

CMS Finalizes MACRA Quality Measures

The U.S. Department of Health and Human Services (HHS) Centers for Medicare & Medicaid Services (CMS) on April 27 issued a Notice of Proposed Rulemaking proposal designed “to align and modernize how Medicare payments are tied to the cost and quality of patient care for hundreds of thousands of doctors and other clinicians.” The proposal contains quality measures intended to serve as a first step in implementing specific provisions of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). Medicare currently assesses the value and quality of care provided by doctors and other clinicians through a patchwork of programs. Some clinicians are part of Alternative Payment Models (such as the Accountable Care Organizations [ACO], the Comprehensive Primary Care Initiative, and the Medicare Shared Savings Program), and most participate in programs such as the Physician Quality Reporting System, the Value Modifier Program, and the Medicare Electronic Health Record Incentive Program. The proposed rule creates a unified framework called the Quality Payment Program, which includes 2 paths: the Merit-Based Incentive Payment System (MIPS) and Advanced Alternative Payment Models (APMs).

Most Medicare clinicians will initially participate in the Quality Payment Program through MIPS. CMS reported that the program will be flexible, allowing clinicians “to choose measures and activities appropriate to the type of care they provide.” The MIPS program will tie pay to scored performance in 4 categories: Quality (50% of total score in y 1); clinicians would report on 6 measures from among a range of options; Advancing Care Information (25% of total score);

clinicians would report on customizable measures that reflect their use of technology in day-to-day practice; Clinical Practice Improvement Activities (15% of total score): clinicians would select practice improvement activities that match goals from a list of >90 options; Cost (10% of total): scores would be based on 40 episode-specific Medicare claims with no additional clinician reporting required. CMS would begin measuring performance for doctors and other clinicians through MIPS in 2017, with payments based on those measures beginning in 2019.

Medicare clinicians who participate to “a sufficient extent” in Advanced Alternative Payment Models would be exempt from MIPS reporting requirements and qualify for financial bonuses. These models include the new Comprehensive Primary Care Plus model, the Next Generation ACO model, and other Alternative Payment Models under which clinicians accept both risk and reward for providing coordinated, high-quality care. CMS noted that many clinicians who now participate in Alternative Payment Models may not meet the law’s requirements for sufficient participation in the most advanced models. The proposed rule is therefore designed to “provide these clinicians with financial rewards within MIPS, as well as to make it easy for clinicians to switch between the components of the Quality Payment Program based on what works best for them and their patients.” More information on MACRA, including a fact sheet, is available at <http://go.cms.gov/QualityPaymentProgram>.

U.S. Department of Health and Human Services

Reversing AD-Related Genetic Changes

In an article e-published on March 29 ahead of print in *Molecular Psychiatry*, Pereira and researchers from The Rockefeller University (New York, NY), the University of Tsukuba (Japan), and the University of California Davis School of Medicine reported on a study characterizing the molecular effects of aging on the hippocampus by assessing Alzheimer disease (AD)-related gene expression changes using RNA sequencing in rodents. The team focused on the effects of riluzole, a glutamate modulator recently shown to improve memory performance in aged rats. They found that riluzole prevented and reversed many key hippocampal age-related gene expression changes in rats. “In aging and AD, the chemical signal glutamate can accumulate between neurons, damaging the circuitry,” said Pereira in a Rockefeller University press release. “When we treated rats with riluzole, we saw a suite of changes. Perhaps most significantly, expression of molecules responsible for clearing excess glutamate returned to more youthful levels.” Previous work in the authors’ lab showed that the drug prompted structural changes in rats’ neurons that prevented memory loss often seen in old animals. The drug modifies the activity of

specific genes in aged animals. For example, the researchers found that the expression of *EAAT2*, a gene linked to AD and known to play a role in removing excess glutamate from nerve fibers, declines as rats age. However, in rats treated with riluzole this gene’s activity was brought back to youthful levels. In addition to its potential ability to allay memory loss and cognitive decline, riluzole is attractive as a potential treatment for AD. The drug is already being used to treat amyotrophic lateral sclerosis and is considered relatively safe. “We hope to use a medication to break the cycle of toxicity by which glutamate can damage the neurons that use it as a neurotransmitter, and our studies so far suggest that riluzole may be able to accomplish this,” Pereira said. “We found that in addition to recovering the expression of *EAAT2*, the drug restored genes critical for neural communication and plasticity, both of which decline with aging and even more significantly in AD.” Pereira and colleagues are currently testing riluzole in a clinical trial including patients with AD at The Rockefeller University Hospital.

Molecular Psychiatry
The Rockefeller University