2024 VA/DoD Clinical Practice Guideline: Management of Stroke Rehabilitation

The Clinical Decision Playbook & Point-of-Care Reference

Distilled evidence-based algorithms and recommendation matrices for VA, DoD, and community healthcare providers. Version 5.0.

800,000

Annual U.S. strokes.
75% are first-time occurrences.
A stroke-related death occurs every 3 minutes and 17 seconds.

10,000+

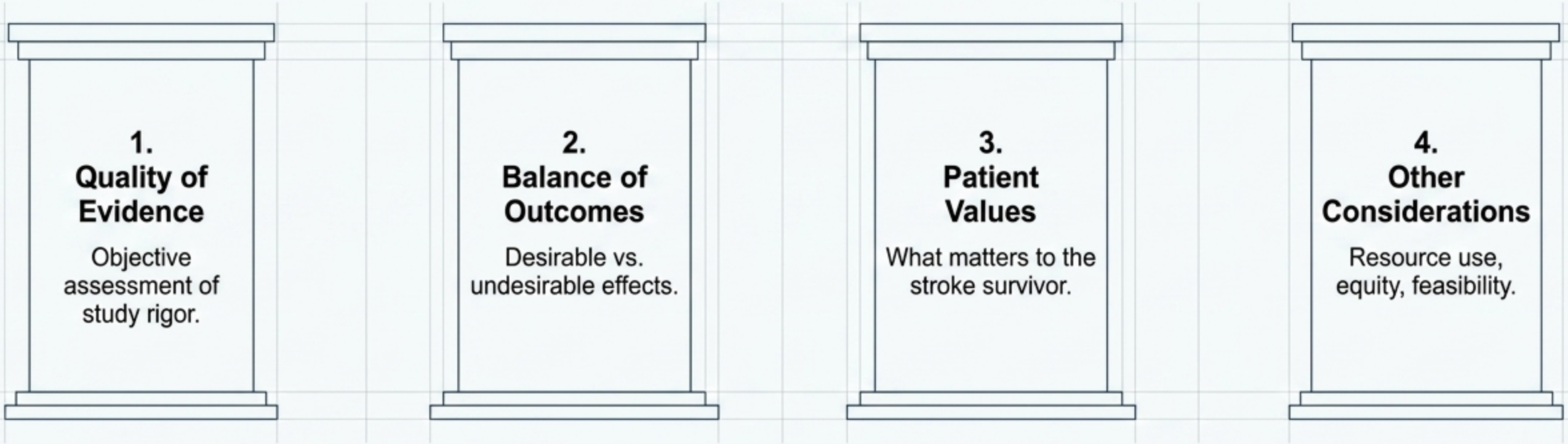
Veterans hospitalized for stroke-related diagnoses in the VHA annually.
Driving over $250 million in annual VA management costs and leading to significant long-term mobility deficits.

40%

Of ischemic strokes in young adults (18-45) are cryptogenic (unknown etiology).
In the active-duty military demographic, residual deficits and recurrence directly impact impact mission objectives, deployability, and disability ratings.

The 2024 CPG Methodology: The GRADE Approach

The 4 Pillars of Recommendation Scoring



The Evidence Slider (Visual Legend)

