

COMMUNICATION DISORDERS AND SPEECH PATHOLOGY

A Practical Guidebook with Exercises

Understanding, Assessing, and Supporting Speech, Language,
Voice, Fluency, Communication, and Swallowing Difficulties



By

Dr. Shazia Shahzadi, Ph.D.

Speech-Language Pathology | Psychology | Behavioural Sciences

*A Practical Learning Book for Students, Clinicians, Teachers,
Health Professionals, Parents, and Caregivers*

COMMUNICATION DISORDERS

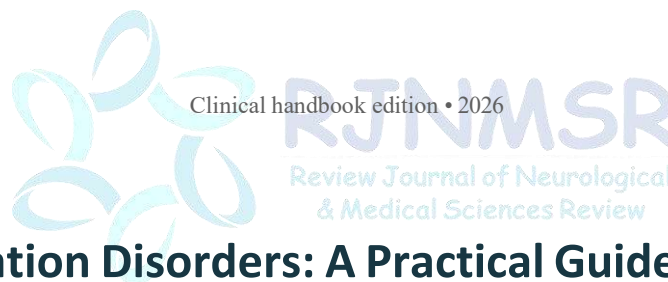
A Practical Guidebook

Simple clinical explanations • assessment • therapy • exercises • practice tools

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TITLE PAGE



Communication Disorders: A Practical Guidebook

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Purpose of this guide

This book is written in plain clinical English for students, early-career clinicians, families who want to understand therapy, and professionals who need a compact refresher. It is a practical guide, not a replacement for professional training, local regulations, medical diagnosis, or individualized clinical judgment.

Clinical language used in this book

The words patient, client, clinic, clinician, professional, and speech pathologist are used throughout. In hospital sections, “patient” is often the most natural term. In school, community, and private-practice sections, “client” may fit better. The person remains more important than the label.

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only within the clinician's training and scope. Medical red flags, voice changes, swallowing risk, sudden neurological symptoms, and hearing concerns require appropriate referral. Examples and case stories are fictional composites created for teaching.

Evidence note

The structure and clinical content were cross-checked against major current professional resources, including the ASHA Practice Portal, NIDCD, Royal College of Speech and Language Therapists guidance, and the WHO International Classification of Functioning, Disability and Health (ICF).



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Why this book is practical

Communication disorders can look complicated in textbooks because one client may have several problems at once. A child may have speech and language difficulties. A patient after stroke may have aphasia, apraxia, dysarthria, and swallowing needs together. This guide separates the main disorders chapter by chapter, but repeatedly brings the reader back to one clinical habit: listen to the person, define the functional problem, assess before treating, and choose therapy that can be carried into daily life.

Dedication

For students who are learning to turn theory into clinical reasoning, for professionals who keep refining their practice, and for every patient, client, and family who teaches us that communication is more than correct speech. It is connection, choice, participation, and dignity.

A note on simple English

Technical terms are included because clinicians need them, but each term is explained in ordinary language. The aim is not to make the subject simplistic. The aim is to make the clinical logic visible. When a complex idea can be explained clearly, it becomes easier to assess, document, teach, and apply.

Book design

Each disorder chapter follows six planned clinical parts: (1) definition and clinical picture, (2) causes and red flags, (3) assessment, (4) treatment, (5) practical exercises, and (6) case wrap-up with goals and a clinician checklist. Sixteen disorder chapters × six pages = 96 clinical pages.

PREFACE

Start with the Person, Not the Label

A referral rarely arrives as a neat diagnosis. It arrives as a sentence: “My child is not talking,” “People cannot understand me,” “My voice is always tired,” “I know the word but cannot get it out,” or “He coughs when he drinks.” Those sentences are the real beginning of clinical work. The speech pathologist listens, observes, measures, and asks what the communication problem is doing to the person’s daily life.

The practical sequence used in this book is simple: describe what is happening, look for likely causes and urgent red flags, evaluate the relevant communication system, agree on functional goals, provide treatment that matches the impairment, and measure whether life is becoming easier. The same sequence works in a children’s clinic, a school, a rehabilitation ward, a university clinic, or a private practice.

The chapters are intentionally balanced. A common disorder does not receive fifty pages while another receives two. Every core chapter follows the same six-part clinical structure and is designed to occupy about five pages in the finished layout. This forces the book to stay useful: enough detail to guide clinical thinking, but not so much detail that the reader loses the pathway from assessment to treatment.

Because speech-language pathology is an inter-professional field, many chapters include referral points. A speech pathologist does not replace the audiologist, otolaryngologist, neurologist, pediatrician, psychologist, dietitian, occupational therapist, physiotherapist, dentist, surgeon, or teacher. Good care becomes stronger when the correct professional is involved at the correct time.

Use this book actively

Write in the margins. Adapt the sample goals. Turn the checklists into clinic forms. Practice explaining each disorder aloud in plain language. The most useful test of understanding is whether you can explain the problem to a client or family without hiding behind jargon.

HOW TO USE THIS BOOK?

A Six-Part Clinical Rhythm

Chapter part	What you will find
Part 1	Definition + a short clinical story + what the disorder may look like
Part 2	Causes/etiology + differential thinking + referral red flags
Part 3	Assessment/evaluation: what to ask, observe, test, and document
Part 4	Treatment/management: principles, methods, and team roles
Part 5	Exercises and practice guide: clinic tasks, home carryover, what to avoid
Part 6	Case wrap-up + sample goals + progress measures + clinician checklist

The 16 disorder groups

The book groups the main communication and speech-pathology caseload into sixteen practical clinical chapters. Some diagnoses overlap. That is intentional. The clinician's job is to recognize overlap rather than force every person into one box.

- Late language emergence
- Developmental language disorder
- Speech sound disorders
- Childhood apraxia of speech
- Stuttering and cluttering
- Voice disorders
- Resonance disorders and cleft palate speech
- Dysarthria
- Acquired apraxia of speech
- Aphasia
- Cognitive-communication disorders after brain injury
- Dementia and progressive communication disorders
- Autism and social communication
- Written language and literacy disorders
- Hearing loss and aural rehabilitation
- Dysphagia: feeding and swallowing disorders

Safety symbol in words

Whenever a chapter says “red flag,” treat it as a prompt to stop routine therapy thinking and consider urgent medical, audiological, psychological, or multidisciplinary referral. This is especially important for sudden neurological change, airway/swallowing risk, unexplained persistent voice change, and sudden hearing loss.

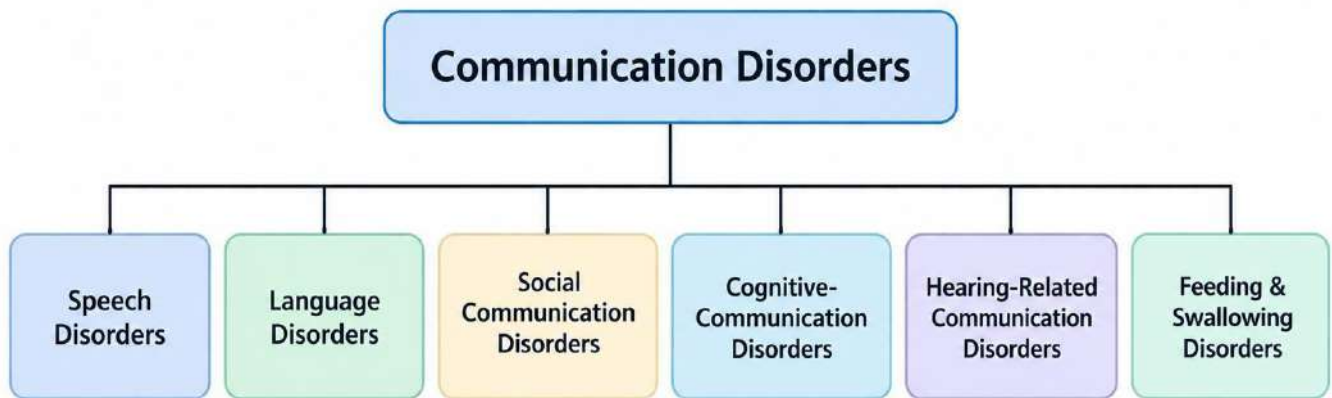


Figure 1. Classification of Communication Disorders into Major Clinical Categories

The figure presents the major areas of **communication disorders** and shows how they are broadly classified in clinical practice. The main categories are **speech disorders**, **language disorders**, **social communication disorders**, **cognitive-communication disorders**, **hearing-related communication disorders**, and **feeding and swallowing disorders**. This classification helps students, clinicians, and other professionals understand the different areas that may affect a patient's or client's ability to communicate effectively.

Communication disorders are conditions that make it difficult for a person to understand, express, or exchange information with others.

Speech Disorders: Problems with producing speech sounds clearly, speaking smoothly, or using the voice normally. Examples include unclear speech, stuttering, and voice problems.

Language Disorders: Difficulties understanding spoken or written language or using words, sentences, and grammar to communicate ideas.

Social Communication Disorders: Problems using language appropriately in social situations, such as starting conversations, taking turns, understanding jokes, or reading social cues.

Cognitive-Communication Disorders: Communication difficulties caused by problems with attention, memory, thinking, reasoning, or planning.

Hearing-Related Communication Disorders: Difficulties understanding or producing communication because of hearing loss or problems processing sounds.

Feeding and Swallowing Disorders: Problems with eating, drinking, chewing, or safely moving food and liquids from the mouth to the stomach.

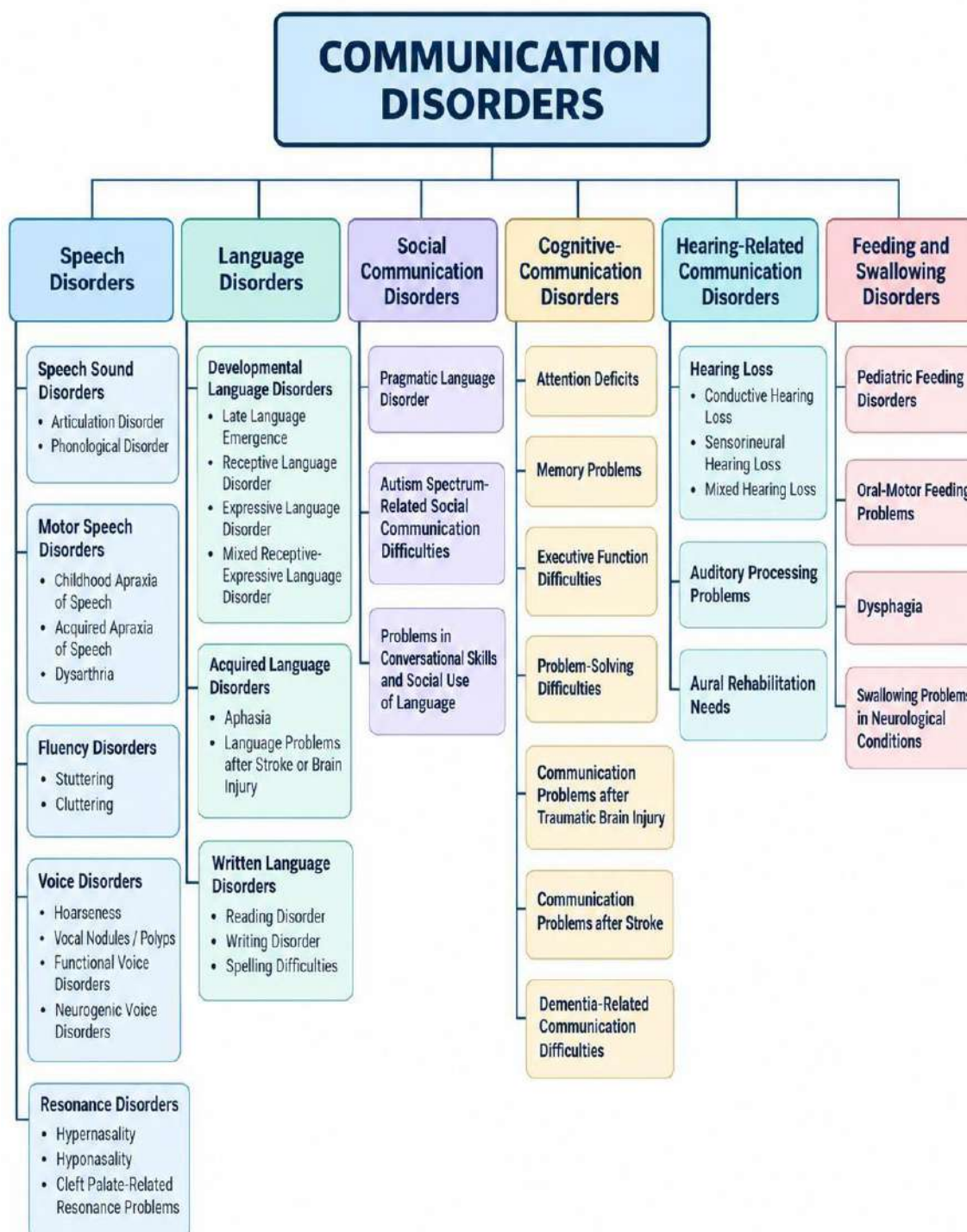


Figure 2. Detailed Classification of Communication Disorders and Their Major Clinical Subtypes.

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Chapter structure

Section	Pages
Front matter	7
Clinical foundations	6
16 disorder chapters × 6 pages	96
Appendices + selected sources	7
Total planned pages	100

Why equal chapters?

Equal chapter length keeps the guide balanced. A reader can move from one disorder to another and find the same clinical sequence every time: definition, causes, assessment, treatment, exercises, and practical closure.

CONTENTS

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Appendices

- Rapid red flags and referral guide
- Case-history form
- Oral-mechanism, speech, and language sample checklist
- Goal-writing and treatment-planning page
- Home-practice planner and exercises
- Progress monitoring + SOAP note example
- Glossary and selected evidence sources

Navigation tip

If you are seeing a client today, start with the relevant chapter's assessment page. If you are teaching, start with page 1 of the chapter and use the case story. If you are planning therapy, pages 4–6 are designed to be used together.

CLINICAL FOUNDATIONS

What Communication Really Requires



A communication problem can arise at one link, or at several links together.

A simple communication pathway. A breakdown can occur at one link or across several links.

Communication is not one skill. A speaker has an idea, selects language, plans movements, produces speech or another signal, and depends on a listener who can hear, see, understand, and respond. The same person may therefore have more than one clinical diagnosis. After stroke, for example, aphasia may affect language while dysarthria affects motor execution. A child may have both a language disorder and a speech sound disorder.

Four questions before naming a disorder

1. What is the person trying to communicate, and in which settings?
2. Is the main problem language, speech movement, voice, fluency, hearing access, cognition, swallowing, or a combination?
3. Is the pattern developmental, acquired, progressive, structural, functional, or still unclear?
4. What is the effect on participation at home, school, work, relationships, safety, or quality of life?

Clinical habit

Describe the functional problem before choosing a treatment technique. A therapy method is not a diagnosis, and a diagnosis is not yet a treatment plan.

CLINICAL FOUNDATIONS

The First Interview: Listen Before You Test

A strong assessment often begins with ten quiet minutes of listening. Clients and families usually describe the most important outcome before the clinician opens a test kit. “He cannot tell me what happened at school,” “She is frightened to answer the phone,” or “Meals now take an hour” are already functional assessment data.

