Planning, Implementation, and Evaluation of Treatment

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Fall NBASLH Prep Course

Objectives

- Treatment Planning
  - Factors that can affect treatment
  - Generating a prognosis
- Treatment Evaluation
  - Establishing methods for monitoring treatment progress and outcomes to evaluate assessment and/or treatment plans
- Treatment
  - Speech sound production
  - Fluency
  - Voice, resonance, and motor speech
  - Receptive and expressive language
  - Social aspects of communication
  - Cognition
  - AAC
  - Hearing and Aural Rehabilitation
  - Swallowing

EVIDENCED BASED-PRACTICE

- A framework for clinical decision making.
- Use EBP to select instruction and intervention appropriate to the age and learning needs of the student.
- The process of applying current, best evidence (external and internal scientific evidence), patient perspective, and clinical expertise to make decisions about the care of the individuals you treat. This page will teach you this versatile process so you can be confident that you're providing the best possible care no matter what clinical questions may arise.

EVIDENCED BASED PRACTICE

- **Clinical expertise/expert opinion**
  - The knowledge, judgment, and critical reasoning acquired through your training and professional experiences
- **Evidence (external and internal)**
  - The best available information gathered from the scientific literature (external evidence) and from data and observations collected on your individual client (internal evidence)
- **Client/patient/caregiver perspectives**
  - The unique set of personal and cultural circumstances, values, priorities, and expectations identified by your client and their caregivers.

Questions to ask yourself

- What type of disorder does this profile describe?
- What age group do these characteristics impact the most?
- What are you evaluating?
- Are you interested in a before and after comparison or a comparison to other treatments?
- What is the goal of implementing this treatment in terms of specific improvements?

Treatment Planning

TREATMENT PLANNING

- Implement the speech language treatment plan
  - Implements the speech language therapy treatment plan
  - Selects appropriate treatment activities to progress patient towards goals
  - Revisions goals/plan of care with pt/family input
  - Provides ongoing patient/family education and training
  - Provides discharge instructions, follow-up and referral to community resources as appropriate
  - Acts as a referral source for staff, families, physicians on services and equipment related to rehabilitation services

CLINICAL PROCESS

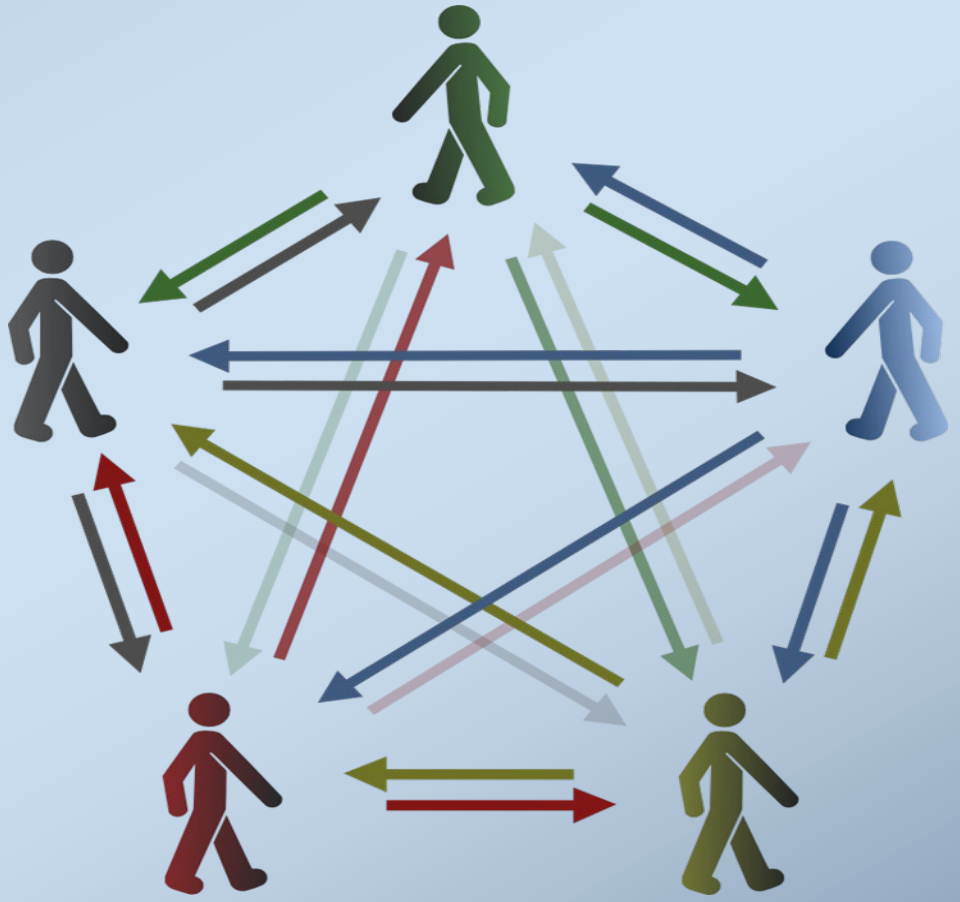
- ***Goal Setting***: Long term and short-term functional measurable goals within each interval as appropriate in each case
- Education and training to caregivers
- Counseling, dialogue, and support with patient / caregivers to assist understanding
  - As appropriate in each case, teach strategies, compensations, self-cueing techniques etc. and provide guidance and suggestions
  - Ongoing preparation of patient and caregivers for discharge through education, training, and resources for "next steps"
- ***Progress Report***: Continual assessing, monitoring, modeling, evaluating responses, providing meaningful feedback, and adjusting treatment and updating plans as needed

