorders, which result in
 29 communication disabilities and for the diagnosis and treatment of swallowing disorders
 30 (dysphagia), regardless of the presence of a communication disability, resulting from
 31 illness, injury, surgery, or congenital abnormality are considered medically necessary
 32 when ALL the following criteria are met:

- 33 1. The services are delivered by a qualified provider of speech therapy services (i.e.,
 34 appropriately trained and licensed by the state to perform occupational therapy
 35 services); and
- 36 2. Rehabilitative speech therapy occurs when the judgment, knowledge, and skills of
 37 a qualified provider of speech therapy services (as defined by the scope of practice
 38 for therapists in each state) are necessary to safely and effectively furnish a
 39 recognized therapy service due to the complexity and sophistication of the plan of
 40 care and the medical condition of the individual.

3. The services (type, amount, frequency, and duration) shall be considered reasonable under accepted standards of medical practice to be a specific and effective treatment for the patient's condition and diagnosis.
4. The patient's condition has the potential to improve or is improving in response to therapy, maximum improvement is yet to be attained; and there is an expectation that the anticipated improvement is attainable in a reasonable and predictable period of time* and will result in a clinically significant level of functional improvement; and
5. Improvement or restoration of function could not be reasonably expected as the individual gradually resumes normal activities without the provision of skilled therapy services; and
6. The documentation objectively verifies progressive functional improvement over specific time frames and clinically justifies the initiation of continuation of rehabilitative services; and
7. The program is individualized, and there is documentation outlining quantifiable, attainable treatment goals.

*Reasonable and predictable period of time: The specific time frames for which one would expect practical functional improvement is dependent on various factors including whether the services are Rehabilitative or Habilitative services. A reasonable trial of care for rehabilitative services to determine the patient's potential for improvement in or restoration of function is influenced by the diagnosis; clinical evaluation findings; stage of the condition (acute, sub-acute, chronic); severity of the condition; and patient-specific elements (age, gender, past and current medical history, family history, and any relevant psychosocial factors). Habilitative services may be prolonged and are primarily influenced by the type of ADLs or IADLs which have not developed, or which are at risk of being lost.

- (2) A speech language pathology (SLP)/speech therapy (ST) evaluation is considered medically necessary for the assessment of speech and language disorders, which result in communication disabilities and for the assessment of swallowing disorders (dysphagia).

Not Medically Necessary

- (1) Rehabilitative SLP services are considered not medically necessary if any of the following is determined:
 1. Rehabilitative services are NOT necessary for the diagnosis and treatment of speech and language disorders, which result in communication disabilities and for the diagnosis and treatment of swallowing disorders (dysphagia), regardless of the presence of a communication disability, that do not result from illness, injury, surgery or congenital abnormality.
 2. Speech therapy is for dysfunctions that could reasonably be expected to improve or normalize; i.e., self-correcting. For example: language therapy for children with natural dysfluency or for developmental articulation errors.

- 1 3. The individual's condition is strictly of a behavioral nature without any associated
- 2 motor involvement that impacts functional activities (e.g., ADHD, anxiety).
- 3 4. The therapy is primarily educational in nature.
- 4 5. Swallowing/feeding therapy for patients with food aversions that are meeting
- 5 normal growth and developmental milestones.
- 6 6. Therapy services that do not require the skills of a qualified provider of SLP
- 7 services. Examples include treatments using routine, repetitious, or reinforced
- 8 procedures that are not diagnostic or therapeutic (e.g., practicing word drills for
- 9 articulation errors without skilled feedback) or procedures that can be implemented
- 10 by the patient, family or caregivers.
- 11 7. The expectation does not exist that the service(s) will result in a clinically
- 12 significant improvement in the level of functioning within a reasonable and
- 13 predictable period of time (up to 4 weeks).
- 14 o If function could reasonably be expected to improve as the individual
- 15 gradually resumes normal activities, then the service is considered not
- 16 medically necessary.
- 17 o The patient's condition does not have the potential to improve or is not
- 18 improving in response to therapy; or would be insignificant relative to the
- 19 extent and duration of therapy required; and there is an expectation that
- 20 further improvement is NOT attainable.
- 21 o The documentation fails to objectively verify functional progress over a
- 22 reasonable period of time (up to 4 weeks).
- 23 o The patient has reached maximum therapeutic benefit.
- 24 8. Reevaluations or assessments of a patient's status that are not separate and distinct
- 25 services from those work components included within physical therapy services
- 26 provided.
- 27 9. Reevaluations or assessments of a patient's status that are not necessary to continue
- 28 a course of therapy nor related to a new condition or exacerbation for which the
- 29 reevaluation will likely result in a change in the treatment plan.
- 30 10. The treatments/services are not supported by and are not performed in accordance
- 31 with peer-reviewed literature as documented in applicable ASH CPGs or other
- 32 literature accepted by ASH Clinical Quality committee.

- 34 (2) The following treatments/programs are **not** considered medically necessary
- 35 because they are nonmedical, non-rehabilitative, educational, or training in nature.
- 36 In addition, these treatments/programs, may be specifically excluded under many
- 37 benefit plans:
- 38 • Health and wellness intervention
- 39 • Education and achievement testing, including Intelligence Quotient (IQ)
- 40 testing.
- 41 • Educational interventions (e.g., classroom environmental manipulation,
- 42 academic skills training and parental training).

- 1 • Services provided within the school setting and duplicated in the
2 rehabilitation setting.
3
- 4 (3) Speech language pathology (SLP)/speech therapy (ST) services for executive
5 functioning is considered not medically necessary as it does not address an
6 underlying medical condition affecting motor deficits.
- 7 • Executive functioning involves learning and cognitive skills which can
8 be addressed with instruction and practice in a life skills or educational
9 program.
- 10 • Examples of executive functioning includes deficits in the following
11 areas, but not limited to: sustaining and shifting attention, focusing,
12 planning, organizing, sequencing, managing frustration, modulating
13 emotions that are affecting life skills and daily activities.
14

15 3. MAINTENANCE SPEECH THERAPY SERVICES

16 According to the Centers for Medicare and Medicaid Services (CMS) guidelines, or when
17 covered by private carriers, maintenance speech language therapy services are a covered
18 benefit when skilled ~~occupational~~ speech language therapy care is medically necessary to
19 maintain functional status or to prevent or slow further deterioration in function. Unlike
20 coverage for rehabilitative therapy, coverage for maintenance therapy does not depend on
21 the presence or absence of a patient's potential for improvement for therapy; the deciding
22 factors are always whether the services are considered reasonable, effective treatments for
23 the patient's condition and require the skills of a therapist. A maintenance program is
24 considered medically necessary when any of the following criteria are met:
25

- 26 • If the specialized skill, knowledge and judgment of a qualified speech language
27 pathologist are required to establish or design a maintenance program to maintain
28 the patient's current condition or to prevent or slow further deterioration.
- 29
- 30 • If skilled speech language therapy services by a qualified speech language
31 pathologist assistant under the supervision of a qualified speech language
32 pathologist, are needed to instruct the patient or appropriate caregiver regarding the
33 maintenance program.
- 34
- 35 • If skilled speech language-therapy services are needed for periodic reevaluations or
36 reassessments of the maintenance program.

37 Once a maintenance program is designed or established, a maintenance program can
38 generally be performed by the patient alone or with the assistance of family member,
39 caregiver or unskilled personnel. In such situations, coverage is not medically necessary.

1 The performance or delivery of the maintenance therapy program is considered medically
 2 necessary only when the documentation establishes that the following criteria has been
 3 met:

- 4
- 5 1. The individualized assessment of a patient's clinical condition demonstrates that
 6 the specialized judgment, knowledge and skills of a physical ~~occupational~~ therapy
 7 practitioner (skilled care) are necessary for the performance of an effective
 8 maintenance program.
- 9 2. When the needed therapy procedures required to maintain the patient's current
 10 function or to prevent or slow further deterioration are of such complexity and
 11 sophistication that the skills of a qualified speech language pathologist-practitioner
 12 (as defined by scope of practice in each state) are required to furnish the therapy
 13 procedure; or
- 14 3. The particular patient's special medical complications require the skills of a
 15 qualified speech language pathologist-practitioner to furnish a therapy service
 16 required to maintain the patient's current function or to prevent or slow further
 17 deterioration, even if the skills of a speech language pathologist practitioner are not
 18 ordinarily needed to perform such therapy procedures.

19
 20 The plan of care must be developed by the physician, NPP (non-physician practitioner) or
 21 SLP who will provide the SLP services.

22 23 **4. HABILITATIVE SPEECH THERAPY SERVICES**

24 Habilitative services may or may not be covered services. If the member's contract
 25 excludes habilitative services, the contract prevails.