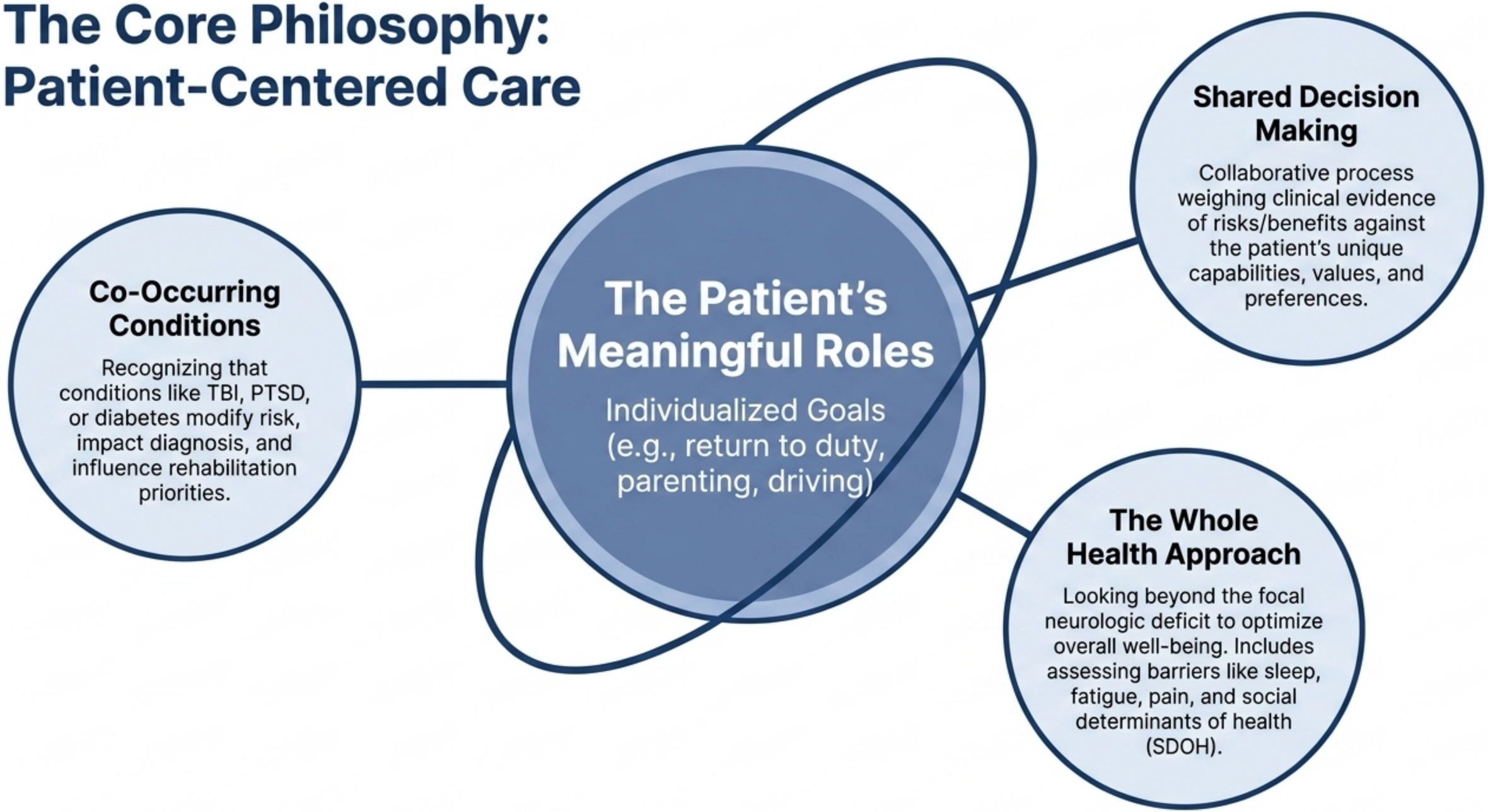
"We recommend..."
High confidence that benefits strongly outweigh risks.

"We suggest..."
Benefits likely outweigh risks, but evidence is lower quality or highly dependent on patient preference.

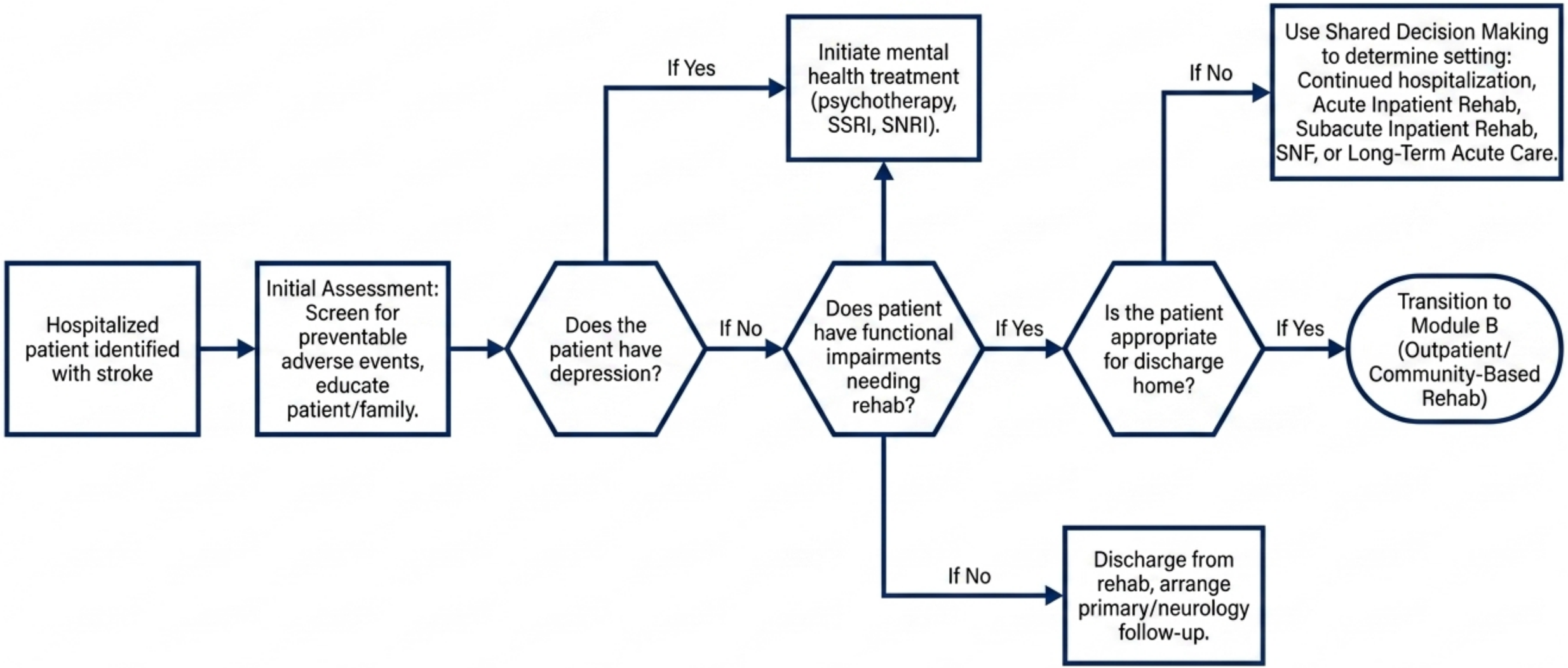
"Neither for nor against..."
Evidence is lacking, inconclusive, or conflicting.