Core case-history questions

Ask about	Simple questions
Onset	When did you first notice the problem? Was it sudden, gradual, or present from early development?
Variability	When is communication easier or harder? Who understands best?
Medical/developmental history	Any stroke, injury, surgery, hearing loss, neurological diagnosis, cleft, feeding issue, or developmental concern?
Languages	Which languages or dialects are used, with whom, and how often?
Participation	What has the problem stopped the person from doing?
Prior therapy	What was tried before? What helped, what did not, and why?
Goal	If therapy worked well, what would be easier in daily life?

Do not skip strengths

Ask what the client can still do well. Strengths are not “extra information.” They are treatment tools: reading ability, gesture, memory for routines, motivation, family support, technology skills, or a strong first language may all shape the plan.

CLINICAL FOUNDATIONS

Assessment: Build a Clinical Argument

A professional evaluation is more than administering a standardized test. It is an argument built from several kinds of evidence: history, observation, structured tasks, standardized measures when appropriate, dynamic teaching, patient or caregiver report, and functional performance. The final diagnosis should explain the pattern better than reasonable alternatives.

A practical assessment sequence

1. Screen urgent red flags and confirm medical stability.
2. Clarify hearing, vision, language background, education, and communication needs.
3. Observe natural communication before over-structuring the interaction.
4. Examine the specific system: speech, language, motor speech, voice, cognition, hearing-related communication, or swallowing.
5. Use formal measures only when they are valid for the person being assessed.
6. Try cues or strategies during the evaluation. Stimulability often guides treatment selection.
7. Write a short clinical summary: strengths, impairments, activity limits, participation impact, contextual factors, diagnosis/differential, and next steps.

Multilingual assessment

A difference caused by language experience or dialect is not a disorder. Whenever possible, assess across the person's languages, use interpreters appropriately, collect natural samples, and use dynamic assessment to see how the person learns with support.

CLINICAL FOUNDATIONS

From Test Result to Functional Goal

The WHO ICF framework is useful because it prevents the clinician from stopping at impairment. A client may have reduced naming ability, but the meaningful problem may be difficulty ordering food, joining family conversation, or returning to work. A child may mispronounce /r/, but the treatment decision depends partly on intelligibility, participation, age, language background, and the child's own concern.

ICF lens	Clinical question
Body function/structure	What is impaired? e.g., word retrieval, phonation, articulation, swallowing physiology.
Activity	What task is difficult? e.g., telling a story, making a phone call, eating a meal.
Participation	Where does it matter? e.g., classroom, job, family, community.
Environment	What helps or blocks success? e.g., noise, partner behavior, device access.
Personal factors	What does the person value, prefer, fear, or want to change?

Goal formula

Functional goal pattern

In [meaningful situation], the patient/client will [specific communication behavior] with [level of cue/support] in [measurable way], so that [participation purpose].

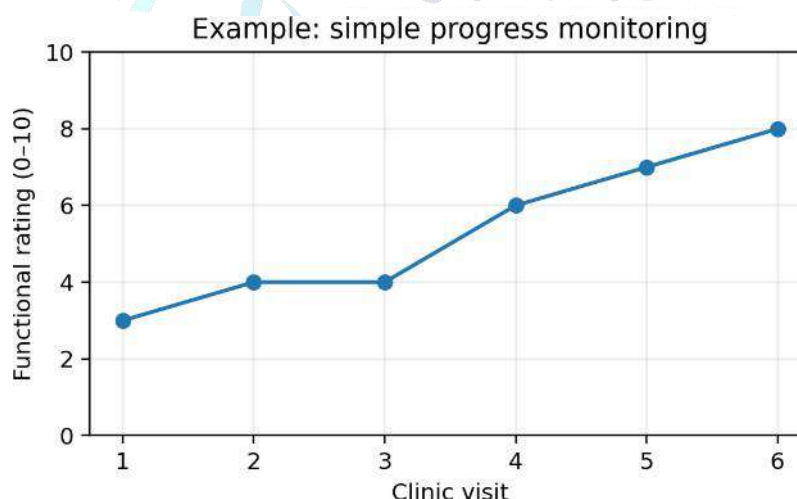
Not every goal needs a percentage. Frequency, independence, listener understanding, patient rating, time taken, successful message transfer, or number of cues can be more meaningful.

CLINICAL FOUNDATIONS

How a Good Therapy Session Flows?

A therapy session should feel like a bridge from clinic to life. The clinician starts with a clear target, gives enough practice for learning, and then changes the task so the skill has to survive outside the drill. The final minutes are used to plan carryover—not simply to hand over a worksheet.

Phase	What the clinician does
1. Connect	Check status, priorities, pain/fatigue, and one functional success or difficulty since last visit.
2. Teach	Explain one idea or strategy in plain language. Demonstrate it.
3. Practice	Use focused repetitions with feedback. Keep success high enough for learning.
4. Vary	Change word, partner, rate, material, environment, or cognitive load.
5. Generalize	Use conversation, material, phone call, meal, or another real task.
6. Plan	Agree on a short home practice and what to record before the next session.



Simple repeated functional ratings can show whether treatment is transferring beyond the clinic.

Documentation rule

Write what changed, not only what was done. “Completed naming worksheet” describes activity. “Named 14/20 functional items independently; improved to 18/20 with semantic cues; used gesture to repair 2 breakdowns” describes performance.

CLINICAL FOUNDATIONS

Referral, Ethics, and Clinical Boundaries

Speech-language pathology sits beside medicine, education, psychology, audiology, rehabilitation, dentistry, nutrition, and social care. A careful clinician knows when to treat, when to consult, and when to stop and refer. This is not a weakness. It is part of safe professional practice.

Common referral points

Finding	Consider referral/collaboration
Persistent unexplained voice change	ENT/otolaryngology with laryngeal visualization
Sudden speech/language change	Emergency/medical neurological evaluation
Hearing concern	Audiology/ENT
Structural resonance concern	Cleft/craniofacial team, ENT, surgeon, prosthodontist
Swallowing red flags	Medical team; instrumental assessment when indicated
Severe emotional distress	Psychology/psychiatry or other mental-health professional
Developmental concerns beyond communication	Pediatrics/developmental team and relevant allied professionals

Consent, privacy, cultural responsiveness, competence, and clear documentation apply in every setting. The clinician should explain uncertainty honestly. “The pattern is consistent with...” is often more professional than overstating certainty when evidence is still developing.

The final foundation principle

Treat the person in front of you, not the chapter in front of you. Use the chapters as maps. Clinical judgment decides the route.

CHAPTER 1 • DEFINITION AND CLINICAL PICTURE

Late Language Emergence

A two-year-old arrives at the clinic holding a toy car. He understands “give it to Mama” and points to what he wants, but he uses only a small set of spoken words. His parents are worried because another child in the family was speaking in short sentences at the same age. The first job of the speech pathologist is not to count words in isolation. It is to understand the whole communication picture: what the child understands, how the child communicates, how play is developing, what languages are used at home, and whether hearing or another developmental issue may be involved.

Plain-language definition

Late language emergence (LLE) describes delayed language onset in a young child, usually without another clearly identified developmental diagnosis at the time of referral. Some children mainly have a small spoken vocabulary; others also show weaker understanding. LLE is not simply “laziness,” and it is not diagnosed from one short clinic sample. The clinician looks at development over time and at how the child communicates across everyday settings.

What you may notice

- Small spoken vocabulary for age
- Few or no word combinations when expected
- Heavy reliance on pointing, leading, or gestures
- Frustration when the message is not understood
- Possible difficulty following age-appropriate directions
- Uneven progress across weeks or months

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Late Language Emergence

Causes / etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Often no single cause can be identified at first
- Family history of speech, language, or literacy difficulty may raise risk
- Hearing loss or fluctuating hearing should be considered
- Broader developmental differences may become clearer over time

- Limited opportunity to hear one language is not the same as a disorder; multilingual exposure does not itself cause LLE

Red flags: stop and think beyond routine therapy

Red flag

Loss of previously used words or social skills

Red flag

Limited response to sound or name

Red flag

Very limited gestures or shared attention

Red flag

Feeding, motor, or broader developmental concerns

ASSESSMENT AND EVALUATION

Late Language Emergence

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Detailed parent/caregiver interview and developmental history
2. Hearing screening or referral for audiological assessment
3. Observation of play, gestures, joint attention, imitation, and turn-taking
4. Receptive and expressive vocabulary sampling in all languages used
5. Language sample during natural play, not only table-top testing
6. Review of oral structure, speech sound attempts, and functional communication
7. Use standardized tools only when appropriate for the child’s language and cultural background

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function.

Example pattern: “Findings are consistent with late language emergence, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Late Language Emergence

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client's own priorities all matter.

Core treatment directions

- Parent/caregiver coaching so language practice happens throughout the day
- Follow the child's focus and add one small step to what the child communicates
- Model short, useful phrases rather than asking repeated test questions
- Use shared book reading, songs, routines, and play for repeated language opportunities
- Accept and build on gestures, signs, pictures, or AAC when helpful
- Monitor progress and broaden assessment if new developmental concerns appear

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Late Language Emergence

Practical clinic activities

Practice	How to use it
Exercise 1	Expansion: child says "car"; adult models "red car" or "car go."
Exercise 2	Choice talk: offer two real choices and name both before waiting.
Exercise 3	Pause-and-wait: create a natural reason to communicate, then give time.
Exercise 4	Comment more, question less during play.

Exercise 5	Repeat key words across routines such as bath, snack, dressing, and outdoor play.
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What to avoid

- Do not force a child to repeat every word.
- Do not advise families to drop a home language.
- Do not assume a device, sign, or picture system will stop speech from developing.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Late Language Emergence

Back to the case

The clinician explains that the child already has useful strengths understanding, pointing, and shared play. A six-week parent-coaching block is planned, with hearing follow-up and a simple home language log. At review, the team looks for growth in communication functions and word combinations, not just a single vocabulary number.

Sample functional goals

- During familiar play, the child will use words, gestures, signs, or pictures to communicate at least five different purposes.
- Caregivers will use three responsive language strategies during daily routines.
- The child will increase spontaneous two-unit combinations when developmentally appropriate.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 2 • DEFINITION AND CLINICAL PICTURE

Developmental Language Disorder

An eight-year-old speaks in full sentences, yet classroom learning is hard. She misses parts of long instructions, struggles to explain events in order, and often uses general words such as “thing” or “stuff.” Her teacher first wonders about attention. During conversation, however, the clinician notices a consistent language pattern: vocabulary is shallow, grammar is less mature than expected, and story organization breaks down when ideas become complex.

Plain-language definition

Developmental language disorder (DLD) is a persistent difficulty learning and using spoken language that affects every day functioning and is not better explained by a known biomedical condition. A child may have difficulty understanding language, expressing ideas, or both. DLD can affect vocabulary, grammar, narratives, classroom learning, friendships, and later literacy.

What you may notice

- Difficulty learning and recalling new words
- Short, simple, or grammatically immature sentences
- Trouble following long or complex directions
- Weak storytelling, sequencing, or explaining
- Difficulty understanding figurative or implied meaning
- Possible reading and writing difficulties

Developmental Language Disorder (DLD): Definition, Features, Assessment and Management

Area	Simple Explanation
Definition	Developmental Language Disorder is a condition in which a child has persistent difficulty learning, understanding, and using language.
Onset	It begins during childhood and is usually noticed when language skills develop more slowly than expected.
Main Difficulties	The child may have trouble understanding instructions, learning new words, forming sentences, using grammar, or expressing ideas clearly.
Speech vs Language	DLD mainly affects language , not necessarily the ability to pronounce speech sounds.
Vocabulary	Vocabulary may be limited, and the child may take longer to learn or remember new words.
Grammar	Sentences may be short, incomplete, or grammatically incorrect for the child's age.
Understanding	Some children have difficulty understanding long sentences, questions, stories, or classroom instructions.
Conversation	The child may find it difficult to explain events, tell stories, maintain a conversation, or organize ideas.
Academic Impact	DLD may affect reading, writing, spelling, comprehension, and overall classroom learning.
Social Impact	Communication difficulties may affect friendships, confidence, and participation in social activities.
Cause	There is usually no single known cause. Genetic and developmental factors may contribute.

Diagnosis	Assessment is usually completed by a speech-language therapist/pathologist using language tests, observation, developmental history, and information from parents and teachers.
Management	Speech and language therapy helps improve vocabulary, grammar, comprehension, storytelling, and functional communication.



Support	Parents and teachers can help by using simple language, giving extra processing time, repeating important information, and encouraging communication.
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CHAPTER 2 • CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Developmental Language Disorder

Causes / etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- DLD is multifactorial; there is no single known cause in most cases
- Genetic and neurodevelopmental factors are important
- Family history of language or literacy difficulty is common
- DLD can co-occur with attention, speech sound, or motor difficulties
- Bilingualism does not cause DLD; true difficulty appears across the child's languages, although it may look different in each

Red flags: stop and think beyond routine therapy

Red flag

Persistent academic difficulty despite teaching

Red flag

Marked difficulty understanding routine classroom language

Red flag

Language problems across settings and languages

Red flag

Social withdrawal or behavior that appears linked to communication failure

ASSESSMENT AND EVALUATION

Developmental Language Disorder

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Interview family and teacher about functional concerns and language exposure
2. Hearing status and developmental/educational history

3. Receptive and expressive language testing with culturally appropriate tools
4. Narrative sample: retell, personal story, and explanation tasks
5. Vocabulary depth, grammar, sentence formulation, and word learning probes
6. Dynamic assessment to examine how well the child learns with support
7. Screen speech sound, literacy, attention, and social communication as needed

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with developmental language disorder, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Developmental Language Disorder

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Teach language through meaningful classroom and daily-life content
- Directly teach vocabulary depth: meaning, category, features, synonyms, and use
- Build grammar using recasts, sentence combining, and focused practice
- Teach narrative structure with visual organizers and repeated retell
- Use explicit strategies for understanding instructions and unfamiliar words
- Coordinate with teachers and families so the same strategies appear outside clinic

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Developmental Language Disorder

Practical clinic activities

Practice	How to use it
Exercise 1	Word web: connect a new word to category, function, features, and examples.
Exercise 2	Sentence stretch: expand a basic sentence using who, what, where, when, and why.
Exercise 3	Story map: character–problem–attempt–outcome–ending.
Exercise 4	Barrier game: one partner gives directions without showing the picture.
Exercise 5	Teach-back: client explains a classroom concept in their own words.

What to avoid

- Do not judge language ability only from casual conversation.
- Do not treat bilingual difference as disorder.
- Do not focus on isolated worksheets without functional carryover.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Developmental Language Disorder

Back to the case

Assessment shows that the student learns new language when teaching is explicit and repeated. Therapy therefore combines direct vocabulary and narrative work with classroom supports. Progress is reviewed through curriculum samples, teacher feedback, and functional communication not test scores alone.

Sample functional goals

- Given a short narrative, the client will state the main idea and key events using a visual organizer.
- The client will use targeted curriculum vocabulary accurately in spoken explanations.
- The client will follow multistep directions using a taught self-check strategy.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 3 • DEFINITION AND CLINICAL PICTURE

Speech Sound Disorders: Articulation and Phonology

A five-year-old talks quickly about dinosaurs, but unfamiliar listeners understand only part of what he says. Several sounds are replaced, and whole sound patterns are simplified. The parent says, “He knows exactly what he wants to say.” The speech pathologist listens beyond single errors and asks a more useful question: Is this mainly difficulty producing particular sounds, or is the child using a broader sound system that is not developing as expected?

