



JMCP

JOURNAL OF MANAGED CARE PHARMACY®

Medicare Quality Improvement Organizations'
Ambulatory Drug Therapy Improvement Activities and
Partnerships With Medicare Part D Prescription Drug Plans
and Medicare Advantage Plans

David G. Schulke
Elaine Krantzberg, RN
Jim Grant, MA

Supplement

July 2007

Vol. 13, No. 6, S-b



David G. Schulke, is executive vice president of the American Health Quality Association, representing the national network of private health care quality improvement organizations (QIOs). Medicare and other purchasers retain QIOs to measure the performance of health care providers, practitioners, and health plans and to teach best practices to expedite improvement in the quality of health care.

Previously, Schulke worked for both Democratic and Republican members of the U.S. Senate and House of Representatives (1983-1995), conducting congressional oversight of the quality of health care products and services provided in hospitals, physician offices, nursing homes, and dialysis clinics. He helped to draft and secure enactment of legislation, including the Medicare hospital quality oversight reforms and beneficiary complaint provisions enacted in 1985 and 1986; portions of the Omnibus Budget Reconciliation Act (OBRA) 87 nursing home reforms; the outpatient drug benefit enacted in the Medicare Catastrophic Coverage Act of 1988; the OBRA 90 Medicaid drug rebate and drug use review legislation; and the first risk-adjusted federal quality "report card" evaluating health care services (infertility clinics), which was enacted in 1993. During this time he wrote several congressional committee reports and peer-reviewed journal articles on health care issues and served on the working group on quality of the White House health reform task force.

In 1995, Schulke joined the American Pharmacists Association, the national professional society of pharmacists, where he was responsible for regulatory affairs. He also worked to develop alliances between pharmacists, physicians, consumers, and manufacturers. From 1978 to 1983, he led a community-based organization that vigorously advocated the interests of residents of long-term care facilities, focusing on quality and access problems.

Elaine Krantzberg, RN, is the project director for the Physician Practice/Pharmacy Quality Improvement Organization Support Center (PPP QIOSC) at FMQAI, providing oversight of the PPP QIOSC activities in providing national expertise and support to QIOs conducting Medicare Part D quality improvement projects. She has worked with the Florida QIO for 10 years and has served in several positions in previous contract cycles, including working with the Medicare Advantage organizations (MAOs) as the Community of Practice leader and with acute-care hospitals throughout the state in the Payment Error program. Her work with the MAOs led to consensus-driven collaborations throughout the state, MAO-endorsed diabetes and mammography interventions, development of the Depression and Pharmacy Management project, and development of a MAO pay-for-performance program.

Prior to her QIO work, Krantzberg served as the quality assurance project coordinator and liaison for a large 3-hospital system, working with the state's QIO program and developing and conducting projects aimed at improving medication safety.

Jim Grant, MA, is the project manager for the Physician Practice/Pharmacy Quality Improvement Organization Support Center at FMQAI. He is responsible for providing subject matter expertise and direction in all phases of project development and implementation. Grant's expertise assists QIOs by providing industry prospective as it pertains to the Medicare Part D quality improvement projects. His work experience includes more than 3 years as a pharmacy benefit manager with a managed care plan in Florida. He has extensive experience in therapeutic information analysis, including experience with pharmacy benefit management companies and in developing models and ad hoc data reports. He was also responsible for implementing several academic detailing projects for cardiac medications, which led to the redesign of benefits to assist in the disease management of patients. With a master's degree in clinical psychology, Grant led a nonprofit hospice organization in the Pacific Northwest and also provided psychotherapy services.

Table of Contents

Medicare Quality Improvement Organizations' Ambulatory Drug Therapy Improvement Activities and Partnerships With Medicare Part D Prescription Drug Plans and Medicare Advantage Plans

- S3** Introduction: Medicare Quality Improvement Organizations—Activities and Partnerships
David G. Schulke; Elaine Krantzberg, RN; and Jim Grant, MA

Quality Improvement Organizations

- S7** ALABAMA: Improving the Treatment of Dyslipidemia in African American Medicare Patients With Diabetes Using Integrated Parts A, B, and D Data
- S8** ALASKA: Improving Prescribing and Medication Use in the Long-term Care Setting
- S9** ARIZONA: Increasing the Use of Medical Diagnosis or ICD-9 Codes on Prescription Orders
- S10** ARKANSAS: Reducing Prescribing of Potentially Inappropriate Medications for the Elderly
- S11** CALIFORNIA: Improving Safety in Medication Prescribing
- S12** COLORADO: Identifying the Incidence of Potentially Inappropriate Medications in Long-term Care Residents
- S13** CONNECTICUT: Improving Diabetes Therapy Through Performance Feedback and Educational Outreach
- S14** DELAWARE: Increasing Use of Generic Angiotensin-Converting Enzyme Inhibitors (ACEIs)
- S15** FLORIDA: Enhancing the Impact of Pharmacists' Face-to-Face Medication Therapy Management Services: Identify, Resolve, and Prevent Medication-Related Problems in the Ambulatory Diabetic Population
- S16** GEORGIA: Empowering the Patient to Better Self-Manage Diabetes
- S17** HAWAII: Improving Beneficiary Understanding of Medication Therapy Management Services Through Collaboration With a PDP/MA-PD/Cost Plan Plus
- S18** IDAHO, NEVADA, OREGON, UTAH, and WASHINGTON: Evaluating Medication Therapy Management in the Western Region
- S19** IOWA, MINNESOTA, MONTANA, NEBRASKA, NORTH DAKOTA, SOUTH DAKOTA, and WYOMING: Improving Prescribing and Medication Use Through Medication Therapy Management Services: A Multi-State Collaborative
- S20** KANSAS, ILLINOIS, and MISSOURI: Enhancing the Impact of Provider and Patient Education on Medication Therapy Management Services Enrollment and Retention
- S21** KENTUCKY, INDIANA, and OHIO: Improving Pharmaceutical Care in Long-term Care
- S23** LOUISIANA: Reducing Inappropriate Prescribing in the Elderly Through Proactive Interventions
- S24** MAINE, NEW HAMPSHIRE, and VERMONT: Improve Prescribing Using Part D Data Through Interventions to Decrease the Use of Avoidable and Duplicative Medications in the Medicare Population

