



Set-Up for Multidisciplinary Device-Aid Therapy Team

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What MDT Means in Advanced PD

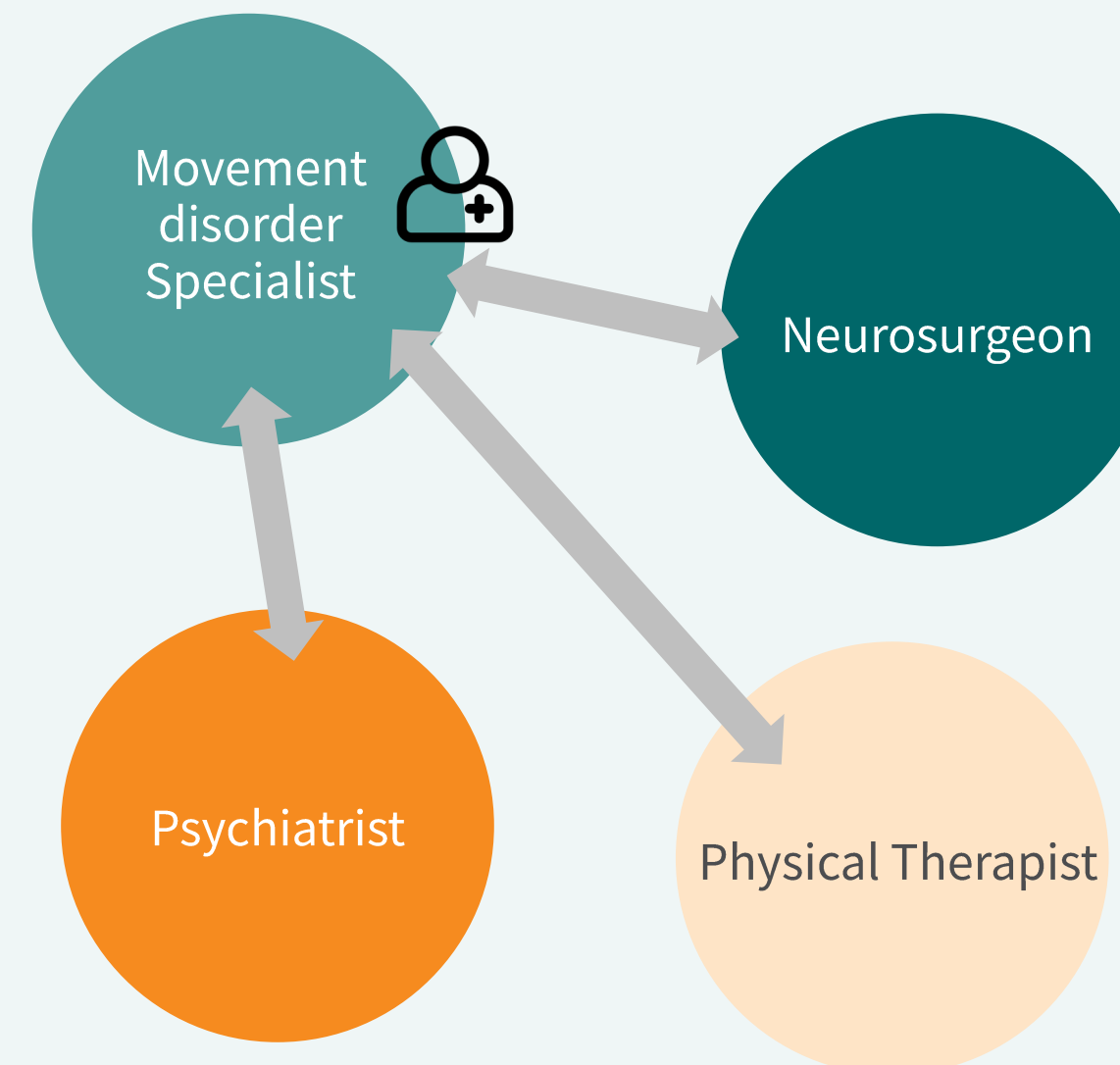
Definition | structured model in which professionals from different disciplines jointly assess, plan, and deliver coordinated, patient-centered care using shared information and **shared decision-making**

Multi-disciplinary team (MDT)



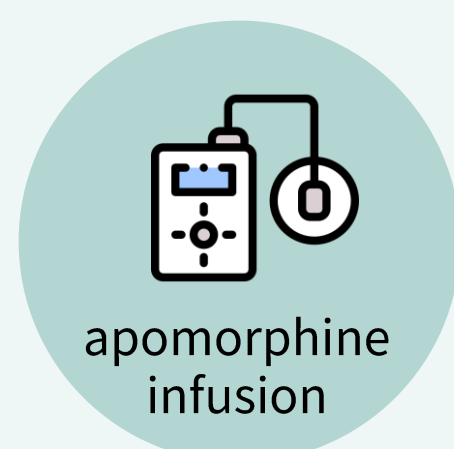
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Patient Referral