"We suggest/recommend against..."
Risks outweigh benefits.

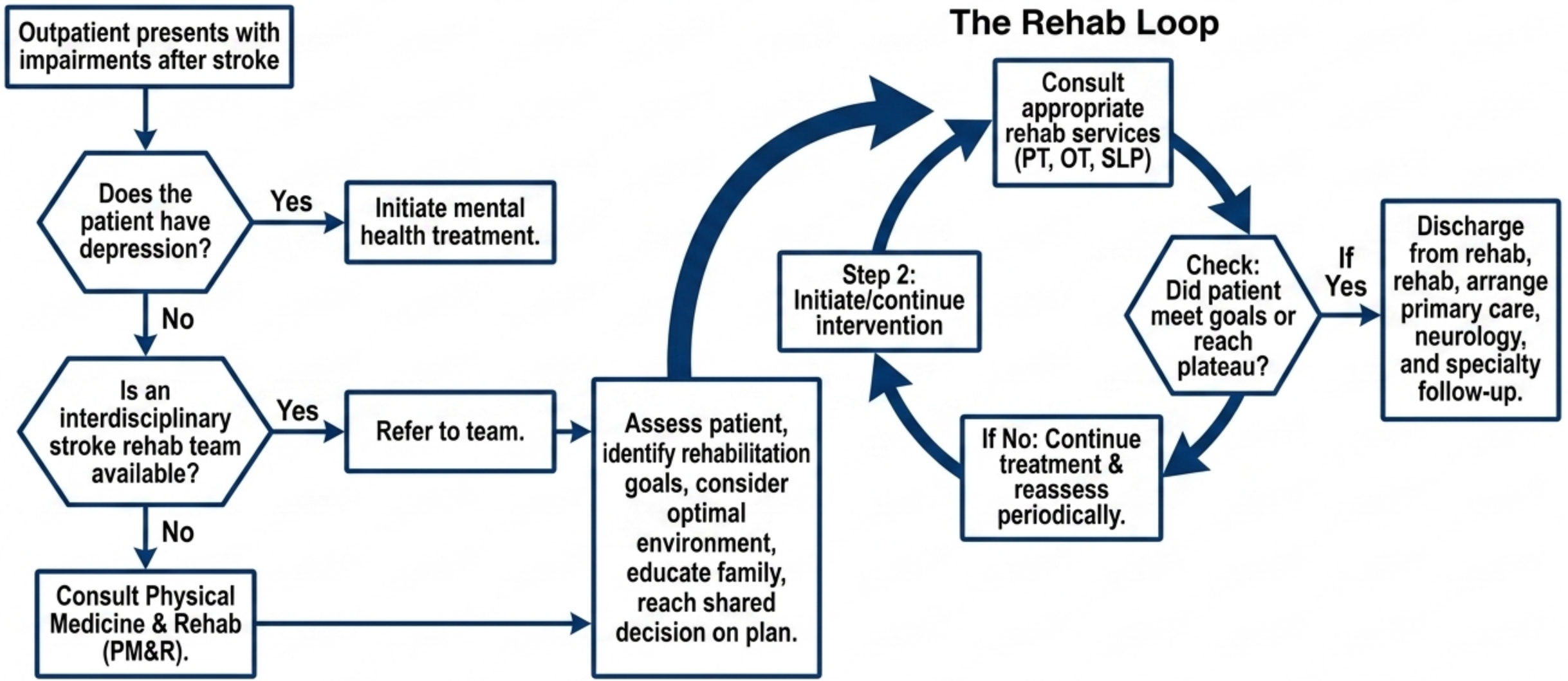
The Core Philosophy: Patient-Centered Care