- S25** MASSACHUSETTS: Determining the Impact of Medication Therapy Management Services on Patients With Diabetes and Hypertension
- S26** MICHIGAN: Evaluating Medication Therapy Management Services
- S27** MISSISSIPPI: Reducing Therapeutic Duplication of Atypical Antipsychotic Agents
- S28** NEW JERSEY: Managing Medications in Long-term Care Facilities: Beneficiaries With Diabetes
- S29** NEW MEXICO: Improving the Safety and Cost of Medications: The New Mexico Prescription Improvement Coalition (NMPIC)
- S30** NEW YORK: Decreasing Anticholinergic Drugs in the Elderly (DADE)
- S31** NORTH CAROLINA and SOUTH CAROLINA: Improving Pharmacologic Therapy and Therapeutic Monitoring for Persons With Heart Failure
- S32** NORTH DAKOTA: Reconciling Medications: A Hospital, Pharmacy, and Quality Improvement Organization Collaboration
- S33** OKLAHOMA: SPOKE: Safe Prescribing in the Oklahoma Elderly
- S34** PENNSYLVANIA: Improving Prescribing Using Part D Data
- S35** PUERTO RICO: Improving the Quality of Care of Part D Enrollees Diagnosed With High Blood Pressure and Prescribed Diuretics
- S36** RHODE ISLAND: Assessing and Improving Medication Use in Diabetes Using Part D Pharmacy Data
- S37** TENNESSEE: Improving Patient Self-Management Through Medication Therapy Management Services
- S38** TEXAS: Analyzing Formulary Impact on Medicaid/Medicare Patients Participating in the Medicare Part D Prescription Drug Program
- S39** VIRGINIA: Evaluating Warfarin Management by Community Pharmacists
- S41** WASHINGTON, DC, and MARYLAND: Enhancing the Impact of Medication Therapy Management Services in a Medicare Population
- S42** WEST VIRGINIA: Increasing Use of Generic Statins in Beneficiaries With Diabetes
- S43** WISCONSIN: Reducing the Use of Medications Known to Pose Unnecessary Risk in the Elderly

This supplement was funded by a grant from Wyeth Pharmaceutical Inc. The article published in this supplement represents the opinions of the authors and does not reflect the official policy or views of the Academy of Managed Care Pharmacy, the authors' institutions, or Wyeth Pharmaceutical Inc.

The analyses upon which this publication is based were performed under Contract Number HHSM-500-2006-FL002C, funded by the Centers for Medicare & Medicaid Services, an agency of the U.S. Department of Health and Human Services. The content of this publication does not necessarily reflect the views or policies of the Department of Health and Human Services, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government. The authors assume full responsibility for the accuracy and completeness of the ideas presented. FL200707T3PP3B/T2DV2B2510435

Introduction: Medicare Quality Improvement Organizations— Activities and Partnerships

David G. Schulke; Elaine Krantzberg, RN; and Jim Grant, MA

ABSTRACT

BACKGROUND: The Medicare Modernization Act (MMA) has provided an opportunity for quality improvement organizations (QIOs) to partner with Medicare Part D plan sponsors. These new relationships have developed into a set of diverse projects, each approved by the Centers for Medicare & Medicaid Services.

OBJECTIVE: To provide information about the scope of the projects being conducted by the QIOs and their partners.

SUMMARY: The document describes a variety of quality improvement projects addressing medication use by beneficiaries enrolled in Medicare Part D. Private Medicare QIO contractors are implementing these projects in each state. Descriptions of each project were developed by individual QIOs with the assistance of lead staff for the Physician Practice/Pharmacy QIO Support Center for all QIOs nationwide. These projects vary in their complexity, in the quality measures used, and in the clinical processes and economic impact they seek to improve. The summaries in this supplement were prepared 6 months into the current 3-year contract period, which began August 2006. Accordingly, the summaries reflect varying stages of development, funding reductions could occur that necessitate project redesign, and projects have not yet been evaluated. With few exceptions, these projects are not designed as research but as quality improvement projects following the “Plan, Do, Study, Act” model for speeding acceptance of evidence-based practice.

CONCLUSIONS: This survey describes the promise of partnerships whose value will be fully realized in future years. The results of these early QIO initiatives will not be available until projects are evaluated, but QIOs and many Medicare Part D plans have established promising partnerships and have begun to share data for the purpose of assessing and improving plan and practitioner performance as well as patient engagement.

Most projects are focused on ambulatory care, but some QIOs are addressing nursing home care and continuity of care between settings. Most ambulatory care projects are limited to prescription drug claims data, but a few plans are providing medical and lab data to QIOs in addition to drug claims. QIOs have historically worked almost exclusively with physicians and nurses but in many states are now engaged with colleges of pharmacy as well as with managed care and community pharmacists. QIO partnerships will provide managed care organizations and pharmacists with the opportunity for innovative quality improvement initiatives that might not otherwise be possible because of limitations of available data or resources. Pharmacists can use this document to review a wide array of options for working with QIOs and other partners in their market to design or strengthen their organization's medication therapy management and quality improvement programs. Managed care pharmacists may be particularly interested in the ability of QIOs to assist them in comparing their plans' performance with other national and regional plans.

KEYWORDS: Quality improvement organizations, Medicare Advantage plans, Prescription drug plans, Medicare Part D, Medication therapy management

J Manag Care Pharm. 2007;13(6)(suppl S-b):S3-S44

Copyright© 2007, Academy of Managed Care Pharmacy. All rights reserved.