Device-aided therapies (DAT) Naturally Requires MDT

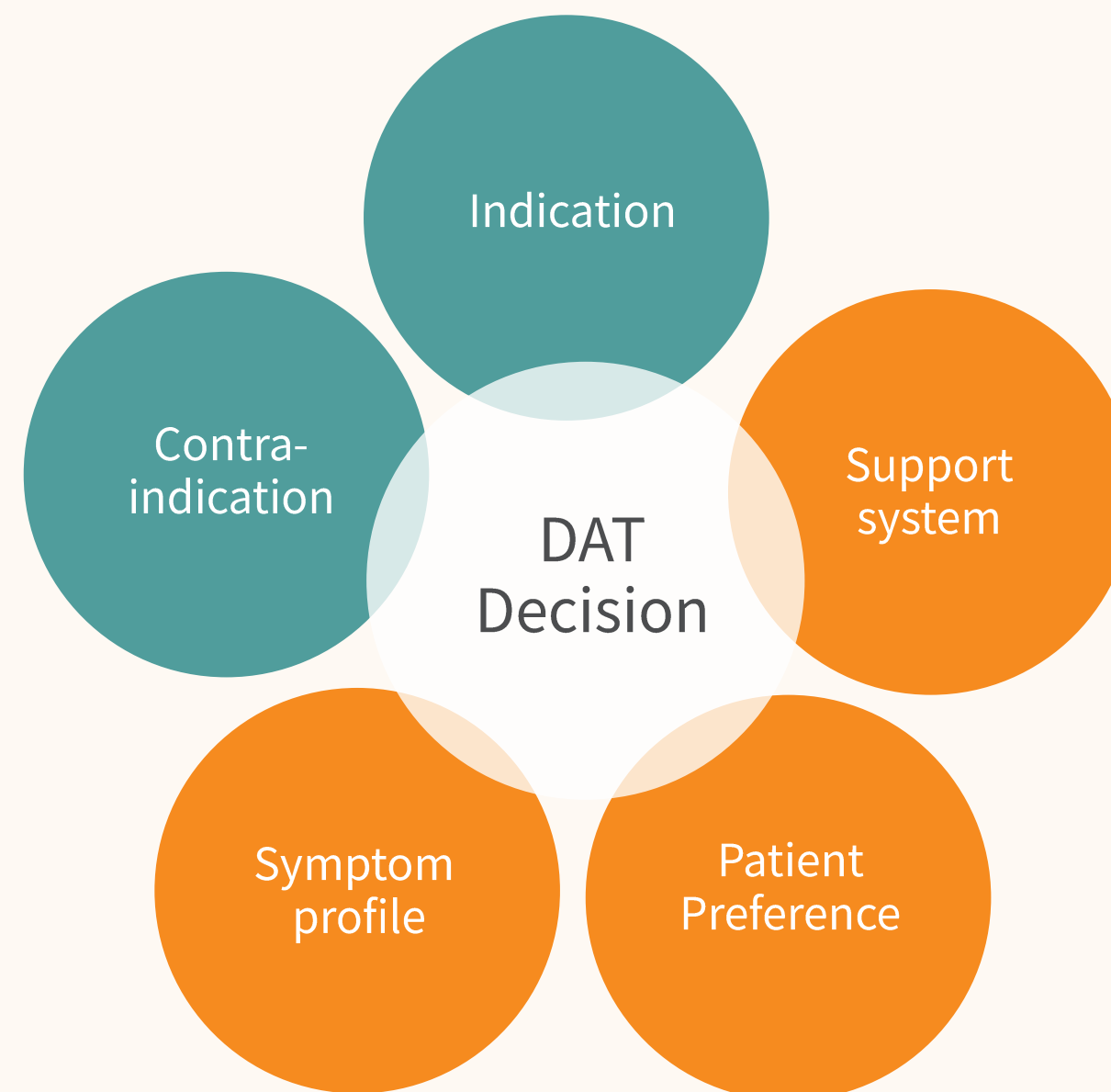
DAT options for advanced PD



DAT consideration trigger

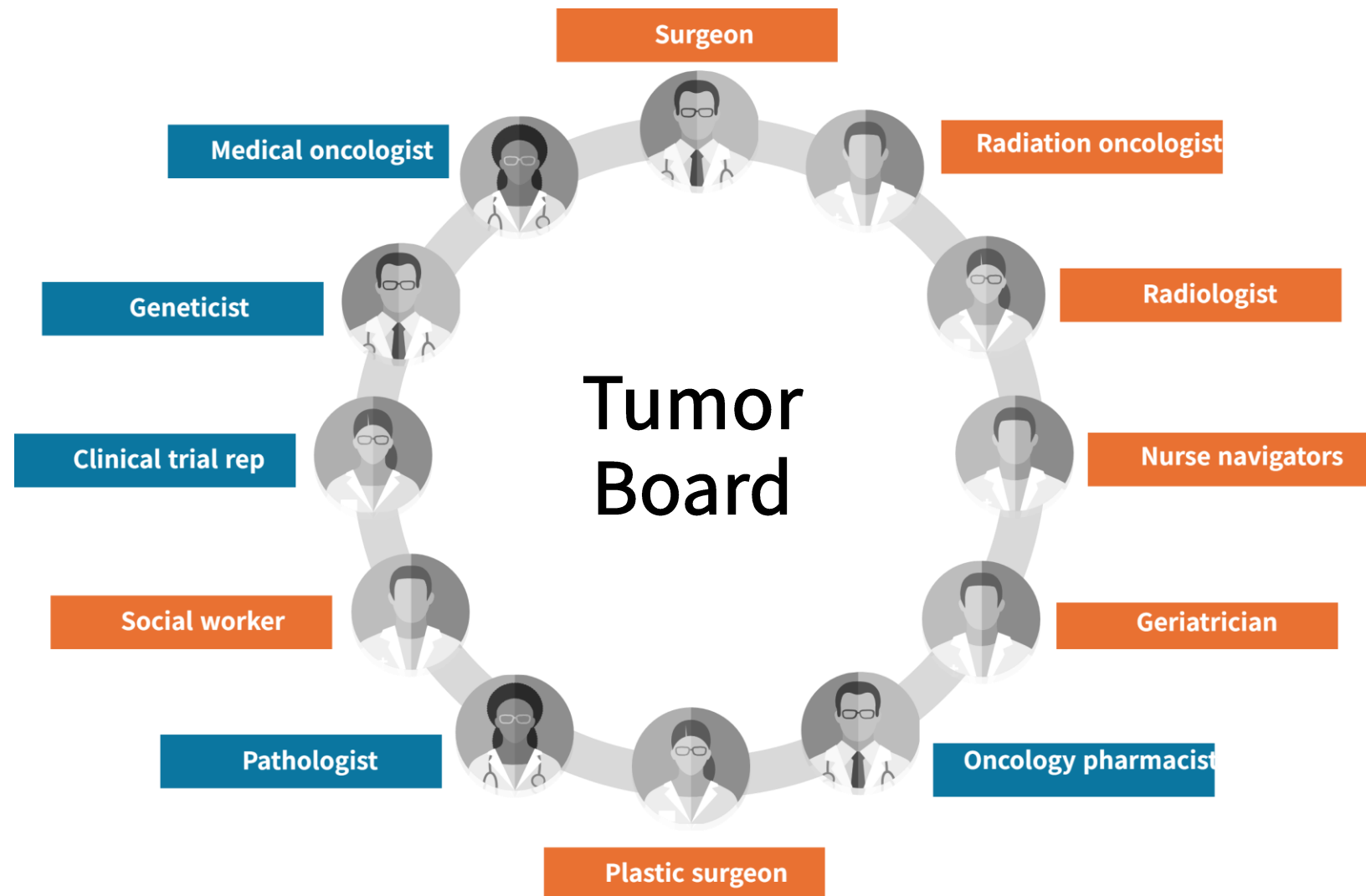
When conventional oral treatments can no longer adequately control motor fluctuations and dyskinesia

Multi-faceted nature of DAT



DAT requires comprehensive team input

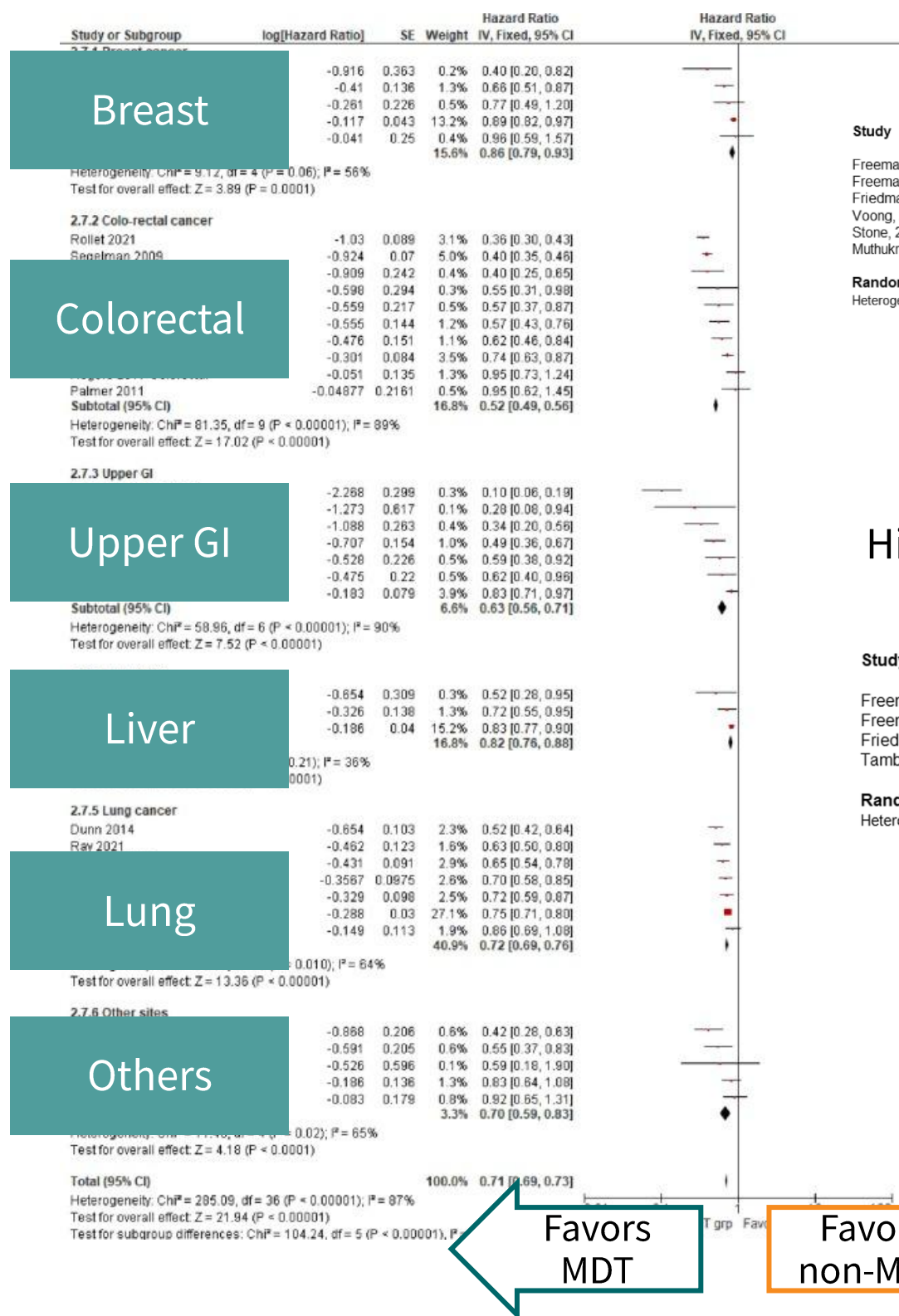
Does MDT Really Improve Outcomes? Lessons from Oncology



