

## Blessing or Burden? Navigating the Nuances of Intrathecal Baclofen Therapy for Complex Cases

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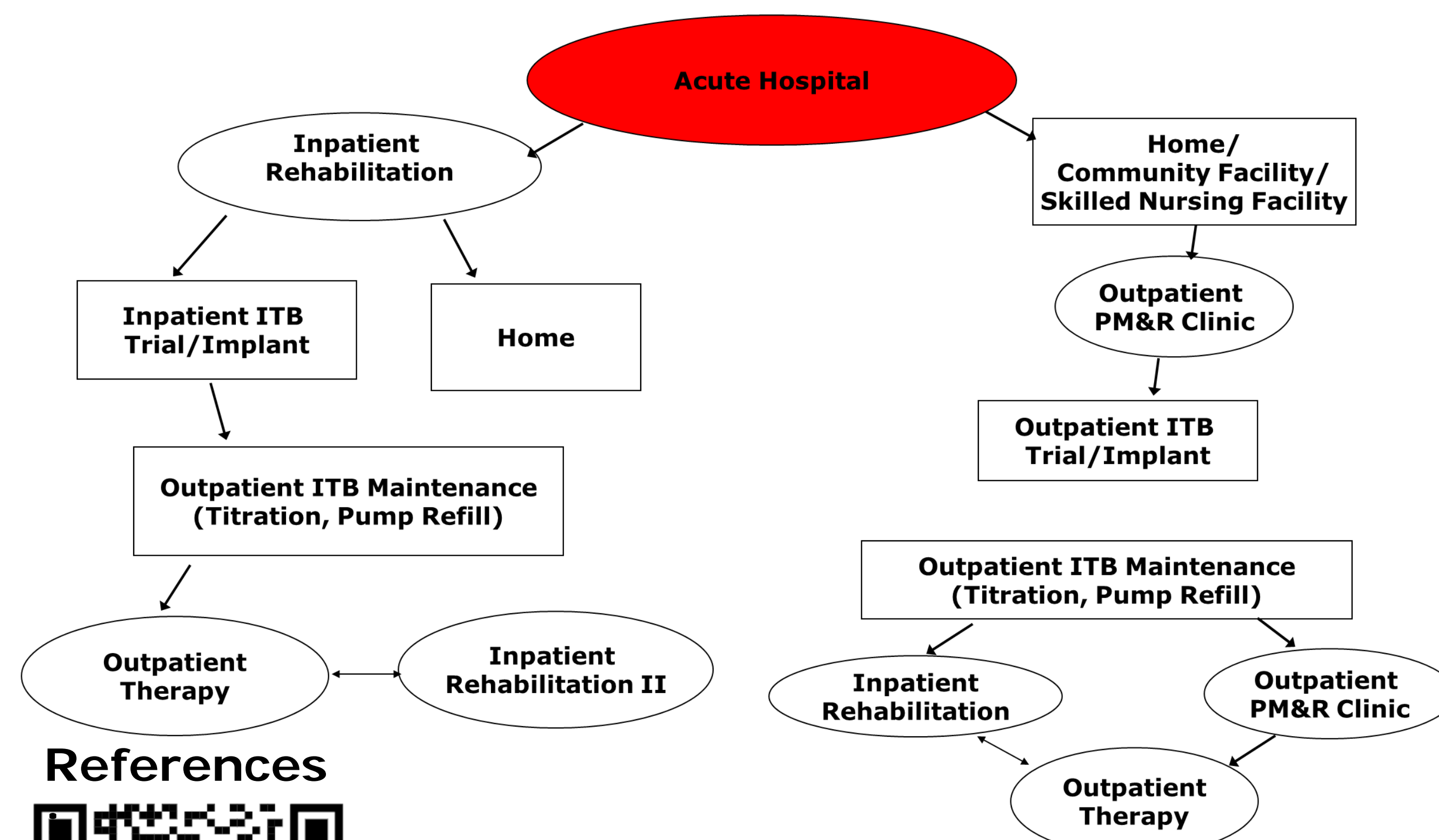
### Background

After spinal cord injury (SCI), spasticity limits independence, activities of daily living, and transfers, which creates barriers in achieving rehabilitation goals. Untreated spasticity impacts discharge disposition, community outcomes, increases readmissions, risk for falls and pressure ulcers. Research has shown that Intrathecal Baclofen (ITB) therapy can significantly reduce spasticity and improve quality of life. ITB therapy can improve sleep quality, improve respiratory function and ability to wean off mechanical ventilation, improve memory and decrease the incidence of autonomic dysreflexia. It can help patients achieve independence with bowel and bladder programs to prevent accidents. However, long-term ITB pump management requires detailed case management, planning, patient education, and family support to be a "blessing" rather than a "burden". Careful consideration of all factors (medical, financial, psychosocial, etc.) before implantation of an ITB pump to ensures best outcomes.

### Purpose

To provide rehabilitation clinicians a detailed overview of the multi-factorial considerations and transdisciplinary approach needed when making a recommendation for ITB.