Scope of This Survey

The Medicare Modernization Act (MMA) has provided an opportunity for Medicare quality improvement organizations (QIOs) to partner with Medicare Part D plan sponsors. These new relationships have developed into a set of diverse projects, each approved by the Centers for Medicare & Medicaid Services (CMS). With few exceptions, these projects are not designed as research but as quality improvement projects following the “Plan, Do, Study, Act” model for speeding acceptance of evidence- and consensus-based practice.

The Academy of Managed Care Pharmacy (AMCP) and the American Health Quality Association (AHQA) identified the need for health care professionals and managed care organizations to become knowledgeable about the scope of the projects being conducted by the QIOs and their partners.

The document describes the variety of projects being implemented in each state. Descriptions of each project are based on summaries developed by individual QIOs with the assistance of Elaine Krantzberg and Jim Grant of Florida Medical Quality Assurance, Inc., the Florida QIO, where they serve as lead staff for the Physician Practice/Pharmacy QIO Support Center for all QIOs nationwide. These projects vary in their complexity and in the clinical processes they seek to improve. The summaries in this supplement were prepared 6 months into the current 3-year contract period, which began August 2006. Accordingly, the summaries reflect varying stages of development, funding reductions could occur that necessitate project redesign, and projects have not yet been evaluated. As experience with these projects becomes available, AMCP and AHQA look to research that will examine their effectiveness and practicality for professionals working in the field.

Authors

DAVID G. SCHULKE, is executive vice president, American Health Quality Association, Washington, D.C.; ELAINE KRANTZBERG, RN, is project director and JIM GRANT, MA, is project manager, Physician Practice/Pharmacy Quality Improvement Organization Support Center, FMQAI, Tampa, Florida.

AUTHOR CORRESPONDENCE: David G. Schulke, Executive Vice President, American Health Quality Association, 1155 21st St. NW, Washington, DC 20036. Tel: (202) 261-7576; Fax: (202) 331-9334; E-mail: dschulke@ahqa.org

This survey describes the promise of a partnership whose value will be fully realized in future years. Medicare officials provided standardized quality measures and baseline data to each QIO in the spring of 2007, after partners had been recruited and projects had been designed and launched. Many QIOs and their drug benefit plan partners used other previously defined quality measures. Progress in the projects may be affected by the proposed rescission of millions of dollars in funding for the program to pay for other priorities at CMS. Also, CMS has not yet obtained the funding necessary to provide QIOs with “integrated” Part A, B, and D claims data.

QIOs have worked around these challenges by designing their own quality measures; requesting data directly from health plans and from ad hoc requests to CMS; engaging in local partnerships with pharmacies, physician group practices, colleges of pharmacy and nursing homes; and, when necessary, scaling back their efforts.

■ Medicare Modernization Act Quality Provisions

In addition to creating an outpatient drug benefit for Medicare beneficiaries, the MMA signed into law in December 2003 authorized a number of lesser-known demonstrations and initiatives aimed at measuring and improving the quality of care purchased by Medicare. These MMA provisions included the following:

- Sec. 101: Providing comparative plan information to beneficiaries
- Sec. 101: Medication therapy management services
- Sec. 101: Electronic drug prescribing
- Sec. 109: Quality improvement organizations’ assistance to drug plans and professionals
- Sec. 501: Submission of hospital quality data for public reporting
- Sec. 649: Medicare care management performance demonstration
- Sec. 721: Chronic care improvement pilot
- Sec. 722: Medicare Advantage plan quality improvement program
- Sec. 944-945: Improvements in implementation of the Examination and Treatment for Emergency Medical Conditions and Women in Labor Act

Two of these provisions are particularly promising for their likely long-term effect on the quality of drug therapy: (1) the requirement for every Medicare prescription drug plan (PDP) to establish a medication therapy management (MTM) program, and (2) the extending of quality improvement assistance through the existing QIO program. Officials at CMS have taken important steps to coordinate these 2 new efforts to maximize their benefits.

The MTM program was championed in Congress by the pharmacy profession and by pharmacies. The program’s objective is to give patients the benefit of interventions by health care providers, including pharmacists, to improve the safety and effectiveness of

drug therapy purchased by Medicare. Under the law, the MTM program is a service, paid for by Medicare through administrative fees to its private plan contractors, which every Medicare plan must offer to beneficiaries most dependent on safe, high-quality pharmacotherapy: those who have multiple chronic ailments and are using multiple medications and who are therefore expected to have very high annual drug costs.

MEDICATION THERAPY MANAGEMENT PROGRAM—

(A) DESCRIPTION—

(i) IN GENERAL—A medication therapy management program described in this paragraph is a program of drug therapy management that may be furnished by a pharmacist and that is designed to assure, with respect to targeted beneficiaries described in clause (ii), that covered part D drugs under the prescription drug plan are appropriately used to optimize therapeutic outcomes through improved medication use, and to reduce the risk of adverse events, including adverse drug interactions. Such a program may distinguish between services in ambulatory and institutional settings.

In section 109(b) of the MMA, Congress added a new assignment to the QIO program, instructing QIOs to work with the new Medicare Advantage plans and PDPs to improve the quality of therapy:

PRESCRIPTION DRUG THERAPY QUALITY IMPROVEMENT—The [Quality Improvement Organization] shall... [offer] to providers, practitioners, Medicare Advantage organizations offering Medicare Advantage plans under part C, and prescription drug sponsors offering prescription drug plans under part D[,] quality improvement assistance pertaining to prescription drug therapy.

By law and under the implementing regulations, every Medicare drug plan has a great deal of discretion in implementing its MTM program. CMS officials also gave QIOs a lot of latitude, but encouraged them to work with plans to strengthen their MTM programs.

■ Quality Improvement Organizations

QIOs are private organizations with a variety of public and private customers, including the Medicare program. Medicare enters into contracts with QIOs to evaluate and assist providers and professionals to reliably provide the highest-quality care.

As private contractors with quality expertise, most QIOs also perform quality and access monitoring for Medicaid programs, many support state patient safety initiatives by contributing staff time and funding, and many adjudicate appeals under a score of state managed care “patients rights” laws.