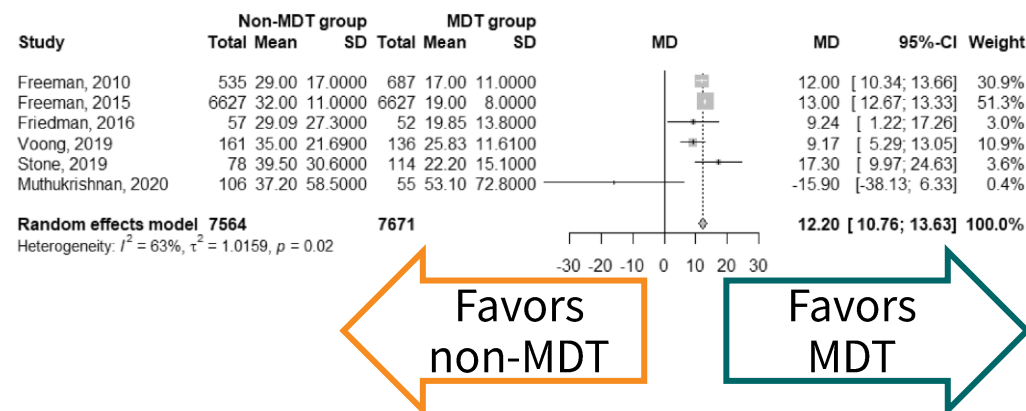
- Oncology provides the most mature evidence base for MDT-based care among complex chronic diseases.
- Reviews and meta-analyses suggest MDT care is associated with more accurate staging, better quality-of-care, and survival benefit.

Does MDT Really Improve Outcomes? Lessons from Oncology

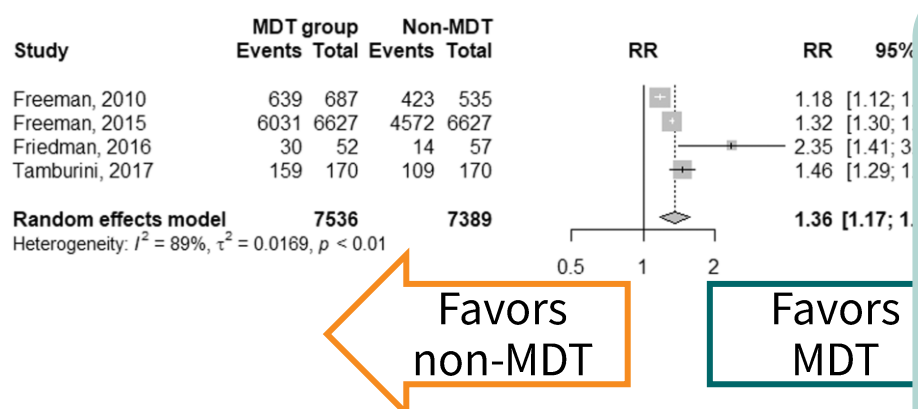
Survival Benefit of MDT



Shorter Treatment Time

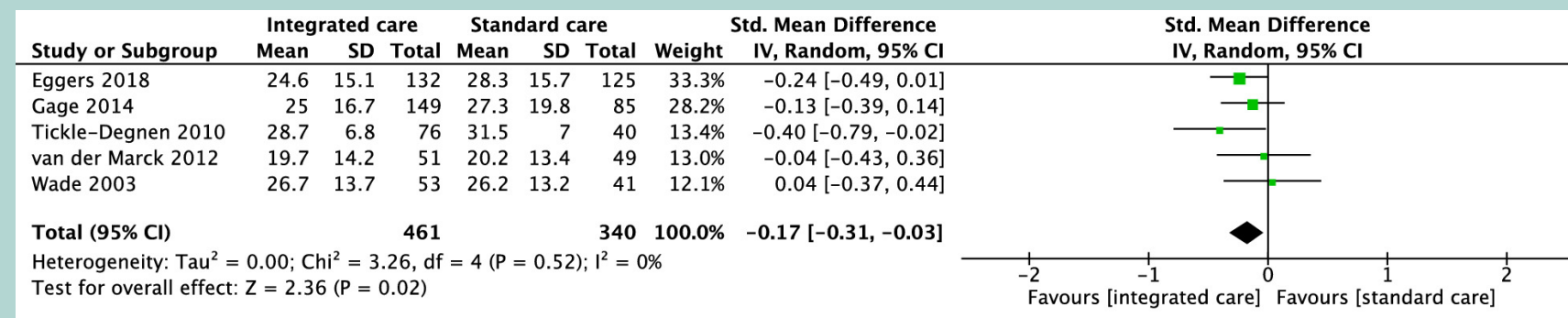


Higher Proportion of Complete Staging



Promising results in PD & neuro-degenerative diseases

Integrated care for PD out-patient setting on Health Related Quality of Life



Does MDT Really Improve Outcomes? Lessons from Oncology

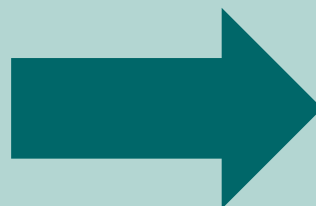
Successful MDT strategies for cancer patient

1. Regular board meetings are needed.
2. Case summaries must be standardized before the meeting.
3. It should be clear who records the final recommendation.
4. There must be a coordinator who is actually responsible for implementing the decision.

The effectiveness of the team depends more on how it operates than on how many people attend.

