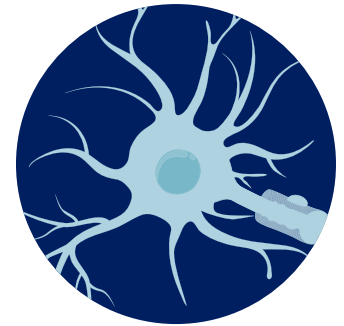


RESEARCH SPOTLIGHT ON

# Multiple Sclerosis



Multiple sclerosis (MS) is a chronic, unpredictable disease that affects an estimated **400,000 Americans**, according to the World Health Organization. MS damages the central nervous system and can affect nearly any function, but the most common symptoms are overwhelming fatigue, vision problems, and difficulties with mobility.

This incurable disease can have significant impacts on health-related quality of life and can place high financial burdens on those who have the disorder. Patients who need medications to manage their symptoms may face high out-of-pocket costs, depending on which therapies they use and their insurance coverage.

There are currently 14 approved disease-modifying drugs for MS patients. While effective, many also carry health risks. Selecting the right therapy depends on careful consideration of many factors. However, there is scant evidence comparing the risks and benefits of these drugs with one another, or with non-drug care approaches, to help patients and those who care for them choose the best course.

As of December 2016, PCORI has awarded

**\$26 MILLION TO FUND 7**

comparative clinical effectiveness research studies  
related to multiple sclerosis

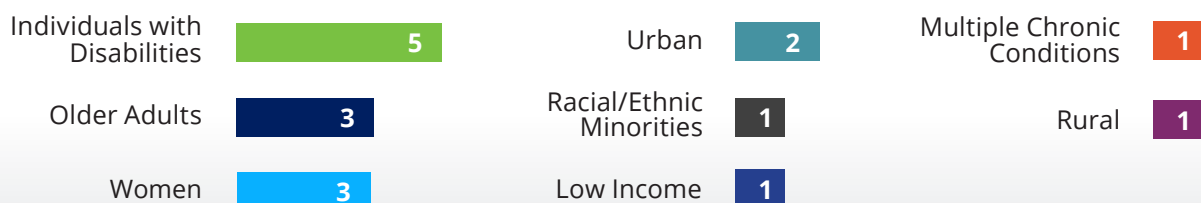
## Building a Robust Research Portfolio

PCORI funds **comparative clinical effectiveness research (CER)** that helps people make better-informed healthcare choices by finding out which healthcare options work best for which patients, based on their needs and preferences.

### BY THE NUMBERS

*By number of projects*

#### Special Populations Studied



## Building Capacity for Patient-Centered Research

PCORI is investing in people and infrastructure to support high-quality patient-centered research for years to come.



**PCORnet, the National Patient-Centered Clinical Research Network**, represents an estimated 90 million patients who have sought medical care from a provider in the past five years.

PCORI has invested \$2.3 million to develop **iConquerMS**, one of the patient-powered networks within PCORnet. It is helping to drive research that is led and informed by those living with MS. People can securely contribute their health information to iConquerMS and provide researchers with data they need to find answers.

## Bringing Patients Together to Drive Research

iConquerMS has enrolled 3,000 patients toward a goal of 20,000 in its registry to enable faster, more accurate research on MS. It is endorsed by major organizations, including:

- The National Multiple Sclerosis Society
- The Multiple Sclerosis Foundation
- The Multiple Sclerosis Association of America
- The Multiple Sclerosis Coalition

## STUDY SPOTLIGHTS

### A Multi-centric Randomized Pragmatic Trial to Compare the Effectiveness of Fingolimod versus Dimethyl Fumarate on Patient Overall Disease Experience in Relapsing-Remitting Multiple Sclerosis

Two oral medications for MS, fingolimod and dimethyl fumarate, have been shown effective in reducing the rate of relapse in patients with the relapsing-remitting form of the disease. These two drugs are commonly used as second-line therapy after a patient has relapsed while taking a first-line therapy. This project is the first head-to-head comparison of these medications' health risks and effectiveness in staving off relapses. It is also the first study to consider patients' overall disease experience and quality of life as important outcomes. It aims to provide patients and clinicians with information necessary to decide which drug would best meet their needs and preferences. The study will include sites in the United States, Europe, Italy, and Israel.

**LEAD INVESTIGATOR:** Silvia Rossi, MD, PhD, Foundation of the Carlo Besta Neurological Institute, Milan, Italy

**YEAR AWARDED:** 2016

**PROJECT BUDGET:** \$3.4 million

### Comparative Effectiveness Trial between a Clinic- and Home-Based Complementary and Alternative Medicine Telerehabilitation Intervention for Adults with Multiple Sclerosis (MS)

This study is measuring whether patients get as much benefit from an exercise-based rehabilitation program delivered via Internet or telephone as from the same therapy provided in a clinic. Evidence shows that exercise, yoga, and other nondrug therapies are effective in alleviating symptoms and improving function, but clinics that can provide such services are scarce in rural and low-income areas. The study, led by a research team based at the University of Alabama at Birmingham, is taking place in Alabama and Mississippi.

**LEAD RESEARCHER:** James Rimmer, BS, MA, PhD, University of Alabama at Birmingham

**YEAR APPROVED:** 2016

**PROJECT BUDGET:** \$5.8 million