A list of QIOs with their corporate names and the states for which they serve as the Medicare QIO contractor may be found at the Web site of AHQA, the national association of the QIOs:

http://www.ahqa.org/pub/connections/162_694_2450.cfm. In addition, each summary in this supplement identifies the QIO by name and provides contact information for the staff person leading the Medicare Part D work.

The Medicare work of the QIOs is authorized under the title “Utilization Review and Quality Control Peer Review Organization Program” (today known as the Quality Improvement Organization or QIO Program). The program was created by Congress in 1982 in title XI of the Social Security Act. Congress gave the secretary of the Department of Health and Human Services (HHS) a broad statutory scope for the Medicare QIO program, authorizing the secretary to use the QIOs to review and improve the quality and effectiveness of any item or service for which Medicare pays any part. The secretary is authorized to fund the QIOs through a direct draw on the Medicare Hospital Insurance and Supplemental Medical Insurance Trust Funds.

The 3 main purposes of the QIO program are to (1) improve the quality of care for beneficiaries; (2) protect the integrity of the Medicare trust funds by ensuring that Medicare pays only for services and goods that are reasonable, are medically necessary, and are provided in the most appropriate setting; and (3) protect beneficiaries by expeditiously addressing individual complaints and appeals.

This supplement focuses on the main work of QIOs, which is to provide technical assistance to providers, practitioners, and plans. QIOs are also responsible for addressing care that falls short of professionally recognized standards. If a QIO confirms a quality complaint or finds substandard care through other means, the QIO contacts the provider and requests additional information. After assessing that information, a QIO may ask a provider, practitioner, or plan to undertake a quality improvement plan to address a confirmed problem, and the QIO will usually assist in this process. If a provider, practitioner, or plan does not take appropriate action, the QIO may refer that individual or entity to state regulatory authorities or to the HHS Office of Inspector General for action. That office may impose civil monetary penalties or exclude the individual or entity from Medicare and Medicaid for a period of time or permanently. The sanction process is rarely needed or invoked, because most individuals or entities will work with the QIO to take appropriate action when the QIO requests it.

While the statutory scope of activities is remarkably broad for which the secretary may use QIOs to perform for the Medicare program, the secretary may limit the scope of work that QIOs are hired to perform by the specific content of contracts with the organizations.

The secretary revises the QIO contract extensively every 3 years. The 8th Statement of Work (or SoW8, so named because it is eighth in a series of multiyear contracts that began with implementation of the program in 1984) began in August 2005 and will run through the end of July 2008. Funding for this latest 3-year contract period was initially budgeted at \$1.265 billion, of which the QIO contractors themselves may be paid approximately

\$860 million over 3 years (equivalent to about \$287 million a year nationally, or about 56 cents per beneficiary per month). The amount actually available to QIOs has been significantly diminished by the reprogramming of some of these funds to other HHS initiatives.

The contract assigns QIOs to tasks in the following care settings and topics:

- Hospitals (including rural and critical access hospitals)—improving care for heart attack, heart failure, community acquired pneumonia, and surgical complications
- Physician offices—helping physician practices to choose and use health information technology to improve the care they provide to chronically ill people and to promote greater awareness of the needs of racial and ethnic minorities
- Nursing homes—reducing the rate of pressure ulcers among high-risk individuals, decreasing the use of physical restraints, and improving the management of pain in chronic (long-stay) residents
- Home health agencies—reducing rehospitalizations of home care patients
- Improving the quality of pharmacotherapy in a variety of settings, ranging from ambulatory care (by physicians and pharmacists) to long-term care facilities
- Protecting Medicare beneficiaries and the program through complaint investigations, adjudication of appeals of provider and Medicare Advantage plan coverage limitations and denials, and review of hospital admissions

■ QIO Projects to Improve Pharmacotherapy

Medicare officials view the new QIO drug therapy safety and quality work as more developmental in nature than most other provisions of the QIO contract. This is, in part, because CMS has had little involvement with ambulatory pharmacotherapy quality measurement and improvement, but also because Congress enacted the new QIO responsibilities in November 2003, when planning for the 8th SoW was well under way. CMS has set forth the QIO assignment as follows:

- When the [prescription drug plan] PDP or Medicare Advantage PDP, both at risk for prescription cost, agree that the activities are supportive of its [the QIO's] contractual goals of quality improvement and cost containment, the QIO shall provide resources of staff and data, including Part D integrated with Part A and B data, when that enhances PDPs' activities.
- [QIOs shall work closely with groups of “identified participants,” who] are physician practices and/or pharmacies designated by the QIO to engage in quality improvement activities. The QIO shall work with identified participants on clinical performance measure improvement.
- The QIO shall conduct the following activities:
 - Report the required information on drug plans and physician practices/pharmacies with which it has

worked and quality improvement projects that it has deployed

- Develop and deploy an intervention strategy
- Contribute to the program knowledge base through inter-QIO sharing by providing information to other QIOs
- Conduct other appropriate activity to include PDPs and providers in quality improvement activities
- Respond to and track beneficiary written complaints, regarding quality of care with respect to covered prescription medications

iv. If one or more PDPs, pharmacies, or physician practices in a QIO's state/jurisdiction serve Medicare beneficiaries in other states/jurisdictions, the QIO shall coordinate outreach and improvement work with the other QIOs in the states/jurisdictions in which such multistate/jurisdiction entities operate.

■ Highlights of Medicare QIO Projects to Improve Safety and Quality in Pharmacotherapy

The bulk of this supplement describes specific projects that QIOs have undertaken to fulfill their responsibilities under their contracts with the Medicare program. Most QIOs chose to work with plans, and most of them cooperated to improve enrollment in and services provided by the plans' MTM programs. The following summary sketches out these and other innovative approaches now being tested for larger-scale implementation in the 9th QIO Statement of Work (SoW9, which starts in late 2008).