26 27 **Medically Necessary**

28 (1) Habilitative SLP services are considered medically necessary when ALL the following
 29 criteria are met:

- 30 1. The therapy is intended to maintain or develop speech, language, or swallowing
 31 impairment skills which, as a result of illness (including but not limited to autism
 32 spectrum disorders), injury, loss of a body part, or congenital abnormality, either:
 - 33 ○ Have not (but normally would have) developed; or
 - 34 ○ Are at risk of being lost;
- 35 2. The SLP evidence-based services require the judgment, knowledge, and skills of a
 36 qualified provider of SLP services due to the complexity and sophistication of the
 37 plan of care (including education and training) and the medical condition of the
 38 individual;

3. There is an expectation that the therapy will assist in the development of normal function or maintain a normal level of functioning;
4. An individual would either not be expected to develop the function or would be expected to permanently lose the function (not merely experience fluctuation in the function) without the habilitative service. If the undeveloped or impaired function is not the result of a loss of body part or injury, a physician experienced in the evaluation and management of the undeveloped or impaired has confirmed that the function would not either be expected to develop or would be permanently lost without the habilitative service. This information also concurs with the written treatment plan, which is likely to result in meaningful development of function or prevention of the loss of function;
5. There is a written treatment plan documenting the short and long-term goals (including estimated time when goals will be met) of treatment, frequency and duration of treatment, and what quantitative outcome measures will be used to assess function objectively;
6. Documentation objectively verifies that, at a minimum, functional status is developed or maintained; and
7. The services are delivered by a qualified provider of SLP services.

Not Medically Necessary

(3) Habilitative SLP services are considered not medically necessary if any of the criteria above are not met.

1. .

5. REDUNDANT THERAPEUTIC EFFECTS AND DUPLICATIVE REHABILITATIVE OR HABILITATIVE SERVICES

1. Redundant rehabilitative or habilitative therapy services expected to achieve the same therapeutic goal are considered not medically necessary and it would be inappropriate to provide these services to the same body region during the same treatment session. This includes treatments, such as but not limited to:
 - multiple modalities procedures that have similar or overlapping physiologic effects (e.g., multiple forms of superficial or deep heating modalities).
2. Duplicative (same or similar) rehabilitative or habilitative services provided as part of an authorized therapy program through another therapy discipline are not medically necessary and inappropriate in the provision of care for the same patient.
 - When individuals receive physical, occupational, or speech therapy, the therapists should provide different treatments that reflect each therapy discipline's unique perspective on the individual's impairments and functional deficits and not duplicate the same treatment. They must also have separate evaluations, treatment plans, and goals. This applies to chiropractic services as well.

6. CLINICAL DOCUMENTATION

Medical record keeping is an essential component of patient evaluation and management. Medical records should be legible and should contain, at a minimum sufficient information to identify the patient, support the diagnosis, justify the treatment, accurately document the results, indicate advice and cautionary warnings provided to the patient and provide sufficient information for another practitioner to assume continuity of the patient's care at any point in the course of treatment. Good medical record keeping improves the likelihood of a positive outcome and reduces the risk of treatment errors. It also provides a resource to review cases for opportunities to improve care, provides evidence for legal records, and offers necessary information for third parties who need to review and understand the rationale and type of services rendered (e.g., medical billers and auditors/reviewers.)

Outcome measures are important in determining effectiveness of a patient's care. The use of standardized tests and measures early in an episode of care establishes the baseline status of the patient, providing a means to quantify change in the patient's functioning. Outcome measures provide information about whether predicted outcomes are being realized. When comparison of follow-up with baseline outcome metrics does not demonstrate minimal clinically important difference (MCID) (minimal amount of change in a score of a valid outcome assessment tool), the treatment plan should be changed or be discontinued. Failure to use Functional Outcome Measures (FOMs) / Outcome Assessment Tools (OATs) may result in insufficient documentation of patient progress and may result in an adverse determination (partial approval or denial) of continued care.

6.1 Evaluation and Re-evaluations

A comprehensive evaluation is essential to determine if ST services are medically necessary, gather baseline data, establish a treatment plan, and develop goals based on the data. The initial evaluation is usually completed in one to three sessions. An evaluation is needed before implementing any ST treatment. Evaluation begins with the administration of appropriate and relevant assessments using standardized assessments and tools. The evaluation must include:

- Prior functional level, if acquired condition;
- Specific standardized and non-standardized tests, assessments, and tools to assess the individual's level of functional communication/swallowing in that individual's natural environment(s);
- Analytic interpretation and synthesis of all data, including a summary of the baseline findings in written report(s) of the individual's current communication/swallowing skills;
- Objective, measurable, and functional descriptions of an individual's deficits using comparable and consistent methods;
- Summary of clinical reasoning and consideration of contextual factors with recommendations;

- 1 • Plan of care with specific treatment techniques or activities to be used in treatment
- 2 sessions that should be updated as the individual's condition changes;
- 3 • Frequency and duration of treatment plan;
- 4 • Functional, measurable, and time-framed long-term and short-term goals based on
- 5 appropriate and relevant evaluation data;
- 6 • Rehabilitation prognosis;
- 7 • Education and goal development with client and/or parent;
- 8 • Discharge plan that is initiated at the start of ST treatment.

9

10 A comprehensive speech and language evaluation of the patient and his or her speech and
 11 language potential is required before a full treatment plan is developed. As part of the
 12 evaluation, standardized assessment tests should be used for evaluations to identify and
 13 quantify impairments and may include, but are not limited to, the following:

- 14 • Receptive-Expressive Emergent Language Scale (REEL): infants (birth to three
- 15 years)
- 16 • Preschool Language Scale (PLS)
- 17 • Test of Language Development (TOLD): school-age children
- 18 • Peabody Picture Vocabulary Test (PPVT): pediatrics and adults
- 19 • Clinical Evaluation of Language Fundamentals (CELF)
- 20 • Comprehensive Assessments of Spoken Language (CASL)
- 21 • Boston Diagnostic Aphasia Exam (BDAE) adults
- 22 • Cognitive Linguistic Quick Test (CLQT+) adults

23

24 The speech-language pathologist will be able to determine, based on these factors and on
 25 the natural course of the disease or condition, when a speech generating device or treatment
 26 is necessary and what type of device or treatment would best meet the needs of the specific
 27 patient in question. Upon completion of the evaluation, a speech generating device may be
 28 recommended according to the permanence and severity of expressive speech impairment,
 29 as well as the short- and long-term goals for these individuals.

30

31 In children, a hearing test should also be conducted to determine if the child is experiencing
 32 mild hearing loss as a result of ear infections or allergies or for some other reason. If a
 33 hearing loss is identified, medical management and monitoring is important to minimize
 34 any further effects on language learning. Comorbid psychiatric disorders, environmental
 35 deprivation, pervasive developmental disorders, mental retardation, autism and selective
 36 mutism should all be considered in cases of language delay. The evaluation of a patient's
 37 level of function is focused on identifying what the patient wants or needs to do to function
 38 on a daily basis (or should be doing for proper development), and on identifying those

1 factors that help or hinder the performance of those activities. During the first patient
2 contact, the speech-language pathologist evaluates and documents:

- 3 • A diagnosis (where permitted by scope of practice and regulatory statutes) and
4 description of the specific problem to be evaluated and/or treated. This should
5 include the specific body area(s) evaluated. Include all conditions and complexities
6 that may impact the treatment. A description might include, for example, the pre-
7 morbid function, date of onset, and current function;
- 8 • Objective measurements, preferably standardized patient assessment instruments
9 and/or outcomes measurement tools related to current functional status, when these
10 are available and appropriate to the condition being evaluated;
- 11 • Clinical judgments or subjective impressions that describe the current functional
12 status of the condition being evaluated, when they provide further information to
13 supplement measurement tools; and
- 14 • A determination that treatment is not needed, or, if treatment is needed a prognosis
15 for return to pre-morbid condition or maximum expected condition with expected
16 time frame and a plan of care.

17
18 **Re-evaluation** (see the *Medical Necessity Decision Assist Guideline for Evaluations and*
19 *Re-evaluations (CPG 111 – S)* for specific medical necessity criteria)

20
21 A re-evaluation is a follow-up evaluation of the patient’s performance and goals after an
22 intervention plan has been instituted. The re-evaluation is used to help determine if any
23 changes in the treatment plan are needed. A re-evaluation is usually indicated when there
24 are new significant clinical findings, a rapid change in the individual's status, or failure to
25 respond to ST interventions. Re-evaluation requires the same professional skill as
26 evaluation. The decision to provide a re-evaluation shall be made by the speech-language
27 pathologist making a professional judgment about the patient’s current treatment plan
28 whether the need is for continued care, modifying goals and/or treatment or terminating
29 services. Re-evaluations may be appropriate at a planned discharge. Infrequent re-
30 evaluations of maintenance programs may be covered when deemed necessary, if they
31 require the skills of the speech-language pathologist, and they are a distinct and separately
32 identifiable service which can only be done safely by the speech-language pathologist.

33
34 A re-evaluation is a comprehensive examination that includes all the updated findings of
35 the initial evaluation, such as:

- 36 • Data collection with objective measurements based on appropriate and relevant
37 assessment tests and tools using comparable and consistent methods of the
38 individual's level of functional communication/swallowing in that individual's
39 natural environment(s);
- 40 • Determination of whether skilled care is still necessary;
- 41 • Organizing the different problem areas and deciding a priority/focus of treatment;
- 42 • Identifying the appropriate intervention(s) for new or ongoing goal achievement;

- 1 • Modification of intervention(s);
- 2 • Revision in plan of care if needed;
- 3 • Correlation to meaningful change in function; and
- 4 • Determining and evaluating the effectiveness of intervention(s).

