# Madigan Healthcare System
# Traumatic Brain Injury Program


# Overview of Assessment and Management of mTBI and Co-occurring Disorders:

## A Large TBI Program's Multispecialty Team Approach to Care

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# Brain Injury and Behavioral Outcome

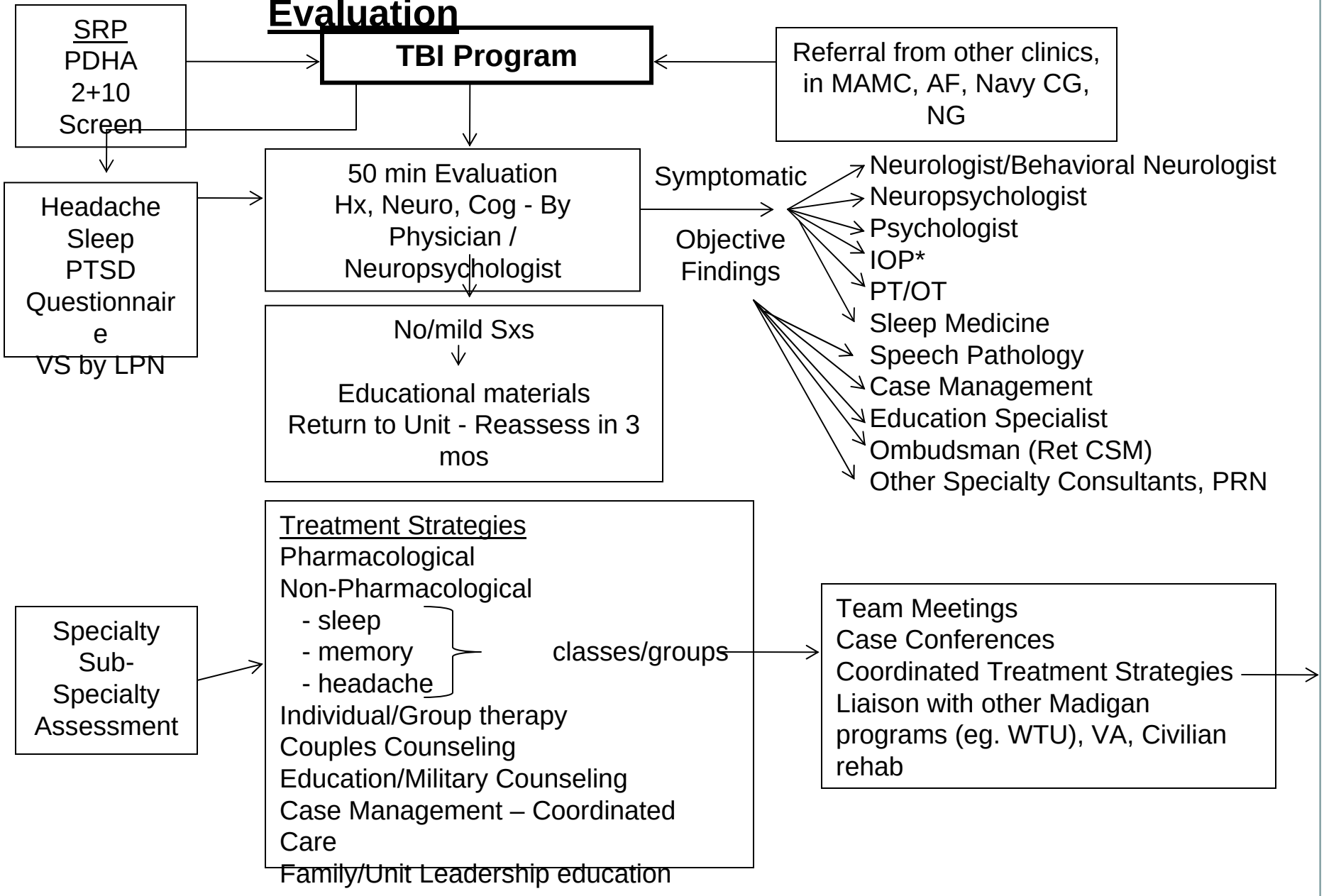
**Everyone has but one brain. Among its many functions, is that it is also the organ of behavior. Each person's brain is uniquely different, based on their genetics, age, and all of their life's experiences, including previous injury or illness. Therefore, the net outcome of similar mild traumatic brain injuries to different people often results in distinct symptom presentations, response to treatment, recovery course, presence or absence of persistent symptoms, and functional abilities of each of the individuals affected. Each individual's investment in their own health contributes greatly to the outcome of care. This is why approach to treatment must be individualized. When there are co-occurring medical and psychological conditions, recovery is often protracted. This underscores the challenges of caring for Service Members with a mTBI and co-occurring conditions. There is no "one size fits all" approach to treatment and management of these patients.**