Oncology principle

- Tumor board
- Staging summary
- Treatment plan note
- Navigator nurse



DAT translation

- DAT candidate board
- pre-DAT summary sheet
- MDT decision note
- DAT coordinator

When Technical Success Does Not Translate Into Patient Satisfaction

Case : 70/F, 8-year duration of PD

Chief complaint

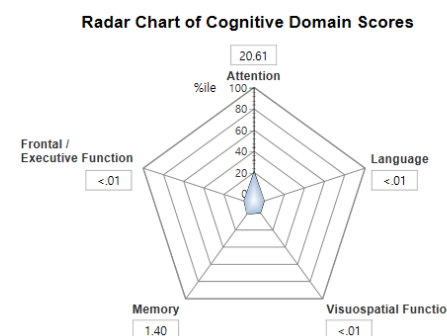
Motor fluctuation & levodopa-induced dyskinesia (LID)
Was eager for DBS for the relief of LID

Past medical history

No major medical/surgical co-morbidities
Depression & anxiety disorders, since long before the onset of PD

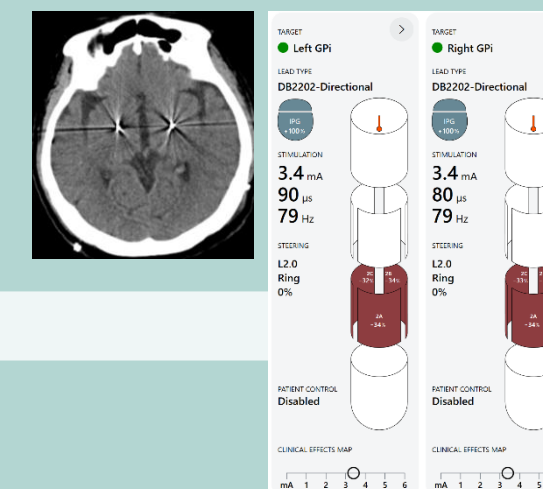
Pre-DBS evaluation (Jan, 2025)

- Brain imaging
 - No unusual findings
- Levodopa response
 - OFF/ON MDS-UPDRS part III: 49 / 25 (49% change)
- Cognitive tests
 - SNSB: multiple domain amnesic MCI
 - K-MMSE: 15, CDR: 0.5 (sum-of-box 3.0)
- Psychiatric evaluation
 - Long-standing depression, anxiety & panic attacks
 - Stable without any harmful ideas
- Patient & family education
 - Realistic expectation for the surgery



DBS (Feb, 2025)

Bilateral GPi DBS
(Boston Scientific, Vercise Genus™ R16)
without complications



Post-OP 3~6 months

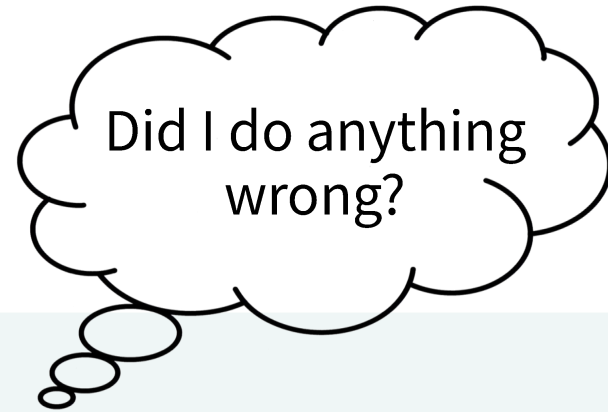
- No LID
- Well managed, high satisfaction

Post-OP > 6 months

- Frequent visit & calls complaints about frequent falls & freezing
- Bi-weekly visits to 2 neurologists and neurosurgery clinic
- Calls to Boston Scientifics, demanding further DBS adjustments
- Tried various advanced settings
- Was under physical therapy the whole time

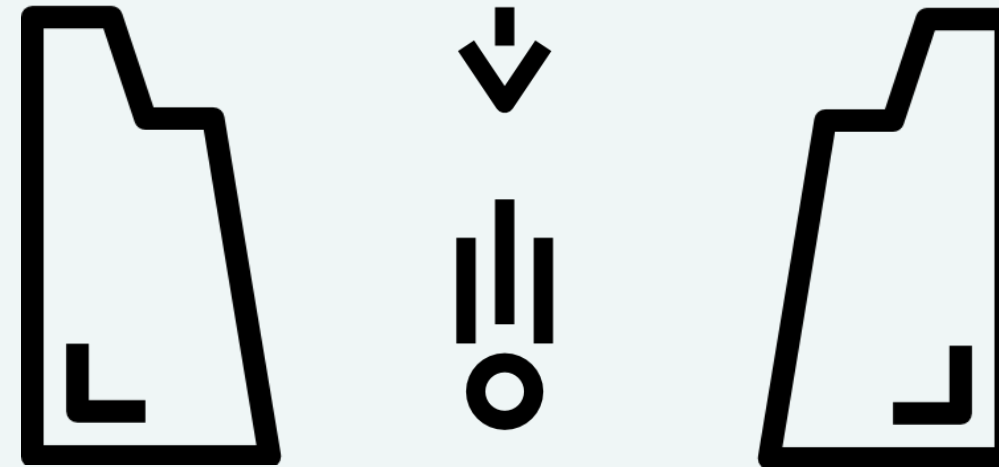
➔ Emergence of Axial Symptoms & Dementia Conversion

When Technical Success Does Not Translate Into Patient Satisfaction



- Disease progression
- Through expectation leveraging prior to surgery
- Followed-up with 5 specialized physicians with best care
- Surgical success without long waitlist
- Advanced programming

The Gap



- Diminished response to DBS
- **Lack of single point-of-contact**
- **Inconsistent messaging**

When Technical Success Does Not Translate Into Patient Satisfaction

What would a workable MDT look like?



Care Model Optimization

Focus Area

Communication

Patient Access

Education

Expectations

Current State

Departmental Silos (Nuance Gaps)

Dispersed Contact Points

Technical-Oriented

DBS-Centric Success



Proposed Strategy

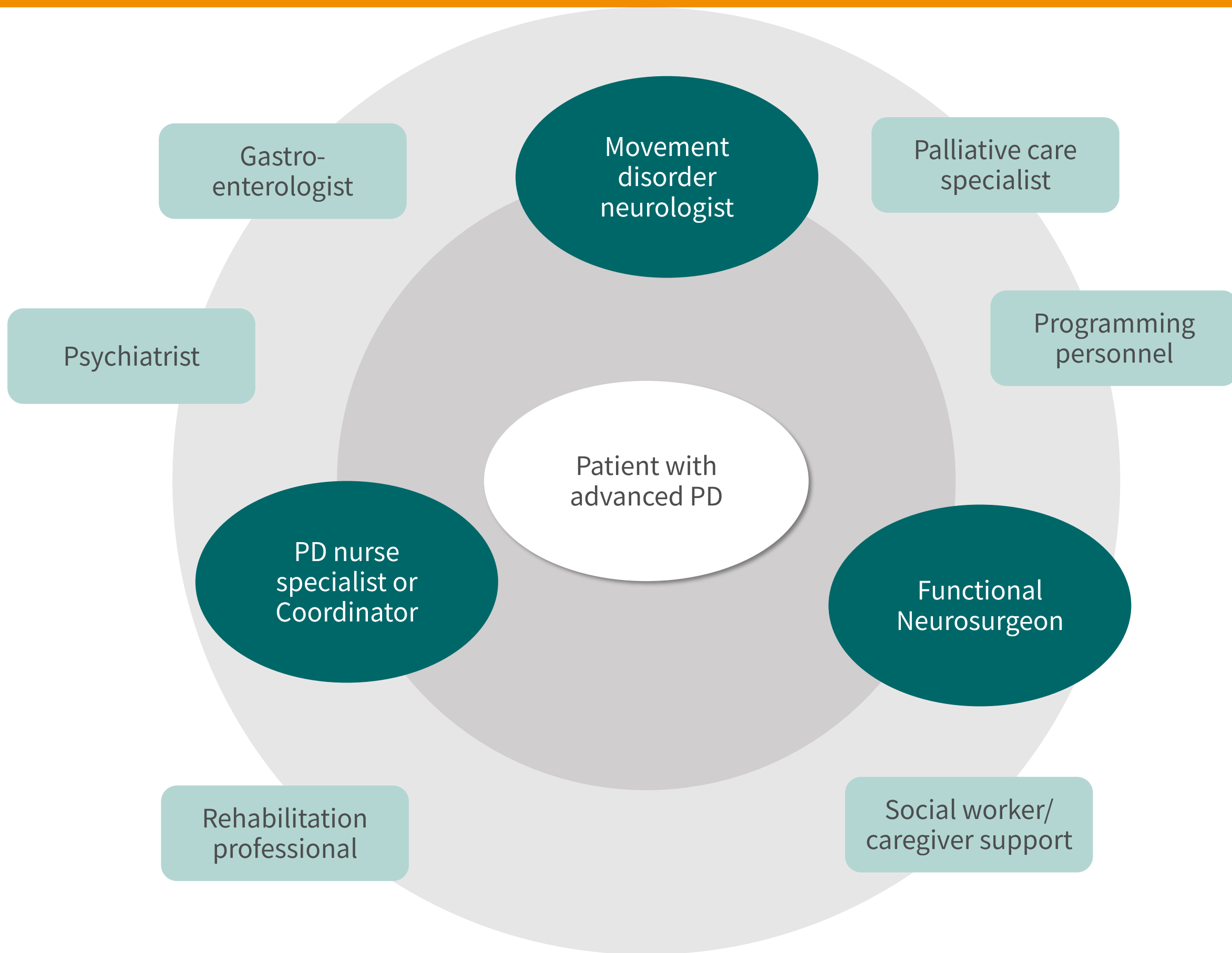
MDS Case Conferences (Unified Voices)

