Evaluation of medication management programs proves difficult

The most valuable lessons to be learned from the federally funded evaluation of Health Care Innovation Award–winning medication management programs lie not in the statistical information but in the qualitative findings, say two pharmacy researchers.

“We have another case of trying to evaluate an innovation but [using a method that] really wasn’t designed to evaluate what the innovation was intended to do,” said Todd D. Sorensen, a professor in the Department of Pharmaceutical Care & Health Systems at the University of Minnesota College of Pharmacy in Minneapolis.

Gary R. Matzke, coprincipal investigator for one of the award-winning programs, said he would not interpret the results of the evaluation—which found few statistical differences in outcomes with the use of medication management services—as a negative verdict on the value of pharmacy interventions.

Rather, the evaluation’s quantitative findings point to “the extreme importance” of analyzing “the entirety of the data,” said Matzke, a professor in the Department of Pharmacotherapy and Outcome Sciences at Virginia Commonwealth University School of Pharmacy in Richmond.

The awards were part of the effort by the Innovation Center at the Centers for Medicare and Medicaid Services (CMS) to test new service-delivery models that reduce the agency’s costs for its healthcare programs while preserving or improving the quality of the care that beneficiaries receive.

The 6 recipients of the medication management Health Care Innovation Awards were as follows:

• Carilion New River Valley Medical Center’s Improving Health for At-risk Rural Patients (IHARP) program, conducted in collaboration with Virginia Commonwealth University,
• Pharmacy Society of Wisconsin,
• University of Hawaii at Hilo’s Pharm2Pharm program,
• University of Pennsylvania’s HeartStrong program,
• University of Southern California, and
• University of Tennessee’s SafeMed program.

“Since they didn’t assess quality of care, they missed one of the key components,” Matzke said of the CMS-funded evaluation by Acumen, LLC, and Westat, Inc.

He advised waiting for the results of the evaluations by the investigators who have led these programs and designed analyses before Acumen’s involvement.

Both researchers agreed that the CMS-funded evaluation’s qualitative findings provide the takeaways for pharmacy practitioners and planners.

To Sorensen, the qualitative findings provide valuable, albeit not “earthshattering,” lessons about the implementation of innovations.

“The innovation needs to be coordinated among a team,” he said. “A standalone innovation delivered by pharmacists and not being connected to the rest of the patient’s healthcare team is going to be a challenge in a lot of ways.”

Solving the issue of coordination or collaboration for medication management programs is more the responsibility of pharmacists than established team members, Sorensen said.

“Almost universally in my own experience,” he said, “if you work side by side with other providers, you develop a sense of trust, and then there is an acceptance and usually a desire to perpetuate that collaboration.”

Interviews with the awardees, the CMS-funded evaluation states, revealed that a “high level of trust between physicians and pharmacists” needs to exist before implementation of the collaborative practice agreements that the program leaders view as having “great potential” to improve pharmacists’ efficiency and productivity and optimize program implementation.

Another notable qualitative finding was that workflow, especially in the community pharmacy setting, must be modified to allow pharmacists to dedicate time to medication management, Matzke and Sorensen said.

As for lessons learned about the sustainability of the innovative programs, Sorensen said, “Don’t expect this to work in a fee-for-service environment.”

Almost every program was unable to sustain itself after conclusion of the CMS grant, according to the evaluation.

The programs, Sorensen said, then either got “scaled back” or were discontinued.

A “quality-driven or value-based environment” is where the real value of the programs will likely be ascertained, he said.
That the CMS-funded evaluation focused on Medicare beneficiaries rather than all patients participating in the programs presented a problem in ascertaining program benefits, Matzke said.

And in the case of the IHARP program, for which Matzke is a coprincipal investigator, the evaluation focused only on the Medicare beneficiaries continuously enrolled in Parts A and B—the fee-for-service components—as well as Part D. The decision by Acumen to exclude Medicare Advantage enrollees from the evaluation meant that data on 46% of the IHARP program’s 1,797 Medicare beneficiaries was not considered.

Yet the evaluation of the University of Southern California’s innovative medication management program and the University of Hawaii at Hilo’s Pharm2Pharm program included both Medicare Advantage enrollees and Medicare fee-for-service enrollees.

The Pharmacy Society of Wisconsin’s program, focusing on state Medicaid beneficiaries, was evaluated in terms of outcomes in all patients served by the program, 26% of whom were also enrolled in Medicare.

Investigators for the Pharm2Pharm program reported on its medication-related hospitalization rate, estimated costs of hospitalizations, and actual costs of pharmacist services in the January 2017 issue of the *Journal of the American Geriatrics Society*.

According to the article, hospitals that implemented the Pharm2Pharm model had a “substantial” decrease in the rate of medication-related hospitalizations among patients 65 years of age or older relative to hospitals that did not participate. Based on those avoided hospitalizations, the investigators calculated a 264% return on CMS’s investment in Pharm2Pharm pharmacists’ services.

A description of the study design for assessing the impact of the IHARP model of collaborative care on clinical and health services utilization measures was published in the November 1, 2016, issue of *AJHP*.

The lead investigator of the University of Southern California’s innovative medication management initiative stated a year ago that the group was preparing its findings for publication [see May 15, 2016, *AJHP* News].


—Cheryl A. Thompson
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**New drugs and dosage forms**

**Avelumab** injection (Bavencio, EMD Serono): The programmed death ligand-1–blocking monoclonal antibody is indicated for the treatment of metastatic Merkel cell carcinoma in patients 12 years of age or older. The product is subject to FDA Medication Guide requirements.

**Dupilumab** injection (Dupixent; sanofi-aventis U.S. and Regeneron Pharmaceuticals): The interleukin-4 receptor α antagonist is indicated for the treatment of adults with moderate-to-severe atopic dermatitis whose disease is not adequately controlled with topical prescription therapies or when those therapies are not advisable.

**Lamivudine and zidovudine** tablets (no brand name, Aspen Pharmacare): The combination product, which is not a generic, is indicated for use in combination with other antiretroviral agents for the treatment of HIV-1 infection. The tablets, which are not film coated, are packaged in bottles with a desiccant and induction seal.

**Naldemedine** tablets (Symproic, Shionogi): The opioid antagonist is indicated for the treatment of opioid-induced constipation in adults with chronic non-cancer pain. The drug is subject to FDA Medication Guide requirements. As a derivative of naltrexone, which is a derivative of oxymorphone, naldemedine is a Schedule II controlled substance; FDA stated that it has submitted a scheduling recommendation to the Drug Enforcement Administration.

**Niraparib** capsules (Zejula, Tesaro): The poly (ADP-ribose) polymerase inhibitor is indicated for the maintenance treatment of adults with recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in a complete or partial response to platinum-based chemotherapy.

**Ocrelizumab** injection (Ocrevus, Genentech): The CD20-directed cytolytic antibody is indicated for the treatment of patients with relapsing or primary progressive forms of multiple sclerosis. The product is subject to FDA Medication Guide requirements.

**Safinamide** tablets (Xadago, US WorldMeds): The monoamine oxidase type B inhibitor is indicated as an add-on treatment for use along with levodopa–carbidopa therapy in patients with Parkinson’s disease who are experiencing episodes of levodopa–carbidopa ineffectiveness.