### ITB Continuum of Care



### References



### ITB Therapy Benefits

- Improve positioning and ambulation quality [8]
- Reduce/alleviate spasticity & pain [9]
- Prevent contractures & pressure ulcers [5]
- Improvement in quality of life [12]
- Potential for greater independence [13]
- Reduce cost of care [2, 10]
- Improved sleep quality [1]
- Improved respiratory function [7]
- Improved memory [11]
- Facilitate vent weaning [3]
- Decreased autonomic dysreflexia episodes [4]
- Improvement in disorders of consciousness [6]

### ITB Therapy Barriers

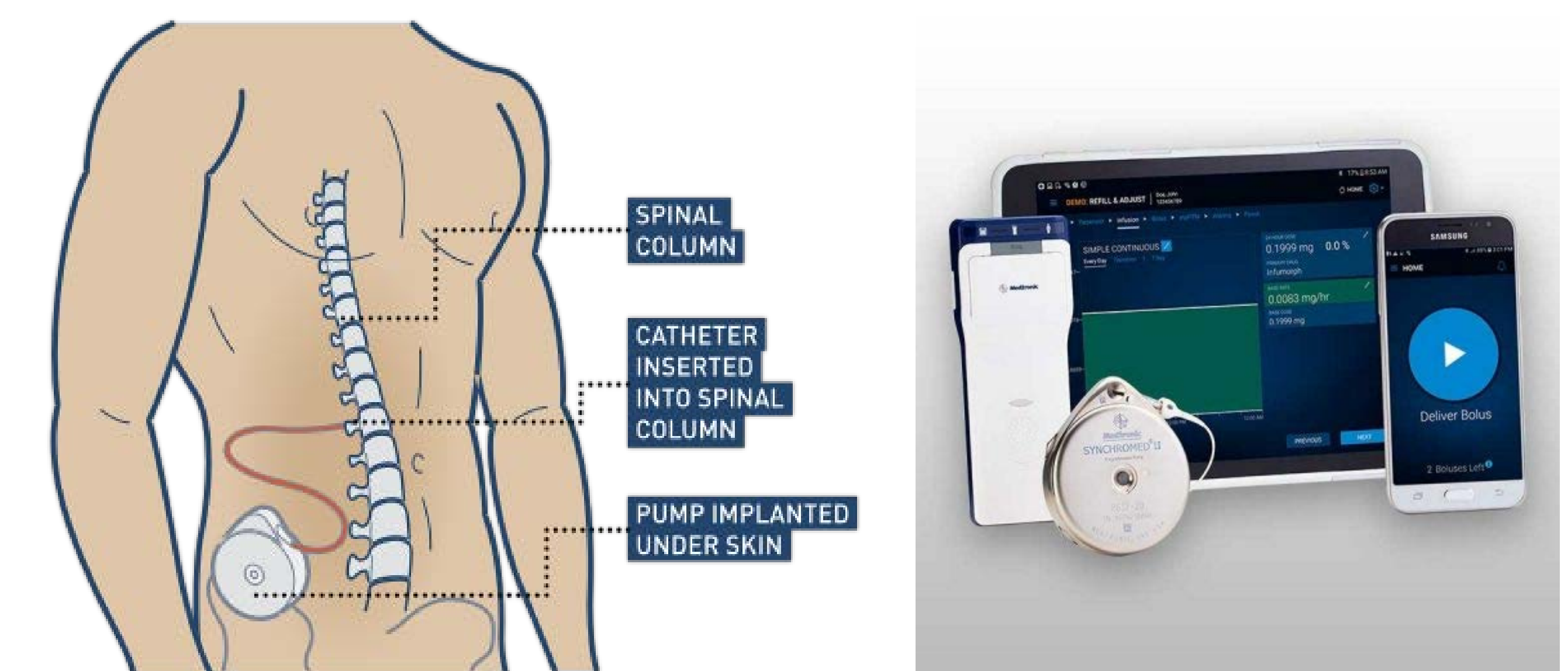
- Insurance (Cobra is limited to 18 months, expensive; Transition to Medicare; Out of Network plan)
- Lack of resources (No insurance; Cannot afford copay)
- Non-compliance
- Wounds (sacral; osteomyelitis; infection)
- Transportation
- Lack of caregiver support
- Philosophy of care about timing of ITB pump
- No accepting physician for ITB pump maintenance
- Fear & misinformation; Lack of education
- Previous bad experience (Unsuccessful lumbar puncture; Poor management; Pump pocket refill; Unsuccessful refill)

### Overcoming Barriers

- Refer to in-network provider; Discuss in-network plans
- Social Work used to identify other funding sources
- Identify reasons for non-compliance
- Follow progress of wound
- Public transportation options; Pump refills in the home
- Eligibility for services; alternate living arrangements
- Education using EBP literature on timing of ITB therapy
- Locate ITB provider in area before pump implant
- Patient/family education; ITB program Peer Ambassadors
- Experienced providers; Trained RNs for pump maintenance; Titrate to therapeutic dose within 1 year; Provide on-call ITB service

### Interdisciplinary Team

- **Physician:**
  - History & Physical, Assess spasticity impact on quality of life and function
  - Determine if tone due to spasticity or other hypertonia
  - Discuss treatment goals and develop treatment plan
- **Therapist (PT/OT/SLP):**
  - Spasticity Measurement (Ashworth/MAS, Tardieu, AROM)
  - Functional Activity Assessment (transfers, dressing, bed mobility, ADL's); Assessment of spasticity limiting activities and triggers
- **ITB Nurse Coordinator:**
  - Patient Education on ITB Therapy
  - Medication review (anticoagulation, oral baclofen)
  - Close monitoring during screening test dose/ITB Trial
  - Pump maintenance (dose titration, pump refill, On-Call)
- **Social Worker:**
  - Psychosocial Assessment (Living arrangements and family/caregiver support)
  - History of medical compliance
  - Availability of transportation (private or public)
  - Financial resources



### Conclusion

Early treatment of spasticity is necessary to prevent later complications. ITB pump therapy is the gold standard for treatment of generalized spasticity. It's important to perform a thorough psychosocial assessment to identify potential barriers and to employ measures to overcome these obstacles. When ITB pump therapy is delayed or not recommended for patient's safety, an interdisciplinary team will assist in identifying other spasticity management interventions and therapeutic modalities.