Centralized Care Coordinator

Holistic Disease Course Education

Realistic Progression Alignment

Who Should Be on the DAT Team?



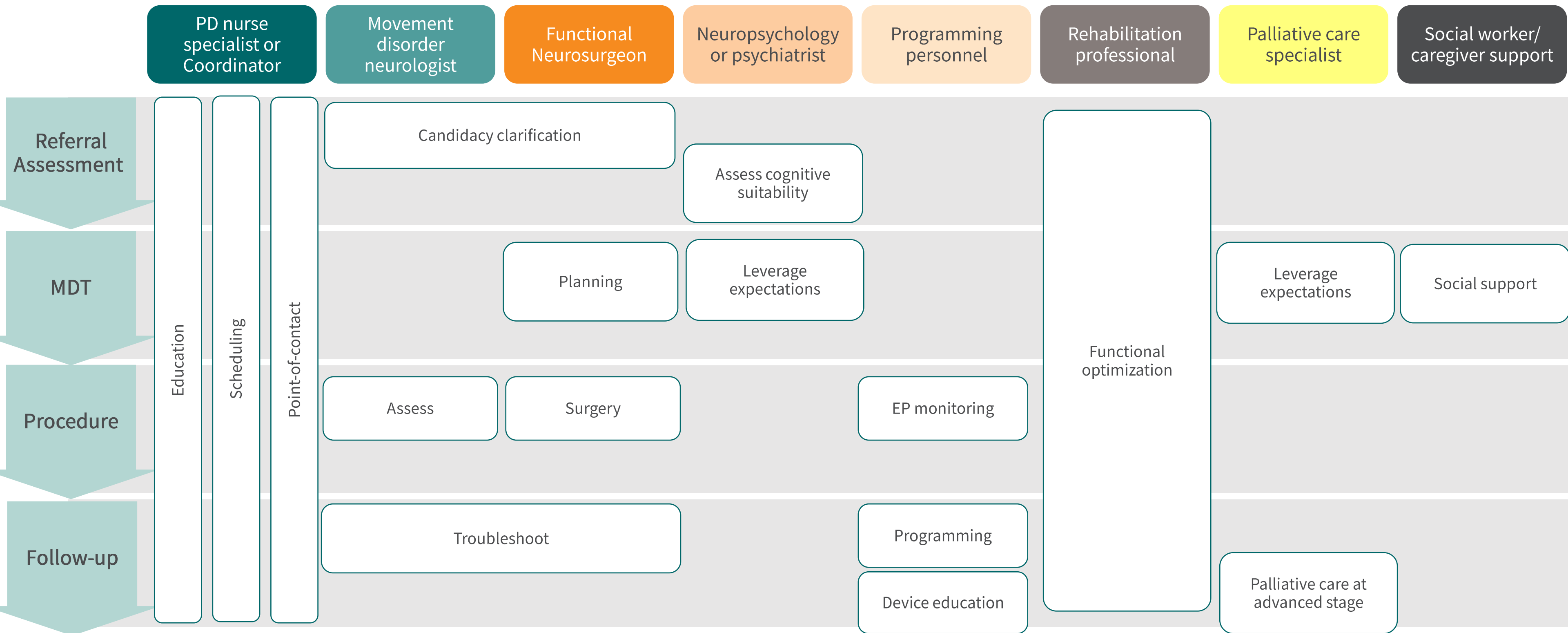
“Minimally viable MDT”

The key principle is not to assemble the largest possible team, but to define the smallest team that can safely assess, deliver, and follow DAT longitudinally

