

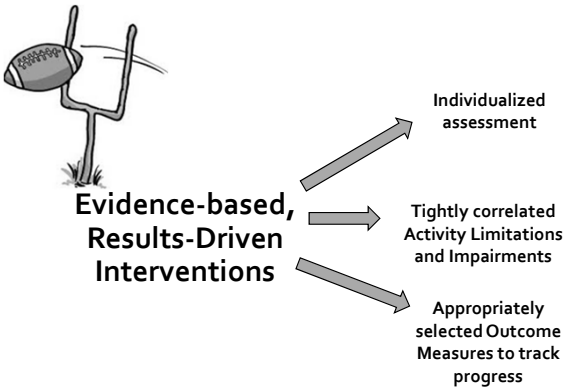
TOOLS TO IMPROVE CLINICAL REASONING FOR ASSESSMENT & TREATMENT

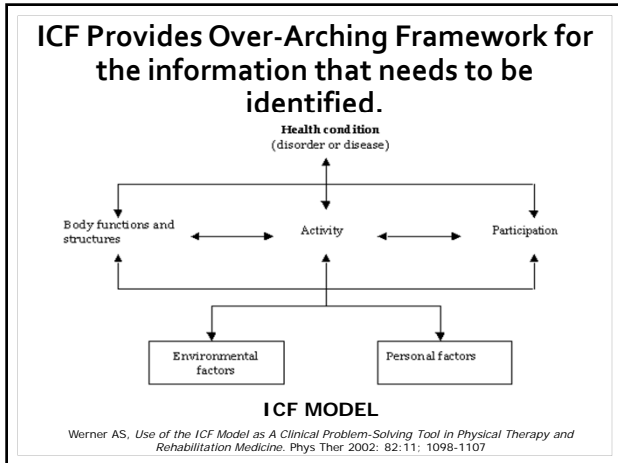
Presented By:
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Spring Conference 2018

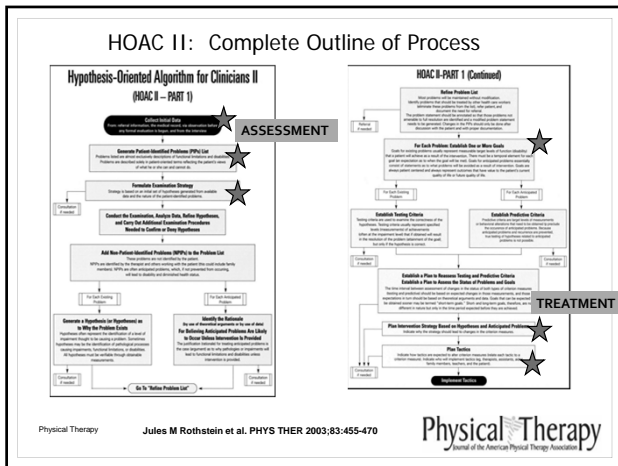
OBJECTIVES:

Following completion of this session, the learner will be able to:

1. Define a hypothesis-driven approach to assessment and treatment and identify how it aligns to the ICF Model.
2. Describe the process for utilizing the hypothesis-driven assessment form for assessment planning.
3. Describe the process for utilizing a progression framework to guide management from assessment through goal achievement.
4. State methods to implement these tools within a clinical experience in any clinical setting.







WHY WHY WHY WHY WHY WHY WHY WHY

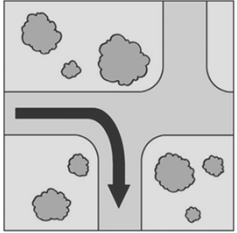
- Standardized examination forms do not direct the student to individualize the gathered information
- Standardized examination forms generate information, promote information gathering but do not guide the student to answer the question "why", failing to bring in the clinical reasoning skills needed for a thorough examination
- Synthesis of examination produces a final result that is individualized and goal-driven
- Typical language used in standardized examination forms is NOT indicative of skilled intervention

Set-Up of Typical Examination Form

GATHER INFORMATION	→ Questions about home, work Questions about support at home What medications Cognition Reflexes Cranial Nerves ROM MMT
LOOK AT FUNCTION	→ Watch them bend forward/turn Look at squat Gait (device, how much assistance, how far do they walk) Transfers (strategy, how much assistance) Wheelchair propulsion Bed mobility Observe reaching into cabinet/overhead throw
SET UP TREATMENT	→ Typical PRE's (3 sets of 10) Stretching Practice function Use equipment (bike, treadmill, NuStep) Manual therapy

WHY DO IT DIFFERENTLY?