Plain-language definition

Speech sound disorders (SSDs) involve difficulty producing and/or organizing speech sounds. An articulation difficulty may affect the motor production of particular sounds. A phonological difficulty involves patterns in how sounds are used within the language system. Many clients show a mixture. The clinical goal is intelligible, functional speech, not perfect performance on an isolated sound list.

Speech uses coordinated breathing, voice, resonance and articulation.

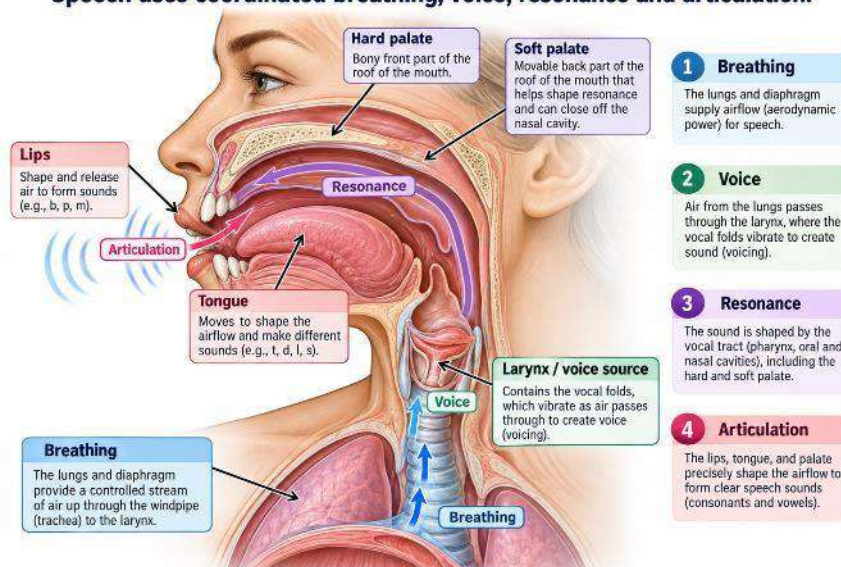


Figure 4: Anatomy and coordinated processes involved in speech production, including breathing, voice, resonance, and articulation.

What you may notice

- Sound substitutions, omissions, additions, or distortions
- Consistent error patterns across groups of sounds
- Reduced intelligibility, especially to unfamiliar listeners
- Frustration or avoidance when not understood
- Possible difficulty with phonological awareness and early literacy
- Errors that are unexpected for the person's age, language, or dialect

Speech Sound Disorders: Articulation and Phonology

Causes / Etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Often idiopathic in children, with no single cause identified
- Hearing loss can affect speech sound learning
- Structural differences such as cleft palate or dental anomalies may contribute
- Neuro-motor disorders may cause a different type of speech problem and require differential diagnosis
- Speech differences associated with accent or dialect are not disorders

Red flags: stop and think beyond routine therapy

Red flag

Sudden loss or change in speech

Red flag

Signs of motor speech disorder such as inconsistent errors with disrupted prosody

Red flag

Hyper-nasality or suspected structural problem

Red flag

Hearing concerns or persistent ear disease

ASSESSMENT AND EVALUATION

Speech Sound Disorders: Articulation and Phonology

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Case history including intelligibility across listeners and settings
2. Hearing screening and oral-mechanism examination
3. Single-word speech sample and connected-speech sample

4. Inventory of sounds, error types, phonological patterns, and consistency
5. Stimulability testing to see whether a sound improves with cues
6. Intelligibility rating and functional impact
7. Language and phonological-awareness screening when indicated



Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function.

Example pattern: “Findings are consistent with speech sound disorders, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Speech Sound Disorders: Articulation and Phonology

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Choose targets that improve intelligibility and fit the error pattern
- Use motor-based practice for articulation errors: clear model, cue, repeated accurate practice, then carryover
- Use contrast approaches for phonological patterns, such as minimal or multiple oppositions when appropriate
- Move from sound or syllable to word, phrase, sentence, and conversation
- Vary practice while maintaining enough repetition for learning
- Teach self-monitoring gently so the client can notice success without becoming afraid to speak

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Speech Sound Disorders: Articulation and Phonology

Practical clinic activities

Practice	How to use it
Exercise 1	Sound shaping: find a successful sound and shape it toward the target.
Exercise 2	Minimal pairs: contrast two words that differ by the target feature.
Exercise 3	Five-word ladder: practice the same sound in increasingly difficult words.
Exercise 4	Conversation hunt: mark naturally occurring target words during a two-minute chat.
Exercise 5	Listener rating: compare intelligibility before and after one cue.

What to avoid

- Do not use non-speech oral-motor strengthening as a substitute for speech practice in typical SSD.
- Do not correct every error in conversation.
- Do not label dialect features as pathology.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Speech Sound Disorders: Articulation and Phonology

Back to the case

The child's assessment shows several predictable phonological patterns plus one persistent distorted sound. Therapy begins with patterns that affect many words, then shifts to the residual sound. Parents receive a two-minute daily practice routine rather than a long worksheet.

Sample functional goals

- The client will produce a selected target sound accurately in meaningful sentences across positions.

- The client will reduce a targeted phonological pattern in practiced and unpracticed words.
- Overall intelligibility will improve in connected speech with familiar and unfamiliar listeners.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 4 • DEFINITION AND CLINICAL PICTURE

Childhood Apraxia of Speech

A four-year-old can say a word clearly once and then struggle with the same word a moment later. Longer words break down. Vowels may sound unusual, and stress sometimes falls on the wrong syllable. The family has practiced mouth exercises for months with little change. In clinic, the speech pathologist watches how the child plans and sequences speech movements rather than simply counting sound errors.

Plain-language definition

Childhood apraxia of speech (CAS) is a pediatric motor speech disorder in which the planning and programming of speech movements are impaired. The muscles are not simply weak. The speech difficulty is often marked by inconsistent sound errors, disrupted transitions between sounds or syllables, and inappropriate prosody or stress. No single sign proves CAS; diagnosis depends on a pattern across tasks.

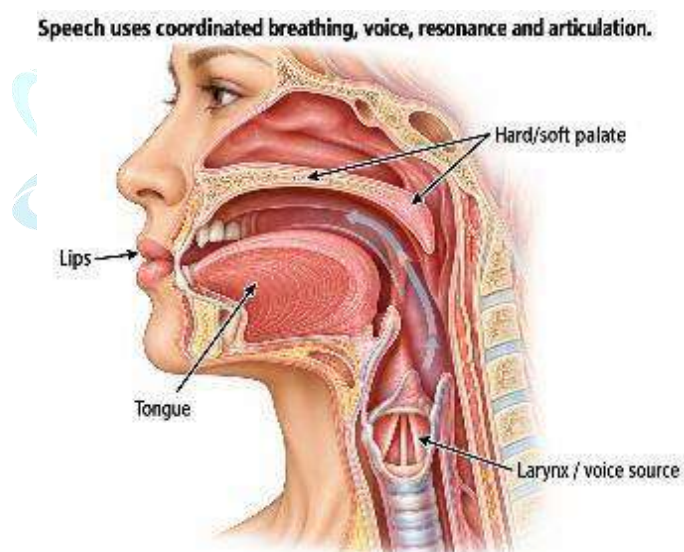


Figure 4. Major Anatomical Structures Involved in Speech Production: Lips, Tongue, Palate, and Larynx.

What you may notice

- Inconsistent errors on repeated attempts
- Difficulty moving smoothly from one sound or syllable to the next
- Vowel distortions or unusual sound distortions
- Difficulty with longer or more complex words
- Atypical stress or rhythm
- Speech may improve with visual, tactile, or slowed cueing

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Childhood Apraxia of Speech

Causes / etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- CAS may occur without a known cause
- It can occur with genetic or neurodevelopmental conditions
- Some children have broader language, literacy, or motor coordination needs
- CAS is not caused by weak parenting, lack of practice, or multilingual exposure

Red flags: stop and think beyond routine therapy

Red flag

Very limited syllable shapes with slow progress

Red flag

Marked inconsistency plus abnormal prosody

Red flag

Groping or effortful trial-and-error movements

Red flag

History suggesting a broader neurological or genetic condition

ASSESSMENT AND EVALUATION

Childhood Apraxia of Speech

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Detailed developmental and speech history
2. Hearing screening and oral-mechanism examination
3. Repeated productions of the same words to examine consistency
4. Tasks that increase in length and complexity

5. Dynamic motor speech assessment using different cue types
6. Observation of prosody, vowel accuracy, and movement transitions
7. Language assessment because CAS may co-occur with language disorder

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with childhood apraxia of speech, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Childhood Apraxia of Speech

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Use speech movement practice rather than non-speech strengthening
- Provide many successful repetitions with carefully graded difficulty
- Use clear auditory, visual, gestural, and tactile cues as appropriate
- Practice movement sequences in functional words and phrases
- Adjust cueing and feedback as accuracy improves
- Consider AAC to support communication when speech is not yet sufficient

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Childhood Apraxia of Speech

Practical clinic activities

Practice	How to use it
Exercise 1	Integral stimulation: clinician models, client watches/listens, then says it together and independently.
Exercise 2	Syllable sequencing: practice simple CV patterns before longer sequences when needed.



Exercise 3	Blocked-to-variable practice: stabilize a target, then mix it with related targets.
Exercise 4	Prosody practice: mark stress with tapping or visual cues.
Exercise 5	Functional word set: practice names, requests, and daily phrases that matter to the child.

What to avoid

- Do not rely on blowing, tongue wagging, or strengthening tasks to treat a speech-planning problem.
- Do not chase perfect sound production at the expense of smooth movement sequences.
- Do not remove AAC while speech is still unreliable.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Childhood Apraxia of Speech

Back to the case

The clinician selects a small, meaningful target set and schedules frequent motor-based practice. The family learns exactly how to cue each word and when to stop. Progress is judged by consistency, transition accuracy, prosody, and functional communication not by the number of mouth exercises completed.

Sample functional goals

- The child will produce selected functional words with consistent movement patterns across repeated attempts.
- The child will produce two- and three-syllable targets with improved transitions and stress.
- The child will use speech plus AAC/gesture to communicate successfully when speech breaks down.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?

- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

DEFINITION AND CLINICAL PICTURE

Fluency Disorders: Stuttering and Cluttering

A university student says, “Some days I speak easily. Other days I avoid introducing myself because I know I may get stuck.” His speech sample includes repetitions and blocks, but the larger problem is what happens around the stutter: tension, word substitution, and fear of being judged. A good fluency assessment therefore listens to the speech and to the person’s lived experience.

Plain-language definition

Fluency refers to the flow, rate, rhythm, continuity, and effort of speech. Stuttering may include sound or syllable repetitions, prolongations, or blocks, often with physical tension or avoidance. Cluttering is different: speech may be unusually rapid or irregular, with reduced clarity, collapsed syllables, or disorganized language. Fluency differences vary across people and situations.

What you may notice

- Repetitions, prolongations, or blocks
- Physical tension or secondary movements
- Avoidance of words, situations, phone calls, or introductions
- Negative thoughts or strong effort related to speaking
- For cluttering: fast/irregular rate, reduced awareness, and decreased intelligibility
- Large variability across situations

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Fluency Disorders: Stuttering and Cluttering

Causes / etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Developmental stuttering reflects neurodevelopmental and genetic influences; it is not caused by anxiety or parenting
- Emotions can change the experience or severity of stuttering without being its root cause
- Cluttering also has neurodevelopmental features and may co-occur with other communication disorders
- Sudden acquired stuttering requires medical and neurological consideration

Red flags: stop and think beyond routine therapy

Red flag

Sudden onset in an adult

Red flag

Rapid change with other neurological symptoms

Red flag

Severe distress, participation restriction, or bullying

Red flag

Persistent preschool stuttering with risk factors and family concern

ASSESSMENT AND EVALUATION

Fluency Disorders: Stuttering and Cluttering

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Case history including onset, variability, family history, previous therapy, and goals
2. Speech samples across conversation, reading, and real-life contexts where possible
3. Description of stuttering behaviors (Primary & Secondary) without reducing the person to a percentage
4. Assessment of tension, avoidance, self-advocacy, and communication participation
5. For cluttering: rate, pausing, intelligibility, language organization, and awareness
6. Screen language, speech sound, voice, and cognitive factors when relevant

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with fluency disorders, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Fluency Disorders: Stuttering and Cluttering

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Set goals with the client; successful therapy does not have to mean “zero stuttering.”
- For young children, parent-child communication support and evidence-based direct or indirect programs may be appropriate
- Teach speech modification strategies when the client wants them
- Teach stuttering modification, desensitization, and communication confidence as appropriate
- Address avoidance, stigma, and listener reactions; involve mental-health professionals when needs exceed SLP scope
- For cluttering, target rate awareness, pausing, organization, and intelligibility

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Fluency Disorders: Stuttering and Cluttering

Practical clinic activities

Practice	How to use it
Exercise 1	Voluntary stuttering or easy stuttering practice when clinically appropriate and agreed with the client.
Exercise 2	Pausing map: mark natural pause points in a short message.
Exercise 3	Communication hierarchy: practice from easier to harder speaking situations chosen by the client.
Exercise 4	Self-advocacy script: decide how to explain stuttering if the person wants to.
Exercise 5	Cluttering replay: record a brief sample, identify one unclear section, and repeat it with clearer pausing.

What to avoid

- Do not tell every person who stutters to “slow down and breathe.”
- Do not measure success only by fluency counts.
- Do not force disclosure or eye contact.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Fluency Disorders: Stuttering and Cluttering

Back to the case

Therapy begins by asking what the client wants to change. He chooses to work on physical struggle, avoidance, and confidence in seminars. A speaking hierarchy, self-advocacy plan, and optional speech-modification tools are used. Progress is measured through participation and self-ratings as well as speech samples.

Sample functional goals

- The client will use selected communication strategies in real-life situations with reduced struggle.
- The client will identify and reduce avoidance behaviors that limit participation.
- For cluttering, the client will improve intelligibility using self-selected rate and

pausing strategies.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

☐ I can explain the disorder in plain language. ☐ I have ruled out or referred important red flags. ☐ My assessment supports the treatment target. ☐ The goal matters in daily life. ☐ I know how I will measure carryover.



CHAPTER 6 • DEFINITION AND CLINICAL PICTURE

Voice Disorders

A teacher arrives after months of hoarseness. By afternoon, her voice feels tired and she pushes harder to be heard. She drinks water, rests on weekends, and sometimes whispers when the voice is bad. Before therapy starts, the speech pathologist needs a clear medical picture of the larynx. Voice quality can change because of behavior, inflammation, lesions, neurologic conditions, reflux-related irritation, or other causes, and treatment should match the diagnosis.

Plain-language definition

A voice disorder is a problem with voice quality, pitch, loudness, flexibility, or endurance that does not meet the person's communication needs. The sound may be rough, breathy, strained, weak, too loud, too soft, or easily fatigued. Voice is produced by coordinated breathing, vocal-fold vibration, and shaping of sound through the vocal tract.