Etiologies of Communication and Swallowing Disorders

- Neonatal problems (e.g., prematurity, low birth weight, substance exposure);
- Developmental disabilities (e.g., specific language impairment, autism spectrum disorder, dyslexia, learning disabilities, attention deficit disorder);
- Auditory problems (e.g., hearing loss or deafness);
- Oral anomalies (e.g., cleft lip/palate, dental malocclusion, macroglossia, oral-motor dysfunction);
- Pharyngeal anomalies (e.g., upper airway obstruction, velopharyngeal insufficiency/incompetence);
- Laryngeal anomalies (e.g., vocal fold pathology, tracheal stenosis, tracheostomy);
- Neurological disease/dysfunction (e.g., traumatic brain injury, cerebral palsy, cerebral vascular accident, dementia, Parkinson's disease, amyotrophic lateral sclerosis);
- Genetic disorders (e.g., Down syndrome, fragile X syndrome, Rett syndrome, velocardiofacial syndrome).

EXTERNAL FACTORS

- Age
- Concomitant Disorders
- Type and Severity of disorder
- Cultural and Linguistic background
- Underlying medical conditions
- Primary Language
- External factors



INTEGRATING ASSESSMENT RESULTS

- **History** – (medical, developmental, and educational components)
- **Current Functional Status** – (a summary of current functioning as reported by the family from the history forms sent to you before the evaluation)
- **Test Results** – (charts illustrating test results, and detailed narratives to "paint a clear picture" of the client's performance on each test)
- **Behavioral Observations** - (in some cases)
- **Diagnostic Impressions** – (to summarize the analysis of the findings)
- **Prognosis** – (an estimate of the client's potential for making gains)
- **Estimated Frequency & Duration of Treatment** - (an estimate of the amount of therapy needed to meet the goals)
- **Functional Goals & Treatment Plan** – (written plan of action, outlining the areas in need of treatment. If your child is in the public school system, goals will be written that are appropriate to the IEP format.)
- **Recommendations** - (for related services, as needed)

PLAN OF CARE

- Long-term goals
- Short term goals
- Precautions
- Prognosis
- Social support
- Underlying Impairments
- Referrals