1. QIOs organized MTM projects with drug plans in 25 states:

- Improving treatment of patients with anemia, asthma, coronary artery disease, heart failure, diabetes, dyslipidemia, hypertension, postmyocardial infarction
- Replicating the Asheville Project to improve diabetic patient self-management
- Reducing use of potentially inappropriate medications for the elderly
- Reducing drug-drug interactions and adverse drug events
- Evaluating, giving feedback, and assisting plans regarding MTM program performance
- Studying the impact of face-to-face pharmacist MTM services
- Studying the impact of provider and patient education on MTM enrollment and retention
- Improving medication adherence and persistence

2. QIOs recruited diverse partners in projects to measure and improve drug therapy:

- Medicare Advantage prescription drug plans and PDPs in 39 states
- Community pharmacists in 17 states
- Colleges of pharmacy in 11 states

- Long-term care facilities in 7 states
- Pharmacy associations in 6 states
- Medical societies in 3 states
- Hospital pharmacists in 1 state

3. Many QIOs took advantage of CMS's flexibility to create their own innovative and methodologically rigorous projects, including these exemplars:

- Seven QIOs are relying on the well-documented "academic detailing" educational intervention method.
- Six QIOs are promoting better prescribing and dispensing through e-prescribing and use of electronic health record technology.
- Five QIOs are employing control groups to study their interventions.
- Four QIOs are reducing use of therapeutically duplicative drugs.
- One QIO has arranged for evaluation of patients' warfarin management by community pharmacists compared with a control group receiving usual care.
- One QIO is seeking to improve the accuracy of hospital medication reconciliation at the time of admission, with community pharmacy follow-up of discharge orders after hospital discharge.
- One QIO is promoting inclusion of medical diagnosis codes on prescription orders to improve the quality and safety of dispensing.
- One QIO is investigating the impact of formularies on therapy received by dually enrolled Medicaid/Medicare recipients.

ACKNOWLEDGMENT

The authors acknowledge Anna Kowblansky, RPh, MS, AK Pharmacy Consultants, Santa Barbara, California, for her assistance in writing and revising the manuscript.

DISCLOSURES

Author David G. Schulke is executive vice president, American Health Quality Association (AHQA), the national trade association representing QIOs. Funding was received by AHQA from the Academy of Managed Care Pharmacy for work in developing and drafting this document. Authors Elaine Krantzberg and Jim Grant did not receive funding for work in developing and drafting this document.

Alabama

(QIO name: Alabama Quality Assurance Foundation)

1. Title: Improving the Treatment of Dyslipidemia in African American Medicare Patients With Diabetes Using Integrated Parts A, B, and D Data

2. Objective: Improve the effectiveness of prescribing and adherence to lipid-modifying agents for the African American beneficiary with diabetes and dyslipidemia.

3. Background: The project target population is African American Alabama Medicare beneficiaries aged 18 to 75 years who are continuously enrolled in 8 Medicare Advantage prescription drug (MA-PD) plans /prescription drug plans (PDPs) and diagnosed with diabetes and dyslipidemia. Alabama Quality Assurance Foundation (AQAF) is partnering with VIVA Medicare Advantage, HealthSpring of Alabama, Blue Advantage Healthcare of Alabama, Humana PDP, MemberHealth PDP, and plan physicians to achieve project success.

4. Interventions: The project supplies participating health care providers with information and guidelines on lipid-modifying agents, and treatment information for patients with diabetes and dyslipidemia. On-site visits will be made if resources allow. Patients receive diabetes and dyslipidemia educational materials, patient record keeping tools, as well as information emphasizing the importance of prescription adherence.

5. Project Description: At baseline, the 5 organizations involved in these 8 plans represent 1,877 beneficiaries and 460 physicians. Through analysis and examination of claims data, AQAF will evaluate the prescribing of lipid-modifying agents and the incidence of hospitalizations for cardiovascular events in eligible beneficiaries. Blinded data results will be reviewed and discussed on a regular basis at meetings with PDPs and MA-PD plans. Lessons learned will be discussed and evaluated during regularly scheduled meetings of essential partners and will be shared with other QIOs on monthly QIO support center calls.

6. Primary Outcomes: Evaluate whether the rate of prescribing lipid-modifying agents to eligible beneficiaries increased and hospitalizations for cardiovascular events decreased. Evaluate whether providers' lipid panel measurements improved.

7. Evaluation Design and Methods: Through analysis and examination of Part D data, the project will evaluate whether the rate of prescribing of lipid-modifying agents to eligible beneficiaries increased. Through analysis and examination of Part B claims data, AQAF will determine whether providers' lipid panel performance measurement improved. Through examination and analysis of Part A claims data, AQAF will determine whether the incidence of hospitalizations for cardiovascular events decreased in the cohort of eligible beneficiaries.

8. Contacts:

Alabama Quality Assurance Foundation
Hien Vu, RHIA, Project Manager, (205) 970-1600, ext. 2281
hvu@alqio.sdps.org

Benjamin Dickson, RN, MPH, (205) 970-1600, ext. 3424
bdickson@alqio.sdps.org

Alaska

(QIO name: Mountain-Pacific Quality Health Foundation)

1. Title: Improving Prescribing and Medication Use in the Long-term Care Setting

2. Objective: Devise a collaborative project in the long-term care (LTC) setting that will focus on opportunities to simplify medication regimens. Specifically, promote guideline-based appropriate use of anemia treatment in elderly, at-risk LTC residents.

3. Background: The setting is 2 LTC facilities in Alaska that have agreed to collaborate in a medication regimen simplification and anemia treatment project. The project targets beneficiaries, LTC providers, nurses, and pharmacists providing medication services to residents in each of those facilities.

4. Interventions: The intervention builds on consensus-driven quality indicators that have been developed in conjunction with medical, pharmacy, and nursing staff. Examples of materials are quick-list formulary cards, process-driven guidelines for medication use in the facility, and/or educational sessions summarizing information about the most recent evidence-based practice guidelines specific to 1 or more clinical indicators. After clinical indicators have been agreed upon and materials developed to support the indicators, Mountain-Pacific Quality Health Foundation will work with LTC staff to implement a quality improvement cycle.