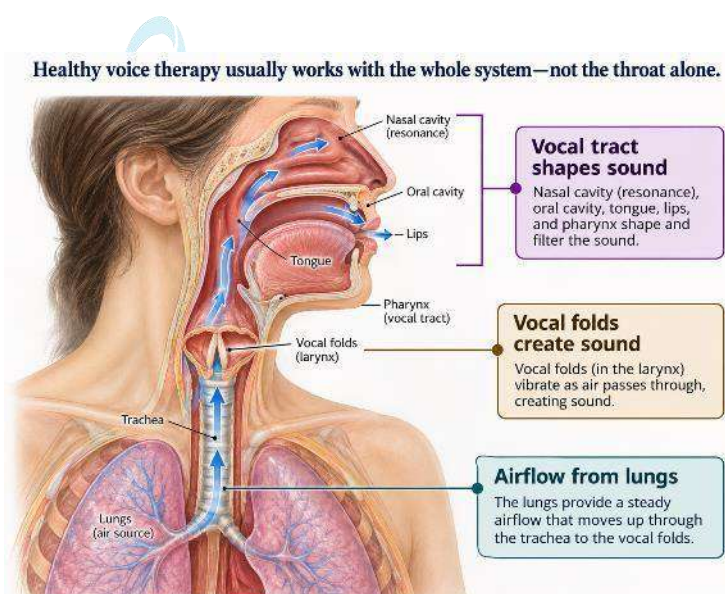
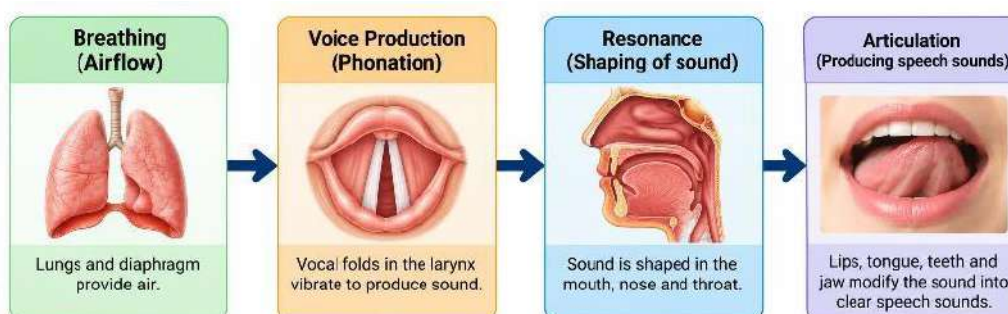


Figure 5. Integrated Voice Production System: Airflow, Vocal Fold Vibration, and Vocal Tract Resonance



What you may notice

- Persistent hoarseness, roughness, strain, breathiness, or weakness
- Reduced pitch range or loudness control
- Vocal fatigue or throat discomfort with speaking
- Frequent voice loss or need to push
- Change in voice that affects work, social life, or identity
- Possible chronic cough or throat clearing

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Voice Disorders

Causes / etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Phono-traumatic patterns and heavy voice use
- Benign or other vocal-fold lesions
- Inflammatory or irritative conditions
- Neurological disorders such as vocal tremor or spasmodic dysphonia
- Vocal-fold weakness/paralysis and postsurgical change
- Multiple factors may be present together

Red flags: stop and think beyond routine therapy

Red flag

Unexplained persistent dysphonia, especially with smoking history

Red flag

Pain, breathing difficulty, coughing blood, neck mass, or swallowing change

Red flag

Sudden voice change after surgery or intubation

Red flag

Professional voice user with rapid loss of function

ASSESSMENT AND EVALUATION

Voice Disorders

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Medical/ENT evaluation with laryngeal visualization is essential for suspected voice disorder
2. Case history: onset, vocal load, variability, health, medications, hydration, reflux symptoms, and goals
3. Perceptual rating of quality, pitch, loudness, resonance, and effort
4. Acoustic and aerodynamic measures when available and clinically useful
5. Patient-reported impact measures
6. Stimulability tasks to see how voice changes with efficient production

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with voice disorders, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Voice Disorders

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Explain the laryngeal findings in plain language and agree on realistic goals
- Reduce harmful vocal behaviors while maintaining necessary communication
- Use evidence-based techniques such as resonant voice, semi-occluded vocal tract tasks, flow phonation, or other methods as indicated

- Train efficient breath-voice coordination and appropriate loudness



- Modify environment: amplification, breaks, noise control, hydration access
- Coordinate with ENT and other professionals when medical or surgical management is needed

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Voice Disorders

Practical clinic activities

Practice	How to use it
Exercise 1	Semi-occluded vocal tract practice such as gentle straw phonation when appropriate.
Exercise 2	Resonant hum-to-word progression using an easy, forward vibration sensation.
Exercise 3	Flow phonation: easy airflow followed by light voice onset.
Exercise 4	Vocal pacing: short speaking blocks with planned recovery periods.
Exercise 5	Voice-use log: note high-load times, symptoms, and recovery.

What to avoid

- Do not prescribe voice exercises before appropriate medical evaluation of persistent dysphonia.
- Do not recommend prolonged whispering as “voice rest.”
- Do not force loudness when the laryngeal condition is unknown.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Voice Disorders

Back to the case

ENT examination shows a pattern appropriate for behavioral voice therapy. Treatment combines efficient phonation with classroom amplification and vocal pacing. Instead of “protecting” the voice through whispering, the teacher learns to use easy voice, planned

recovery, and environmental support.



Sample functional goals

- The client will produce conversational voice with reduced perceived effort across functional speaking tasks.
- The client will use two vocal-load management strategies during the workday.
- Self-rated vocal fatigue will improve from baseline across repeated weekly measures.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 7 • DEFINITION AND CLINICAL PICTURE

Resonance Disorders and Cleft Palate Speech

A school-age child with repaired cleft palate is difficult to understand. Some sounds carry too much nasal resonance, and the child has learned unusual ways to make pressure consonants. The key clinical question is structural as well as behavioral: Is the velopharyngeal valve closing adequately, or is the child using learned compensatory placements even though structure is sufficient?

Plain-language definition

Resonance disorders occur when sound energy is distributed abnormally through the oral and nasal cavities. Hyper-nasality is excessive nasal resonance, often most noticeable on vowels. Hypo-nasality is reduced nasal resonance. In cleft palate and velopharyngeal dysfunction, speech may also include nasal air emission and compensatory articulation patterns. Structural problems and learned speech errors require different management.

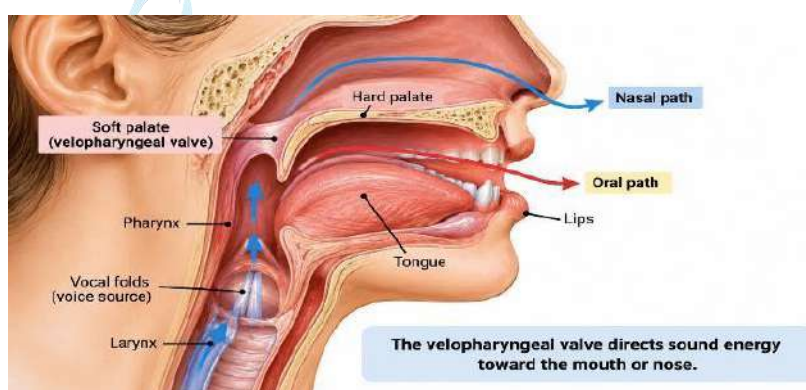
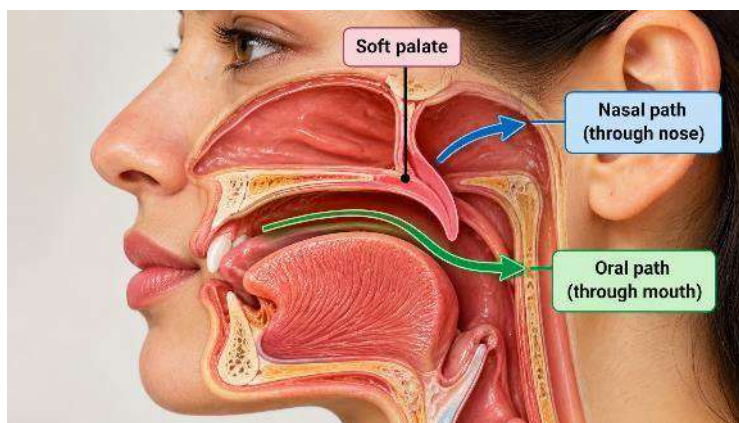


Figure 6. Velopharyngeal Mechanism Showing the Direction of Sound Through the Oral and Nasal Pathways



Clinical system

What you may notice

- Hyper-nasal or hypo-nasal voice quality
- Audible nasal air emission on pressure sounds
- Weak oral pressure consonants
- Compensatory productions such as glottal or pharyngeal placements
- Reduced intelligibility
- History of cleft palate, craniofacial condition, or nasal obstruction

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Resonance Disorders and Cleft Palate Speech

Causes / etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Velopharyngeal insufficiency: structure is inadequate for closure
- Velopharyngeal incompetence: movement/control may be impaired
- Velopharyngeal mis-learning: learned speech pattern despite adequate structure
- Nasal obstruction can cause hypo-nasality
- Mixed resonance may occur when more than one factor is present

Red flags: stop and think beyond routine therapy

Red flag

Suspected structural insufficiency

Red flag

Persistent hyper-nasality after cleft repair

Red flag

Nasal regurgitation or significant feeding history in a young child

Red flag

Airway or nasal obstruction symptoms

ASSESSMENT AND EVALUATION

Resonance Disorders and Cleft Palate Speech

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Perceptual speech assessment using vowels, pressure consonants, and connected speech
2. Oral examination for palate, fistula, dentition, and structural features
3. Differentiate resonance from articulation and voice quality
4. Listen for nasal air emission and compensatory placements
5. Instrumental assessment such as naso-endoscopy or video-fluoroscopy through the cleft/craniofacial team when indicated
6. Coordinate with surgeon, ENT, prosthodontist, audiology, and dentistry as needed

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with resonance disorders, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Resonance Disorders and Cleft Palate Speech

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Speech therapy is appropriate for learned articulation errors and velopharyngeal mislearning

- Use correct oral place, airflow, and pressure for target consonants
- Begin with sounds that can be shaped accurately and move toward words and conversation
- Structural velopharyngeal insufficiency usually needs medical, surgical, or prosthetic management; therapy alone cannot close an anatomical gap
- After structural management, therapy may still be needed to replace compensatory speech habits
- Treat hypo-nasality by addressing the underlying obstruction medically when indicated

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Resonance Disorders and Cleft Palate Speech

Practical clinic activities

Practice	How to use it
Exercise 1	Contrast oral and nasal airflow using simple awareness tasks—not as a cure for structural VPI.
Exercise 2	Shape /p, t, k/ from accurate placement with light, visible cues.
Exercise 3	Use a mirror or tissue to increase awareness of unwanted nasal airflow when appropriate.
Exercise 4	Practice short, high-success word sets before longer phrases.
Exercise 5	Generalization drill: carry one corrected consonant into a two-minute conversation.

What to avoid

- Do not use blowing or sucking exercises to “strengthen the palate” for speech resonance.
- Do not treat structural hyper-nasality with articulation drills alone.
- Do not postpone cleft-team referral when structure is suspected.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Resonance Disorders and Cleft Palate Speech

Back to the case

The team confirms that both structure and learned compensatory patterns are involved. Structural management is addressed first. Therapy then focuses on replacing glottal productions with correct oral consonants, using a small number of carefully chosen targets and frequent carryover checks.

Sample functional goals

- The client will use accurate oral place for selected pressure consonants.
- Nasal air emission due to mislearning will reduce on targeted sounds.
- Following medical/prosthetic management, intelligibility and resonance will be monitored in connected speech.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 8 • DEFINITION AND CLINICAL PICTURE

Dysarthria

After a stroke, a patient says, “I know the words, but my mouth does not move the way it used to.” Speech is slow and slurred, voice is weak, and long sentences fade at the end. The speech pathologist listens to the whole motor system such as breathing, voice, resonance, articulation, rate, and prosody because dysarthria rarely lives in one muscle or one sound.

Plain-language definition

Dysarthria is a motor speech disorder caused by impaired strength, speed, range, steadiness, tone, or coordination of the muscles used for speech. It can result from stroke, traumatic brain injury, Parkinson’s disease, motor neuron disease, multiple sclerosis, cerebral palsy, and other neurological conditions. Language may be intact, although dysarthria can co-occur with aphasia or cognitive-communication disorders.

What you may notice

- Slurred or imprecise consonants
- Weak, strained, breathy, or harsh voice
- Abnormal speech rate
- Reduced loudness or short breath groups
- Mono-pitch or reduced stress variation
- Hyper-nasality or poor coordination of speech subsystems

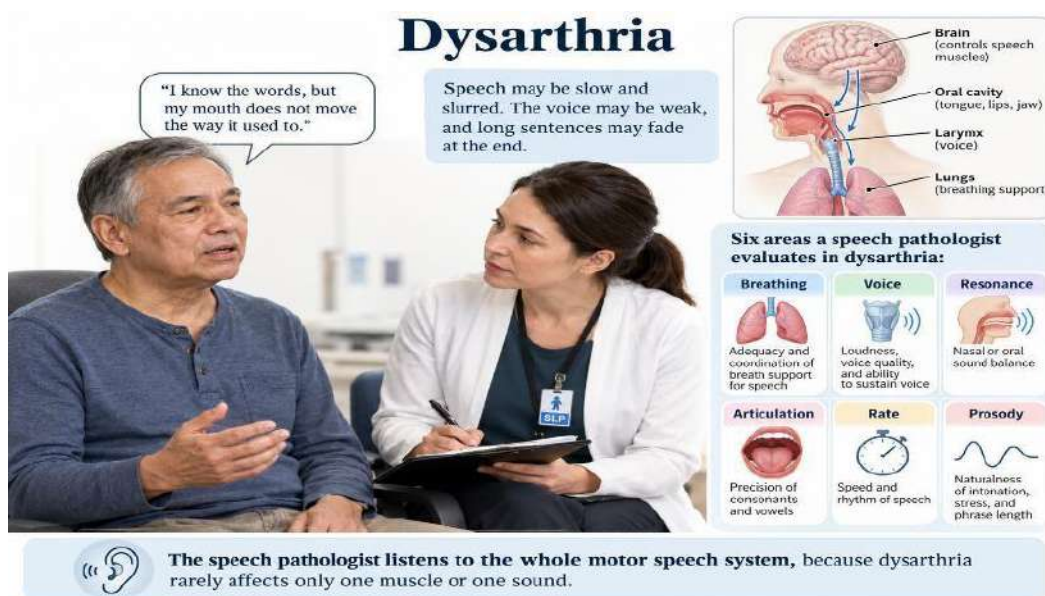


Figure 7. Dysarthria After Stroke: Motor Speech Features and Key Areas Assessed by the Speech Pathologist.

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Dysarthria

Causes / Etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Central or peripheral nervous system disease or injury
- Stroke or traumatic brain injury
- Progressive neurological conditions
- Neuromuscular disease
- Medication or medical status may influence performance and fatigue

Red flags: stop and think beyond routine therapy

Red flag

Sudden new dysarthria may be a neurological emergency

Red flag

New swallowing difficulty, facial weakness, or limb symptoms

Red flag

Rapid progression without diagnosis

Red flag

Marked fatigue or respiratory compromise

ASSESSMENT AND EVALUATION

Dysarthria

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Medical and neurological history, onset, fatigue, and communication priorities
2. Oral-motor examination for strength, range, speed, coordination, and symmetry

3. Speech subsystem assessment: respiration, phonation, resonance, articulation, and prosody
4. Tasks across sustained vowels, repeated syllables, reading, and conversation
5. Intelligibility and communication-efficiency measures
6. Screen language, cognition, hearing, and swallowing when indicated
7. Trial strategies to identify what produces the best functional change

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with dysarthria, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Dysarthria

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Select treatment according to dysarthria type, severity, prognosis, and patient priorities
- Optimize respiratory support and phrase length when appropriate
- Work on loudness or voice efficiency when indicated
- Improve articulatory precision using clear speech and over-articulation cues
- Use rate control, pacing, and prosody strategies
- Introduce AAC, alphabet/topic supplementation, amplification, or partner strategies when speech alone is insufficient

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Dysarthria

Practical clinic activities

Practice	How to use it
Exercise 1	Clear-speech contrast: compare habitual and deliberately clear production.
Exercise 2	Phrase planning: mark natural breath groups in a short paragraph.
Exercise 3	Pacing board or finger tapping for clients who benefit from slower rate.
Exercise 4	Functional loudness practice using phrases from daily life when appropriate.
Exercise 5	Alphabet supplementation: point to first letter while speaking difficult messages.