Roles & Responsibilities (DBS) in a Large Team

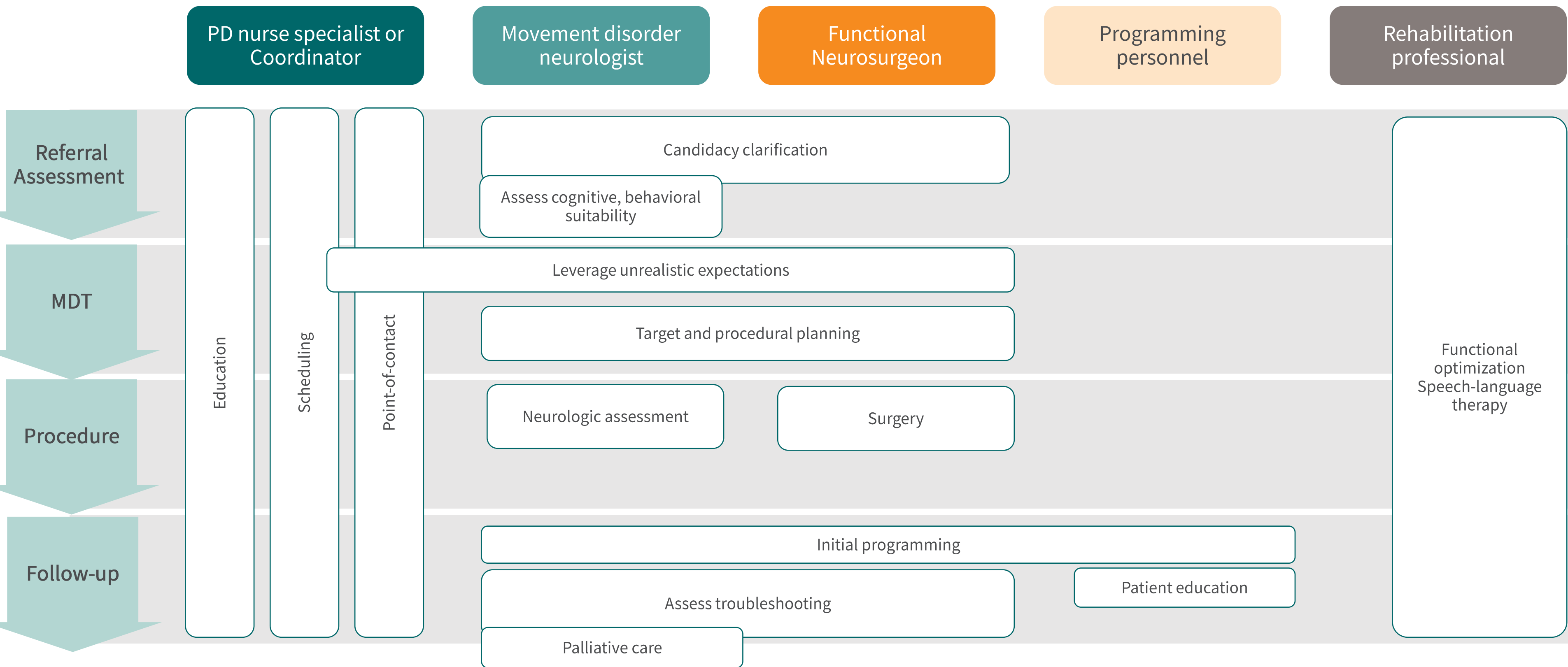


Role clarity is the key for success



Roles & Responsibilities (DBS) in a Small Team

Role clarity is the key for success



Coordinator Role

The coordinator keeps care coherent

- Most important, but under-recognized role
- The person who keeps care coherent across settings and time points

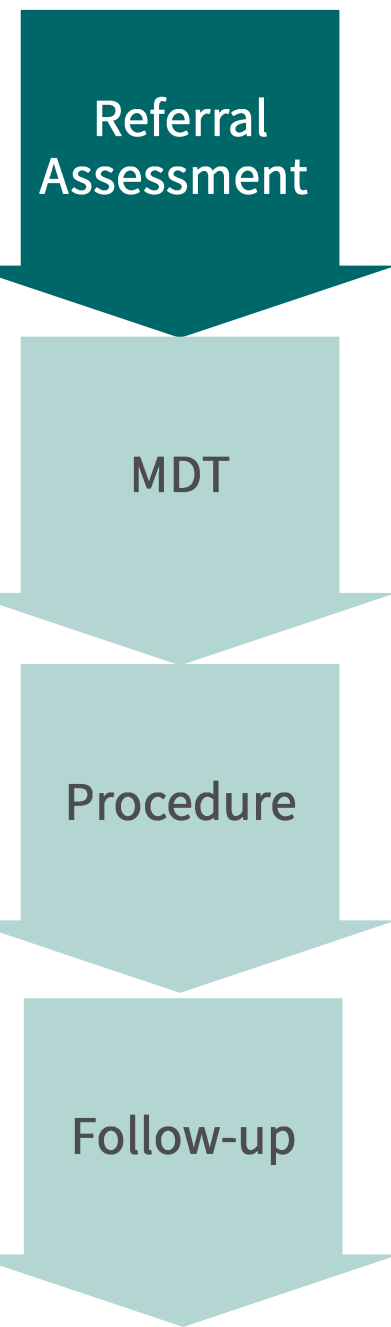
Scheduling

Education

Communication

Point-of-Contact

When Should a Patient Enter the DAT Pathway?

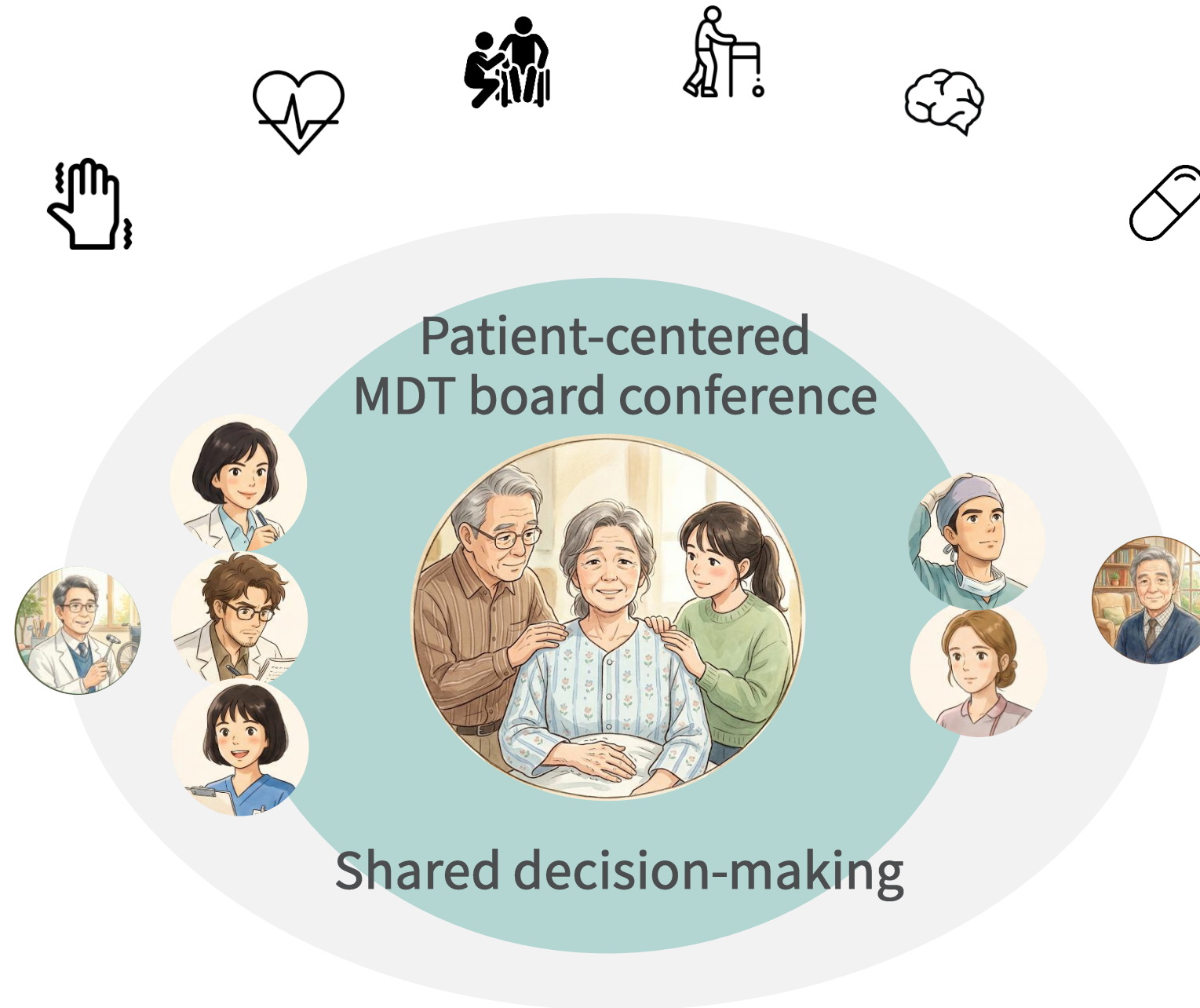
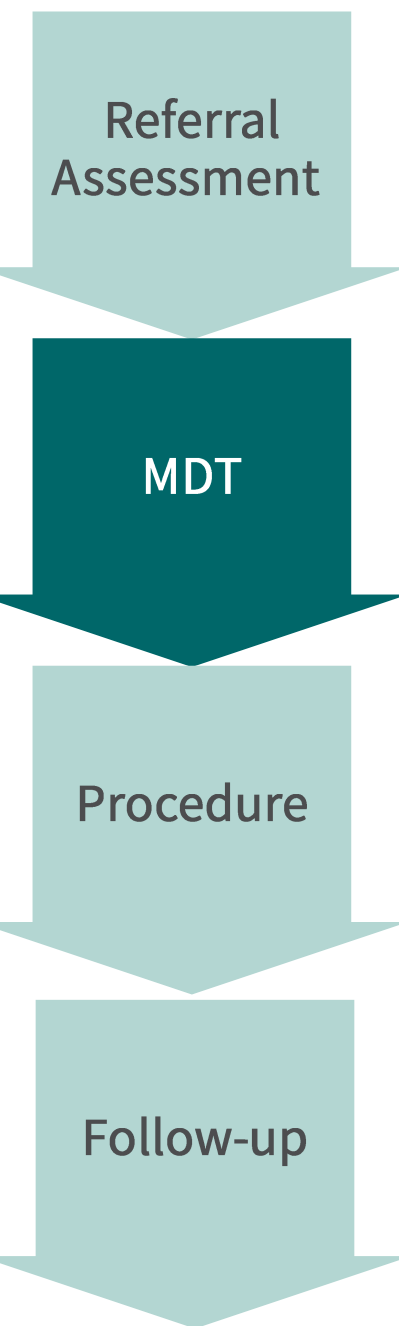


