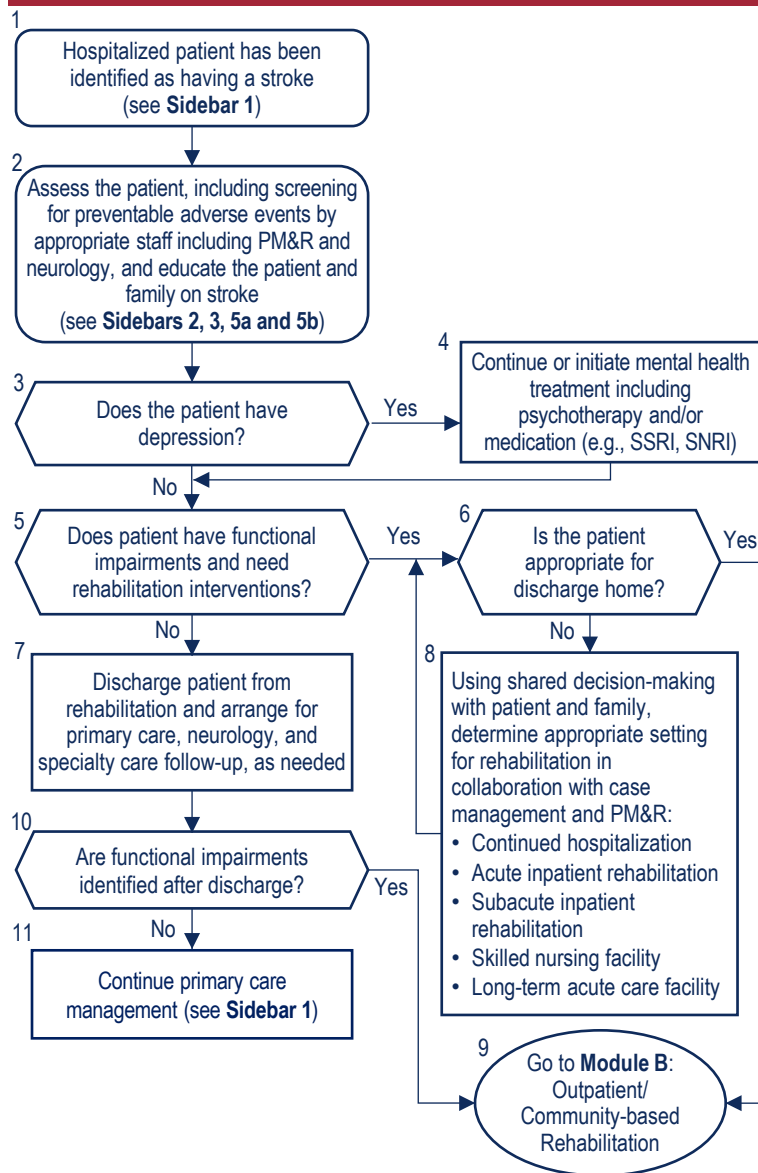




VA/DoD Evidence-Based Practice



**Sidebar 1: Essential Guidelines for the Medical Management of Stroke**

- 2019 Update to the 2018 AHA/ASA Guidelines for the Early Management of Patients with Acute Ischemic Stroke
- 2021 AHA/ASA Guidelines for the Prevention of Stroke in Patients with Stroke and Transient Ischemic Attack
- 2022 AHA/ASA Guidelines for the Management of Spontaneous Intracerebral Hemorrhage

**Sidebar 2: Assessment of Impairments and Disabilities**

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|--|---|
| <p><b>Assessment of impairments</b></p> <ul style="list-style-type: none"> <li>• Auditory/hearing</li> <li>• Bowel and bladder</li> <li>• Cognition</li> <li>• Communication</li> <li>• Emotion tolerance/aerobic capacity</li> <li>• Inattention/neglect</li> <li>• Motor/mobility/balance</li> <li>• Swallowing and nutrition</li> <li>• Tactile/touch/somatosensory</li> <li>• Vision and formal visual fields</li> <li>• Vestibular</li> </ul> | <p><b>Assessment of barriers to participation in therapy</b></p> <ul style="list-style-type: none"> <li>• Cognitive impairment</li> <li>• Communication impairment</li> <li>• Fatigue and sleep</li> <li>• Medical conditions</li> <li>• Mental health (e.g., depression)</li> <li>• Motivation</li> <li>• Pain</li> <li>• Social determinants of health (e.g., financial, employment, transportation)</li> </ul> |
| <p><b>Assessment of support system</b></p> <ul style="list-style-type: none"> <li>• Family, caregivers, community</li> <li>• Military leadership/structure, if applicable</li> </ul>   | <p><b>Assessment of activity and function</b></p> <ul style="list-style-type: none"> <li>• ADLs (e.g., feeding, dressing, grooming) and IADLs (e.g., finances, shopping)</li> <li>• Driving</li> <li>• Meaningful roles (e.g., parent, spouse)</li> <li>• Return to work/duty or school</li> <li>• Sexual function and intimacy</li> </ul>  |