What to avoid

- Do not assume stronger muscles always mean clearer speech.
- Do not use exhausting exercise in a client with significant fatigue or progressive disease.
- Do not delay AAC until speech becomes unusable.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Dysarthria

Back to the case

Trial therapy shows that shorter breath groups, clear speech, and a modest rate reduction improve intelligibility. The patient also learns alphabet supplementation for noisy environments. The plan protects energy while supporting real communication rather than drilling speech for long periods.

Sample functional goals

- The patient will improve intelligibility in functional phrases using selected strategies.
- The patient will independently use rate or breath-group planning in conversation.
- The patient and communication partner will use one repair strategy when breakdown occurs.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 9 • DEFINITION AND CLINICAL PICTURE

Acquired Apraxia of Speech

A patient recovering from left-hemisphere stroke knows the word she wants. Her tongue is not weak, yet the first sound may come out differently each time. She pauses, restarts, and visibly searches for the correct position. The speech pathologist separates motor planning from language formulation and muscle weakness, because aphasia, dysarthria, and apraxia of speech often occur together.

Plain-language definition

Acquired apraxia of speech (AOS) is a neurological motor speech disorder affecting the planning or programming of speech movements. The person may know the intended word but have difficulty sequencing the movements needed to say it. Errors can be inconsistent, sound distortions are common, and prosody may become slow or segmented.

What you may notice

- Effortful trial-and-error speech movements
- Inconsistent sound errors
- Distorted substitutions or additions
- Difficulty initiating or sequencing sounds
- Slow or segmented speech with abnormal stress
- Performance may worsen as words become longer or more complex

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Acquired Apraxia of Speech

Causes / Etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Most commonly stroke involving language/motor speech networks
- Traumatic brain injury
- Brain tumor or surgery
- Progressive neurological disease in some cases
- AOS may co-occur with aphasia and/or dysarthria

Red flags: stop and think beyond routine therapy

Red flag

Sudden onset requires urgent medical assessment if not already evaluated

Red flag

New swallowing or neurological symptoms

Red flag

Rapidly progressive speech planning difficulty

Red flag

Severe communication failure without an established backup system

ASSESSMENT AND EVALUATION

Acquired Apraxia of Speech

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Case history and neurological diagnosis
2. Oral-motor examination to look for weakness or dysarthria
3. Repeated word productions to examine consistency
4. Words and phrases of increasing length and complexity
5. Observation of sound distortions, groping, rate, and stress
6. Language assessment to separate AOS from aphasia
7. Stimulability with visual, auditory, rhythmic, and tactile cueing

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with acquired apraxia of speech, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to

be judged fairly.



TREATMENT AND MANAGEMENT

Acquired Apraxia of Speech

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client's own priorities all matter.

Core treatment directions

- Use intensive speech-movement practice tailored to the individual
- Articulatory-kinematic approaches emphasize accurate movement gestures and repeated practice
- Rate/rhythm approaches may help timing and prosody in selected clients
- Use integral stimulation and hierarchical cueing
- Practice meaningful words and phrases, then vary context for generalization
- Add AAC or multimodal communication for efficiency and participation

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Acquired Apraxia of Speech

Practical clinic activities

Practice	How to use it
Exercise 1	Watch–listen–say together–say alone hierarchy.
Exercise 2	Repeated practice of personally important phrases with fading cues.
Exercise 3	Contrast a short word with a longer related word to train movement transitions.
Exercise 4	Rhythmic pacing or metrical cueing for selected clients.
Exercise 5	Repair practice: gesture, write, or point when a spoken word does not come.

What to avoid

- Do not treat AOS as a language comprehension problem.

- Do not use non- speech oral-motor exercise as the main intervention.
- Do not insist on speech-only communication when writing, gesture, or AAC improves participation.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.



CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Acquired Apraxia of Speech

Back to the case

Therapy selects a small group of highly useful phrases and practices them with integral stimulation. Cues are faded slowly. Because aphasia is also present, the patient keeps a picture-and-word communication book so communication does not stop while motor speech recovers.

Sample functional goals

- The patient will produce a functional phrase set with improved accuracy and reduced cueing.
- The patient will improve articulatory transitions in multisyllabic words.
- The patient will use a backup communication method when speech does not succeed.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 10 • DEFINITION AND CLINICAL PICTURE

Aphasia

A retired engineer can still solve a mechanical problem after his stroke, but names disappear in conversation. He understands much of what is said and becomes frustrated when people speak to him as if he has lost his intelligence. The speech pathologist begins by making one fact clear to the family: aphasia is a language disorder. It can affect speaking, understanding, reading, and writing, but it does not automatically erase thinking or personhood.

Plain-language definition

Aphasia is an acquired language disorder caused by damage to brain systems that support language. Stroke is the most common cause, but traumatic brain injury, tumors, infections, and neurodegenerative disease can also cause aphasia. The pattern differs from person to person and may affect word finding, sentence formulation, comprehension, repetition, reading, and writing.

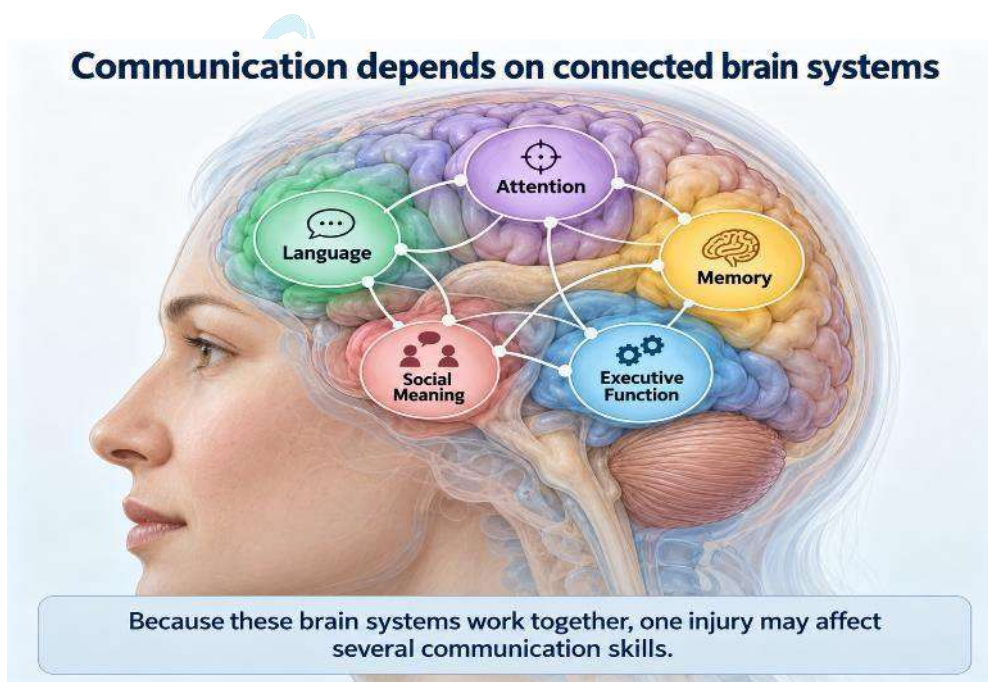


Figure 8. Connected Brain Systems Supporting Communication: Language, Attention, Memory, Social Meaning, and Executive Function.

What you may notice

- Word-finding pauses or use of vague words
- Paraphasias: saying a related or incorrect sound/word
- Reduced or effortful sentence production
- Fluent but empty or difficult-to-understand speech in some forms

- Difficulty understanding spoken language, especially complex messages
- Reading and writing changes



CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Aphasia

Causes / Etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Left-hemisphere stroke is common
- Traumatic brain injury or neurosurgery
- Brain tumor or infection
- Primary progressive aphasia and other neurodegenerative diseases
- Severity and pattern depend on location, extent, time since injury, health, and many personal factors

Red flags: stop and think beyond routine therapy

Red flag

Sudden aphasia can be a sign of stroke and needs emergency medical attention

Red flag

New neurological signs such as weakness, facial droop, or severe headache

Red flag

Rapid decline in language without known diagnosis

Red flag

Severe depression or social isolation requiring additional support

ASSESSMENT AND EVALUATION

Aphasia

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Interview patient and family about premorbid communication, languages, work,

hobbies, and goals

2. Assess auditory comprehension from simple to complex
3. Assess naming, repetition, sentence production, conversation, and discourse



4. Assess reading and writing at meaningful levels
5. Observe communication in functional tasks, not only picture naming
6. Screen motor speech, cognition, hearing, vision, and swallowing when indicated
7. Use patient-reported and participation measures

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with aphasia, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Aphasia

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Combine restorative language practice with compensatory communication
- Train word retrieval, sentence production, comprehension, reading, or writing according to the profile
- Use personally relevant topics and repeated practice
- Teach supported conversation: verify, write key words, draw, gesture, and give adequate response time
- Train communication partners and reduce environmental barriers
- Use AAC, notebooks, pictures, or technology when helpful

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Aphasia

Practical clinic activities

Practice	How to use it
Exercise 1	Semantic feature analysis: describe category, function, location, properties, and associations of a word.
Exercise 2	Script practice for a common conversation such as ordering tea or greeting visitors.
Exercise 3	Supported reading: highlight key words and discuss one paragraph at a time.
Exercise 4	Communication repair: practice gesture, writing, or drawing when a word is stuck.
Exercise 5	Conversation coaching with a family member.

What to avoid

- Do not speak to the patient like a child.
- Do not confuse slow word retrieval with reduced intelligence.
- Do not make naming drills the whole treatment plan.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Aphasia

Back to the case

The engineer chooses three priorities: talking with grandchildren, managing appointments, and discussing news. Therapy combines word-retrieval work with a conversation notebook and partner training. Progress is judged by whether he can participate in these real conversations, not only by naming-test scores.

Sample functional goals

- The patient will communicate key information about a familiar topic using speech plus multimodal supports.
- The patient will retrieve targeted personally relevant words with less cueing.
- A communication partner will use supported-conversation strategies during everyday interactions.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 11 • DEFINITION AND CLINICAL PICTURE

Cognitive-Communication Disorders After Brain Injury

A patient after traumatic brain injury speaks clearly and uses normal grammar, so friends assume communication is fully recovered. Yet conversations drift off topic, instructions are forgotten, jokes are misunderstood, and planning a simple phone call becomes tiring. The speech pathologist looks beyond speech and language form to the cognitive systems that make communication effective: attention, memory, organization, executive function, and social inference.

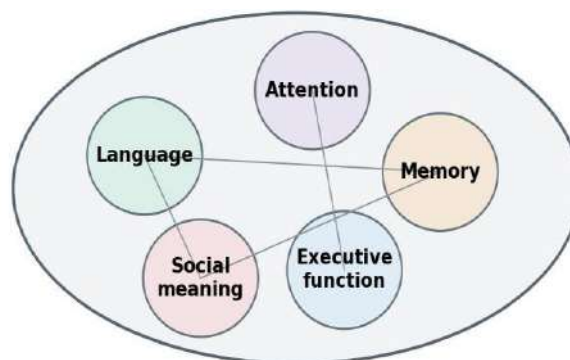
What you may notice

- Losing the topic or giving disorganized information
- Difficulty understanding humor, inference, or indirect meaning
- Forgetting instructions or conversational details
- Poor planning, self-monitoring, or problem solving

Plain-language definition

Cognitive-communication disorders are communication difficulties caused by changes in cognitive processes such as attention, memory, executive function, processing speed, perception, and social cognition. They can follow traumatic brain injury, right-hemisphere stroke, tumors, hypoxic injury, and other neurological conditions. The person may sound fluent while still having major difficulty using communication effectively.

- Impulsive responses or reduced awareness of communication breakdown



Communication depends on connected brain systems, so one injury can affect several skills.

- Difficulty reading complex material or managing work communication

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Cognitive-Communication Disorders After Brain Injury

Causes / Etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Traumatic brain injury
- Right-hemisphere stroke or other acquired brain injury
- Hypoxic/anoxic injury
- Brain tumor or neurosurgical conditions
- Cognitive fatigue, mood, sleep, pain, and medications may affect day-to-day performance

Red flags: stop and think beyond routine therapy

Red flag

Sudden cognitive-communication change

Red flag

Worsening confusion or alertness

Red flag

Safety problems with medication, finances, driving, or judgment

Red flag

Severe behavior or emotional change requiring team input

ASSESSMENT AND EVALUATION

Cognitive-Communication Disorders After Brain Injury

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Detailed functional interview with patient and care partner
2. Screen hearing, vision, motor speech, and language

3. Assess attention under different levels of distraction
4. Assess learning and memory using functional material
5. Examine planning, problem solving, inhibition, and self-monitoring



6. Assess discourse: story, explanation, conversation, and inference
7. Observe real tasks such as scheduling, phone use, or following written instructions

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with cognitive-communication disorders, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Cognitive-Communication Disorders After Brain Injury

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Use functional, personally meaningful tasks rather than abstract worksheets alone
- Teach external supports such as calendars, checklists, alarms, and written key words
- Use metacognitive routines: plan, do, check, and revise
- Teach attention-management strategies and reduce unnecessary distraction
- Practice organization of spoken and written messages
- Train communication partners to give clear structure and allow processing time

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Cognitive-Communication Disorders After Brain Injury

Practical clinic activities

Practice	How to use it
Exercise 1	Plan–Do–Check worksheet for a real weekly task.
Exercise 2	Message map: write three key points before a phone call.
Exercise 3	Distraction ladder: practice a task in quiet, then add realistic background demands.
Exercise 4	Inference practice using short everyday scenarios.
Exercise 5	Prospective-memory task: remember to complete a planned action using an external cue.

What to avoid

- Do not assume clear articulation means normal communication.
- Do not overload the client with long verbal instructions.
- Do not remove external aids in the name of “independence” when they improve safety and participation.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Cognitive-Communication Disorders After Brain Injury

Back to the case

The patient chooses one priority: returning to part-time work. Therapy therefore uses real email, meeting, and scheduling tasks. A plan–do–check routine and phone reminders are introduced. The team tracks errors, fatigue, and independence in work-like tasks rather than relying only on paper-and-pencil tests.

Sample functional goals

- The client will use a planning checklist to complete a multistep functional task.
- The client will organize spoken information using a simple message framework.
- The client will independently select an external memory support for daily appointments.

Measure progress with more than accuracy

- Independence: how much cueing is needed?

- Generalization: does the skill appear outside the practiced task?



- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 12 • DEFINITION AND CLINICAL PICTURE

Dementia and Progressive Communication Disorders

A family says, “She can still tell old stories, but new information disappears quickly.” Their mother repeats questions, loses names, and becomes overwhelmed in group conversation. The clinical task is different from rehabilitation after a single stroke. With progressive disease, speech-language therapy often aims to preserve successful communication, reduce frustration, support decision making, and teach care partners how to make conversations easier.