DELIVERY OF TREATMENT

- **Format**: The structure of the treatment session (e.g., group, individual, in consult with the family).
- **Provider**: The person providing the treatment (e.g., SLP, trained volunteer, caregiver).
- **Dosage**: The frequency, intensity, and duration of service.
- **Timing**: The timing of intervention relative to the onset of dementia.
- **Setting**: The location of treatment (e.g., home, assisted living facility, nursing facility, community-based setting
- **Session**: Individual vs Group

SMART GOALS

- ***S**pecific,*
- ***M**easurable,*
- ***A**ttainable,*
- ***R**elevant*
- ***T**imely*

SMART GOALS

- **S**pecific/**S**ignificant: It is great to have a clear concise title to your goal, but you should also describe it in more detail.
  - For example, "further my education" could be described with "Identify the schools that I want to attend and research why the programs are good choices."
- **M**easurable/**M**eaningful: Try to write a goal that you can measure numerically. A goal can be much more motivating if you can track and record your progress, and see how you are doing.
- **A**chievable-**A**ction-Oriented/**R**ealistic -**R**elevant: Can your goal really be done? Think not only about the goal, but about your personal circumstances.
- **T**imely/**T**rackable: How much time will you have to put in on a regular basis to achieve this goal? How long from now do you plan to achieve this goal?

GOALS

All goals must have 4 components:

- Time frame
- An objective measure
- Represent a functional change
- Represent a skilled service

VERBS FOR GOALS

- *Evaluate*
- *Assess*
- *Analyze*
- *Teach*
- *Train*
- *Educate*
- *Progress*
- *Modify*
- *Instruct*
- *Alter*
- *Modify*
- *Produce*

LONG TERM GOAL

- State the exception of the patient's final specific functional level and the effect on the life skills at the end of therapy
- Met in a reasonable time
- Similar to the patient prior level of function
- Should be established for each functional deficit that will be addressed during this episode of care
- Measurable
- Specific to life skill

SHORT TERM GOALS

- Based upon the functional deficits identified during the assessment
- Are to contain required components of goal:
  - Measurable
  - Contain a specific life goal
- Should be attainable within a reasonable time frame
- Should be the building blocks to each long term goal

FREQUENCY/DURATION

- Select the number of times per week the patient will be treated and the duration based upon the patients needs.
  - Duration: Length of a session in time (e.g., 50 minutes)
  - Frequency: Number of sessions per unit of time (e.g., 2 x week)
  - Ex. Skilled St will tx 5x/wk x 4wks for dysphagia management. Skilled ST to include compensatory swallow strategies, po trials, and patient/caregiver education.

FREQUENCY/DURATION

- Severity of objective clinical findings
- Presence of and number of complicating factors and comorbidities
- Natural history and chronicity of condition
- Expectation for functional improvement with skilled intervention
- Response to treatment provided
- Patient's level of independence

PROGNOSIS

- A prediction of the progress that should be made during the course of treatment.
  - Ex. Rehab Potential: Good
  - Ex. Rehab Potential: Excellent due to good progress with current treatments, functional reasoning skills, functional visual tracking skills, responsive to cuing, patient motivated to return home, positive results from previous treatments, supportive family and caregiver.
  - Ex. Excellent due to strong caregiver support

INTEGRATING PATIENT and/or CAREGIVER PREFERNCES

- Verbal
- Written
- Demonstration (model)
- Visual aids
- Family-centered
- Manipulatives

MEASURING PROGRESS

- Use terminology that reflects the clinician's technical knowledge.
- Indicate the rationale (how the service relates to functional goal), type, and complexity of activity.
- Report objective data showing progress toward goal
- Specify feedback provided to patient/caregiver about performance
- Elaborate on patient/caregiver education or training (e.g., trained spouse to present two-step instructions in the home and to provide feedback to this clinician on patient's performance).
- Evaluate patient's/caregiver's response to training (e.g., after demonstration of cuing techniques, caregiver was able to use similar cuing techniques on the next five stimuli).

JUSTIFICATION FOR SKILLED SERVICES

- Why the child/patient continues to require skilled services to address the goals provided.