**Sidebar 4: Considerations for Outpatient/Community-based Rehabilitation Services**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Current functional status and endurance level</li> <li>• Family and caregiver support</li> <li>• Home assessment for safety</li> </ul> | <ul style="list-style-type: none"> <li>• Motivation and preferences</li> <li>• Necessary equipment</li> <li>• Resources, availability, and eligibility</li> <li>• Transportation</li> </ul> |
|---|---|

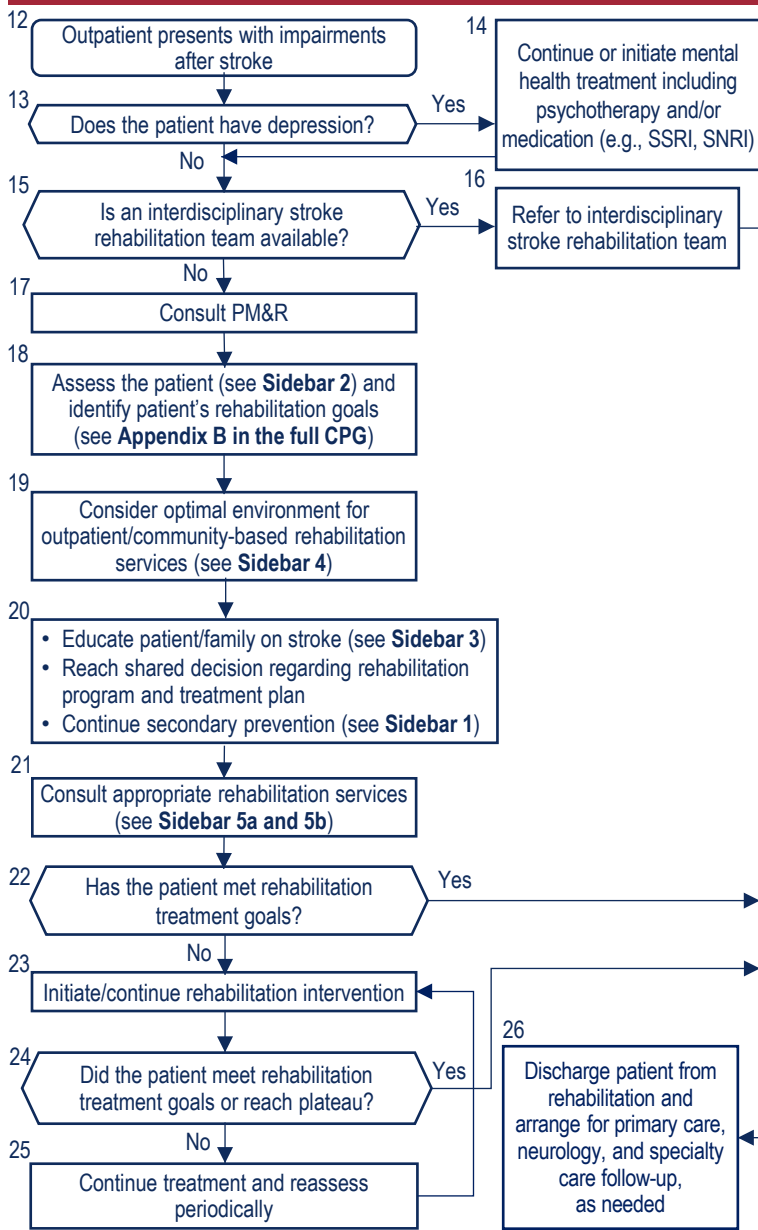
**Sidebar 3: Stroke Education Topics**

- Stroke signs and symptoms – BE FAST**
- Balance – Sudden difficulty with balance or coordination, dizziness, vertigo
  - Eyes – Sudden blurred, double, or loss of vision in one or both eyes
  - Face – Sudden facial droop/weakness on one side of the face
  - Arm – Sudden weakness in one arm
  - Speech – Slurred speech, unable to speak, or difficulty understanding speech
  - Time – If any of these symptoms occur, call 911. Time is critical for stroke.
- Common causes of stroke**
- Ischemic stroke (80-90% of all strokes)
    - ◆ Heart conditions, such as atrial fibrillation
    - ◆ Atherosclerosis of the large arteries in the neck and brain
    - ◆ Small vessel disease
    - ◆ ~30% of ischemic strokes are not found to have a clear cause (cryptogenic)
  - Hemorrhagic stroke (10-20% of all strokes)
    - ◆ High blood pressure (hypertension)
    - ◆ Vascular malformations (aneurysm, cavernous malformation, fistula)
    - ◆ Amyloid angiopathy
- |   |   |
|---|---|
| <p><b>Risk factors for stroke</b></p> <ul style="list-style-type: none"> <li>• High blood pressure (hypertension)</li> <li>• High blood sugar (diabetes mellitus)</li> <li>• High cholesterol (hyperlipidemia)</li> <li>• Heart conditions (atrial fibrillation, heart failure)</li> <li>• Tobacco/nicotine (smoking, vaping, chewing)</li> <li>• History of previous stroke</li> <li>• Age, ethnicity, gender/sex, race, socioeconomic status</li> </ul> | <p><b>Other Topics</b></p> <ul style="list-style-type: none"> <li>• Nutrition</li> <li>• Physical activity and falls prevention</li> <li>• Continuum of care options/follow-up after discharge</li> <li>• Inpatient rehabilitation</li> <li>• Outpatient rehabilitation</li> <li>• Therapy at home</li> <li>• Adjustment and coping after stroke</li> <li>• Primary care follow-up</li> </ul> |
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Abbreviations: AHA: American Heart Association; ASA: American Stroke Association; ADLs: activities of daily living; IADLs: instrumental activities of daily living



