The Benefits of Disease Therapy Management (DTM) for Multiple Sclerosis (MS)

Member Outreach Program finds improved outcomes, reduced costs
Multiple sclerosis is a chronic inflammatory neurologic disease requiring lifelong adjustments and coping skills. Because of the recurring, disabling, and potentially progressive nature of the disease, programs that promote symptom management, medication adherence, and a health-promoting lifestyle are crucial for patients with MS. In the past, self-management programs among patients with MS have been largely directed at improving physical activity, fatigue, or health-related quality of life (HRQOL).
Achieving long-term adherence to MS therapy is a significant challenge for MS patients. Previous studies have shown that approximately 80% of patients with MS adhere to injectable MS therapy for 6 months\(^1\), and 60-76% of patients with MS adhere to therapy for 2-to-5 years\(^2\). However, 43% of patients initiating therapy become nonpersistent within 14 months due to problems with injections, perceived lack of efficacy, and adverse events\(^3\).

While programs that promote self-management or self-efficacy have shown positive outcomes, there have been few studies of MS disease management programs that incorporate medication management as a core component of the treatment program. In 2007, Prescription Solutions implemented a structured 7-month MS disease management (DTM) program that contains both a disease self-management component and a medication management component. The program is designed to improve patients’ knowledge of MS and treatment options, maximize therapeutic outcomes, promote self-management, and enhance HRQUOL.

THE GOALS FOR OUR DTM PROGRAM INCLUDE:

- Empower patients through education and support to help them successfully attain skills in the self-management of their symptoms and medication therapy of their chronic condition
- Increase patients' knowledge of their medical condition, treatment options, and overall management of their health
- Maximize therapeutic outcomes by promoting medication adherence and persistence and reducing the risk of side effects
- Enhance patients' quality of life

References:

MS patients eligible for our disease therapy management program were identified on a weekly basis and sent a welcome packet. A total of 283 patients completed the program; 156 remained after we applied the continuous enrollment and matching criteria.

During the initial consultation, a registered nurse or pharmacist used the INTERMED (a validated observer-rated instrument for assessing case complexity and healthcare needs) to divide DTM patients into the regular intensity program or the high-intensity program. The patients then received MS-specific telephone consultations, care plan mailings, and monthly educational mailings based on the predefined schedule for their level of intensity. For the regular-intensity program, consultations were conducted intermittently at enrollment (month 0), month 1, month 4, and month 6. For the high-intensity program, consultations were conducted monthly throughout the 7-month program.

The initial consultation typically lasted 40-to-60 minutes, with follow-up consultations lasting 20-to-30 minutes. During each consultation, the clinician assessed patient knowledge and health concerns, as well as provided education on core topics, such as pathophysiology of MS, lab values pertaining to MS or medication therapy, optimizing medication therapy and adherence, pain/stress management, diet/exercise, patient-provider communication, home safety, and more.

After the initial phone conversation, the clinician developed a personalized care plan for the patient, which was sent to the patient along with a cover letter. The prescriber of the injectable MS medication also received a copy of the care plan and cover letter along with a program summary. In subsequent consultations, new care plans were developed as necessary and sent to the patient and provider.
Two control groups aided program evaluation

To evaluate the MS DTM program, data was obtained from the DTM program database and from electronic pharmacy claims for patients participating in the Medicare Advantage Prescription Drug Plan, other prescription drug plans, or commercial health plans that use Prescription Solution’s specialty pharmacy.

Two control groups (retail pharmacy patients and specialty pharmacy patients) were compared with the claims data population. Retail pharmacy patients were those who filled a prescription for an injectable MS medication at a retail pharmacy but did not fill any prescriptions for injectable MS medications through Prescription Solutions specialty pharmacy. Specialty pharmacy patients were those who filled a prescription for an injectable MS medication at Prescription Solutions specialty pharmacy but did not participate in the DTM program. Patients in both control groups had to be continuously enrolled during the preperiod and the postperiod.

Medication adherence was significantly higher for the DTM group compared with the retail pharmacy group ($p<0.001$).
DTM program delivers results for MS patients

During the postperiod, the DTM group had the highest medication adherence, followed by the specialty pharmacy group, and the retail pharmacy group. Compared with the specialty pharmacy group or the retail pharmacy group, the DTM group demonstrated a significantly longer duration of therapy, significantly greater medication persistence, and a significantly lower discontinuation rate. As a result of our disease management program, we saw a 33.6% reduction in the number of patients reporting a MS relapse.

Assumptions:
• Based on a 33.6% reduction in patients experiencing a relapse (13.3 fewer relapses) from month 0 to month 6 reported by patients participating in DTM.
• Relapse costs (includes costs for MS or MS-related complications) were estimated at $13,026 per relapse based on a prior study conducted by Prescription Solutions.
Based on previously published findings that insured patients with MS incur 2 to 3 times more expense than average insured patients, we estimate that disease management would save approximately $173,246 in medical costs due to relapse (based on $13,026 per MS relapse). Managed care organizations may be interested in clinical programs that reduce additional medical expenditures incurred by patients with MS.

The DTM program was rated by 97.2% of the participants to be “very helpful” or “somewhat helpful” in enabling them to better manage their health. Additionally, 91.5% of the participants rated the program “very good” or “excellent”.

While the program did not demonstrate any improvement in health-related quality of life or work productivity, previously published research evaluating the effect of injectable MS medications on health-related quality of life has had varying results. Therefore, it is not surprising that patients who participated in the program did not report improvements in their general health status. Further, the patients who participated in this program were not necessarily new to therapy, which may have had an impact on demonstrating a change in health-related quality of life.

Because of a lack of published information on Work Productivity Activity Impairment (WPAI) in patients with MS, it is possible that the WPAI is not sensitive enough to detect changes in work productivity that may have occurred as a result of increased adherence to MS medication therapy. This finding is further complicated by the fact that only 19.4% of the patients in our program worked outside the home.

Regardless, the results of this program clearly demonstrate the benefits of utilizing a MS DTM program that focuses on medication management. Medical professionals and patients challenged by this disabling, progressive disease will be heartened by our results showing the use of a DTM program not only increases adherence and persistence to injectable MS medications, but also decreases by one-third the percentage of patients reporting a relapse.

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