5
6 Current Procedural Terminology (CPT) does not define a re-evaluation code for ST; the
7 evaluation code should be used. The documentation should differentiate between
8 evaluation/re-evaluation and screening. Routine reassessments are not considered re-
9 evaluations. These include ongoing reassessments that are part of each skilled treatment
10 session, progress reports, and discharge summaries.

11
12 Before continuing speech/language services, the results of the patient-specific measures
13 listed previously should demonstrate that the individual is consistently improving and that
14 a plateau (i.e., where no additional meaningful improvements are being measured or are
15 expected to occur) has not been reached. It is common for some patients to hit a plateau for
16 a short period of time and may need their goals adjusted accordingly (as in the case of
17 patients with Down's syndrome and/or autism). Once the individual has reached their goals
18 or a therapeutic plateau has been reached, then ongoing therapy becomes maintenance in
19 nature.

20
21 In order to reflect that continued ST services are medically necessary, intermittent progress
22 reports must demonstrate that the individual is making functional progress. Progress
23 reports should meet the American Speech-Language-Hearing Association (ASHA)
24 standards, which include at a minimum:

- 25 • Start of care date;
- 26 • Time period covered by the report;
- 27 • Communication/swallowing/cognitive diagnosis;
- 28 • Statement of the individual's functional communication/swallowing at the
29 beginning of the progress report period;
- 30 • Statement of the individual's current status as compared to evaluation baseline data
31 and the prior progress reports, including objective measures of member
32 communication/swallowing performance in functional terms that relate to the
33 treatment goals;
- 34 • Changes in prognosis and rationale;
- 35 • Changes in plan of care and rationale;
- 36 • Changes in goals and rationale;
- 37 • Consultations with other professionals or coordination of services, if applicable;
- 38 • Signature and title of speech-language pathologist responsible for the therapy
39 services.

1 **6.2 Speech Therapy Treatment Sessions**

2 A speech therapy intervention is the purposeful interaction of the speech language
 3 pathologist and speech language pathology assistant with the patient and, when
 4 appropriate, with other individuals involved in patient care, using various therapy
 5 procedures and techniques to produce changes in the condition that are consistent with the
 6 diagnosis and prognosis. Speech therapy interventions consist of coordination,
 7 communication, and documentation; patient-related and family/caregiver instruction; and
 8 procedural interventions. Speech therapists focus to alleviate impairment and functional
 9 limitation by designing, implementing, and modifying therapeutic interventions. A ST
 10 treatment session is usually defined as thirty (30) minutes to one (1) hour of ST on any
 11 given day, depending on the age and diagnosis and ability to sustain attention for therapy.
 12 Treatment sessions for more than one (1) hour per day may be medically appropriate for
 13 inpatient acute settings, day treatment programs, and select outpatient situations, but must
 14 be supported in the treatment plan and based on an individual's medical condition. These
 15 services may include:

- 16 • Evaluation or re-evaluation;
- 17 • Therapeutic oral motor, laryngeal, pharyngeal, or breathing exercises;
- 18 • Establishment of compensatory or adaptive communication/swallowing
- 19 techniques, strategies, and skills;
- 20 • Management of positioning, eating, and swallowing to enable/progress safe eating
- 21 and swallowing;
- 22 • Establishing hierarchy of tasks or cues that direct an individual toward goals;
- 23 • Skilled reassessment of the individual's problems, plan, and goals as part of the
- 24 treatment session;
- 25 • Training of the individual, caregiver, and family/parent to augment restorative
- 26 treatment or establish a maintenance program;
- 27 • Selection and training in assistive technology and adaptive devices, e.g., speech
- 28 generating devices, augmentative or alternative communication systems;
- 29 • Training in the use of prosthetic devices;
- 30 • Group therapy sessions.

31
 32 Documentation of each treatment session should include at a minimum:

- 33 • Date of treatment;
- 34 • Subjective complaints and current status (including functional deficits and ADL
- 35 restrictions);
- 36 • Description/name of each specific treatment intervention provided that match the
- 37 CPT codes billed, including;
- 38 ○ Treatment time and parameters
- 39 • The patient's response to each service and to the entire treatment session;
- 40 • Any progress toward the goals in objective, measurable terms using consistent and
- 41 comparable methods;

- 1 • Any changes to the plan of care;
- 2 • Recommendations for follow-up visit(s);
- 3 • Signature/electronic identifier, name and credentials of the treating clinician.

4 **6.3 Discharge/Discontinuation of Intervention**

5 The SLP discharges the patient from speech language pathology services when the
6 anticipated goals or expected outcomes for the patient have been achieved. The SLP
7 discontinues intervention when the patient is unable to continue to progress toward goals
8 or when the SLP determines that the patient will no longer benefit from speech therapy.
9

10 The speech therapy discharge documentation includes:

- 11 • The status of the patient at discharge and the goals and outcomes attained
- 12 • Appropriate date and authentication by the SLP who performed the discharge
- 13 • When a patient is discharged prior to attainment of goals and outcomes, the status
14 of the patient and the rationale for discontinuation
- 15 • Initial, subsequent, and final FOMs scores
- 16 • Proposed self-care recommendations, if applicable
- 17 • Referrals to other health care practitioners/referring physicians as appropriate
- 18 • If the patient self- discharges, documentation of final status and if known, the
19 reason for discontinuation of services.

20 **6.4 Duplicated / Insufficient Information**

21 (1) Entries in the medical record should be contemporaneous, individualized, appropriately
22 comprehensive, and made in a chronological, systematic, and organized manner.
23 Duplicated/nearly duplicated medical records (a.k.a. cloned records) are not acceptable. It
24 is not clinically reasonable or physiologically feasible that a patient's condition will be
25 identical on multiple encounters. (Should the finding be identical for encounters, it would
26 be expected that treatment would end because patient is not making progress toward current
27 goals.)
28

29 This includes, but not limited to:

- 30 • duplication of information from one treatment session to another (for the same or
31 different patient[s]);
- 32 • duplication of information from one evaluation to another (for the same or
33 different patient[s]).

34 Duplicated medical records do not meet professional standards of medical record keeping
35 and may result in an adverse determination (partial approval or denial) of those services.
36

37 (2) The use of a system of record keeping that does not provide sufficient information (e.g.,
38 checking boxes, circling items from lists, arrows, travel cards with only dates of visit and
39

1 listings). These types of medical record keeping may result in an adverse determination
 2 (partial approval or denial) of those services.

3
 4 Effective and appropriate records keeping that meet professional standards of medical
 5 record keeping document with adequate detail a proper assessment of the patient's status,
 6 the nature and severity of his/her complaint(s) or condition(s), and/or other relevant clinical
 7 information (e.g., history, parameters of each therapy performed, objective findings,
 8 progress towards treatment goals, response to care, prognosis).

10 **6.5 Centers For Medicare and Medicaid Services (CMS)**

11 For Medicare and Medicaid services, medical records keeping must follow and be in
 12 accordance with Medicare and any additional state Medicaid required documentation
 13 guidelines.

15 **7. CLINICAL REVIEW PROCESS**

16 Medical necessity evaluations require approaching the clinical data and scientific evidence
 17 from a global perspective and synthesizing the various elements into a congruent picture
 18 of the patient's condition and need for skilled treatment intervention. Clinical review
 19 decisions made by the CQEs are based upon the information provided by the treating
 20 practitioner in the submitted documentation and other related findings and information.
 21 Failure to appropriately document pertinent clinical information may result in adverse
 22 determinations (partial approval or denial) of those services. Therefore, thorough
 23 documentation of all clinical information that established the diagnosis/diagnoses and
 24 supports the intended treatment is essential

26 **7.1 Definition of Key Terminology used in Clinical Reviews**

28 **Elective/Convenience Services**

29 Examples of elective/convenience services include: (a) preventive services; (b) wellness
 30 services; (c) services not necessary to return the patient to pre-illness/pre-injury functional
 31 status and level of activity; (d) services provided after the patient has reached MTB.
 32 (Elective/convenience services may not be covered through specific client or ASH
 33 benefits.)

35 **Minimal Clinically Important Difference (MCID)**

36 The MCID is the minimal amount of change in a score of a valid outcome assessment tool
 37 that indicates an actual improvement in the patient's function or pain. Actual significance
 38 of outcome assessment tool findings requires correlation with the overall clinical
 39 presentation, including updated subjective and objective examination/evaluation findings.

1 **Maximum Therapeutic Benefit (MTB)**

2 MTB is the patient's health status when the application of skilled therapeutic services has
 3 achieved its full potential (which may or may not be the complete resolution of the patient's
 4 condition.) At the point of MTB, continuation of the same or similar skilled treatment
 5 approach will not significantly improve the patient's impairments and function during this
 6 episode of care.

7
 8 If the patient continues to have significant complaints, impairments, and documented
 9 functional limitations, one should consider the following:

- 10 • Altering the treatment regimen such as utilizing a different physiological approach
 11 to the treatment of the condition, or decreasing the use of passive care (modalities,
 12 massage etc.) and increasing the active care (therapeutic exercise) aspects of
 13 treatment to attain greater functional gains;
- 14 • Reviewing self-management program including home exercise programs; and/or
- 15 • Referring the patient for consultation by another health care practitioner for
 16 possible co-management or a different therapeutic approach.