Use of this examination form:



Succinct, targeted approach to determining what is limiting the patient across Participation, Activity Limitations and Impairment ICF categories

Can't lift arm overhead	Strength Motor Control Edema	Right Scap stabilizers Timing of prox stability before open chain humeral motion localized acute inflammation of bicipital tendon
Min assist gait 25 feet	dec. ROM dec. Strength	Limited ankle DF Bil. Tight hip flexors Bil. lack of activation of hip ext in closed chain tasks

Gathering Information

Not specific enough to drive treatment or show skill

Links limiting impairment directly to goal of episode of care. Shows skill and is individualized.

OVERVIEW OF ASSESSMENT FORM:

SECTIONS:

- Preliminary Hypothesis: Expected Impairments, Activity Limitations, Medications
- Subjective Questions
- Screens
- Examinations
- Functional Tasks
- Outcome Measures
- Education Needs
- Role of PT for this Patient

Systems to Consider for Screen or Examination

- Cardiovascular/pulmonary/aerobic capacity
- Endocrine
- Cranial Nerves
- GI/Urinary/Reproductive
- Integumentary/circulation
- Balance
- Gait
- Joint integrity
- Cognition
- Motor function
- Pain
- Sensory
- Muscle performance
- Coordination
- Posture
- Range of motion
- Reflexes
- Skeletal integrity

SUGGESTIONS FOR IMPLEMENTATION:

CONSISTENCY! Expert clinicians are developed through "habit of the mind" and "pattern recognition". Encourage this process with your students.

PREPARE! The student should prepare ahead of time with the information they do have and then use this form when gathering more information from the chart.

THE "NEW" FLOWSHEET

The key to getting the patient from point A (current status) to achievement of the goal (point B) needs to be strategically developed through prioritization and progression which matches what we know about motor learning and motor control.



MAIN IMPAIRMENT	BEGINNING STATUS	Progress Intervention	Progression Intervention
Asymmetrical Trunk Firing (right>left) Hability to recruit cervical flexors and trunk flexors	Max assist supine to sit from flat surface, malleable	decrease deep core activation to achieve stabilization in pelvic neutral	Flexibility deep cervical flexor recruitment needed for initiation of supine to sit
	↑ STARTING POINT ↓	<ul style="list-style-type: none"> Transverse abdominis activation in prone neutral with chin and leg movement Pelvic neutral with transverse abdominis activation with manual touching system and chin lock Posterior neck with transverse abdominis activation Other pelvic-neutral with transverse abdominis activation with VC and FFC Pre-thoracic abdominis with manual VC and FFC 	<ul style="list-style-type: none"> Chin Lock with manual trunk flexion walking on resistance Chin Lock with manual head protrusion and chin lock Chin Lock with manual VC and FFC Substituted chin lock in sitting with manual VC and FFC Chin Lock with manual VC and FFC

TOP ROW: The focus of the treatment Follows principles of tissue healing, proximal stability before distal mobility, MC/ML and Align-Activate-Rehabilitate

BOTTOM ROW: The treatments which will meet the goals of the focus of the intervention.

Uses a 2-up/ 2-down approach (always ready to progress or modify)

From Left to Right progresses to look more and more like the goal.

SUGGESTIONS FOR IMPLEMENTATION:

CONSISTENCY! Have students prepare this as homework for their patients. This is the treatment plan and allows for progression within a session.

PREPARE! The student should prepare ahead of time. This will force them to come in with a treatment plan beyond a list of things to do.... It is a true plan, based in knowledge of pathology, MC/ML and exercise principles.



Resources:

Thoomes EJ and Schmitt MS. Practical Use of the HOAC II for Clinical Decision Making and Subsequent Therapeutic Interventions in an Elite Athlete with Low Back Pain. *Journal of Orthopedic & Sports Physical Therapy*. 2011;41:2 108-118

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Jensen GM, Nordstrom T, Segal RL, McCallum C, Graham C, Greenfield B. Education research in physical therapy: visions of the possible. *Physical therapy*. 2016; 96(12):1874-84.

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