Plain-language definition

Dementia is a syndrome involving progressive decline in cognitive abilities severe enough to affect daily life. Communication changes may include word-finding difficulty, reduced comprehension of complex information, repetition, topic loss, reading/writing changes, and later reduced verbal output. Primary progressive aphasia is a related neurodegenerative condition in which language decline is an early and prominent feature.

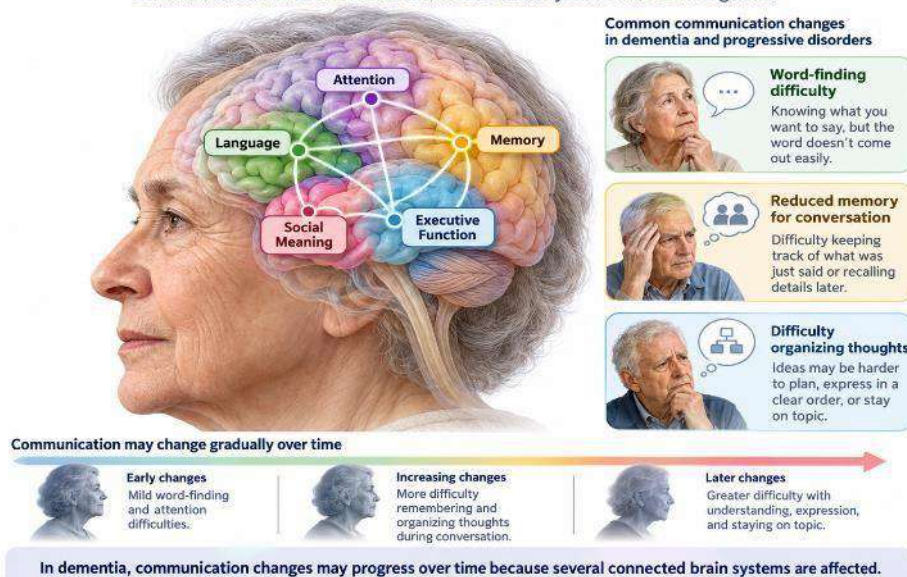
Figure 9. Dementia and Progressive Communication Disorders: Connected Brain Systems and Common Changes in Communication Over Time.

What you may notice

- Repeated questions or stories
- Word-finding difficulty and vague language
- Difficulty following complex conversation
- Reduced organization of narratives

Dementia and Progressive Communication Disorders

Communication relies on several connected brain systems that work together.



- Problems reading, writing, or managing written information
- Later-stage reduction in initiation or verbal output

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Dementia and Progressive Communication Disorders

Causes / etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Alzheimer's disease and related dementias
- Vascular disease
- Lewy body disease, frontotemporal degeneration, and other neurodegenerative conditions
- Mixed causes are common
- Delirium, medication effects, hearing loss, depression, and medical illness can worsen communication and should not be overlooked

Red flags: stop and think beyond routine therapy

Red flag

Sudden confusion suggests delirium or acute medical illness rather than expected dementia progression

Red flag

New swallowing difficulty or weight loss

Red flag

Rapid decline

Red flag

Safety concerns, caregiver exhaustion, or suspected abuse/neglect

ASSESSMENT AND EVALUATION

Dementia and Progressive Communication Disorders

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.



Step-by-step evaluation

1. Interview patient and care partners about communication priorities and daily routines
2. Hearing and vision status
3. Functional conversation and discourse
4. Naming, comprehension, reading, writing, and use of external aids
5. Cognitive-communication screening in collaboration with the medical team
6. Swallowing assessment when concerns arise
7. Assess communication environment and caregiver strategies

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: "Findings are consistent with dementia and progressive communication, characterized by [main features], which currently affects [daily activity/participation]."

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Dementia and Progressive Communication Disorders

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client's own priorities all matter.

Core treatment directions

- Focus on remaining strengths and meaningful routines
- Use external memory and communication supports: calendars, labeled photos, written choices, life-story books
- Use spaced retrieval or error-reducing learning for selected functional information
- Simplify environment and message length without speaking in an infantilizing way
- Train care partners to use one idea at a time, yes/no or choice support when needed, and adequate wait time
- Plan early for future communication needs, including AAC and personal preference documentation

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next s conversation, classroom, work, home, community, or mealtime as s ready.

EXERCISES AND PRACTICE GUIDE

Dementia and Progressive Communication Disorders

Practical clinic activities

Practice	How to use it
Exercise 1	Life-story book: organize names, photos, routines, and personally important facts.
Exercise 2	Spaced retrieval for one practical target such as locating a call bell or remembering a safety instruction.
Exercise 3	Supported choice: present two written or pictured options.
Exercise 4	Routine script: practice a familiar sequence such as greeting or ordering.
Exercise 5	Care-partner coaching using video or role play.

What to avoid

- Do not argue repeatedly about memory errors.
- Do not test the person throughout the day with “Do you remember?” questions.
- Do not wait until late stages to discuss communication supports.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Dementia and Progressive Communication Disorders

Back to the case

The family creates a simple communication book and places a large calendar in the main room. Therapy focuses on daily routines and partner strategies. The clinician reviews the system as the disease changes, adding picture choices and simpler scripts when needed.

Sample functional goals

- The patient will use a personalized external aid to support one daily communication task.
- Care partners will use agreed supportive communication strategies.

- The patient will participate in familiar conversation with reduced breakdown and distress.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 13 • DEFINITION AND CLINICAL

PICTURE

Autism and Social Communication

A teenager is referred because adults say he “does not make enough eye contact.” In conversation, he explains complex topics clearly but finds rapid group talk exhausting and sometimes misses indirect hints. The speech pathologist reframes the goal: therapy should not train a person to look typical. It should support communication access, self-advocacy, mutual understanding, and any language or social-pragmatic skills the client

personally wants to strengthen.

Plain-language definition

Autism is a neurodevelopmental condition associated with differences in social communication and interaction together with restricted or repetitive patterns of behavior, interests, or sensory experience. Social communication disorder (SCD) involves persistent pragmatic communication difficulty without the restricted/repetitive features required for an autism diagnosis. Speech-language pathologists assess and treat communication needs across the lifespan within an inter-professional team.

What you may notice

- Differences in conversational reciprocity or turn-taking
- Difficulty interpreting indirect, figurative, or ambiguous language
- Different use or interpretation of gesture, facial expression, prosody, or personal space
- Strong preference for familiar topics or routines
- Possible language delay, echolalia, or highly advanced vocabulary
- Sensory and processing differences that affect communication settings

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Autism and Social Communication

Causes / Etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Autism is neurodevelopmental and strongly influenced by genetics

- It is not caused by vaccines, poor parenting, or multilingual exposure
- SCD has no single known cause and may co-occur with language or learning differences
- Communication profile can change with age, context, stress, sensory load, and communication partner



Red flags: stop and think beyond routine therapy

Red flag

Loss of previously acquired communication or social skills

Red flag

Severe distress, self-injury, or safety concerns requiring wider team support

Red flag

Sudden change from the person's usual communication pattern

Red flag

Unrecognized hearing or language disorder

ASSESSMENT AND EVALUATION

Autism and Social Communication

Assessment should answer two questions: "What is happening?" and "What should we do next?" A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Learn the person's preferred communication style and terminology
2. Interview client and caregivers/teachers about strengths, challenges, and priorities
3. Assess receptive, expressive, pragmatic, and narrative language as relevant
4. Observe communication across natural contexts and partners
5. Consider sensory, cognitive, literacy, motor speech, and AAC needs
6. Use culturally sensitive interpretation of eye contact, gesture, and social behavior
7. Differentiate autism, SCD, language disorder, and other conditions collaboratively

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: "Findings are consistent with autism and social communication, characterized by [main features], which currently affects [daily activity/participation]."

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Autism and Social Communication

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client's own priorities all matter.

Core treatment directions

- Use neurodiversity-affirming, person-centered goals
- Support functional language, self-advocacy, conversation repair, and understanding of confusing social situations
- Teach explicit communication strategies when the client wants them
- Modify environments and partner behavior, not only the client
- Use visual supports, scripts, AAC, written communication, or alternative modalities as helpful
- Support caregivers, teachers, and peers to communicate clearly and respect the person's preferences

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Autism and Social Communication

Practical clinic activities

Practice	How to use it
Exercise 1	Conversation map: identify topic, listener need, and possible repair choices.
Exercise 2	Literal/indirect language comparison using real-life examples chosen by the client.
Exercise 3	Self-advocacy phrases such as "Please say that directly" or "I need more time."
Exercise 4	Planning a group conversation with turn cues or written notes.
Exercise 5	AAC or text-based backup for situations where speech becomes difficult.

What to avoid

- Do not force eye contact.



- Do not suppress harmless self-regulatory behavior simply to look “normal.”
- Do not make masking the person’s identity the goal of therapy.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Autism and Social Communication

Back to the case

The teenager chooses two goals: handling fast group discussion and asking for clarification without embarrassment. Therapy uses written planning, explicit repair phrases, and environmental changes. Eye contact is not a target because it is not required for successful communication.

Sample functional goals

- The client will use a preferred repair strategy when a message is unclear.
- The client will identify and communicate one sensory or processing need in a chosen setting.
- Communication partners will use direct, respectful language and agreed supports.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 14 • DEFINITION AND CLINICAL PICTURE

Written Language and Literacy Disorders

A bright ten-year-old can explain a science experiment aloud, but reading is slow and spelling is unpredictable. Written answers are much shorter than spoken ones. The speech pathologist knows that speech, language, phonological processing, reading, and writing are connected. A literacy difficulty may therefore be part of the same language system rather than a separate school problem.

Plain-language definition

Written language disorders affect reading and/or writing. They may involve word reading, decoding, spelling, reading fluency, reading comprehension, written grammar, organization, or composition. Dyslexia is commonly associated with persistent difficulty in accurate or fluent word reading and spelling. Speech-language pathologists contribute when language and phonological skills are part of the difficulty and collaborate with educators and psychologists.

What you may notice

- Slow or inaccurate word reading
- Difficulty decoding unfamiliar words
- Poor spelling despite practice
- Weak phonological awareness
- Reading comprehension below oral comprehension
- Short or poorly organized written work

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Written Language and Literacy Disorders

Causes / Etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Neurodevelopmental and genetic factors are important
- Difficulties may co-occur with DLD or speech sound

disorder

- Instruction quality and opportunity matter but do not fully explain persistent dyslexia
- Vision problems do not usually explain dyslexia, though visual health should be managed separately
- Multilingual learners require careful comparison with expected learning in each language



Red flags: stop and think beyond routine therapy

Red flag

Persistent reading difficulty despite explicit instruction

Red flag

Strong family history of dyslexia or language disorder

Red flag

Large gap between oral knowledge and reading/writing output

Red flag

Significant academic or emotional impact

ASSESSMENT AND EVALUATION

Written Language and Literacy Disorders

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Educational and developmental history including quality of instruction
2. Hearing and vision status as relevant
3. Phonological awareness and phonological memory
4. Rapid naming and sound-symbol knowledge where appropriate
5. Word reading, decoding, spelling, fluency, and comprehension
6. Oral language assessment because language disorder may be hidden
7. Written samples for sentence structure, organization, and content

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with written language and literacy disorders, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to



TREATMENT AND MANAGEMENT

Written Language and Literacy Disorders

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client's own priorities all matter.

Core treatment directions

- Coordinate with evidence-based literacy instruction at school
- Teach phonological awareness explicitly and connect sounds to letters
- Build decoding and spelling patterns systematically
- Support vocabulary, morphology, syntax, and reading comprehension
- Teach planning and revision for written expression
- Use assistive technology such as text-to-speech or speech-to-text when appropriate

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Written Language and Literacy Disorders

Practical clinic activities

Practice	How to use it
Exercise 1	Sound map: segment a word into phonemes and link each sound to letters.
Exercise 2	Word family sort using meaningful spelling patterns.
Exercise 3	Morphology build: base word plus prefixes/suffixes.
Exercise 4	Read–retell–check: read a short passage, retell, then verify key points.
Exercise 5	Sentence combine: join short sentences into one clear written sentence.

What to avoid

- Do not use guessing from pictures as the main decoding strategy.
- Do not assume a child is lazy because reading is effortful.

- Do not provide speech-language therapy in isolation from classroom literacy teaching.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Written Language and Literacy Disorders

Back to the case

The clinician finds weak phonological awareness and oral language vulnerability in addition to slow decoding. Therapy coordinates with school literacy instruction, reinforces sound-letter mapping, and supports vocabulary and written sentence structure. Progress is tracked with curriculum reading and writing samples.

Sample functional goals

- The student will improve phoneme-grapheme mapping in a structured word set.
- The student will identify the main idea and supporting details in grade-appropriate text with support.
- The student will plan and produce a coherent paragraph using a visual organizer.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

CHAPTER 15 • DEFINITION AND CLINICAL PICTURE

Hearing Loss and Aural Rehabilitation

An older adult says, “I can hear people talking, but I cannot catch the words in a busy restaurant.” Hearing aids have helped, yet family conversations still break down. Aural rehabilitation goes beyond fitting a device. The clinician and audiologist look at listening access, communication strategy, partner behavior, room acoustics, technology, and the person’s own goals.

Plain-language definition

Hearing loss can reduce access to spoken communication and may affect speech, language, education, work, and social participation. Aural rehabilitation is a person-centered process that helps an individual make the best possible use of hearing technology, listening skills, visual information, communication strategies, and partner support. Speech pathologists often work with audiologists as part of this process.

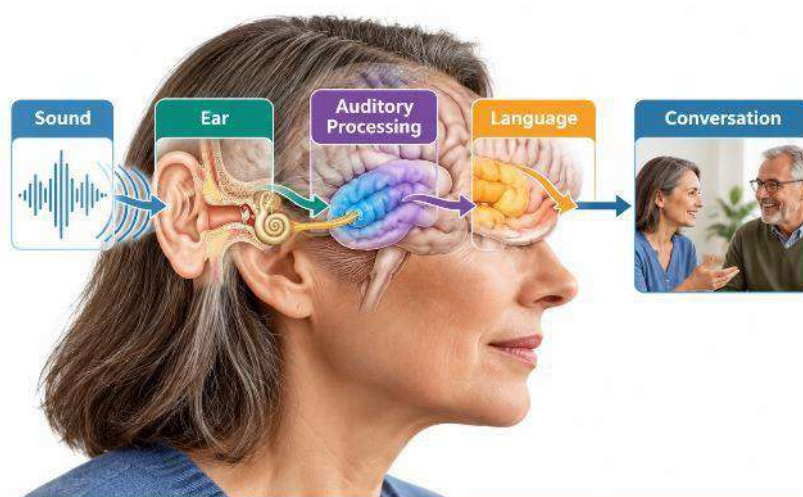


Figure 9. Auditory Pathway from Sound Detection to Language Processing and Conversation, Highlighting the Role of Aural Rehabilitation.

What you may notice

- Frequent requests for repetition
- Difficulty in noise or group conversation
- Mishearing similar-sounding words
- Listening fatigue
- Reduced participation or social withdrawal
- For children, possible effects on speech, language, and academic development.



CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Hearing Loss and Aural Rehabilitation

Causes / etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Congenital or genetic hearing loss
- Ear disease and conductive loss
- Noise exposure
- Age-related hearing loss
- Ototoxic medication or medical conditions
- Auditory access can vary across ears, frequencies, devices, and environments

Red flags: stop and think beyond routine therapy

Red flag

Sudden hearing loss requires urgent medical/audiological care

Red flag

Ear pain, drainage, dizziness, or unilateral sudden change

Red flag

Child with delayed speech/language and unconfirmed hearing status

Red flag

Device problems causing poor access or discomfort

ASSESSMENT AND EVALUATION

Hearing Loss and Aural Rehabilitation

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Audiological assessment is central for type and degree of hearing loss
2. Interview about real listening situations and communication priorities

3. Functional listening assessment with and without technology as appropriate
4. Speechreading/visual support and communication-repair skills
5. For children, speech, language, phonology, and literacy assessment



6. Assess partner behavior and environmental barriers

7. Review hearing-aid/cochlear-implant use with audiology team

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with hearing loss and aural rehabilitation, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Hearing Loss and Aural Rehabilitation

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Optimize access through audiology and appropriate technology
- Teach communication repair: request repetition, rephrasing, key words, or confirmation
- Train communication partners to face the person, reduce distance, and gain attention first
- Improve listening in meaningful tasks, not isolated sounds only
- Use auditory training and speechreading when indicated
- Modify environment: reduce noise, improve lighting, choose seating, use remote microphone or other assistive technology

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Hearing Loss and Aural Rehabilitation Practical clinic activities

Practice	How to use it
Exercise 1	Key-word repair: ask the partner to repeat only the missing part.
Exercise 2	Closed-set to open-set listening practice matched to the person's level.
Exercise 3	Noise strategy rehearsal: choose seat, lighting, and distance before conversation.
Exercise 4	Teach-back: repeat key information from an appointment or phone call.
Exercise 5	Partner practice: speak clearly at normal rate without shouting.

What to avoid

- Do not assume hearing aids restore normal hearing in every setting.
- Do not shout; excessive loudness can distort speech and feel uncomfortable.
- Do not place all responsibility on the person with hearing loss.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.



CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Hearing Loss and Aural Rehabilitation

Back to the case

The older adult keeps his hearing aids but adds a restaurant plan: quieter seating, visual access to faces, and a repair phrase that requests the missing word instead of a full repetition. His spouse practices speaking from the same room rather than calling from another room.

Sample functional goals

- The client will use two repair strategies during difficult listening situations.
- The client and partner will apply agreed environmental changes in daily conversation.
- For children, speech/language goals will be linked to verified auditory access.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?

- Client/caregiver report: does the change matter to the person?



Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.



CHAPTER 16 • DEFINITION AND CLINICAL PICTURE

Dysphagia: Feeding and Swallowing Disorders

A patient recovering from stroke coughs during lunch and tires before finishing the meal. The family wants a list of exercises immediately. The speech pathologist first explains that swallowing treatment is not “one exercise fits all.” Safe management depends on the person’s medical condition, the phase of swallowing affected, nutritional needs, alertness, respiratory status, and when needed instrumental information from VFSS or FEES.

Plain-language definition

Dysphagia is difficulty moving food, liquid, or saliva safely and efficiently from the mouth through the pharynx and into the esophagus. It may involve oral preparation, oral transit, pharyngeal swallowing, or problems that require medical evaluation of the esophagus. Dysphagia can affect nutrition, hydration, respiratory health, enjoyment, and quality of life.

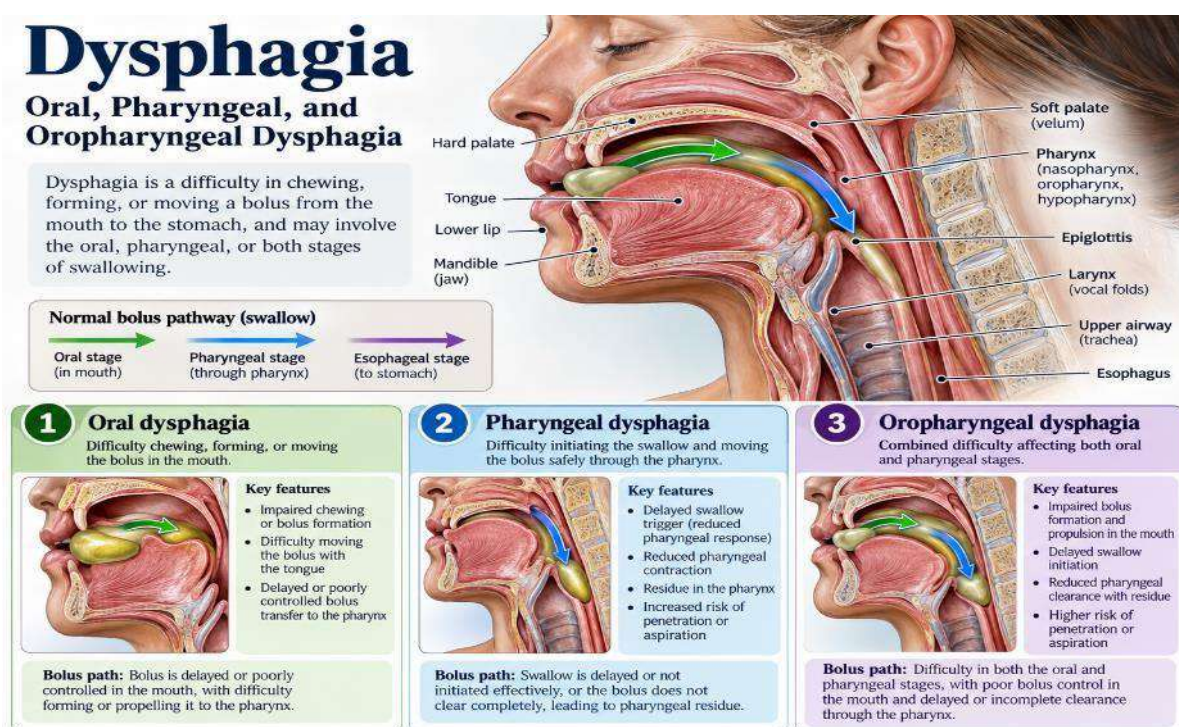


Figure 10. Dysphagia: Illustration of Oral, Pharyngeal, and Oropharyngeal Swallowing Difficulties.



What you may notice

- Coughing or throat clearing during or after intake
- Wet/gurgly voice after swallowing
- Food remaining in the mouth
- Prolonged mealtimes or fatigue
- Unexplained weight loss, dehydration, or recurrent chest infection
- Sensation of food sticking or difficulty managing saliva

CAUSES, DIFFERENTIAL THINKING, AND RED FLAGS

Dysphagia: Feeding and Swallowing Disorders

Causes / Etiology

Etiology means the factors that may cause or contribute to the disorder. In speech-language pathology, the answer is often multifactorial. The clinician uses the history and examination to decide what is likely, what is possible, and what must be ruled out.

- Stroke and other neurological disease
- Head and neck cancer or surgery
- Progressive neurological disease
- Frailty, critical illness, and deconditioning
- Structural disease of the head, neck, or esophagus
- In children, developmental, neurological, structural, sensory, and medical factors may contribute

Red flags: stop and think beyond routine therapy

Red flag

Acute airway compromise or choking emergency

Red flag

Recurrent pneumonia, significant weight loss, or dehydration

Red flag

Sudden new swallowing difficulty

Red flag

Reduced alertness or respiratory instability during intake

ASSESSMENT AND EVALUATION

Dysphagia: Feeding and Swallowing Disorders

Assessment should answer two questions: “What is happening?” and “What should we do next?” A useful evaluation combines structured measures with natural communication and explains how the findings affect everyday participation.

Step-by-step evaluation

1. Medical history, nutrition/hydration status, respiratory status, and patient goals
2. Cranial nerve/oral-mechanism examination and secretion management
3. Clinical swallowing evaluation using appropriate consistencies only when safe
4. Observe timing, oral control, cough, voice change, fatigue, and mealtime efficiency
5. Instrumental assessment such as VFSS or FEES when physiology, aspiration risk, or treatment selection needs clarification
6. Coordinate with physician, dietitian, nursing, OT, gastroenterology, ENT, and other team members

Clinical summary sentence

At the end of the evaluation, write one sentence that links the disorder to function. Example pattern: “Findings are consistent with dysphagia, characterized by [main features], which currently affects [daily activity/participation].”

Document both strengths and needs

A complete report should state what the patient or client can do independently, what improves with cues, what remains difficult, and what environmental or partner factors change performance. This makes treatment planning easier and allows later progress to be judged fairly.

TREATMENT AND MANAGEMENT

Dysphagia: Feeding and Swallowing Disorders

Treatment begins only after the clinician understands the pattern well enough to choose a target. The same diagnosis can require very different plans in different people. Age, severity, prognosis, language background, fatigue, motivation, family support, medical status, and the client’s own priorities all matter.

Core treatment directions

- Base treatment on the identified swallowing physiology and overall health
- Use compensatory strategies such as posture, pacing, bolus size, or route modification

only when clinically indicated

- Use rehabilitative exercises only when they target a documented impairment and the patient can perform them safely



- Support oral hygiene, mealtime environment, and caregiver training
- Discuss risk, preference, quality of life, and informed decision making
- Reassess when medical status or swallowing function changes

Carryover rule

A clinic skill is not finished when it works in a drill. Plan the next step into conversation, classroom, work, home, community, or mealtime as soon as the client is ready.

EXERCISES AND PRACTICE GUIDE

Dysphagia: Feeding and Swallowing Disorders

Practical clinic activities

Practice	How to use it
Exercise 1	Examples a trained clinician may select include effortful swallow, Mendelsohn maneuver, CTAR, expiratory muscle strength training, or task-specific swallowing practice but only when assessment supports the target.
Exercise 2	Pacing practice: one controlled sip/bite at a time when indicated.
Exercise 3	Mealtime endurance plan with rest breaks and efficient setup when fatigue is a factor.
Exercise 4	Oral care routine to reduce bacterial load and support comfort.
Exercise 5	Caregiver cueing practice matched to the patient's cognitive level.

What to avoid

- Do not recommend thickened liquids or a swallowing exercise as a universal solution.
- Do not use a bedside exam alone to claim that aspiration is absent.
- Do not practice swallowing maneuvers with food or liquid when the method requires dry practice or has not been cleared for that patient.

Home practice

Keep home practice short, clear, and linked to daily life. One well-chosen activity completed regularly is more useful than a long list the family cannot sustain. Give the client or caregiver one way to record success, difficulty, or questions.

CASE WRAP-UP, GOALS, AND CLINICIAN CHECKLIST

Dysphagia: Feeding and Swallowing Disorders

Back to the case

Instrumental assessment shows the main problem and identifies which strategies help. Therapy uses only those strategies and one targeted exercise, with nursing and dietitian input. The family receives a written plan that explains what to do, what to watch for, and when to request reassessment.



Sample functional goals

- The patient will use the prescribed swallowing strategy safely during a functional meal with reduced cueing.
- The patient/caregiver will demonstrate the agreed oral-care and mealtime plan.
- Treatment will target a specific physiologic impairment identified through assessment.

Measure progress with more than accuracy

- Independence: how much cueing is needed?
- Generalization: does the skill appear outside the practiced task?
- Participation: is an important daily activity easier?
- Efficiency: is the message faster, clearer, safer, or less effortful?
- Client/caregiver report: does the change matter to the person?

Clinician checklist

- ☐ I can explain the disorder in plain language.
- ☐ I have ruled out or referred important red flags.
- ☐ My assessment supports the treatment target.
- ☐ The goal matters in daily life.
- ☐ I know how I will measure carryover.

APPENDIX 1

Rapid Red Flags and Referral Guide

Finding	Action
Sudden speech/language change	Possible stroke/neurological event urgent medical evaluation.
Sudden hearing loss	Urgent audiology/ENT/medical evaluation.
Persistent unexplained hoarseness	ENT/otolaryngology; laryngeal visualization before/alongside voice therapy.
Breathing difficulty, choking, airway emergency	Emergency medical response.
Weight loss, recurrent chest infection, dehydration with swallowing concerns	Medical team + dysphagia assessment; consider instrumental assessment.
Structural resonance concern	Cleft/craniofacial or ENT team.
Regression/loss of developmental skills	Medical/developmental evaluation.
Severe emotional distress or risk	Appropriate mental-health/emergency pathway.

This page is a quick prompt, not an exhaustive emergency guide. Local clinical pathways, scope-of-practice rules, and medical policies must always be followed.

Clinical pause

When the pattern changes suddenly, the priority changes. Diagnosis and safety come before routine therapy.

APPENDIX 2

Case-History Form

Patient/client name or code: _____

Date / age: _____ Setting: _____

Reason for referral in the person's own words: _____

Onset: ☐ sudden ☐ gradual ☐ developmental ☐ progressive ☐ unclear

Medical/developmental history: _____

Hearing/vision status: _____

Languages/dialects used and with whom: _____

Education/work/communication demands: _____

Previous assessment/therapy and response: _____

Main communication partners:

What is easiest? _____

What is hardest? _____

Top three goals named by client/family:

1) _____

2) _____

3) _____

Clinician red flags/referrals: _____

APPENDIX 3

Oral-Mechanism, Speech, and Language Sample Checklist

Area	Observe / document
Structure	Face, lips, jaw, dentition, tongue, palate, symmetry, structural differences.
Movement	Range, speed, coordination, strength when relevant, alternating/sequential movements interpreted cautiously.
Voice/ resonance	Quality, loudness, pitch, fatigue, hyper/hypo-nasality, nasal emission.
Speech	Sound inventory, distortions, consistency, intelligibility, rate, prosody, motor planning/execution signs.
Language	Comprehension, vocabulary, grammar, narrative, word finding, reading/writing when relevant.
Pragmatics/ discourse	Turn taking, topic, repair, inference, organization, partner/context effects.
Cognition	Attention, memory, executive function, awareness, fatigue when indicated.
Swallowing	Only when within competence: secretion management, oral control, clinical signs, medical context; refer/instrument as indicated.

Speech sample reminder

Collect more than one speech sample when possible. A single word list can hide problems that appear in conversation, and a clinic conversation can miss problems that appear in school, work, phone calls, or noisy settings.

APPENDIX 4

Goal-Writing and Treatment-Planning Page

Write the problem in one sentence

The client has _____, characterized by _____, which affects _____

Choose one participation priority

The activity the person most wants to improve is:

Build the goal

Goal frame

In situation, the patient/client will behavior using _____ support, measured by _____, so that _____ participation becomes easier.

Plan the therapy ladder

Level	Plan
Step 1	Easiest successful version of the skill
Step 2	Increase length, complexity, or independence
Step 3	Vary materials, partner, or context
Step 4	Use the skill in a functional simulation
Step 5	Use it in real life and review what happened

Outcome measure

What will prove that this treatment matters? Accuracy ☐ Intelligibility ☐ Independence ☐ Participation ☐ Safety ☐ Client rating ☐ Partner rating ☐ Other: _____

APPENDIX 5

Home Practice Planner

Home practice should be realistic. The clinician chooses one small task that matches the treatment target, explains why it matters, demonstrates it, and gives a clear stopping point.