5. Project Description: The QIO assists and supports partnering LTC facilities in the development of 2 medication-related quality indicators. The first quality indicator focuses on an evidence-based review of clinical practice guidelines and clinical practice recommendations for use of epoetin (EPO)/darbepoetin in the treatment of anemia. The second quality indicator directly supports the minimum data set quality measure/quality indicator for clinical management of 9 or more medications (medication regimen simplification) for residents in each facility.

6. Primary Outcomes: Anemia Project: Increase the number of residents evaluated through use of the established collaborative protocols and subsequent potential discontinuation/modification of EPO therapy. Nine or More Medications Project: Increase the number of residents whose drug therapy regimens have been simplified by using the efforts of the QIO and facility as compared with the baseline number.

7. Evaluation Design and Methods: Determine whether the LTC facility implemented a system to assure only appropriate initiation, and continuous reexamination of a continued need for EPO and other medications. Do a summary analysis identifying the number and type of medication regimen simplifications.

8. Contact:

Mountain-Pacific Quality Health Foundation
Mark Eichler, RPh, Pharmacy Programs Manager, (406) 457-5818
meichler@mpqhf.org

Arizona

(QIO name: Health Services Advisory Group)

1. Title: Increasing the Use of Medical Diagnosis or ICD-9 Codes on Prescription Orders

2. Objective: Demonstrate a simple, low-cost framework that will increase the number of prescriptions submitted with diagnoses. It is expected that an increase in prescriptions submitted with a diagnosis will result in increased accuracy of prescriptions dispensed, ultimately resulting in greater patient safety.

3. Background: Approximately 5 pharmacies have been recruited for this project. Each pharmacy recommends 10 to 12 physicians, from whom Health Services Advisory Group (HSAG) recruits a select number who agree to include a diagnosis code for each written or electronic prescription.

4. Interventions: Pharmacists are trained to track and record in the database whether the diagnosis is included in the written prescription or the e-prescription. Pharmacists are trained to urge physicians to include the diagnosis on the prescription. HSAG distributes stamped prescription pads to the recruited physicians to remind them to write the ICD-9 (*International Classification of Diseases, Ninth Revision*) code or diagnosis and trains the physicians in their use.

5. Project Description: This project focuses on training physicians to include a patient's diagnosis on the written or electronic prescription, which should result in an increase in prescriptions correctly filled and, ultimately, in greater patient safety.

6. Primary Outcomes: Improve patient medication safety by increasing the accuracy of prescriptions filled.

7. Evaluation Design and Methods: The evaluation design is both quantitative and qualitative. The quantitative component involves the evaluation of the data that the pharmacy submits to HSAG. The QIO will evaluate the increase in the number of prescriptions submitted with a diagnosis, as well as the number of potentially inappropriate medications prescribed for the Medicare population. The qualitative component is a survey in which pharmacists will be asked to evaluate how the project has impacted their workflow and the accuracy of prescription dispensing.

8. Contact:

Health Services Advisory Group

Kimberly Harris-Salamone, PhD, Director, Physician Office Quality, (602) 745-6200

Ksalamone@azqio.sdps.org

Arkansas

(QIO name: Arkansas Foundation for Medical Care)

1. Title: Reducing Prescribing of Potentially Inappropriate Medications for the Elderly

2. Objective: Assess whether Arkansas Medicare beneficiaries aged 65 years and older have been prescribed medications, such as certain benzodiazepines or opioid analgesics, that are potentially harmful to the elderly, and test intervention strategies to reduce inappropriate prescribing in the target population.

3. Background: This project focuses on medication management of the state's geriatric Medicare population for appropriateness, cost, and potential toxicity. Geriatric physiology can alter drug metabolism and increase side effects. Use of certain agents could unnecessarily expose patients to toxicities that could be avoided by safer or more effective medications. Inappropriate medication in the elderly has been defined as medication for which the potential risk outweighs the potential benefit and for which a good alternative drug is available. Gerontologist Mark H. Beers, MD,¹ has been advocating the use of explicit criteria developed by expert consensus panels for identifying inappropriate use of medications in the elderly. In 1991, he developed explicit criteria for nursing facilities to use to determine the appropriateness of medication for the frail elderly. He has updated these criteria to include medication therapy in all persons over the age of 65 years. Beers's Criteria have been used as national guidelines and references for physicians and pharmacists to improve medication use in the elderly. These criteria are the core of Arkansas Foundation for Medical Care's (AFMC's) educational foundation for intervention development and implementation.

4. Intervention: Quality improvement programs are developed to ensure appropriate drug utilization for this population. The program includes appropriate drug selection, dosing, duration of use, and monitoring. Interventions include interactive reduction strategies and educational offerings at annual statewide pharmacist meetings. AFMC assists pharmacists with defining better internal processes for identification of adverse prescribing patterns. The QIO identifies and promotes systems and technologies that encourage optimal prescribing. Educational outreach with practitioners and pharmacists is conducted to facilitate review of the medications in this population, as well as statewide letters detailing the rationale for avoiding commonly used drugs that are potentially inappropriate. Long-term care (LTC) facility medication watch lists are developed to provide medication administration staff quick references for adverse drugs.

5. Project Description: The target Medicare population includes older adults with chronic and acute disorders, including those that reside in community dwellings as well as those in LTC facilities. This project is being deployed in collaboration with essential partners such as the Arkansas Pharmacists Association, University of Arkansas for Medical Sciences College of Pharmacy, and the top prescription drug plans (PDPs) covering Arkansas beneficiaries. The project focuses on the clinical settings of family, general, geriatric, and internal medicine practices and nursing homes and independent and chain pharmacies. AFMC is seeking to partner with the top 4 PDPs, which represent 70% of the beneficiary population in the state.

6. Primary Outcomes: Reduce inappropriate prescribing, decrease polypharmacy, avoid adverse events, and maintain functional status.