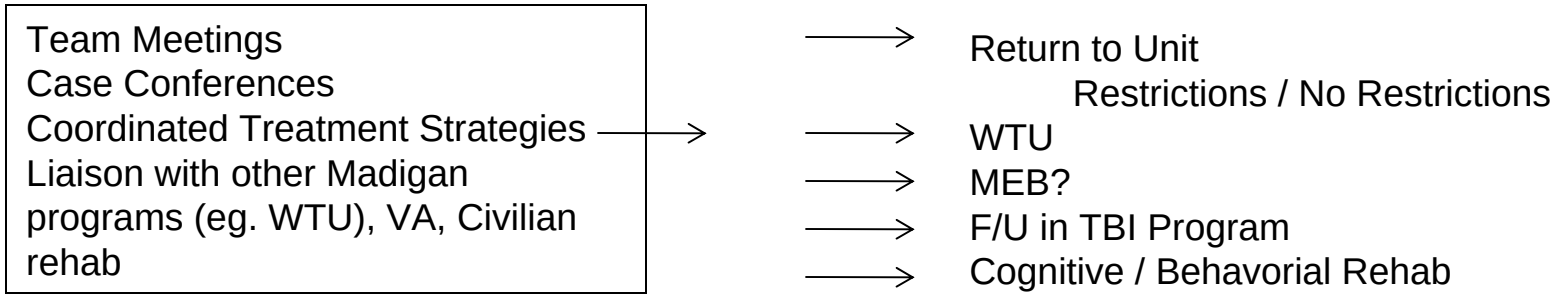
Flynn, FG 2011

# Madigan TBI Program Staff

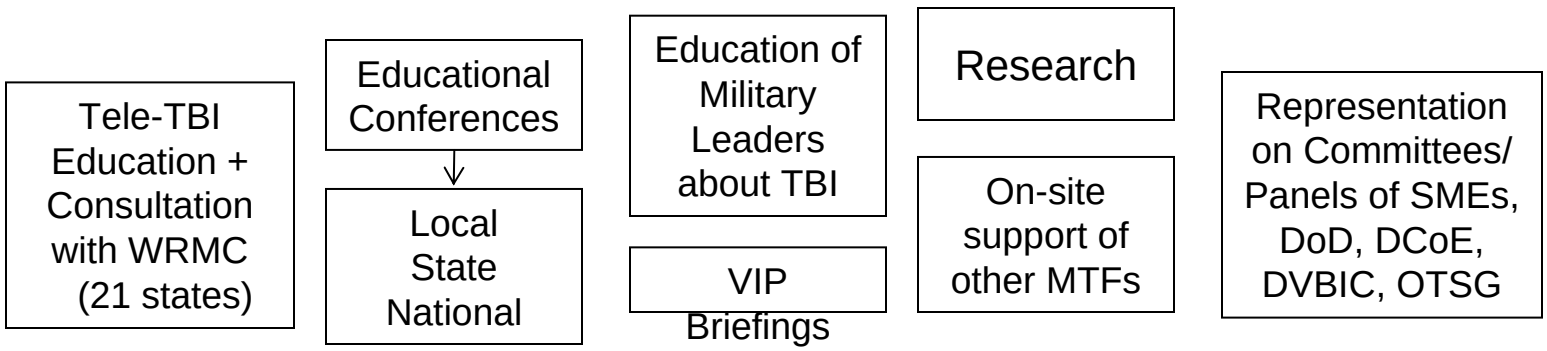
- Program Director/Behavioral-Neurologist
- TBI Program Administrative Officer
- Primary Care Providers (4)
- Neurologists (2)
- Neuropsychologists (2) Neuropsychometrist (1)
- Clinical Psychologists (2)
- Clinic LPN
- OT/PT/Speech Pathologists (1 each)
- TBI Case Managers ( 3 RNs)
- Education Specialist (1) and RN Educators (2)
- Ombudsman
- Admin Medical Assistants (4)
- Tele-TBI Team (PM, Technical Specialists (2), and RNs (2))

# Post-Deployment Screening and Evaluation






## Other Activities of the TBI Program



# Persistent Post-Concussive Symptoms

## Consider:

Multiple concussions

Chronic pain  Acute/chronic stress

Undiagnosed medical condition  Post-traumatic stress

Depression  Anxiety

Substance/alcohol abuse  Medication misuse

Job change/unemployment  Financial problems

Marital discord/family stressors  Spiritual loss

Impending combat deployment  Secondary gain

Somatoform disorder  Personality disorder

Unmasking a pre-morbid psychiatric condition

# Case History

- 36 yo RHM AD 1SGT decorated combat infantryman. Hx of 3 concussions (2 LOC 5-10 min) during 3 deployments 2004-2008. Volunteered for 4th deployment 2009-no concussions
- Headaches, memory/concentration and sleep problems, chronic shoulder pain. Multiple previous med trials without success
- Previously denied any Behavioral Health prob. Now endorses highest scores possible on sleep, headache, PTSD, and depression scales
- Neuro exam: “give way” weakness; midline split vibratory
- NP test: non-valid; best performance on most difficult tests; 7.5 SD below mod-severe TBI patients; TOMM: 37, 46, 46; PAI: endorsed multiple somatic complaints; depressed and anxious
- Multispecialty approach to care – revealed “I’d rather be back in Iraq”
- Discovered significant marital/family problems
- Receiving marital counseling and Behavior Health therapy