This week's communication goal: _____

Practice task: _____

How long: _____ minutes

How often: _____ times/week

Best time/place: _____

Cue to use: _____

Stop or contact clinician if: _____

What went well? _____

What was difficult? _____

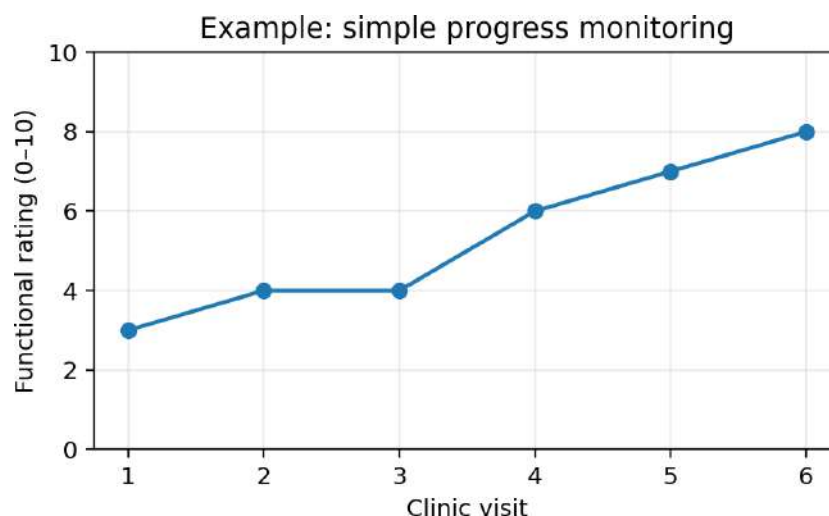
Question for next session: _____

Two-minute rule

When adherence is poor, make the practice smaller before making it more complicated. A two-minute task that is done regularly can be more valuable than a twenty-minute program that is avoided.

APPENDIX 6

Progress Monitoring and SOAP Note Example



A short SOAP note can still be meaningful

SOAP	Example
S — Subjective	Client reports phone conversations felt easier this week; one difficult call in a noisy setting.
O — Objective	Used key-word repair strategy in 8/10 simulated breakdowns independently; 10/10 with one cue.
A — Assessment	Strategy is becoming independent in structured conversation. Noise remains a barrier.
P — Plan	Next session: practice with background noise and unfamiliar partner; home task: use strategy in one real call and rate difficulty 0–10.

Progress question

Do not ask only, “Did the score improve?” Also ask, “Did the person communicate more independently, safely, confidently, efficiently, or meaningfully?”

APPENDIX 7

SMART Goal Setting in Speech Pathology

Goal setting guides assessment, treatment, progress monitoring, and discharge planning in speech pathology. Goals should be functional, realistic, measurable, and meaningful to the patient or client. They should reflect the individual's communication needs in daily life, school, work, family, and community settings.

The SMART Framework

Element	Meaning	Question for the Clinician
S – Specific	Clearly states the skill to be improved.	What exactly should the client do?
M – Measurable	Includes a level of accuracy, frequency, duration, or support.	How will progress be measured?
A – Achievable	Matches the client's current ability and clinical condition.	Is the goal realistic?
R – Relevant	Relates to functional communication or swallowing needs.	Why is this goal important for the client?
T – Time-bound	Gives a reasonable period for achievement.	When should the goal be reviewed?

Long-Term Goals

A **long-term goal (LTG)** describes the broader functional outcome expected after a period of therapy. It focuses on participation and everyday communication rather than a single exercise.

General formula: The client will + functional communication skill + level of independence + functional setting + time period.

Examples: “The client will improve functional speech intelligibility to communicate needs and participate in everyday conversations with minimal assistance within 12 weeks.”

“The client will improve receptive and expressive language skills to participate more independently in home, academic, or social communication within three months.”

Short-Term Goals

A **short-term goal (STG)** breaks the long-term goal into smaller, measurable treatment targets. Several short-term goals may contribute to one long-term goal.

General formula: The client will + specific behavior + condition/task + measurable criterion + level of cueing + time period.

Example: “The client will produce target speech sounds correctly in words with 80% accuracy across three consecutive sessions with minimal verbal cues within four weeks.”

For **language therapy**, a goal may state: “The client will follow two-step verbal directions with 80% accuracy in structured activities with minimal cues across three sessions.”

For **aphasia**, the clinician may write: “The client will name common functional objects with 80% accuracy using semantic or phonemic cues as needed across three consecutive sessions.”

For **fluency, voice, cognitive-communication, or swallowing therapy**, the same SMART structure can be used by changing the target behavior and measurement method.

From Assessment to Goal

A good clinical goal begins with the **assessment findings**. The speech pathologist first identifies the client’s strengths, difficulties, functional limitations, priorities, and environmental needs. A broad long-term outcome is then selected, followed by smaller short-term goals that can be practiced and measured during therapy. Goals should be reviewed regularly and modified when the client improves, reaches a plateau, develops new needs, or changes priorities.

Practical Rule

A well-written speech pathology goal should clearly answer:

Who will do what, under what condition, with what level of accuracy or assistance, and by when?

Goals should not simply state, “improve speech,” “improve language,” or “improve swallowing.” They should describe an **observable behavior** that the clinician can measure and the client can use in real life.

APPENDIX 8

Therapeutic Exercises for Communication, Speech, Voice, Fluency, and Swallowing Disorders

A Practical Guide for Speech-Language Pathologists, Clinicians, and Rehabilitation Professionals

This appendix provides structured therapeutic exercises for six clinical areas: oral motor function, voice disorders, fluency disorders, dysphagia, aphasia, and dysarthria. Each table describes the exercise, clinical purpose, practical procedure, and suggested practice schedule.

Clinical note: Exercises should be selected according to individual assessment, diagnosis, severity, and treatment goals. The practice schedules are illustrative rather than universal prescriptions. Swallowing exercises require particular attention to safety and should be prescribed following an appropriate swallowing assessment.

Table A8.1. Oral Motor Exercises

Exercise	Therapeutic purpose	Procedure	Suggested practice
Lip closure	Improve lip seal and control	Gently press lips together, hold, and relax	5 repetitions
Lip rounding	Improve lip movement for speech sounds	Round lips as if saying /u/, then relax	5–10 repetitions
Lip spreading	Improve lip mobility	Smile widely, then relax	5–10 repetitions
Tongue protrusion	Improve tongue mobility	Extend tongue straight outward, then return	5 repetitions
Tongue lateralization	Improve tongue control	Move tongue slowly toward each corner of the mouth	5 repetitions each side
Tongue elevation	Improve tongue-tip placement	Touch the ridge behind upper front teeth with tongue tip	5–10 repetitions
Tongue retraction	Practice backward tongue movement	Pull tongue gently backward inside the mouth	5 repetitions
Jaw opening and closing	Improve controlled jaw movement	Open and close mouth slowly within a comfortable range	5–10 repetitions
Speech sound sequencing	Improve coordination for articulation	Repeat /pa/, /ta/, /ka/, followed by /pa-ta-ka/	3–5 short sets

Clinical consideration: Non-speech oral motor exercises should not be used routinely as a substitute for speech-based intervention. For speech sound disorders, functional articulation and speech-motor practice generally have stronger clinical justification.

Table A8.2. Voice Disorder Exercises

Exercise	Therapeutic purpose	Procedure	Suggested practice
Diaphragmatic breathing	Improve respiratory awareness and support	Breathe comfortably, allowing gentle abdominal movement	2–3 minutes
Humming	Encourage comfortable voice production	Produce gentle /m/ sounds without throat strain	5 repetitions
Lip trills	Promote easier phonation	Produce gentle lip vibration with airflow and voice	5 short trials
Straw phonation	Reduce excessive vocal effort	Produce comfortable voice through a suitable straw	1–2 minutes

Pitch glides	Improve pitch flexibility	Glide gently from a comfortable low pitch to a higher pitch and back	5 repetitions
Resonant voice practice	Encourage efficient voice production	Produce /m/, /n/, and humming-based words with minimal effort	5–10 trials
Easy onset	Reduce hard glottal attack	Begin vowel sounds gently with coordinated airflow	5–10 repetitions
Gentle sustained phonation	Practice steady, comfortable voice	Sustain /a/ briefly at a natural pitch and loudness	5 repetitions
Vocal hygiene	Reduce harmful vocal behaviors	Maintain hydration, avoid habitual shouting and unnecessary throat clearing	Throughout the day

Clinical consideration: Persistent hoarseness, pain, or unexplained voice change warrants appropriate laryngeal evaluation. Voice exercises should be adjusted to the identified vocal condition.

Table A8.3. Fluency Disorder Exercises

Exercise	Therapeutic purpose	Procedure	Suggested practice
Easy onset	Reduce tension at speech initiation	Begin selected voiced sounds with a gentle onset	5–10 trials
Light articulatory contact	Reduce excessive speech-related tension	Produce consonants using gentle articulatory movements	5–10 words
Prolonged speech	Explore smoother speech transitions	Gently lengthen selected speech sounds during structured practice	5 minutes
Pausing and phrasing	Support comfortable communication pacing	Divide sentences into meaningful phrases with natural pauses	5 minutes
Voluntary stuttering	Reduce avoidance and fear	Intentionally produce mild, controlled stuttering in a supportive setting	Clinician-directed
Pull-out technique	Manage moments of stuttering	During a stuttering moment, gradually reduce tension and continue speaking	Clinician-directed
Cancellation technique	Develop awareness and modification	After a stuttered word, pause and repeat it with reduced tension	Clinician-directed
Desensitization practice	Reduce negative emotional reactions	Practice personally meaningful speaking situations in gradual steps	Individualized
Conversational practice	Promote functional communication	Practice speaking in supportive dialogues and real-life situations	5–10 minutes

Clinical consideration: Fluency intervention should be individualized, emphasize communication participation and confidence, and avoid implying that completely fluent speech is required for successful treatment.

Table A8.4. Dysphagia (Swallowing Disorder) Exercises

Exercise	Therapeutic purpose	Procedure	Suggested practice
Effortful swallow	Increase swallowing pressure	Swallow firmly while pressing the tongue against the palate	Clinician-prescribed repetitions

Mendelsohn maneuver	Improve laryngeal elevation and swallowing coordination	During a swallow, briefly maintain the larynx in its raised position	Supervised practice
Masako maneuver	Target posterior pharyngeal wall movement	Gently hold the tongue between the teeth and perform a saliva swallow without food or liquid	Clinician-directed
Shaker exercise	Strengthen suprahyoid muscles	While lying on the back, lift the head toward the toes without raising the shoulders	Individualized
Chin tuck against resistance (CTAR)	Target suprahyoid muscle activation	Gently press chin against an appropriately positioned resistance device	Clinician-directed
Tongue resistance exercise	Improve tongue strength	Press tongue against a clinically appropriate resistance device	Individualized
Supraglottic swallow	Support airway protection	Perform a prescribed breath-hold, swallow, and cough sequence	Specialist supervision
Expiratory muscle strength training	Improve expiratory muscle performance and potentially airway protection	Exhale through a calibrated resistance device	Structured clinical protocol

Safety: Dysphagia exercises must be selected by a qualified clinician, ideally using swallowing physiology findings from VFSS or FEES when indicated. Some maneuvers are unsuitable for particular medical conditions and may increase swallowing risk.

Table A8.5. Aphasia (Language Disorder) Exercises

Exercise	Therapeutic purpose	Procedure	Suggested practice
Object naming	Improve word retrieval	Show familiar objects or pictures and ask the patient to name them	10 items
Semantic feature analysis	Strengthen semantic word retrieval	Identify an object's category, function, location, properties, and associations	5–10 words
Word-picture matching	Improve auditory or reading comprehension	Present a spoken or written word and ask the patient to select the matching picture	10 trials
Sentence completion	Facilitate verbal expression	Complete familiar phrases or sentences	10 sentences
Repetition practice	Improve repetition where appropriate	Repeat meaningful words and gradually longer phrases	5–10 trials
Melodic intonation therapy	Facilitate verbal production in selected patients	Practice functional phrases using structured melodic and rhythmic cues	Specialist-directed
Reading comprehension	Improve understanding of written information	Read words, sentences, or short paragraphs and answer questions	5–10 minutes
Writing practice	Improve written communication	Write personally relevant words, names, and short messages	5–10 minutes
Script training	Improve functional conversational expression	Rehearse personally meaningful communication scripts	5–10 minutes

Supported conversation	Improve participation in daily communication	Use gestures, written keywords, pictures, and conversational support	Daily functional practice
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Table A8.6. Dysarthria (Motor Speech Disorder) Exercises

Exercise	Therapeutic purpose	Procedure	Suggested practice
Clear speech practice	Improve speech intelligibility	Produce meaningful words and sentences with deliberate, precise articulation	5–10 minutes
Over-articulation	Improve consonant precision	Practice exaggerated but natural articulatory movements during speech	10 words or phrases
Rate control	Improve speech clarity	Speak using comfortable pacing and brief pauses	5 minutes
Pacing board practice	Regulate speaking rate	Touch one marker for each word or syllable	5 minutes
Contrastive stress drills	Improve prosodic control	Emphasize different words within the same sentence	10 sentences
Pitch variation	Improve vocal expression	Practice appropriate pitch changes during meaningful phrases	5 repetitions
Loudness practice	Improve functional vocal intensity	Produce short phrases at an appropriately increased, comfortable loudness	Clinician-directed
Respiratory-phonatory coordination	Improve breathing and speaking coordination	Practice speaking short phrases on comfortable exhalations	5–10 trials
Speech sequencing	Improve articulatory coordination	Produce /pa/, /ta/, /ka/, and /pa-ta-ka/ at an accurate, controlled rate	3–5 short sets
Functional communication practice	Improve everyday communication	Rehearse greetings, telephone phrases, questions, and personal information	5–10 minutes

Dysarthria treatment should target the affected speech subsystems and meaningful communication outcomes. Specialized approaches, including intensive loudness treatment, require appropriate patient selection and clinician training.

Table A8.7. General Therapeutic Guidelines and Documentation

Clinical component	Recommended approach
Initial assessment	Evaluate the patient's speech, language, voice, swallowing, and functional communication needs as relevant
Exercise selection	Match exercises to the diagnosis, impairment, and individualized clinical goals
Therapy duration	Adjust according to tolerance, attention, fatigue, condition, and evidence-based treatment protocol
Exercise frequency	Determine from the treatment plan; avoid using the same dosage for all disorders
Patient comfort	Stop or modify exercises when pain, excessive strain, breathing difficulty, or significant fatigue occurs
Family involvement	Teach appropriate home activities and supported communication strategies

APPENDIX 9

Glossary and Selected Evidence Sources

Mini glossary

Term	Meaning
AAC	Augmentative and alternative communication: ways to supplement or replace speech, including gesture, pictures, writing, communication boards, and speech-generating technology.
Etiology	Cause or contributing factors.
Intelligibility	How much of a speaker's message is understood by a listener.
Prosody	Speech rhythm, stress, and intonation.
Stimulability	Whether performance improves when the clinician provides a model, cue, or strategy.
Generalization	Use of a learned skill outside the practiced item or setting.
Participation	Involvement in real-life situations such as school, work, family, and community.
VFSS / FEES	Instrumental swallowing assessments used to visualize aspects of swallowing physiology.

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ASHA. Adult Dysphagia. [Clinical guidance on swallowing assessment and rehabilitation](#).

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ASHA. Speech Sound Disorders: Articulation and Phonology. [Clinical evidence and treatment guidance](#).

Note: The ASHA Practice Portal clinical pages used in this guide include acquired apraxia of speech, aphasia, aural rehabilitation, autism, childhood apraxia of speech, dementia, dysarthria, hearing loss, late language emergence, pediatric and adult dysphagia, resonance disorders, right hemisphere disorder, social communication disorder, speech sound disorders, spoken language disorders, stuttering and cluttering, traumatic brain injury, and voice disorders. These continuously updated professional webpages do not have individual DOIs.

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