7. Evaluation Design and Methods: AFMC uses 2 related measures to assess the project goal to improve therapy by reducing use of potentially inappropriate medicines in elderly individuals who are receiving 1 or more such drugs. The first measure is whether therapy was improved in beneficiaries who received at least 1 drug to be avoided in the elderly. The second measure is to improve therapy in beneficiaries who received at least 2 different drugs to be avoided by the elderly.

8. Contact:

Arkansas Foundation for Medical Care, Inc.

Nancy Archer, RN, CPHQ, Assistant Vice President, Quality, (877) 375-5700, ext. 8732

narcher@ar2qio.sdps.org

California

(QIO name: Lumetra)

1. Title: Improving Safety in Medication Prescribing

2. Objective: Improve safety in medication prescribing for California Medicare beneficiaries by focusing on potentially inappropriate medications (PIMs) for the elderly and drug-drug interactions (DDIs).

3. Background: This project focuses on the outpatient setting. The partners are 6 health plans, all of which sponsor Medicare Advantage prescription drug plans within California. The clinical rationale for selecting this project is that clinical quality relevance for PIMs and DDIs has been demonstrated in the literature, current and past. On the practical side, Part D data are readily available at the point of adjudication, and this study is a prelude to the future integration of Parts A, B, and D data, which requires additional infrastructure development before the process can be feasible.

4. Interventions: The interventions are targeted to prescribers with high rates of PIMs identified in the study's baseline data analysis and include distribution of printed information for both beneficiaries and providers about PIMs, DDIs, and medication safety. Focused interventions include academic detailing using the 2003 Beers Criteria,¹ provider feedback based on prescription utilization data, and explicit suggestions for therapeutic alternatives and changes in practice.

5. Project Description: Lumetra uses 2 quality indicators commonly used in medication safety studies: the prevalence of PIMs used in the elderly and DDIs. Lumetra gathers pharmacy claims data from the participating health plans, performs retrospective claims data analysis, and assists Part D sponsors to implement interventions aimed at reducing potentially harmful prescriptions.

6. Primary Outcomes: Evaluate improvement from baseline of the PIM quality indicator. Evaluate the DDI indicator describing frequency of the identified DDI pairs. The descriptive analyses provided to the participating plans will contribute to future development of this measure.

7. Evaluation Design and Methods: For PIM, Lumetra identified drugs using both the 2003 Beers Criteria and the Health Plan Employer Data and Information Set (HEDIS) Drugs to be Avoided in the Elderly (DAE) 2006. For DDI pairs, Lumetra established a listing based on identifying those with a level 1 significance rating (clinically important interactions), major severity (life threatening or may cause permanent damage), and established documentation. The retrospective preintervention and postintervention study design with 3 defined time periods allows for observation points at equal intervals and enough time to confirm preintervention and postintervention variations for the outcome variables.

8. Contact:

Lumetra

Ana Perez, MSN, RN, CDE, CPHQ, Senior Manager, Healthcare Process Improvement,

(415) 677-2142

aperez@caqio.sdps.org

Colorado

(QIO name: Colorado Foundation for Medical Care)

1. Title: Identifying the Incidence of Potentially Inappropriate Medications in Long-term Care Residents

2. Objective: Identify the incidence of potentially inappropriate medications (PIMs) among long-term care (LTC) residents in select facilities in Colorado and minimize such prescriptions.

3. Background: Prescribing of PIMs in the elderly has been the subject of a variety of peer-reviewed articles. Colorado Foundation for Medical Care (CFMC) is working with 5 to 10 selected LTC facilities to identify a subject pool of approximately 500 or more elderly persons who may have been prescribed 1 or more PIMs.

4. Interventions: The intervention builds on educational sessions and educational materials designed to change the delivery of the identified drugs and to heighten the awareness of other PIMs. There is at least 1 face-to-face meeting with each facility to provide feedback on the data and educational information about the PIMs. CMFC staff will present and lead teleconferences on a quarterly basis to intervene on the use of PIMs; local opinion leaders will participate. Other intervention items to be considered include reminder stickers, prompts, and posters designed to address the use of the medications.

5. Project Description: This project addresses PIMs in Medicare beneficiaries residing in LTC facilities. The quality indicator will be the proportion of residents 65 years old or older with at least 1 PIM as part of their regularly scheduled medications. The numerator will be the number of residents 65 years old or older receiving at least 1 PIM, and the denominator will be the total number of residents 65 years old or older for whom data were collected in the LTC facilities. Medications available on an as-needed basis will be reviewed and addressed separately, as it may be difficult to determine if these medications are actually being administered to the residents.

6. Primary Outcomes: Decrease the number of PIMs prescribed to LTC residents.

7. Evaluation Design and Methods: A lower proportion of residents with 1 or more PIMs, between baseline and remeasurement, will be considered improvement. Additional measures, such as the nursing home depression quality measure, the nursing home falls quality indicator, or the National Committee for Quality Assurance (NCQA) Health Plan Employer Data and Information Set (HEDIS) Drugs Avoided in the Elderly (DAE), will be used, as appropriate, to gain a more complete picture of therapy being provided to this population.

8. Contact:

Colorado Foundation for Medical Care (CFMC)
Jennifer Regensburger, Project Manager/Biostatistician, (303) 931-0027
jregensburger@coqio.sdps.org

Connecticut

(QIO name: Qualidigm)

1. Title: Improving Diabetes Therapy Through Performance Feedback and Educational Outreach

2. Objective: Improve routine lipid testing and control of cholesterol levels, improve the use of statin therapy, and reduce the risk of heart disease in Medicare managed care patients with diabetes.

3. Background: Qualidigm is partnering with Health Net of Connecticut, Inc., and the Connecticut State Medical Society-Independent Practice Association (IPA) in a pilot project to improve the delivery of lipid-modifying prescription drugs to Medicare managed care patients with diabetes. The health plan reports enrollment of approximately 26,500 Medicare beneficiaries in their managed Medicare Advantage prescription drug (MA-PD) plan. Physicians will be selected for the project if they participate in the plan's provider network, if they have >10 Medicare patients aged 18-74 years with diabetes individually or in aggregate with their partners, and if their office is in the towns of Fairfield, Bridgeport, or Trumbull.