Clinical Algorithm A: Inpatient Disposition



Clinical Algorithm B: Outpatient/Community Rehab



Matrix 1: Transitions to Community

Intervention	Strength	Category	Clinical Rationale
Case Management	**Weak For**	New-Added	Suggested at discharge to improve ADLs and functional independence. Mitigates the significant burden placed on patients and caregivers navigating complex healthcare systems.
Behavioral Health & Psychoeducation	**Weak For**	New-Added	Suggested to improve patient/caregiver depression, family function, and QoL. Reduces caregiver strain, though requires recognizing patient preferences around time burdens.
Transitional Care & Early Supported Discharge (ESD)	**Insufficient Evidence**	New-Replaced	No distinct statistical difference over usual care for ADLs or functional disability. Resource-intensive to implement.
Community Participation Interventions	**Insufficient Evidence**	New-Added	No statistically significant between-group differences in community engagement; potential risk of worsening depressive symptoms in some patients.

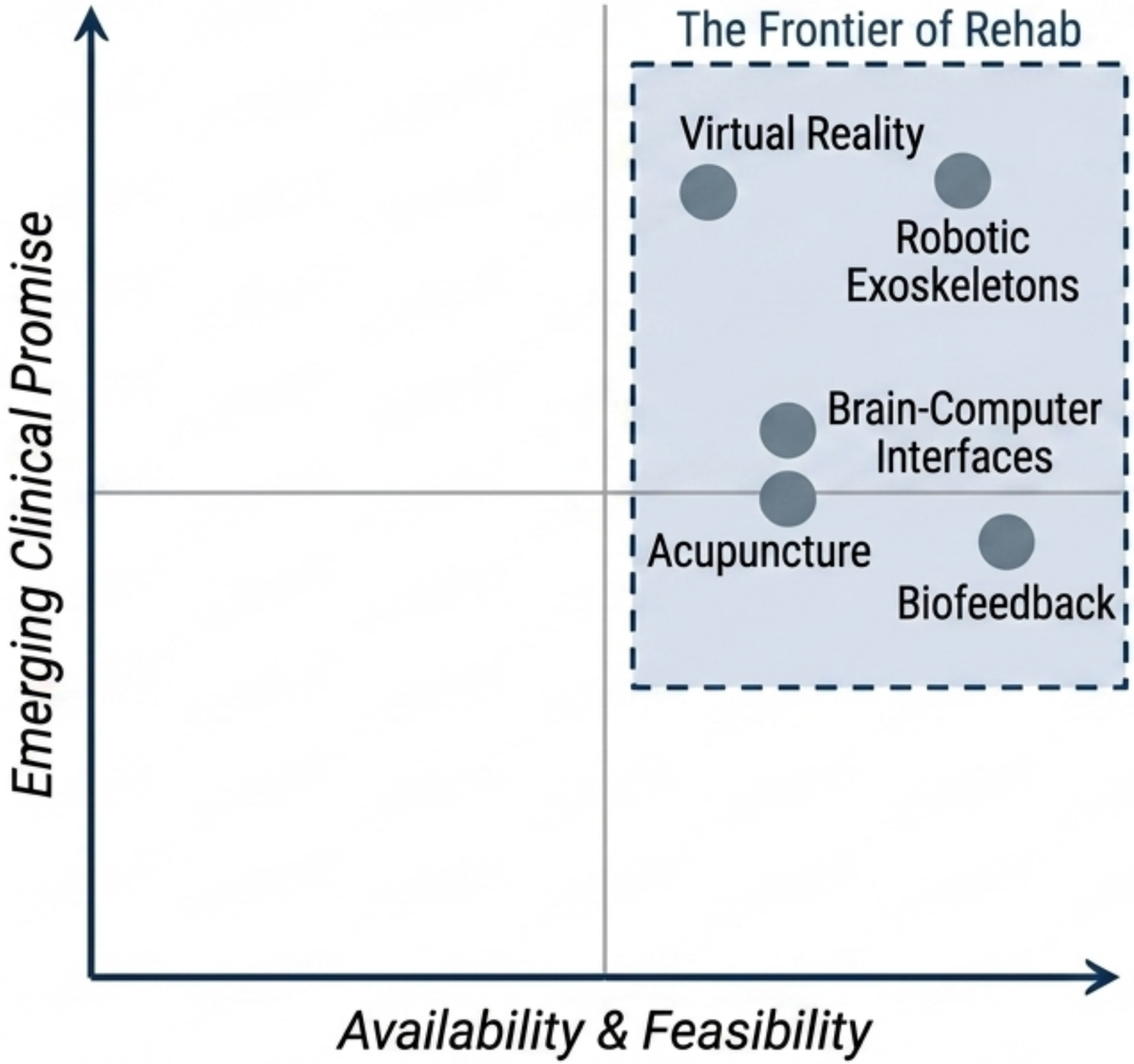
Matrix 2: Motor Therapy (General Approaches)