# Treatment Philosophy
# First Step: Education of the SM

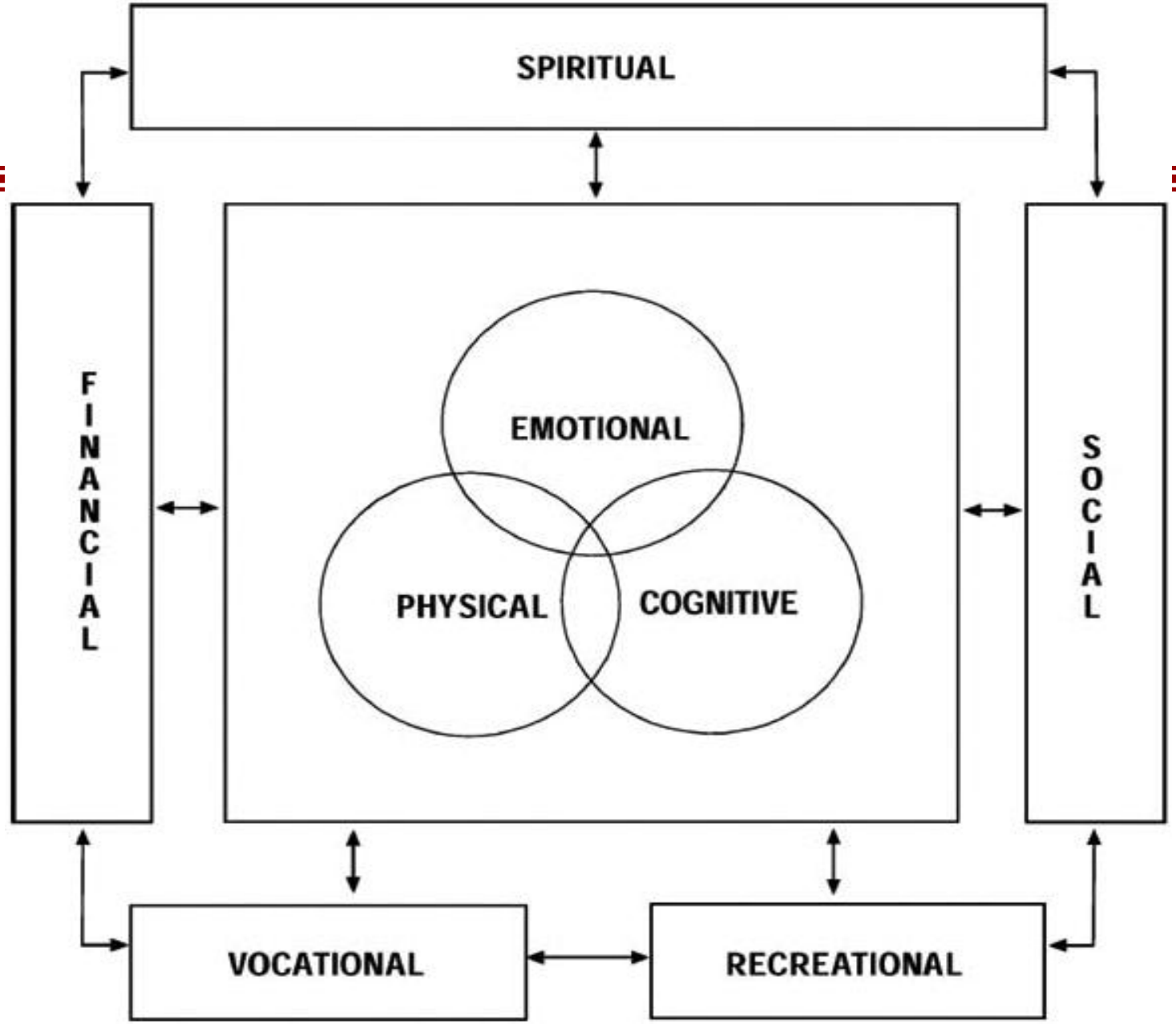
- Validate the injury
- “mild TBI” is a clinical definition and not a judgment of their distress
- Despite history of mTBI, symptoms may have a different etiology
- Expectation of recovery
- Response to treatment and time of recovery varies
- Stress importance of spouse/family/unit support in successful treatment

# Treatment Philosophy

- Follow general management guidelines of VA/DOD
- Treat the whole person not just a isolated symptom
- Medication may result in effective treatment of one or more symptoms or it may cause new problems
- Utilize non-pharmacological therapies as indicated
- Group classes: headache, sleep, cognition
- Multispecialty team work
- Observations:
  - Lack of effort and failure on validity measures on Neuropsychological testing may be more of a cry for help than malingering
  - Extreme scores on symptom questionnaires and/or high somatization scores on personality inventories are being seen more frequently among SMs who have significant Behavioral Health issues but whose symptoms have been misattributed to mTBI

# Lessons Learned in the Madigan TBI Program

A multispecialty TBI program under one roof provides time for the Soldier, detailed evaluation, on the spot consultation with a variety of specialists, coordination of care, case management, education, continuity of care, selection of patients who would best benefit from referral for rehab, and communication with other providers, unit leadership, and administration

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