Referral Triggers

- Wearing-off / unpredictable OFF
- Troublesome dyskinesia
- Medication burden
- Functional decline
- Refractory tremor
- Need for frequent rescue strategies

Refer before the patient becomes too complex

MDT Conference



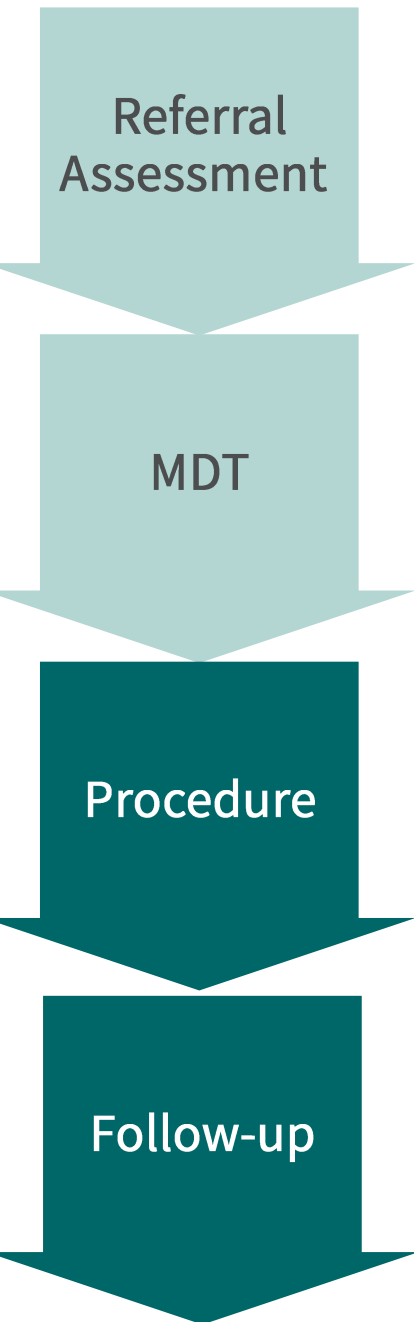
- DAT choice**
- DBS
 - LCIG
 - Apomorphine infusion
 - Defer DAT

- DAT planning (in case of DBS)**
- Surgery date
 - Lead target, device
 - Monitoring, Anesthesia

- Patient education**
- Realistic expectation
 - Assess device care capability
 - Surgery risks, MR limitations, etc.

- Adjunctive helps**
- PT/SLT
 - Social help
 - Future palliative care plan

Procedure is the Middle, Not the End



The success of DAT depends on...

the day of the procedure

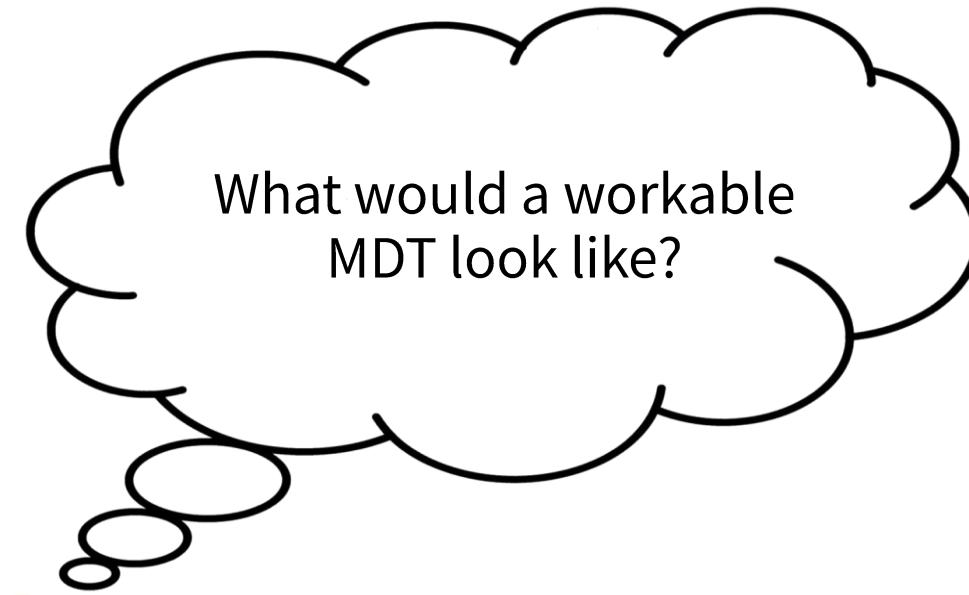


subsequent programming

Titration

reassessment

What would a workable MDT look like?



Core Principles

Core Principles



Patient-Centricity

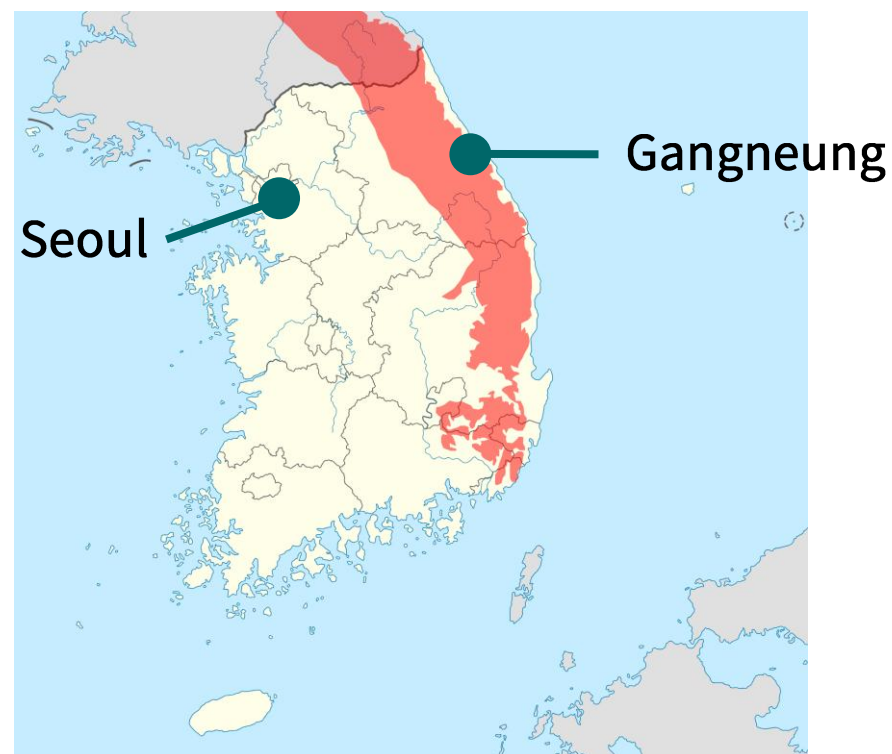
Establish high-touch face-to-face conferences and proactive patient education