17 **Preventive Services**

18 Preventive services are designed to reduce the incidence or prevalence of illness,
 19 impairment, and risk factors, and to promote optimal health, wellness, and function. These
 20 services are not designed or performed to treat or manage a specific health condition.
 21 (Preventive services may or may not be covered under specific clients or through ASH
 22 benefits.)
 23
 24

25 **Acute**

26 The stage of an injury, illness, or disease, in which the presence of clinical signs and
 27 symptoms is less than six weeks in duration, typically characterized by the presence of one
 28 or more signs of inflammation or other adaptive response.
 29

30 **Sub-Acute**

31 The stage of an injury, illness, or disease, in which the presence of clinical signs and
 32 symptoms is greater than six weeks, but not greater than twelve weeks in duration.
 33

34 **Chronic**

35 The stage of an injury, illness, or disease, in which the presence of clinical signs and
 36 symptoms is greater than twelve weeks in duration.
 37

38 **Red Flag(s)**

39 Signs and symptoms presented through history or examination/assessment that warrant
 40 more detailed and immediate medical assessment and/or intervention.

Yellow Flag(s)

Adverse prognostic indicators with a psychosocial predominance associated with chronic pain and disability. Yellow flags signal the potential need for more intensive and complex treatment and/or earlier specialist referral.

Co-Morbid Condition(s)

The presence of a concomitant condition, that has an unrelated pathology or disease process, but may inhibit, lengthen, or alter in some way the expected response to care.

7.2 Clinical Quality Evaluation

The goal of the CQEs during the review and decision-making process is to approve, as appropriate, those clinical services necessary to return the patient to pre-clinical/pre-morbid health status or stabilize a chronic condition, as supported by the documentation presented. The CQE is to evaluate if the documentation and other clinical information presented by the treating provider has appropriately substantiated the patient's condition and appropriately justifies the treatment plan that is presented.

Approval

ASH CQEs have the responsibility to approve appropriate care for all services that are medically necessary. The CQEs assess the clinical data supplied by the practitioner in order to determine whether submitted services and/or the initiation or continuation of care has been documented as medically necessary. The practitioner is accountable to document the medical necessity of all services submitted/provided. It is the responsibility of the peer CQE to evaluate the documentation in accordance with their training, understanding of practice parameters, and review criteria adopted by ASH through its clinical committees.

The following items influence clinical service approvals:

- No evidence of contraindication(s) to services submitted for review;
- Complaints, exam findings, and diagnoses correlate with each other;
- Treatment Plan is supported by the nature and severity of complaints;
- Treatment Plan is supported by exam findings;
- Treatment Plan is expected to improve symptoms (e.g., pain, function) within a reasonable period of time;
- Maximum therapeutic benefit has not been reached;
- Treatment Plan requires the skills of the provider; and
- Demonstration of progression toward active home/self-care and discharge.

Partial Approval

Occurs when only a portion of the submitted services are determined to be medically necessary services. The partial approval may refer to a decrease in treatment frequency, treatment duration, number of Durable Medical Equipment (DME)/supplies/appliances,

1 number of therapies, or other services from the original amount/length submitted for
 2 review. This decision may be due to any number of reasons, such as:

- 3 • the practitioner’s documentation of the history and exam findings are inconsistent
 4 with the clinical conclusion(s)
- 5 • the treatment dosage (frequency/duration) submitted for review is not supported
 6 by the underlying diagnostic or clinical features
- 7 • the need to initiate only a limited episode of care in order to monitor the patient’s
 8 response to care

9 Additional services may be submitted and reviewed for evaluation of the patient’s response
 10 to the initial trial of care. If the practitioner or patient disagrees with the partial approval of
 11 services, they contact the CQE listed on their response form to discuss the case, submit
 12 additional documentation through the Reopen process, or submit additional documentation
 13 to appeal the decision through the Provider Appeals and Member Grievances process.

14 15 **Non-approval / Denial**

16 Occurs when none of the services submitted for review are determined to be medically
 17 necessary services. The most common causes for a non-approval/denial of all services are
 18 administrative or contractual in nature (e.g., ineligibility, reached plan benefit limits, non-
 19 coverage). Clinically, it is appropriate to deny continued/ongoing care if the patient’s
 20 condition(s) are not, or are no longer, responding favorably to the services being rendered
 21 by the treating practitioner, or the patient has reached maximum therapeutic benefit.

22 23 **Additional / Continued Care**

24 Approval of additional treatment/services requires submission of additional information,
 25 including the patient’s response to care and updated clinical findings. In cases where an
 26 additional course of care is submitted, the decision to approve additional services will be
 27 based upon the following criteria:

- 28 • The patient has made clinically significant progress under the initial treatment
 29 plan/program based on a reliable and valid outcome tool or updated subjective and
 30 objective examination findings.
- 31 • Additional clinically significant progress can be reasonably expected by continued
 32 treatment (The patient has not reached MTB or maximum medical improvement).
- 33 • There is no indication that immediate care/evaluation is required by other health
 34 care professionals.

35
36 Any exacerbation or flare-up of the condition that contributes to the need for additional
 37 treatment/services must be clearly documented.

38
39 Ancillary diagnostic procedures should be selected based on clinical history and
 40 examination findings that suggest the necessity to rule out underlying pathology or to
 41 confirm a diagnosis that cannot be verified through less invasive methods.

- 42 • Information is expected to directly impact the treatment/services and course of care.

- 1 • The benefit of the procedure outweighs the risk to the patient’s health (short and
- 2 long term).
- 3 • The procedure is sensitive and specific for the condition being evaluated (e.g., an
- 4 appropriate procedure is utilized to evaluate for pathology).

5

6 The clinical information that the CQE expects to see when evaluating the documentation

7 in support of the medical necessity of submitted treatment/services should be

8 commensurate with the nature and severity of the presenting complaint(s) and scope of the

9 practitioner of services and may include but is not limited to:

- 10 • History
- 11 • Physical Examination/Evaluation
- 12 • Documented Treatment Plan and Goals
- 13 • Estimated time of Discharge

14

15 In general, the initiation of care is warranted if there are no contraindications to prescribed

16 care, there is reasonable evidence to suggest the efficacy of the prescribed intervention,

17 and the intervention is within the scope of services permitted by State or Federal law. The

18 treatment submission for a disorder is typically structured in time-limited increments

19 depending on clinical presentation. Dosage (frequency and duration of service) should be

20 appropriately correlated with clinical findings, potential complications/barriers to recovery

21 and clinical evidence. When the practitioner discovers that a patient is nonresponsive to

22 the applied interventions within a reasonable time frame, re-assessment and treatment

23 modification should be implemented and documented. If the patient’s condition(s) worsen,

24 the practitioner should take immediate and appropriate action to discontinue or modify care

25 and/or make an appropriate healthcare referral.

26

27 Services that do not require the professional skills of a practitioner to perform or supervise

28 are not medically necessary., If a patient’s recovery can proceed safely and effectively

29 through a home exercise program or self-management program, services are not indicated

30 or medically necessary.

31

32 **7.3 Critical Factors during Clinical Reviews**

33 The complexity and/or severity of historical factors, symptoms, examination findings, and

34 functional deficits play an essential role to help quantify the patient’s clinical status and

35 assess the effectiveness of planned interventions over time. CQEs consider patient-specific

36 variables as part of the medical necessity verification process. The entire clinical picture

37 must be taken into consideration with each case evaluated based upon unique patient and

38 condition characteristics.

39

40 Such variables may include, but not be limited to co-morbid conditions and other barriers

41 to recovery, the stage(s) of the condition(s), mechanism of injury, severity of the

42 symptoms, functional deficits, and exam findings, as well as social and psychological status

1 of the patient and the available support systems for self-care. In addition, the patient's age,
 2 symptom severity, and the extent of positive clinical findings may influence duration,
 3 intensity, and frequency of services approved as medically necessary. For example:

- 4 • Severe symptomatology, exam findings, and/or functional deficits may require
 5 more care overall (e.g., longer duration, more services per encounter, and frequency
 6 of encounters that the average); these patients require a higher frequency; but may
 7 require short-term trials of care initially to assess patient response to care.
- 8 • Less severe symptomatology, exam findings and/or functional deficits usually
 9 require less care (e.g., shorter duration, fewer services per encounter, and frequency
 10 of encounters that the average); overall but may allow for less oversight and a
 11 longer initial trial of care.
- 12 • As patients age, they may have a slower response to care and this may affect the
 13 approval of a trial of care.
- 14 • Because pediatric patients (under the age of 12) have not reached musculo-skeletal
 15 maturity, it may be necessary to modify the types of therapies approved as well as
 16 shorten the initial trial of care.
- 17 • Complicating and/or co-morbid condition factors vary depending upon individual
 18 patient characteristics, the nature of the condition/complaints, historical and
 19 examination elements, and may require appropriate coordination of care and/or
 20 more timely re-evaluation.

