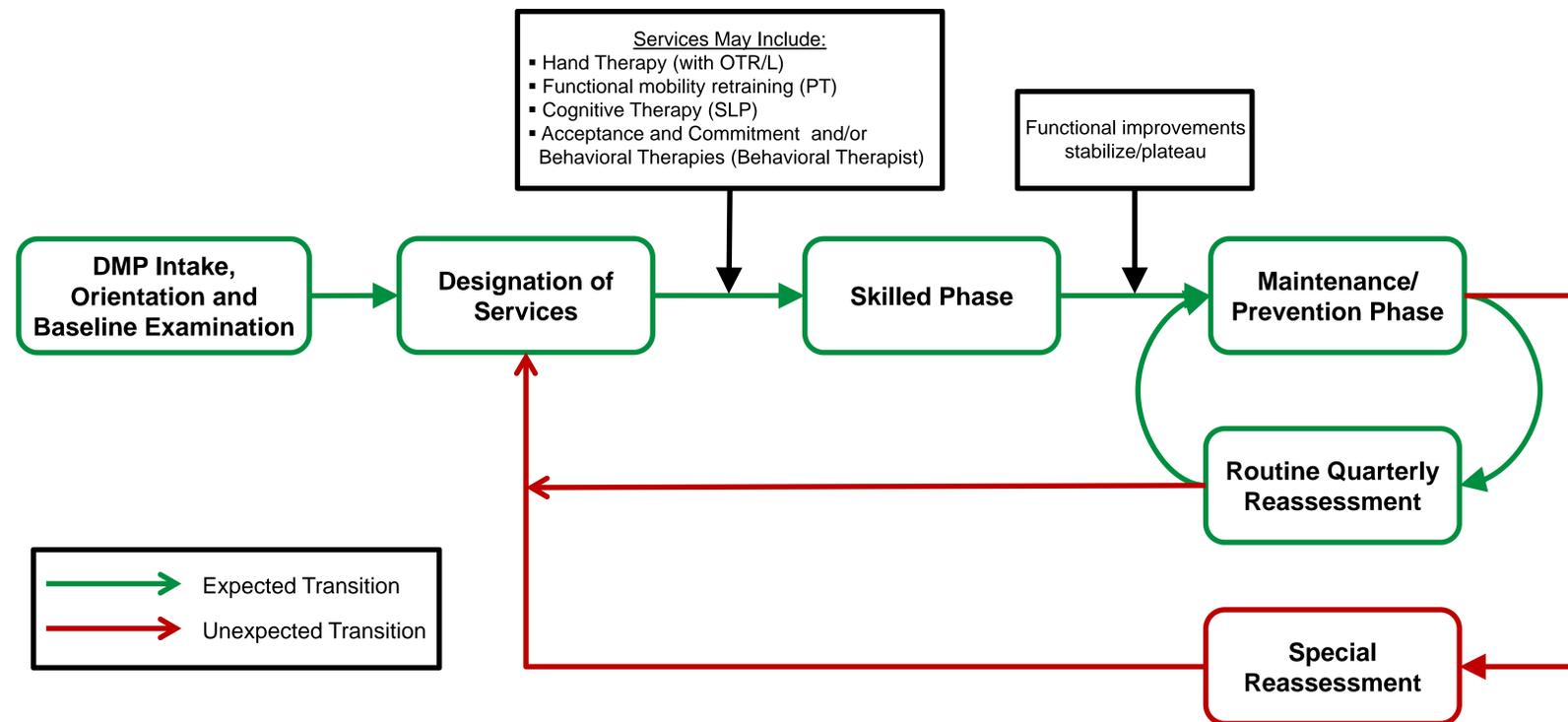


**Background**  
 There is a paucity of evidence for the use of long-term multidisciplinary care lasting longer than six months for persons with multiple sclerosis (MS). This case report describes the results of a person's year-long episode of care in the Disease Management Program (DMP), a multidisciplinary, medically-based rehabilitation service and health management program for persons with MS. The DMP provides services based on each person's needs. Each DMP participant undergoes a quarterly reassessment. Additional reassessments may be conducted if new patient- or clinician-identified problems arise.

**Objectives**  
 1. Describe the DMP as applied to a person with MS, and describe the person's status from the baseline examination through 15-months of participation in the DMP.  
 2. Describe the feasibility of the DMP in improving function and quality of life for persons with MS.

**Methods**  
 The baseline assessment was conducted by the DMP team members at intake. This included both the standard set of measures collected from all DMP participants and a discipline-specific examination by respective DMP team members. The designation of services was based on goals identified by the person with MS and the DMP team. Once the person's progress stabilized, a transition to the maintenance phase was initiated. If issues arose during the maintenance phase or at a quarterly assessment that indicated need, the person reentered the skilled phase. This cycle was repeated over the 15-month-long period resulting in the collection of data for the baseline and five regular quarterly assessment. A flow chart of DMP processes can be found in figure 1.

Figure 1. Flow Chart of Disease Management Program Processes



**Results**  
**Objective 1.** The person completed 15-months of the DMP despite three unexpected events: two separate orthopedic foot injuries, and a crisis of hope and optimism. These problems were identified early through the DMP's routine and special assessments. This facilitated redesignation of skilled services which enabled the person to continue participation in the DMP. From baseline to the 15-month measurement, the person improved all components of the Multiple Sclerosis Functional Composite (figure 2) and in 7/9 items of the Multiple Sclerosis Quality of Life Inventory (MSQLI) (figure 3). Improvements were also noted in 6-Minute Walk and Four-Square Step tests, walking speed, and in the number of reported falls (Figure 4).

**Objective 2.** The program described here was a person-centered multidisciplinary rehabilitation and health maintenance program with a relatively low cost. The interventions provided by the DMP were well tolerated and resulted in substantial improvements across a number of important outcomes. This case report shows an example of the steady improvements that can be achieved through the use of a persistent, long-term health maintenance program, even when unexpected events may temporarily derail progress. The DMP appears to be a feasible intervention and health management program for persons with MS.

**Conclusion**  
 In this case study, the year-long DMP resulted in substantial improvements from baseline for this person with moderate MS-related disability. Despite a number of potentially problematic events, the person was able to adhere to this long-term program. The DMP team felt that the use of Acceptance and Commitment Therapy was critical to this person's success. Although the overall trend was toward improvement, quality of life (QOL) (i.e. the MSQLI components) showed the greatest variation. The DMP shows promise as an efficient, effective and feasible multidisciplinary intervention program. Further study is required to fully determine the feasibility and effectiveness of this long-term multidisciplinary program for persons with MS of different severities, and to determine how the DMP may be altered to have a more consistent positive impact on QOL.