Sustainability

Tailor the program to our institutional DNA by strategic leveraging of regulatory benefits to proactively prevent burnout

Tailoring to Institutional DNA



- Compact tertiary center
- Small volume, High expertise
- Mountain-sequestered region
- Limited para-medic support
- Lenient patient admission

HIRA Notification: Multidisciplinary Team (MDT) Consultation

1. Requirements for Participation & Method
 - Participants: Minimum of **3 full-time specialists** from different clinical departments.
 - Consultation Method: Simultaneous **face-to-face consultation** with the patient
2. Documentation Requirements (Medical Records)
 - Essential Details: Time and location of the consultation.
 - Identification: Names and formal signatures of all participating physicians.
 - **Clinical Content: Established treatment plan and rationale for clinical decisions. Detailed summary of explanations** provided to the patient and/or legal guardian.
3. Eligibility & Frequency Limits
 - Eligible Patients: Cancer patients registered under the **Benefit Extension Policy for Rare Diseases**
 - Frequency Limits:
 - Primary Cancer: Up to 3 sessions.
 - Recurrent Cancer: Up to 2 sessions.
4. **Reimbursement & Incentive Structure**
 - NHIS to Hospital (Reimbursement):
 - 4 Participants: Approx. ₩113,000
 - 5+ Participants: Approx. ₩141,000
 - Hospital to Physician: Internal performance-based incentives





Core Principles



Patient-Centricity



Sustainability

Strategies

Role Clarification

Define clear roles and responsibilities among existing team members

System Coordinator

Designate a dedicated coordinator to streamline operation

Policy Alignment

Maximize the reimbursement and system efficiency

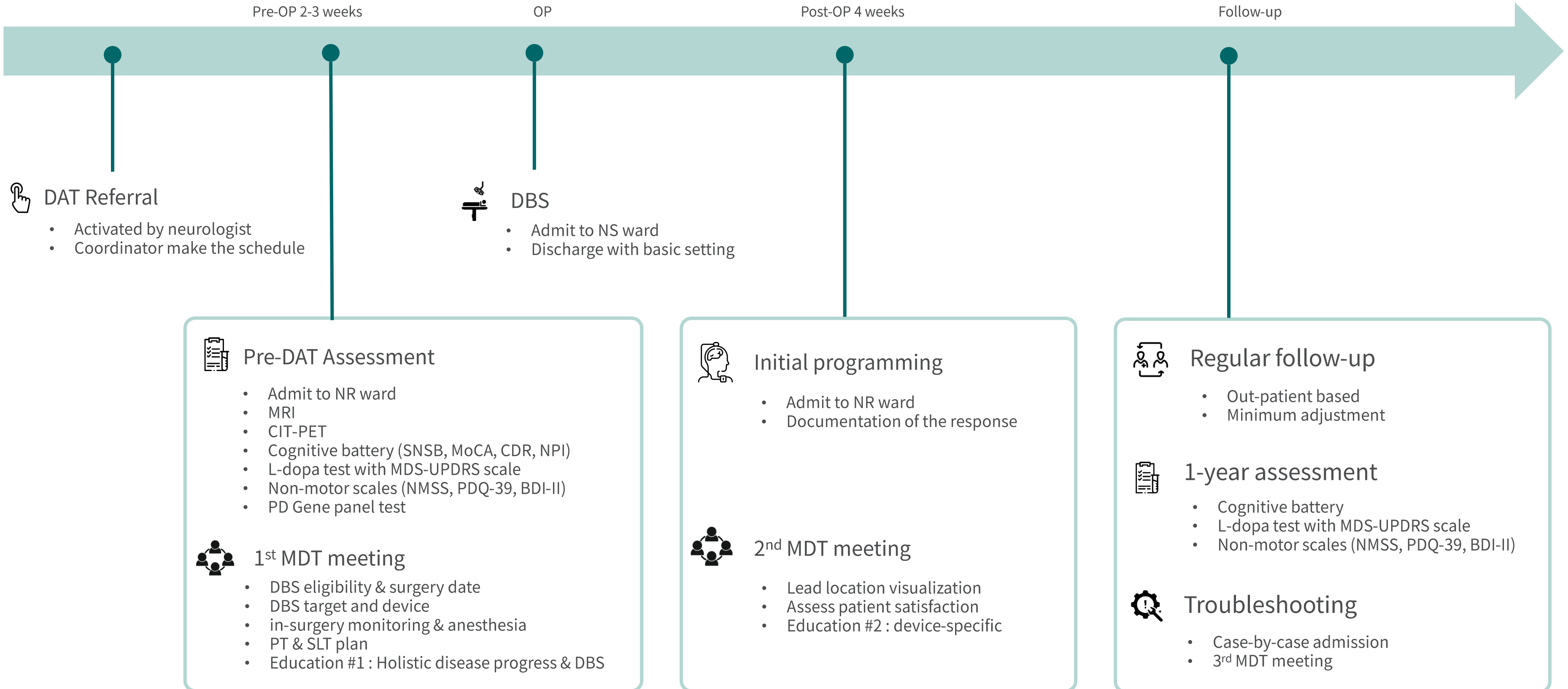
In-patient Focus

Standardize the process within in-patient setting

Clear Documentation

Documentation of members, role, workflow, and case report forms

A Draft Patient-Centered Workflow



Why Good DAT Pathways Fail & Solutions

Institutional barrier

Regional inequalities
Low compensation

Resource

Limited Specialists
Procedural Capacity

Clinical Flow

Delayed referral
Physician bias

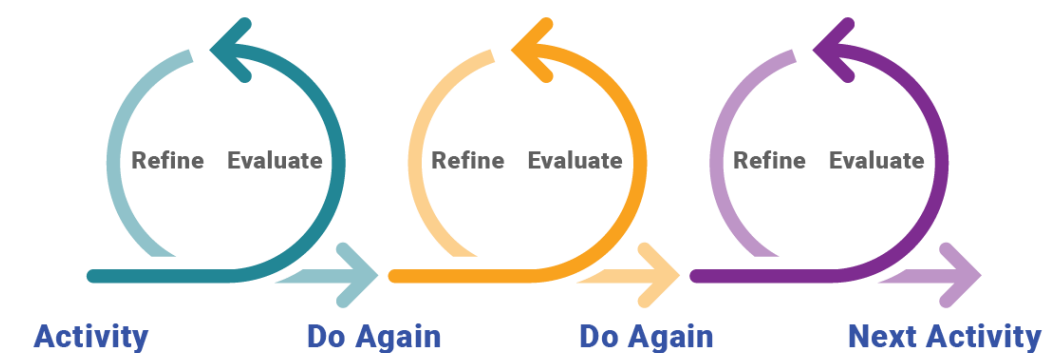
Human Factor

Provider Burnout
Patient Hesitancy

For providers: MDT optimizer

Role clarification
Coordinator function
Standardized workflow
Incentives for motivation
Tailoring to the environment
Hub-and-spoke

Start Small, and Iterate



Take Home Messages

- **MDT Optimization** | Essential for the complex landscape of advanced PD.
- **Structured Collaboration** | MDT as a roadmap for shared decision-making.
- **Quality over Quantity** | Role clarity is more critical than team size for MDT success.
- **The Unsung Hero** | Recognize the coordinator as the most crucial role in the team.
- **Iterative Growth** | Build sustainability by starting small and refining constantly.



Thank you for your attention!

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