21
 22 The following are examples of the factors CQEs consider when verifying the medical
 23 necessity of rehabilitative services for musculoskeletal conditions and pain disorders.

24 **7.3.1 General Factors**

25 Multiple patient-specific historical and clinical findings may influence clinical decisions,
 26 such as but not limited to:

- 27 • Red Flags
- 28 • Yellow Flags (Psychosocial Factors)
- 29 • Co-morbid conditions (e.g., diabetes, inflammatory conditions, joint instability)
- 30 • Age (older or younger)
- 31 • Non-compliance with treatment and/or self-care recommendations
- 32 • Lack of response to appropriate care
- 33 • Lifestyle factors (e.g., smoking, diet, stress, deconditioning)
- 34 • Work and recreational activities
- 35 • Pre-operative/post-operative care
- 36 • Medication use (type and compliance)

37 Nature of Complaint(s)

- 38 • Acute and severe symptoms
- 39 • Functional testing results that display severe disability/dysfunction

- 1 • Pain that radiates below the knee or elbow (for spinal conditions)

2
3 History

- 4 • Trauma resulting in significant injury or functional deficits.
5 • Pre-existing pathologies/surgery(ies)
6 • Congenital anomalies (e.g., severe scoliosis)
7 • Recurring exacerbations
8 • Prior episodes (e.g., >3 for spinal conditions)
9 • Multiple new conditions which introduce concerns regarding the cause of these
10 conditions

11
12 Examination

- 13 • Severe signs/findings
14 • Results from diagnostic testing that are likely to impact coordination of care and
15 response to care (e.g., fracture, joint instability, neurological deficits)

16
17 **Assessment of Red Flags**

18 At any time the patient is under care, the practitioner is responsible for seeking and
19 recognizing signs and symptoms that require additional diagnostics, treatment/service,
20 and/or referral. A careful and adequately comprehensive history and evaluation in addition
21 to ongoing monitoring during the course of treatment is necessary to discover potential
22 serious underlying conditions that may need urgent attention. Red flags can present
23 themselves at several points during the patient encounter and can appear in many different
24 forms. If a red flag is identified during a medical necessity review, the CQE should
25 communicate with the provider of services as soon as possible by telephone and/or through
26 standardized communication methods. When red flag is identified, CQE may not approve
27 services and recommend returning the patient back to the referring healthcare practitioner
28 or referring the patient to other appropriate health care practitioner/specialist with the
29 measure of urgency as warranted by the history and clinical findings.

30
31 Due to the rarity of actual red flag diagnoses in clinical practice, it is emphasized that the
32 practitioner does not need to perform expensive or invasive diagnostic procedures (e.g., x-
33 ray, advanced imaging, laboratory studies) in the absence of suspicious clinical
34 characteristics. Important red flags and events as well as the points during the clinical
35 encounter at which they are likely to appear include but may not be limited to:

36
37 Past or Current History

- 38 • Personal or family history of cancer.
39 • Current or recent urinary tract, respiratory tract, or other infection.
40 • Anticoagulant therapy or blood clotting disorder.
41 • Metabolic bone disorder (osteopenia and osteoporosis).

- 1 • Unintended weight loss.
- 2 • Unexplained dizziness or hearing loss.
- 3 • Trauma with skin penetration; and
- 4 • Immunosuppression (AIDS/ARC).

5

6 Present Complaint

- 7 • Writhing or cramping pain.
- 8 • Precipitation by significant trauma.
- 9 • Pain that is worse at night or not relieved by any position.
- 10 • Suspicion of cerebrovascular compromise.
- 11 • Symptom's indicative of progressive neurological disorder.

12

13 Physical Examination/Assessment

- 14 • Inability to reproduce symptoms of musculoskeletal diagnosis or complaints.
- 15 • Pulsing abdominal mass.
- 16 • Fever, chills, or sweats without other obvious source.
- 17 • New or recent neurologic deficit (special senses, sensory, language, and motor).
- 18 • Signs of carotid/vertebrobasilar insufficiency.
- 19 • Uncontrolled hypertension.
- 20 • Signs of nutritional deficiency.
- 21 • Signs of allergic reaction requiring immediate attention.
- 22 • Abuse/neglect.
- 23 • Psychological distress.

24

25 Pattern of Symptoms Not Consistent with Benign Disorder

- 26 • Chest tightness, difficulty breathing, chest pain.
- 27 • Headache of morbid proportion.
- 28 • Rapidly progressive neurological deficit.
- 29 • Significant, unexplained extremity weakness or clumsiness.
- 30 • Change in bladder or bowel function.
- 31 • New or worsening numbness or paresthesia.
- 32 • Saddle anesthesia.
- 33 • New or recent bilateral radiculopathy.

34

35 Lack of Response to Appropriate Care

- 36 • History of consultation/care from a series of practitioners or a variety of health care approaches without resolving the patient's complaint.
- 37 • Unsatisfactory clinical progress, especially when compared to apparently similar cases or natural progression of the condition.
- 38 • Signs and symptoms that do not fit the normal pattern and are not resolving.

40

1 **Assessment of Yellow Flags**

2 When yellow flags are present, clinicians need to be vigilant for deviations from the normal
3 course of illness and recovery. Examples of yellow flags include depressive symptoms,
4 injuries still in litigation, signs, and symptoms not consistent with pain severity, and
5 behaviors incongruent with underlying anatomic and physiologic principles.

6
7 If a yellow flag is identified during a medical necessity review, the reviewer should
8 communicate with the provider of services as soon as possible by telephone and/or through
9 standardized communication methods. CQE may recommend returning the patient back to
10 the referring healthcare practitioner or referring the patient to other health care
11 practitioner/specialist as appropriate.

12 **Assessment of Historical Information**

13 The following factors are assessed in review and determination if the services are medically
14 necessary:
15

- 16 • The mechanism of onset and date of onset are congruent with the stated condition's
17 etiology.
- 18 • The patient's past medical history and response to care do not pose
19 contraindication(s) for the services submitted for review.
- 20 • The patient's past medical history of pertinent related and unrelated conditions does
21 not pose contraindication(s) for the services submitted for review.
- 22 • The patient's complaint(s) have component(s) that are likely to respond favorably
23 to services submitted for review.
- 24 • Provocative and palliative factors identified on examination indicate the presence
25 of a musculoskeletal condition as expected per diagnosis(es) or complaints, or as
26 consistent with other type of diagnosis(es).
- 27 • The patient's severity of limitations to activities of daily living (ADLs) are
28 appropriate and commensurate for the presence of the condition(s) or disorder(s).
- 29 • The quality, radiation, severity, and timing of pain are congruent with the
30 documented condition(s) or disorder(s).
- 31 • The patient's past medical history of having the same or similar condition(s)
32 indicates a favorable response to care.
- 33 • The absence or presence of co-morbid condition(s) may or may not present absolute
34 or relative contraindications to care.

35 **Assessment of Examination Findings**

- 36 • The exam procedures, level of complexity, and components are appropriate for the
37 patient's complaint(s) and historical findings.
- 38 • Objective palpatory, orthopedic, neurologic, and other physical examination
39 findings are current, clearly defined, qualified, and quantified, including the nature,
40

- 1 extent, severity, character, professional interpretation, and significance of the
 2 finding(s) in relation to the patient's complaint(s) and differential diagnosis(es).
- 3 • Exam findings provide evidence justifying the condition(s) is/are likely to respond
 4 favorably to services submitted for review.
 - 5 • Exam findings provide a reasonable and reliable basis for the stated diagnosis(es).
 - 6 • Exam findings provide a reasonable and reliable basis for treatment planning;
 7 accounting for variables such as age, sex, physical condition, occupational and
 8 recreational activities, co-morbid conditions, etc.
 - 9 • The patient's progress is being appropriately monitored each visit (as noted within
 10 daily chart notes and during periodic re-exams) to ensure that acceptable clinical
 11 progress is realized.

13 **Assessment of Treatment / Treatment Planning**

- 14 • Treatment dosage (frequency and duration of service) is appropriately correlated
 15 with the nature and severity of the subjective complaints, potential
 16 complications/barriers to recovery, and objective clinical evidence.
- 17 • Services that do not require the professional skills of a practitioner to perform or
 18 supervise are not medically necessary, even if they are performed or supervised by
 19 a Physical Therapist. Therefore, if the continuation of a patient's care can proceed
 20 safely and effectively through a home exercise program or self-management
 21 program, services are not indicated or medically necessary.
- 22 • The use of passive modalities in the treatment of subacute or chronic conditions
 23 beyond the acute inflammatory response phase requires documentation of the
 24 anticipated benefit and condition-specific rationale in order to be considered
 25 medically necessary.
- 26 • The treatment plan includes the use of therapeutic procedures to address functional
 27 deficits and ADL restrictions.
- 28 • The set therapeutic goals are functionally oriented, realistic, measurable, and
 29 evidence based.
- 30 • The proposed date of release/discharge from treatment is clearly defined.
- 31 • The treatment/therapies are appropriately correlated with the nature and severity of
 32 the patient's condition(s) and set treatment goals.
- 33 • Functional Outcome Measures (FOM) demonstrate minimal clinically important
 34 difference (MCID) from baseline results through periodic reevaluations during the
 35 course of care. This is important in order to determine the need for continued care,
 36 the appropriate frequency of visits, estimated date of release from care, and if a
 37 change in the treatment plan or a referral to an appropriate health care
 38 practitioners/specialist is indicated.
- 39 • Home care, self-care, and active-care instructions are documented.