  - Ex. Patient continues to exhibit impairments with recall and attention affecting cognition. Without continued skilled ST the patient will not be able to locate his room or dining room which places the patient at risk for anxiety, weight loss, and social isolation.
  - Ex. Continued skilled SLP is required to ensure progress of expressive and receptive language skills for moderately complex thoughts, ideas to improve quality of life.

PT/FAMILY EDUCATION

- Patient/Caregiver training and education should begin at the start of therapy and should not until the child/patient has been discharged from therapy.
- Documentation should be specific to the task and to the patient and caregiver(s) who were trained (CNA, LPN, Spouse, Parent, etc).
- Ex. Family, CNAs and nursing staff educated and return demonstration was observed, to use only yes/no questions when communicating with patient.

PT/FAMILY EDUCATION

- Modeling
- Home Program
- Return demonstration of compensatory strategies
- Care giver training and education
- Teach compensatory strategies, self-cueing techniques etc. and provide guidance and suggestions
- Ongoing preparation to patient and caregivers for discharge through education, training, and community resources

EDUCATION EXAMPLES

- Taught nursing verbal cues for chin tuck posture
- Explained need for thickened liquids to family members
- Instructed patient in safe transfer from wheelchair (lock breaks, push up from arms of wheelchair, accept weight on legs, complete turn using walker, reach back for bed, sit with ease)
- Taught patient use of sock aid
- Discussed rehab process with patient
- Educated patient concerning muscle wasting and the need to be out of bed on a daily basis

TREATMENT OUTCOMES

- Response to treatment
- Setback in a functional area and why
- Significant functional progress/gains/plateau
- Reasonable expectation for improvement

TREATMENT EVALUATION

BASELINE PERFORMANCE

- Starting point, current quantitative level/number, indicator of how much change to expect
- Clinicians must know where their patient started to create realistic and appropriate goals.
  - For example, if at baseline a patient is NPO with a PEG tube following a massive stroke, the first short term goal a clinician writes should not be expecting the patient to safely swallow a regular diet and thin liquids within the next few weeks.

BASELINE PERFORMANCE

- Look at your assessment results, yes the student has deficits, but what specific areas or subtests.
- Once you have specifics (i.e. phonological disorder) you can break it down a step further.
- What type? (i.e. backing, final consonant deletion)
- Now gather baseline, attempt some trials with the student (or count how many correct/incorrect on the test). Determine what level they can achieve right now, without any help or with help (just remember to note that in your baseline)
- What number or % did they achieve? (i.e. 2/10 trials or 20% accuracy, with /d/ in the initial position of words) That's your baseline!

COLLABORATION OR POSSIBLE REFERRALS

- Physician or neurologist
- Social worker
- Audiology
- AAC specialist
- OT/PT
- ENT
- Dietitian

DISCHARGE CRITERIA

- Patient has reached highest functional level of ability
- The patient's condition has stabilized. The skills of a therapist are no longer needed.
- Caregivers, family members, and support personnel have been trained to use communicative strategies and other approaches to improve or maintain skills, decrease the risk for decline, and/or decrease adverse behaviors while enhancing the person's quality of life.
- Patient is able to continue with a home management or maintenance program
- Patient's response/non-response to treatment justifies discharge
- Medical reasons dictate break from/or termination of sessions

SPEECH-LANGUAGE PATHOLOGY TREATMENTS

TREATMENT

- ***Design, implement, and document delivery of service in accordance with best available practice appropriate to the practice setting;***
- ***Provide culturally and linguistically appropriate services;***
- Integrate the highest quality available research evidence with practitioner expertise and individual preferences and values in establishing treatment goals;
- ***Utilize treatment data to guide decisions and determine effectiveness of services;***
- Integrate academic materials and goals into treatment;
- Deliver the appropriate frequency and intensity of treatment utilizing best available practice;
- ***Engage in treatment activities that are within the scope of the professional's competence;***
- Utilize AAC performance data to guide clinical decisions and determine the effectiveness of treatment; and
- ***Collaborate with other professionals in the delivery of services.***