Intervention	Strength	Category	Clinical Rationale
Task-Specific Practice (Repetitive Task Practice)	Strong For	Not Changed	The Gold Standard. Recommended to improve motor function, gait, posture, and ADLs. Practice of whole tasks (e.g., grasp, mobility) applying motor learning principles.
Mirror Therapy	Weak For	New-Replaced / New-Added	Suggested to improve motor outcomes, ADLs, and unilateral spatial neglect (USN). Harnesses neuroplasticity via visual feedback, though some patients find it frustrating.
Rhythmic Auditory Stimulation (RAS)	Weak For	New-Replaced	Suggested as an adjunct intervention to improve step cadence and velocity. Low-cost, easy to implement.
Constraint-Induced Movement Therapy (CIMT)	Insufficient Evidence	New-Replaced	Time and resource-intensive (up to 6 hours/day) with unclear clinical significance over conventional therapy.
High-Intensity Interval Training (HIIT) vs. Moderate Aerobic	Insufficient Evidence	New-Replaced	Both approaches improve outcomes; insufficient evidence to recommend HIIT over moderate-intensity continuous training for gait recovery.

Matrix 3: Motor Therapy (Technology-Assisted)

Intervention	Strength	Category	Clinical Rationale
Neuromuscular Electrical Stimulation (NMES) 	Weak For	New-Replaced	Suggested to improve motor outcomes. Shows short-term improvement in upper limb motor function/ADLs and lower limb motor function. Generally well-tolerated.
Robot-Assisted Therapy (Exoskeletons/End-effectors) 	Insufficient Evidence	New-Added	Highly engaging but no clear superiority over conventional physical therapy for lower extremity outcomes. Very high cost/space constraints.
Virtual Reality / Serious Gaming 	Insufficient Evidence	New-Replaced / New-Added	Enhances motivation and task repetition, but insufficient evidence it improves balance, gait, or upper extremity ADLs over standard care. Not appropriate for patients with visual/cognitive deficits.
Contralaterally Controlled FES (CCFES) & Brain-Computer Interfaces (BCI) 	Insufficient Evidence	New-Added	Emerging technologies showing promise in research settings for hand paresis and motor function, but current evidence is low quality and devices lack mainstream availability.

Synthesis: The ‘Insufficient Evidence’ Paradox



The Paradox

"Insufficient Evidence" does not mean "Do Not Use." It indicates that rigorous Grade–level trial data is currently lacking, conflicting, or does not clearly out-perform standard care.

The Clinical Reality

Standard routine rehabilitation remains the core. However, frontier therapies (like VR or Robotics) can still be utilized based on:

1. Provider Expertise: Is the facility equipped and trained?
2. Patient Engagement: Does the tech motivate a patient who is otherwise plateauing?
3. Resource Allocation: Can it be done without detracting from Task-Specific Practice?

The Future

These areas dictate the VA/DoD research agenda for the next decade.

Point-of-Care Summary & Implementation Strategy

1 Screen Early, Screen Often

Depression severely limits rehabilitation potential. Screen at both inpatient and outpatient transitions and treat aggressively (Psychotherapy, SSRI/SNRI).

2 Practice Makes Permanent

Task-Specific Practice is the undisputed gold standard for motor recovery. Anchor therapy around high-repetition, whole-task movements before turning to technology.

3 Partner with the Patient

Rehabilitation is a team sport. Leverage shared decision-making, integrate caregivers early, and prioritize the stroke survivor's specific life goals (Whole Health) over generic generic metrics.

Access the Full 2024 CPG Toolkit

https://www.healthquality.va.gov/

For deeper dives into Dysphagia, Aphasia, and specific medication management.