- Durable Medical Equipment (DME), supplies, appliances, and supports are provided when medically necessary and appropriately correlated with clinical findings and clinical evidence.

Assessment of Diagnostic Imaging / Special Studies

- Laboratory tests are performed only when medically necessary to improve diagnostic accuracy and treatment planning. Abnormal values are professionally interpreted as they relate to the patient's complaint(s) or to unrelated co-morbid conditions that may or may not impact the patient's prognosis and proposed treatment.
- X-ray procedures are performed only when medically necessary to improve diagnostic accuracy and treatment planning. (Indicators from history and physical examination indicating the need for x-ray procedures are described in the *X-Ray Guidelines (CPG 1-S)* clinical practice guideline).
- Advanced imaging studies, when medically necessary and/or available, are evaluated for structural integrity and to rule out osseous, related soft tissue pathology, or other pathology.
- EMG and NCV studies, when medically necessary and/or available, are evaluated for objective evidence of neural deficit. For more information, see the *Electrodiagnostic Testing (CPG 129-S)* clinical practice guideline.
- Imaging or special studies' findings are appropriate given the nature and severity of the patient's condition(s) and the findings obtained are likely to influence the basis for the proposed treatment.

7.3.2 Factors that Influence Adverse Determinations of Clinical Services (Partial Approvals/Denials)

Factors that influence adverse determinations of clinical services may include but are not limited to these specific considerations and other guidelines and factors identified elsewhere in this policy.: Topics/factors covered elsewhere in this guideline are also applicable in this section and may result in an adverse determination on medical necessity review. To avoid redundancy, many of those factors have not been listed below.

Additional Factors Considered in Determination of Medical Necessity

History / Complaints / Patient Reported Outcome Measures

- The patient's complaint(s) and/or symptom(s) are not clearly described
- There is poor correlation and/or a significant discrepancy between the complaint(s) and/or symptom(s) as documented by the treating practitioner and as described by the patient
- The patient's complaint(s) and/or symptom(s) have not demonstrated clinically significant improvement

- 1 • The nature and severity of the patient’s complaint(s) and/or symptom(s) are
- 2 insufficient to substantiate the medical necessity of any/all submitted services
- 3 • The patient has little or no pain as measured on a valid pain scale
- 4 • The patient has little or no functional deficits using a valid functional outcome
- 5 measure or as otherwise documented by the practitioner
- 6

7 **Evaluation Findings**

- 8 • There is poor correlation and/or a significant discrepancy in any of the following:
 - 9 ○ patient’s history
 - 10 ○ subjective complaints
 - 11 ○ objective findings
 - 12 ○ diagnosis
 - 13 ○ treatment plan
- 14 • The application of various exam findings to diagnostic or treatment decisions are
- 15 not clearly described or measured. (e.g., severity, intensity, professional
- 16 interpretation of results, significance)
- 17 • The patient’s objective findings have not demonstrated clinically significant
- 18 improvement
- 19 • The objective findings are essentially normal or are insufficient to support the
- 20 medical necessity of any/all submitted services
- 21 • The submitted objective findings are insufficient due to any of, but not limited to,
- 22 the following reasons:
 - 23 ○ old or outdated relative to the requested dates of service
 - 24 ○ do not properly describe the patient’s status
 - 25 ○ do not substantiate the medical necessity of the current treatment plan do
 - 26 not support the patient’s diagnosis/diagnoses do not correlate with the
 - 27 patient’s subjective complaint(s) and/or symptom(s)
- 28 • Not all of the patient’s presenting complaints were properly examined
- 29 • The patient does not have any demonstrable functional deficits or impairments
- 30 • The patient has not made reasonable progress toward pre-clinical status or
- 31 functional outcomes under the initial treatment/services
- 32 • Clinically significant therapeutic progress is not evident through a review of the
- 33 submitted records; this may indicate that the patient has reached maximum
- 34 therapeutic benefit
- 35 • The patient is approaching or has reached maximum therapeutic benefit
- 36 • The patient’s exam findings have returned to pre-injury status or prior level of
- 37 function
- 38 • There is inaccurate reporting of clinical findings
- 39 • The exam performed is for any of the following:
 - 40 ○ wellness
 - 41 ○ pre-employment

- sports pre-participation
- The exam performed is non-standard and solely technique/protocol based

Diagnosis

- The diagnosis is not supported by one or more of the following:
 - patient's history (e.g., date/mechanism of onset)
 - subjective complaints (e.g., nature and severity, location)
 - objective findings (e.g., not clearly defined and/or quantified, not professionally interpreted, significance not noted)

Submitted Medical Records

- The submitted records are insufficient to reliably verify pertinent clinical information, such as (but not limited to):
 - patient's clinical health status
 - the nature and severity of the patient's complaint(s) and/or symptom(s)
 - date/mechanism of onset
 - objective findings
 - diagnosis/diagnoses
 - response to care
 - functional deficits/limitations
- There are daily notes submitted for the same dates of service with different/altered findings without an explanation
- There is evidence of duplicated or nearly duplicated records for the same patient for different dates of service, or for different patients
- There is poor correlation and/or a significant discrepancy between the information presented in the submitted records with the information presented during a verbal communication between the reviewing CQE and treating practitioner
- The treatment time (in minutes) and/or the number of units used in the performance of a timed service (e.g., modality, procedure) during each encounter/office visit was not documented
- Some or all of the service(s) submitted for review are not documented as having been performed in the daily treatment notes

Treatment / Treatment Planning

- The submitted records show that the nature and severity of the patient's complaint(s) and/or symptom(s) require a limited, short trial of care in order to monitor the patient's response to care and determine the efficacy of the current treatment plan. This may include, but not limited to, any of the following:
 - significant trauma affecting function
 - acute/sub-acute stage of condition
 - moderate-to-severe or severe subjective and objective findings
 - possible neurological involvement

- 1 ○ presence of co-morbidities that may significantly affect the treatment plan
2 and/or the patient's response to care
- 3 • There is poor correlation of the treatment plan with the nature and severity of the
4 patient's complaint(s) and/or symptom(s), such as (but not limited to):
- 5 ○ use of acute care protocols for chronic condition(s)
6 ○ prolonged reliance on passive care
7 ○ active care and reduction of passive care are not included in the treatment
8 plan
9 ○ inappropriate use of passive modalities in the plan of care
10 ○ use of passive modalities as stand-alone treatments (which is rarely
11 therapeutic) or as the sole treatment approach to the patient's condition(s)
- 12 • There is evidence from the submitted records that the patient's treatment can
13 proceed safely and effectively through a home exercise program or self-
14 management program
- 15 • The patient's function has improved, complaints and symptoms have decreased,
16 and patient requires less treatment (e.g., lesser units of services per office visit,
17 lesser frequency, shorter total duration to discharge)
- 18 • The patient's symptoms and/or exam findings are mild and the patient's treatment
19 plan requires a lesser frequency (e.g., units of services, office visits per week)
20 and/or total duration
- 21 • Therapeutic goals have not been documented; goals should be measurable and
22 written in terms of function and include specific parameters
- 23 • Therapeutic goals have not been reassessed in a timely manner to determine if the
24 patient is making expected progress
- 25 • Failure to make progress or respond to care as documented within subjective
26 complaints, objective findings and/or functional outcome measures
- 27 • The patient's condition(s) is/are not amenable to the proposed treatment plan
- 28 • Additional significant improvement cannot be reasonably expected by continued
29 treatment and treatment must be changed or discontinued
- 30 • The patient has had ongoing care without any documented lasting therapeutic
31 benefits
- 32 • The condition requires an appropriate referral and/or coordination with other
33 appropriate health care services
- 34 • The patient is not complying with the treatment plan that includes lifestyle
35 changes to help reduce frequency and intensity of symptoms
- 36 • The patient is not adhering to treatment plan that includes medically necessary
37 frequency and intensity of services
- 38 • The use of multiple passive modalities with the same or similar physiologic
39 effects to the identical region is considered redundant and not reasonable or
40 medically necessary

- 1 • Home care, self-care, and/or active-care instructions are not implemented or
- 2 documented in the submitted records
- 3 • Uncomplicated diagnoses do not require services beyond the initial treatment plan
- 4 before discharging the patient to active home/self-care
- 5 • As symptoms and clinical findings improve the frequency of services (e.g., visits
- 6 per week/month) did not decrease. The submitted services do not or no longer
- 7 require the professional skills of the treating practitioner. The treatment plan is for
- 8 any of the following:
 - 9 ○ preventive care
 - 10 ○ elective/convenience/wellness care
 - 11 ○ back school
 - 12 ○ vocational rehabilitation or return to work programs
 - 13 ○ work hardening programs
 - 14 ○ routine educational, training, conditioning, return to sport, or fitness.
 - 15 ○ non-covered condition
- 16 • There is duplication of services with other healthcare practitioners/specialties
- 17 • The treatment plan is not supported due to, but not limited to, any of the following
- 18 reasons:
 - 19 ○ technique-/protocol-based instead of individualized and evidence based
 - 20 ○ generic and not individualized for the patient's specific needs
 - 21 ○ does not correlate with the set therapeutic goals
 - 22 ○ not supported in the clinical literature (e.g., proprietary, unproven)
 - 23 ○ not considered evidence-based and/or professionally accepted

24
25 The treatment plan includes services that are considered not evidence-based, not
26 widely accepted, unproven and/or not reasonable or medically necessary,
27 inappropriate or unrelated to the patient's complaint(s) and/or diagnosis/diagnoses.
28 (e.g., Low level laser therapy, axial/spinal decompression, select forms of EMS
29 such as microcurrent, H-wave. Also see the *Techniques and Procedures Not Widely*
30 *Supported as Evidence-Based (CPG 133 – S)* clinical practice guideline for
31 complete list).