SPEECH SOUND PRODUCTION

- Articulation Therapy

- Phonological Therapy

SPEECH SOUND PRODUCTION

UNDERLYING IMPAIRMENTS

- Articulation of sounds
- Ability to repeat
- Production of words
- Breath support
- Voicing

LIFE SKILL

- To be understood by others
- To be heard at meal time
- To communicate with family
- To communicate with peers
- To be able to yell for help
- To give a speech

FLUENCY TREATMENT

- Reducing the severity, duration, and abnormality of stuttering-like dysfluencies in multiple communication contexts
- Reducing avoidance behaviors
- Removing or reducing barriers that create, exacerbate, or maintain stuttering behaviors (e.g., parental reactions, listener reactions, client perceptions)
- Assisting the person who stutters to communicate in educational, vocational, and social situations in ways that optimize activity/participation
- Strategies associated with speech modification(rate control, prolonged syllables, easy onset, light articulatory contact)

VOICE

- Voice therapy
  - Modify vocal behaviors
  - Manipulating voice producing mechanism
- Medical intervention (surgery)
- Physiologic Voice Therapy
  - Expiratory Muscle Strength Training
  - Lee Silverman Voice Treatment
  - Stretch and Flow Phonation
- Symptomatic Voice Therapy
  - Chant Speech
  - Yawn sigh

LANGUAGE DISORDER TX ADULTS

- Auditory comprehension
- Naming
- Word finding
- Melodic Intonation Therapy
- Social skills
- Constraint-induced Therapy (CIT)
- Visual scanning techniques

LANGUAGE DISORDER TX CHILDREN

- Behavioral Interventions/Techniques
- Language Interventions
- Narrative Interventions
- Parent-Mediated/Implemented/Involvement
- Peer-Mediated/Implemented/Involvement
- Pragmatics/Social Communication/Discourse
- Relationship-Based Intervention
- Sensory-Based Interventions

LANGUAGE EXPRESSIVE

UNDERLYING IMPAIRMENTS

- Graphics/written material
- Voicing
- Pragmatics

LIFE SKILL

- Express pain or hunger
- Have a meaningful conversation
- To be appropriate with peers
- Write letters to family

LANGUAGE RECEPTIVE

UNDERLYING IMPAIRMENTS

- Aural rehab
- Reading comprehension
- Visual discrimination
- Auditory comprehension

LIFE SKILL

- To attend BINGO and full participate in activity
- Understand safety guidelines in order to prevent injury
- To read bills and understand charges

NEUROLOGICAL MOTOR SPEECH TREATMENT (Dysarthria, Apraxia)

- Improving the intelligibility of speech
- Improving accuracy, precision, timing, and coordination of articulation.
- Rate modification.
- Improving prosody and naturalness of speech.
- Including direct behavioral treatment techniques, use of prosthetics, or appropriate referral for medical-surgical or pharmacologic management.

COGNITIVE-LINGUISTIC TREATMENT

- Compensatory memory strategies
- Spaced retrieval
- Interventions: (information processing, problem solving, safety awareness, decision making, orientation, executive function, sequencing, attention, reasoning, organization)
- Visual manipulative tasks
- Home safety training
- Route finding

COGNITIVE LINGUISTIC SKILLS

UNDERLYING IMPAIRMENTS

- ATTENTION
- RECALL (ATM, IMM, DELAYED)
- SEQUENCING
- PROBLEM SOLVING
- SAFETY

LIFE SKILL

- TAKE MEDICATIONS CORRECTLY
- MANAGE CHECKING ACCOUNT
- PAY BILLS
- INCREASE SAFETY AWARENESS
- ATTEND MEALS AND ACTIVITIES
- RECALL MEDICATION SCHEDULE

SWALLOWING TREATMENT

- PO trials
- Swallow compensatory strategies
- Therapeutic meals
- Swallow maneuvers
- Instrumental swallow studies
- Oral motor exercise
- Pt/Caregiver education
- Counseling of caregivers and patient