**Module B: Outpatient/Community-Based Rehabilitation**



Sidebar 5a: Resources for Management of Post-Stroke Impairments/Needs*	
Consultants/Referrals	Impairment/Need
Behavioral and mental health	<ul style="list-style-type: none"> <li>• Adjustment and coping</li> <li>• Behavioral smoking cessation</li> <li>• Cognition</li> <li>• Emotion and behavior</li> <li>• Family/caregiver support</li> <li>• Pain</li> <li>• Sexual function and intimacy</li> </ul>
Case management (social work and/or nursing)	<ul style="list-style-type: none"> <li>• Community resources</li> <li>• Emotion and behavior</li> <li>• Family/caregiver support</li> <li>• Financial resources</li> <li>• Risk for abuse/neglect (e.g., emotional, financial exploitation, or physical)</li> </ul>
Dietetics	<ul style="list-style-type: none"> <li>• Healthy eating and nutritional needs</li> </ul>
Neurology	<ul style="list-style-type: none"> <li>• Medication management</li> <li>• Optimization of secondary stroke prevention</li> <li>• Spasticity (medical management)</li> </ul>
Nursing	<ul style="list-style-type: none"> <li>• Bowel and bladder function</li> <li>• Medication administration</li> <li>• Patient and family education</li> <li>• Self-management skills, ADLs, IADLs</li> <li>• Skin care</li> </ul>
Occupational therapy	<ul style="list-style-type: none"> <li>• Cognition</li> <li>• Driving</li> <li>• Durable medical equipment recommendations</li> <li>• Home safety</li> <li>• Self-management skills, ADLs, IADLs</li> <li>• Sexual function and intimacy</li> <li>• Spasticity</li> <li>• Strength</li> <li>• Vision/vision perception</li> </ul>
Ophthalmology	<ul style="list-style-type: none"> <li>• Eye care</li> <li>• Strabismus assessment and procedures</li> </ul>
Optometry/visual rehabilitation	<ul style="list-style-type: none"> <li>• Eye care</li> <li>• Functional eye exam</li> <li>• Non-operative strabismus management</li> <li>• Strabismus assessment and procedures</li> <li>• Visual field cut/blind spot/scotoma</li> </ul>

Sidebar 5a: Resources for Management of Post-Stroke Impairments/Needs* (cont.)	
Consultants/Referrals	Impairment/Need
Physical Medicine and Rehabilitation (e.g., physiatry)	<ul style="list-style-type: none"> <li>• Medication administration</li> <li>• Pain (medical management)</li> <li>• Prevention of post-stroke complications</li> <li>• Rehabilitation management, oversight, and direction including assistance with return to work/duty or school</li> <li>• Sexual function and intimacy</li> <li>• Spasticity (medical management)</li> </ul>
Physical therapy	<ul style="list-style-type: none"> <li>• Balance disorders and dizziness</li> <li>• Durable medical equipment recommendations</li> <li>• Exercise recommendations/aerobic reconditioning</li> <li>• Home safety</li> <li>• Motor/mobility problems</li> <li>• Pain</li> <li>• Sexual function and intimacy</li> <li>• Spasticity</li> <li>• Strength</li> <li>• Self-management skills, ADLs, IADLs</li> </ul>
Primary care	<ul style="list-style-type: none"> <li>• Management of common stroke risk factors</li> <li>• Hypertension</li> <li>• Diabetes mellitus</li> <li>• Hyperlipidemia</li> <li>• Tobacco use</li> <li>• Medication management</li> <li>• Management of comorbidities</li> </ul>
Recreation therapy	<ul style="list-style-type: none"> <li>• Adaptive sports</li> <li>• Community re-entry</li> <li>• Functional cognition</li> <li>• Leisure/recreation participation</li> <li>• Self-management skills, ADLs, IADLs</li> </ul>
Speech-language pathology	<ul style="list-style-type: none"> <li>• Cognition</li> <li>• Communication</li> <li>• Self-management skills, ADLs, IADLs</li> <li>• Swallowing</li> </ul>
Vocational rehabilitation	<ul style="list-style-type: none"> <li>• Return to work/duty or school</li> </ul>

\*Some impairments/needs may have multiple consultants/referrals depending on various factors (e.g., severity).  
 Abbreviations: ADLs: activities of daily living; IADLs: instrumental activities of daily living