32 33 **Health and Safety**

- 34 • There are signs, symptoms and/or other pertinent information presented through
- 35 the patient's history, exam findings, and/or response to care that require urgent
- 36 attention, further testing, and/or referral to and/or coordination with other
- 37 healthcare practitioners/specialists
- 38 • There is evidence of the presence of Yellow and/or Red Flags (See section on Red
- 39 and Yellow Flags above)
- 40 • There are historical, subjective, and/or objective findings which present as
- 41 contraindications for the plan of care

1 **7.3.3 Referral / Coordination of Services**

2 When a potential health and safety issue is identified, the CQE must communicate with the
3 provider of services as soon as possible by telephone and/or through standardized
4 communication methods to recommend returning the patient back to the referring health
5 care practitioner or referring the patient to other appropriate health care
6 practitioner/specialist with the measure of urgency as warranted by the history and clinical
7 findings.

8 Clinical factors that may require referral or coordination of services include, but not limited
9 to:

- 10 • Symptoms worsening following treatment;
- 11 • Deteriorating condition (e.g., orthopedic or neurologic findings, function, etc.);
- 12 • Reoccurring exacerbations despite continued treatment;
- 13 • No progress despite treatment;
- 14 • Unexplained diagnostic findings (e.g., suspicion of fracture);
- 15 • Identification of Red Flags;
- 16 • Identification of co-morbid conditions that don't appear to have been addressed
17 previously that represent absolute contraindications to services;
- 18 • Constitutional signs and symptoms indicative of systemic condition (e.g.,
19 unintended weight loss of greater than 4.5 kg/10 lbs. over 6-month period);
- 20 • Inability to provoke symptoms with standard exam;
- 21 • Treatment needed outside of scope of practice.

22
23 The Clinical Policy is reviewed and approved by the ASH Clinical Quality committees that
24 are comprised of contracted network practitioners including practitioners of the same
25 clinical discipline as the treating providers for whom compliance with the practices
26 articulated in this this document is required. Guidelines are updated at least annually, or as
27 new information is identified that result in material changes to one or more of these
28 policies.

30 **8. LITERATURE REVIEW**

31 **8.1 Electrical Stimulation for Dysphagia**

32 Electrical stimulation (ES) has been examined for the treatment of dysphagia. However,
33 there is currently insufficient evidence to support the effectiveness of ES in treating this
34 condition (Blumenfeld et al., 2006; Kiger et al., 2006; Shaw et al. 2007; Carnaby-Mann
35 and Crary, 2007; Steel et al., 2007; Clark et al., 2009; Christiaanse et al., 2011; Geeganage
36 et al., 2012; Tan et al., 2013; Miller et al., 2014; Terré and Mearin, 2015; Chen et al., 2016;
37 Alamer et al., 2020; Liang et al., 2021; Miller et al., 2022; Propp et al., 2022).

39 **References**

40 Alamer A, Melese H, Nigussie F. Effectiveness of Neuromuscular Electrical Stimulation
41 on Post-Stroke Dysphagia: A Systematic Review of Randomized Controlled Trials.
42 Clin Interv Aging. 2020 Sep 3;15:1521-1531. Doi: 10.2147/CIA.S262596.

- 1 American Speech-Language-Hearing Association. Speech-Language Pathology Medical
2 Review Guidelines, 2008. Retrieved on April 18, 2023 from
3 <http://www.asha.org/uploadedFiles/SLP-Medical-Review-Guidelines.pdf>
4
- 5 Basso A, Cattaneo S, Girelli L, Luzzatti C, Miozzo A, Modena L, Monti A. Treatment
6 efficacy of language and calculation disorders and speech apraxia: a review of the
7 literature. *Eur J Phys Rehabil Med.* 2011 Mar;47(1):101-21.
8
- 9 Bath PM, Lee H, Everton LF. Swallowing therapy for dysphagia in acute and subacute
10 stroke. *Cochrane Database of Systematic Reviews* 2018, Issue 10. Art. No.: CD000323.
11 DOI: 10.1002/14651858.CD000323.pub3
12
- 13 Blumenfeld L, Hahn Y, Lepage A, Leonard R, Belafsky PC. Transcutaneous electrical
14 stimulation versus traditional dysphagia therapy: a nonconcurrent cohort study.
15 *Otolaryngol Head Neck Surg.* 2006;135(5):754-757.
16 doi:10.1016/j.otohns.2006.04.016
17
- 18 Bos-Clark M, Carding P. Effectiveness of voice therapy in functional dysphonia: where
19 are we now? *Curr Opin Otolaryngol Head Neck Surg.* 2011 Jun;19(3):160-4.
20
- 21 Bradt J, Magee WL, Dileo C, Wheeler BL, McGilloway E. Music therapy for acquired
22 brain injury. *Cochrane Database Syst Rev.* 2010 Jul 7;(7):CD006787.
23
- 24 Brady MC, Kelly H, Godwin J, Enderby P. Speech and language therapy for aphasia
25 following stroke. *Cochrane Database Syst Rev.* 2012 May 16;5:CD000425.
26
- 27 Brignell A, Chenausky KV, Song H, Zhu J, Suo C, Morgan AT. Communication
28 interventions for autism spectrum disorder in minimally verbal children. *Cochrane*
29 *Database of Systematic Reviews* 2018, Issue 11. Art. No.: CD012324. DOI:
30 10.1002/14651858.CD012324.pub2
31
- 32 Carnaby-Mann GD, Crary MA. Examining the evidence on neuromuscular electrical
33 stimulation for swallowing: a meta-analysis. *Arch Otolaryngol Head Neck Surg.* 2007
34 Jun;133(6):564-71.
35
- 36 Centers for Medicare and Medicaid Services (CMS). Pub. 100-02, Chapter 15, Sections
37 220. Coverage of Outpatient Rehabilitation Therapy Services (Physical Therapy,
38 Occupational Therapy, and Speech-Language Pathology Services) Under Medical
39 Insurance and Section 230. Practice of Physical Therapy, Occupational Therapy, and
40 Speech-Language Pathology (Rev. 11905; 03-16-23) retrieved on April 18, 2023 from
41 [http://www.cms.gov/Regulations-and-](http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/bp102c15.pdf)
42 [Guidance/Guidance/Manuals/downloads/bp102c15.pdf](http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/bp102c15.pdf)

- 1 Centers for Medicare & Medicaid Services (CMS). Local Coverage Article: Medical
2 Necessity of Therapy Services (A52775). Retrieved on April 18, 2023 from
3 <https://www.cms.gov/medicare-coverage-database/details/article->
4 [details.aspx?articleid=52775&ver=15&bc=CAAAAAAAAAAAAA](https://www.cms.gov/medicare-coverage-database/details/article-)
5
- 6 Centers for Medicare & Medicaid Services (CMS). Local Coverage Determination (LCD):
7 Outpatient Physical and Occupational Therapy Services (L 33631). National
8 Government Services, Inc. retrieved April 18, 2023 from
9 <https://www.cms.gov/medicare-coverage-database/details/lcd->
10 [details.aspx?LCDId=33631&ver=51&SearchType=Advanced&CoverageSelection=B](https://www.cms.gov/medicare-coverage-database/details/lcd-)
11 [oth&NCSelection=NCA%257CCAL%257CNCD%257CMEDCAC%257CTA%257](https://www.cms.gov/medicare-coverage-database/details/lcd-)
12 [CMCD&ArticleType=Ed%257CKey%257CSAD%257CFAQ&PolicyType=Final&s](https://www.cms.gov/medicare-coverage-database/details/lcd-)
13 [=5%257C6%257C66%257C67%257C9%257C38%257C63%257C41%257C64%257](https://www.cms.gov/medicare-coverage-database/details/lcd-)
14 [C65%257C44&Keyword=wheelchairs&KeywordLookUp=Doc&KeywordSearchT](https://www.cms.gov/medicare-coverage-database/details/lcd-)
15 [ype=Exact&kq=true&bc=IAAABAAAAAA&](https://www.cms.gov/medicare-coverage-database/details/lcd-)
16
- 17 Centers for Medicare & Medicaid Services (CMS). Local Coverage Determination
18 (LCD): Speech-Language Pathology (L 34429). National Government Services, Inc.
19 Retrieved on October 16, 2022 from <https://www.cms.gov/medicare-coverage->
20 [database/view/lcd.aspx?lcdid=34429&ver=63&bc=CAAAAAAAAAAAAA](https://www.cms.gov/medicare-coverage-)
21
- 22 Centers for Medicare & Medicaid Services (CMS). National Coverage Determination
23 (NCD) for SPEECH-LANGUAGE PATHOLOGY Services for the Treatment of
24 Dysphagia (170.3). Retrieved on April 18, 2023 from <https://www.cms.gov/medicare->
25 [coverage-database/details/ncd-](https://www.cms.gov/medicare-)
26 [details.aspx?NCDId=192&ncdver=2&bc=AAAAGAAAAAA&](https://www.cms.gov/medicare-)
27
- 28 Chen YW, Chang KH, Chen HC, Liang WM, Wang YH, Lin YN. The effects of surface
29 neuromuscular electrical stimulation on post-stroke dysphagia: a systemic review and
30 meta-analysis. *Clin Rehabil.* 2016 Jan;30(1):24-35.
31
- 32 Christiaanse ME, Mabe B, Russell G, Simeone TL, Fortunato J, Rubin B. Neuromuscular
33 electrical stimulation is no more effective than usual care for the treatment of primary
34 dysphagia in children. *Pediatr Pulmonol.* 2011 Jun;46(6):559-65.
35
- 36 Clark H, Lazarus C, Arvedson J, Schooling T, Frymark T. Evidence-based systematic
37 review: effects of neuromuscular electrical stimulation on swallowing and neural
38 activation. *Am J Speech Lang Pathol.* 2009 Nov;18(4):361-75.
39
- 40 Cohen ML, Hula WD. Patient-Reported Outcomes and Evidence-Based Practice in
41 Speech-Language Pathology. *Am J Speech Lang Pathol.* 2020 Feb 7;29(1):357-370.
42 doi: 10.1044/2019_AJSLP-19-00076. Epub 2020 Feb 3. PMID: 32011905.

