Consider behavioral component (e.g., sleep or a mood disorder)

Person diagnosed with concussion/mTBI and persistent functional status improved? Yes

TABLE C-1    Psychosocial Evaluation

- Unemployment or change in job status
- Substance use disorder
- Co-occurring conditions (chronic pain, mood disorder, stress disorder, personality disorder)
- Sleep disturbance
- Secondary gain issues (compensation, litigation)
- Unemployment or change in job status
- Manage comorbidity according to VA/DoD practice guideline for behavioral health conditions

Person diagnosed with concussion/mTBI and persistent functional status improved? No

TABLE A-3

- Headaches
- Fainting
- Sensitivity to light or sound
- Nausea and/or vomiting
- Dizziness
- Seizures
- Poor coordination
- Weakness or numbness in arms/legs
- Unsteady on feet
- Difficulty speaking
- Confused, irritable, or other unusual behavior
- Functional status limitations
- Problems with concentration
- Problems with memory
- Fatigue
- Loss of energy
- Feeling tired easily
- Cognitive difficulties
- Concentration
- Memory
- Decision making
- Feeling anxious
- Feelings of tension or unease
- Emotional difficulties
- Feelings depressed
- Irritability
- Post-traumatic stress

Consider referral to occupational/vocational therapy and community integration programs

TABLE A-2

- Head injury vs. being struck by object or fall
- Underlying acceleration/deceleration movement (e.g., motor vehicle accident)

TABLE A-1

- Current altered consciousness
- Progressively declining neurological exam
- Pupil asymmetry
- Seizures
- Unsteady on feet
- Repeated vomiting
- Double vision

TABLE A-4    Classification of TBI Severity

- Normal
- Moderate
- Severe

TABLE A-5    Post-Concussion Symptoms

- Headaches
- Fainting
- Sensitivity to light or sound
- Nausea and/or vomiting
- Dizziness
- Seizures
- Poor coordination
- Weakness or numbness in arms/legs
- Unsteady on feet
- Difficulty speaking
- Confused, irritable, or other unusual behavior
- Functional status limitations

* In common with Post Concussive Syndrome (PCS)
TABLE B-1: Assessment - Physical Symptoms

<table>
<thead>
<tr>
<th>Symptoms*</th>
<th>Mode of Review</th>
<th>Access Difficulty</th>
<th>Physical Examinations</th>
<th>Sleep Review</th>
<th>Differential Diagnoses</th>
</tr>
</thead>
</table>
| Headaches | ✓              | ✓                 | ✓                    | ✓           | Pre-existing headache disorder; Intrinsic brain disorder; Migraines; Epileptic attacks; Or referred pain from neck/shoulder/upper back; OFP or pain/pressure over temporal areas (new pain)
| Nausea    | ✓              | ✓                 | ✓                    | ✓           | Inner ear infection; Migraines; Drug side effects; Medication effect
| Change in appetite | ✓ | ✓ | ✓ | ✓ | Gastroenteritis; Alcohol or drug effects; Medication effect
| Sleep disturbance | ✓ | ✓ | ✓ | ✓ | Obstructive sleep apnea; Restless leg syndrome; Insomnia; Narcolepsy; Pre-existing sleep disorder; Caffeine, alcohol, or sedative withdrawal
| Vision problems | ✓ | ✓ | ✓ | ✓ | Binocular vision abnormalities; Ocular motility disorders; Elevated intraocular pressure; Cataracts; Macular degeneration; Pre-existing or undiagnosed eye disorder
| Hearing difficulty | ✓ | ✓ | ✓ | ✓ | Sensorineural hearing loss; Otosclerosis; Conductive hearing loss; Meniere’s disease; Otosclerosis; Inner ear infection; Pre-existing hearing disorder

* ✓ indicates more than 2 or 3 symptom clusters following concussion/mTBI

TABLE B-2: Assessment - Behavioral and Cognitive Symptoms

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Evaluation</th>
<th>Differential Diagnoses</th>
</tr>
</thead>
</table>
| Fatigue  | Review Medications | Anorexia nervosa; Chronic Fatigue Syndrome; Caffeine withdrawal; Sleep apnea
|          | Lab Tests: Electrolytes; CBC; TSH | Adrenal disorders; Caffeine withdrawal; Chronic fatigue syndrome; Thyroid disorders
|          | Review Sleep Habits, Sleep Diary, Sleep Scales: PSQI; SIS | Sleep disorders; Sleep apnea; Sleep apnea
|          | Job Review | Adrenal disorders; Poor sleep hygiene; Substance use disorder

TABLE B-3: Assessment - Symptom Attributes

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Pharmacologic Treatment</th>
<th>Non-Pharmacologic Treatment</th>
<th>Referral after failed response to initial intervention</th>
</tr>
</thead>
</table>
| Headaches | --                      | ---                        | Primary care physician/Neurolo
| Nausea   | --                      | ---                        | General or Family practitioner
| Change in appetite | -- | -- | General or Family practitioner
| Sleep disturbance | -- | -- | General or Family practitioner
| Vision problems | -- | -- | General or Family practitioner
| Hearing difficulty | -- | -- | General or Family practitioner

TABLE B-4: Management - Physical Symptoms

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Non-Pharmacologic Management</th>
<th>Pharmacologic Management</th>
</tr>
</thead>
</table>
| Headaches | Non-narcotic pain meds | NSAIDs
| Nausea   | Antiemetics
| Change in appetite | GI medications |
| Sleep disturbance | Sleep medications |
| Vision problems | Light desensitization |
| Hearing difficulty | Environmental modifications |

TABLE B-5: Management - Behavioral and Cognitive Symptoms

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Pharmacologic Treatment</th>
<th>Non-Pharmacologic Treatment</th>
<th>Referral after failed response to initial intervention</th>
</tr>
</thead>
</table>
| Fatigue  | --                      | ---                        | Primary care physician/Neurolo
| Cognitiv | SEDS | Cognitiv |
| Emotional | -- | -- | Social support

TABLE B-6: Components of Patient Education

- Prevention of information about concussion/mTBI
- Strategies for prevention of further injury
- Education/normalization
- Awareness of limitations
- Self-monitoring of symptoms
- Contact information

TABLE B-7: Early Intervention

- Provide information and education on symptoms and recovery
- Educate about prevention of further injuries
- Reassure on positive recovery expectation
- Empower patient for self management
- Provide sleep hygiene education
- Teach relaxation techniques
- Recommend limiting use of caffeine/alcohol/calorie
- Recommend graded exercise with close monitoring
- Encourage monitored progressive return to normal duty/work/activity

TABLE B-8: Case Management

Assign case manager to:
- Follow-up and coordinate future appointments
- Address psychosocial issues (financial, family, housing or schoolwork)
- Connect to available resources

ACRONYMS

BCR - Brain Contusion Registry
CBB - Central Blood Bank
CST - Cerebrospinal Fluid
ED - Emergency Department
EMG - Electromyogram
EDS - Epilepsy Drug Syndrome
ESRD - End-Stage Renal Disease
G - Gastritis
HTN - Hypertension
I/C - Mental Status Exam
mTBI - Mild Traumatic Brain Injury
NSAIDs - Non-steroidal Anti-inflammatory Drugs
PTSD - Post-Traumatic Stress Disorder
SUD - Substance Use Disorder
TBI - Traumatic Brain Injury
Trypsin

Referral after failed response to initial intervention