Merck's Position Statement – Adherence

Why it matters

Participants at the World Health Organization (WHO) Adherence meeting in June 2001 defined adherence as “the extent to which the patient follows medical instructions.” Medication adherence—focused specifically on compliance with medication-related instructions—is an important component of overall adherence. Medication adherence has profound health and economic benefits for patients, health care systems, and payers. In addition to the cost of wasted medicines, non-adherence often results in treatment failure leading to disease progression and clinical exacerbations that reduce the longevity and quality of life, and require additional (often avoidable) medical resources such as physician visits, laboratory tests, therapy escalation, and hospitalizations.

Former-U.S. Surgeon General C. Everett Koop matter-of-factly explained that “Drugs don’t work in patients who don’t take them.” Recent data indicate that over one-half of patients with chronic illnesses do not take their medications as prescribed. Adherence to oral antineoplastic agents can be as low as 20 percent, and adherence to some oral treatments for diabetes is 36 percent. Mortality rates and total annual health care spending for diabetes patients in the United States with low medication adherence are almost twice that of patients with high adherence (12.1 percent vs. 6.7 percent and $16,499 vs. $8,886). Between 33 to 69 percent of medication-related hospitalizations in the United States are linked to drug non-adherence. Overall, medication non-adherence contributes to the premature deaths of nearly 125,000 Americans and 200,000 Europeans annually. Medication non-adherence is estimated to cost the United States and Europe as much as $290 and $170 billion annually, respectively.

Poor treatment adherence is particularly problematic for conditions such as multiple sclerosis (MS) that are incurable but for which disease-modifying therapies (DMTs) are available that can help to reduce relapse rates, slow disability progression, or modify the overall disease course. Treatment non-adherence in patients with MS can be attributed to forgetting the medication, perceived lack of efficacy, coping with adverse events, and treatment fatigue. Yet, MS patients adherent to prescribed DMTs have significantly lower rates of disease relapse and progression as well as inpatient or emergency room utilization and total MS-related medical cost than those who are non-adherent. In addition, drug adherence delays the need for second- and third-line therapies that are generally more costly and may potentially be associated with greater side effects.

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The World Health Organization finds that adherence is a multidimensional phenomenon determined by the interplay of five sets of factors: (1) social and economic, (2) therapy-related, (3) patient-related, (4) condition-related, and (5) health system and healthcare team.\(^{13}\)

Determinants of adherence include cost and accessibility of medicines, side effects from the medication regimen, cultural beliefs, access to patient support networks, severity of symptoms, and understanding of disease. Barriers to medication adherence are complex and varied; therefore, solutions to improve adherence must entail a multi-stakeholder approach—focusing on the entire patient journey—to improve patient outcomes.

Patients should leave the doctor’s office or hospital with the knowledge, motivation, and skills to follow a prescribed treatment plan. Providers need to prescribe the most appropriate treatment regimen for their patient; ensure that patients understand their rationale for treatment, possible side effects and interactions with other medications, and the manner in which the medicine is to be taken; and establish appropriate expectations from the treatment plan. Health care systems should be designed to enhance patient engagement and education, and embrace proven resources such as electronic prescribing and other innovative health IT-based solutions (e.g. remote patient monitoring, electronic health records). Governments and payers should reimburse adherence-related products and services, employ quality-based measures for adherence, incentivize healthcare providers to monitor and improve adherence, and support public awareness campaigns and research on adherence. Finally, all stakeholders—including pharmacists, pharmaceutical and information technology companies, patients and their families, caregivers and policy-makers—need to work cooperatively to identify new multifaceted solutions and strategies.

**Merck Position**

- Improving patient medication adherence is essential to improving health outcomes and optimizing health care resource utilization. Merck therefore encourages governments to adopt policies that promote medication adherence and to focus on non-adherence within the framework of national health reforms processes.

- Given the human and economic burden that non-adherence represents, Merck advocates for a multi-stakeholder approach involving pharmacists, pharmaceutical and information technology companies, patients and their families, healthcare professionals, provider networks, payers, and policy-makers.

- Merck believes in patient-centered therapy management premised on a genuine partnership between patients and their health care providers. Patient-centered therapy management is critical to achieve medication adherence and compliance. We are committed to educating patients and health care professionals about our medicines because treatment adherence increases with better communication and understanding.\(^{14,15}\) We offer robust patient support programs such as "MS LifeLines" in the United States.

- Merck supports leveraging of new technology such as electronic prescribing, electronic health records, remote patient monitoring, and other innovative solutions that improve medication adherence and clinical outcomes without jeopardizing the patients’ privacy. We recently launched "MSdialog" to provide patients with MS a care management system that uses remote patient monitoring between consultations to enable open dialogue between patient and provider.\(^{16}\) MSdialog is the first and currently only application that connects adherence data with patient-reported outcomes, so patients can follow their disease and share this data with their health care providers. In addition, MSdialog offers payers to monitor drug adherence at a population level.

- Merck is working closely with physicians to help address issues related to poor patient compliance and low adherence rates through the development and/or improvement of injection devices that make self-administration of medicines as convenient as possible.

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• Merck is voluntarily sharing pertinent data with health care providers to improve their understanding of the patient journey, including information about patient behaviours and motivations—all with due attention to the patient’s right to privacy. Our goal is for care takers to better identify at-risk patients in order to optimize treatment adherence and outcomes.

• Merck is conducting studies on adherence and how they can lead to better outcomes.

• Merck encourages governments, health care organizations, and other stakeholders to consider innovative mechanisms to improve medical adherence, including through reimbursement-based incentives.

• At Merck, every patient is important. We oppose policies that discriminate against patients based on conditions requiring specialty therapeutics. We believe that patients should have access to the most appropriate therapy—as determined by their health care provider—for controlling their disease.

About Merck
Merck is a leading science and technology company in healthcare, life science and performance materials. Around 40,000 employees work to further develop technologies that improve and enhance life – from biopharmaceutical therapies to treat cancer or multiple sclerosis, cutting-edge systems for scientific research and production, to liquid crystals for smartphones and LCD televisions. In 2014, Merck generated sales of €11.3 billion in 66 countries. Founded in 1668, Merck is the world's oldest pharmaceutical and chemical company. The founding family remains the majority owner of the publicly listed corporate group. Merck, Darmstadt, Germany holds the global rights to the Merck name and brand. The only exceptions are the United States and Canada, where the company operates as EMD Serono, EMD Millipore and EMD Performance Materials.

Merck’s biopharma business
With headquarters in Darmstadt, Germany, Merck’s biopharma business offers leading brands in 150 countries to help patients with cancer, multiple sclerosis, infertility, endocrine and metabolic disorders as well as cardiovascular diseases. Merck discovers, develops, manufactures and markets prescription medicines of both chemical and biological origin in specialist indications. We have an enduring commitment to deliver novel therapies in our core focus areas of neurology, oncology, immuno-oncology and immunology. For more information, please visit http://biopharma.merckgroup.com/en/index.html