- 1 Flynn E, Smith CH, Walsh CD, Walshe M. Modifying the consistency of food and fluids
 2 for swallowing difficulties in dementia. *Cochrane Database of Systematic Reviews*
 3 2018, Issue 9. Art. No.: CD011077.
 4
- 5 Geeganage C, Beavan J, Ellender S, Bath PM. Interventions for dysphagia and nutritional
 6 support in acute and subacute stroke. *Cochrane Database Syst Rev.* 2012 Oct
 7 17;10:CD000323.
 8
- 9 Goodglass, H., Kaplan, E., & Barresi, B. (2001). *Boston diagnostic aphasia examination*.
 10 Philadelphia, PA: Lippincott, Williams & Wilkins
 11
- 12 Herd CP, Tomlinson CL, Deane KH, Brady MC, Smith CH, Sackley CM, Clarke CE.
 13 Comparison of speech and language therapy techniques for speech problems in
 14 Parkinson's disease. *Cochrane Database Syst Rev.* 2012 Aug 15;8:CD002814.
 15
- 16 Herd CP, Tomlinson CL, Deane KH, Brady MC, Smith CH, Sackley CM, Clarke CE.
 17 Speech and language therapy versus placebo or no intervention for speech problems in
 18 Parkinson's disease. *Cochrane Database Syst Rev.* 2012 Aug 15;8:CD002812.
 19
- 20 *Jimmo v. Sebelius*, No. 5:11-CV-17-CR (D. Vt. filed Jan. 18, 2011).
 21
- 22 Kelly H, Brady MC, Enderby P. Speech and language therapy for aphasia following stroke.
 23 *Cochrane Database Syst Rev.* 2010;(5):CD000425.
 24
- 25 Kiger M, Brown CS, Watkins L. Dysphagia management: an analysis of patient outcomes
 26 using VitalStim therapy compared to traditional swallow therapy. *Dysphagia.* 2006
 27 Oct;21(4):243-53.
 28
- 29 Knuijt S, Cup EH, Pieterse AJ, de Swart BJ, van der Wilt GJ, van Engelen BG, Oostendorp
 30 RA, Hendricks HT. Speech pathology interventions in patients with neuromuscular
 31 diseases: a systematic review. *Folia Phoniatr Logop.* 2011;63(1):15-20.
 32
- 33 Lawler K, Taylor NF, Shields N. Outcomes After Caregiver-Provided Speech and
 34 Language or Other Allied Health Therapy: A Systematic Review. *Arch Phys Med*
 35 *Rehabil.* 2012
 36
- 37 Liang Y, Lin J, Wang H, et al. Evaluating the Efficacy of VitalStim Electrical Stimulation
 38 Combined with Swallowing Function Training for Treating Dysphagia following an
 39 Acute Stroke. *Clinics (Sao Paulo).* 2021;76:e3069. Published 2021 Nov 8.
 40 doi:10.6061/clinics/2021/e3069

- 1 Miller S, Kühn D, Jungheim M, Schwemmler C, Ptok M. Neuromuskuläre
 2 Elektrostimulationsverfahren in der HNO-Heilkunde [Neuromuscular electric
 3 stimulation therapy in otorhinolaryngology]. *HNO*. 2014;62(2):131-140.
 4 doi:10.1007/s00106-013-2810-4
 5
- 6 Miller S, Peters K, Ptok M. Review of the effectiveness of neuromuscular electrical
 7 stimulation in the treatment of dysphagia - an update. *Ger Med Sci*. 2022;20:Doc08.
 8 Published 2022 Jun 14. doi:10.3205/000310
 9
- 10 Mitchell C, Bowen A, Tyson S, Butterfint Z, Conroy P. Interventions for dysarthria due to
 11 stroke and other adult-acquired, non-progressive brain injury. *Cochrane Database of*
 12 *Systematic Reviews* 2017, Issue 1. Art. No.: CD002088. DOI:
 13 10.1002/14651858.CD002088.pub3
 14
- 15 Morgan AT, Dodrill P, Ward EC. Interventions for oropharyngeal dysphagia in children
 16 with neurological impairment. *Cochrane Database Syst Rev*. 2012 Oct
 17 17;10:CD009456.
 18
- 19 Morgan AT, Vogel AP. A Cochrane review of treatment for childhood apraxia of speech.
 20 *Eur J Phys Rehabil Med*. 2009 Mar;45(1):103-10.
 21
- 22 Morgan AT, Vogel AP. A Cochrane review of treatment for dysarthria following acquired
 23 brain injury in children and adolescents. *Eur J Phys Rehabil Med*. 2009 Jun;45(2):197-
 24 204.
 25
- 26 Morris ME, Perry A, Bilney B, Curran A, Dodd K, Wittwer JE, Dalton GW. Outcomes of
 27 physical therapy, speech pathology, and occupational therapy for people with motor
 28 neuron disease: a systematic review. *Neurorehabil Neural Repair*. 2006 Sep;20(3):424-
 29 34.
 30
- 31 Pennington L, Akor WA, Laws K, Goldbart J. Parent-mediated communication
 32 interventions for improving the communication skills of preschool children with non-
 33 progressive motor disorders. *Cochrane Database of Systematic Reviews* 2018, Issue 7.
 34 Art. No.: CD012507.
 35
- 36 Pennington L, Miller N, Robson S. Speech therapy for children with dysarthria acquired
 37 before three years of age. *Cochrane Database Syst Rev*. 2009;(4):CD006937
 38
- 39 Perry A, Lee S, Cotton S, Kennedy C. Therapeutic exercises for affecting post-treatment
 40 swallowing in people treated for advanced-stage head and neck cancers. *Cochrane*
 41 *Database of Systematic Reviews* 2016, Issue 8. Art. No.: CD011112.

- 1 Propp R, Gill PJ, Marcus S, et al. Neuromuscular electrical stimulation for children with
2 dysphagia: a systematic review. *BMJ Open*. 2022;12(3):e055124. Published 2022 Mar
3 25. doi:10.1136/bmjopen-2021-055124
4
- 5 Shaw GY, Sechtem PR, Searl J, Keller K, Rawi TA, Dowdy E. Transcutaneous
6 neuromuscular electrical stimulation (VitalStim) curative therapy for severe dysphagia:
7 myth or reality? *Ann Otol Rhinol Laryngol*. 2007 Jan;116(1):36-44.
8
- 9 Steele CM, Thrasher AT, Popovic MR. Electric stimulation approaches to the restoration
10 and rehabilitation of swallowing: a review. *Neurological Research*. 2007;29(1):9–15.
11
- 12 Tan C, Liu Y, Li W, Liu J, Chen L. Transcutaneous neuromuscular electrical stimulation
13 can improve swallowing function in patients with dysphagia caused by non-stroke
14 diseases: a meta-analysis. *J Oral Rehabil*. 2013 Jun;40(6):472-80.
15
- 16 Terré R, Mearin F. A randomized controlled study of neuromuscular electrical stimulation
17 in oropharyngeal dysphagia secondary to acquired brain injury. *Eur J Neurol*. 2015
18 Apr;22(4):687-e44.
19
- 20 Walshe M, Smith M, Pennington L. Interventions for drooling in children with cerebral
21 palsy. *Cochrane Database Syst Rev*. 2012 Nov 14;11:CD008624.