SWALLOWING TREATMENT

UNDERLYING TREATMENT

- OM FUNCTIONING
- RESPIRATION
- BOLUS FORMATION
- COUGHING/CHOKING

LIFE SKILL

- INCREASE HYDRATION AND NUTRITION TO PREVENT WEIGHT LOSS
- ATTEND MEALS WITH FAMILY & COMMUNITY
- ENJOY MEALS
- PREVENT ASPIRATION
- TOLERATE A REGUALR MEAL WITH NO S/S ASPIRATION

AUDITORY HABILITATION/REHABILITATION TREATMENT

- Auditory training
- Visual cues
- Language development
- Hearing aid management
- Management of assistive listening devices

QUIZ TIME!!!!

What is the most likely diagnosis or conclusion based on these findings: Left Neglect, Pragmatic impairments, Impaired recognition of familiar faces, Lack of affect.

A. Dysphagia
B. Aphasia
C. Dysarthria
D. Right hemisphere syndrome

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If the student's primary language is not English, which is the best way to administer the tests?

A. Using only assessments normed for the student's native language.
B. First administering in Native Language, then in English.
C. First administering in English, then in the student's native language.
D. Using a family member to interpret the tests.

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A child with a chronological age of 3:1 was administered the Preschool Language Scale 4th Edition (PLS:5) to assess receptive and expressive language skills. The child received the following scores on this instrument:

Auditory Comprehension: Standard Score: 81

Expressive Language: Standard Score: 58

Where would treatment begin?

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B. Following commands with gestural cues

C. Demonstrating joint attention

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A. Modifications to the treatment goal

B. Dismiss from speech therapy

C. Refer

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ST engaged resident in oral motor exercises with and without resistance to increase lingual elevation, lingual lateralization, labial seal and buccal tone for 3 sets of 10 reps. ST engaged the patient in hyolaryngeal excursion, bolus manipulation, and trigger swallow initiation, thermal stimulation with cold swab to L faucial arches to help decrease swallow initiation time. Therapist assessed patient during PO trials of puree diet during NMES with skilled instructions for forming a bolus and using an effortful swallow without s/s of aspiration noted after swallow.

Based on the above treatment approaches, what is the ST targeting?

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A. targeting posterior sounds

B. targeting increased oral awareness

C. targeting use of nasal sounds

D. targeting marked sounds

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Alexis is a full time vocal performer. She notices a problem with her voice and schedules an appointment with the SLP. The SLP notices a structural when assessing with a pin light? What is the most appropriate next step?

A. Continue with speech therapy
B. Refer to the ENT
C. Recommend vocal rest
D. None of the above.

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- Pt. able to identify 5/10 pictures of common nouns, 4/10 of verbs. He is able to follow only 2 step verbal commands and can take 3 turns in a conversation on one topic. Immediate memory 5/5, STM 4/5, LTM 5/5. Answered yes/no questions 10/10, wh- questions related to family relationships 7/10. General information provided 5/10 trials, able to put pictures into categories 7/10 and name 3 items in a category in 60 seconds. Sequenced 2 items 3/3, 3 item 1/3 and 4 items 0/3. Poor problem solving skills for safety situations. He presents with decreased intelligibility (75%), decreased intensity and poor breath support. He is only able to produce 4 syllables in one breath group. Plan is for patient to return home with spouse following skilled therapy. Wife will assist patient at whatever level we are able to attain in therapy. Pt.'s cognition will allow for participation in plan of care. Skilled therapy needed to decreased impact of communication deficits for return home.

Pt. has poor lip seal allowing bolus to spill from lips. Following oral swallow significant amounts of stasis remain in oral cavity (on tongue, under tongue and in bilateral sulci). MBSS indicates residue on posterior pharyngeal wall, decreased laryngeal elevation and residue in vallecula and pryiform sinus. No aspiration noted. Pt. was on regular diet with good nutrition at ALF and will return to ALF following treatment if she is able to return to baseline diet. Her cognition will allow for participation in this plan of care. Currently recommend pureed diet. ST recommended to rehab dysphagia to for return to AL.

Questions?