4. Interventions: Qualidigm is spearheading the provision of a medication use report based on the Health Plan Employer Data and Information Set (HEDIS) data set from the health plan. A list of the physician's patients with diabetes is available from the health plan to assist the physicians in reaching out to patients who may need services or medication changes. After the provision of the medication use report, an interactive and structured educational session is scheduled and conducted with physicians individually or, if they prefer, in groups. The educational session includes the discussion of potential intervention strategies to mitigate the barriers physicians may encounter when prescribing lipid-modifying therapy for their patients with diabetes. The IPA medical director uses a standard script that reviews the 2006 American Diabetes Association and National Cholesterol Education Program recommendations and clinical guidelines for diabetes care. The medical director also reviews common barriers to patient medication adherence and the benefits of using generic forms of statin medication. Educational handouts for patients are left with physicians to support their subsequent interactions with patients.

5. Project Description: This project targets Medicare beneficiaries with diabetes who are continuously enrolled in the health plan's MA-PD coverage in 2006-2007 and will focus on improving statin therapy.

6. Primary Outcomes: Increase prescribing and use of statin therapy to reduce the risk of heart disease in patients with diabetes.

7. Evaluation Design and Methods: The primary outcome, measured monthly over the course of the project, includes the use of all lipid-modifying drugs and statin therapy (both brand and generic). When the project is completed, Qualidigm will compare changes in usage between the baseline (January 1, 2006, through June 30, 2006) and follow-up (January 1, 2007, through June 30, 2007) observation periods. Secondary outcomes evaluated at the end of the project include the improvement of lipid testing and low-density lipoprotein cholesterol control. Interim data on physician barriers will be used to refine Qualidigm's telephonic support of the physicians.

8. Contact:

Qualidigm
Maureen Curry, MHA, CPHQ, Project Manager, (860) 632-6335
mcurry@ctqio.sdps.org

Delaware

(QIO name: Quality Insights of Delaware)

1. Title: Increasing Use of Generic Angiotensin-Converting Enzyme Inhibitors (ACEIs)

2. Objective: Reduce cost and improve quality of prescription drug use among Medicare beneficiaries in Delaware by increasing the proportion who are taking generic versus brand-name angiotensin-converting enzyme inhibitors (ACEIs) for hypertension (HTN), heart failure (HF), or renal complications of diabetes.

3. Background: Gelbach et al.² have shown that feedback to physicians on prescription volume and potential savings from greater generic drug use influences physician behavior. This project seeks to increase use of generic ACEIs in persons over the age of 65 by increasing physician awareness.

4. Interventions: Quality Insights provides physicians reports of the total (or estimated) number of patients linked to their practice who are receiving ACEIs and the number and proportion receiving generic ACEIs after baseline analysis. Using *Red Book*³ data or price data, if available in the prescription claim data, the QIO will estimate the total cost for medications prescribed and dispensed and estimated savings if the physician prescribed generic formulations or if generic formulations were dispensed.

5. Project Description: Quality Insights of Delaware will work with 18 Delaware primary care physicians participating in the physician office health information technology (HIT) and care management improvement project (Group 1) with 2 comparison groups randomly selected from physicians not participating in the HIT/care management project. Group 2 will receive profile reports but no other intervention. Group 3 will not be contacted as part of the project, but patient drug utilization will be reported.

6. Primary Outcomes: Increase the use of generic ACEIs, thereby decreasing the cost of ACEIs.

7. Evaluation Design and Methods: The QIO will assess rate of use of generic ACEIs in each of the 3 groups and document changes from baseline to remeasurement. The QIO anticipates little change in Group 3, a larger change in Group 2, and the largest change in Group 1. The QIO will assess changes by measuring the confidence limits around the preintervention and postintervention relative risk of generic ACEI prescription in each of the 3 groups.

8. Contact:

Quality Insights of Delaware
Les DelPizzo, Chief Operating Officer, (302) 478-3600, ext.102
ldelpizzo@deqio.sdps.org

Florida

(QIO name: FMQAI)

1. Title: Enhancing the Impact of Pharmacists' Face-to-Face Medication Therapy Management Services: Identify, Resolve, and Prevent Medication-Related Problems in the Ambulatory Diabetic Population

2. Objective: To improve diabetic patient self-management through pharmacist face-to-face medication therapy management (MTM) services.

3. Background: Poor compliance to medication regimen, increased costs associated with care, increased HbA1c and dyslipidemia can all be influenced by poor patient self-management of medication therapy. Studies have shown that pharmacists' face-to-face MTM services can improve patient self-management of their medication regimen.

4. Interventions: FMQAI is conducting monthly teleconferences with project partners AvMed and Humana Inc. and their contracted community pharmacies to discuss FMQAI's project and its continuous progress. FMQAI is assisting those contracted MTM pharmacies with their implementation of MTM services. Face-to-face appointments with the targeted beneficiaries are scheduled by the Medicare Advantage prescription drug (MA-PD) plans and contracted community pharmacy personnel. FMQAI's communication plan promotes the improvement of the quality indicators for this project. FMQAI reviews and analyzes data and provides feedback using these quality indicators to the MA-PD plans.

5. Project Description: FMQAI has created partnerships with AvMed and Humana to improve patient self-management through pharmacist face-to-face MTM services. These services will be provided at various retail pharmacies contracted by the MA-PD plans. FMQAI collects and analyzes data provided by the MA-PD plans for Medicare beneficiaries with diabetes who are taking medications in at least 2 drug categories, are enrolled in MA-PD plans, and have received pharmacist face-to-face MTM services. FMQAI will also develop and distribute intervention tools to contracted retail pharmacies for the purpose of increasing awareness of MTM services, and will provide technical assistance to the MA-PD plans.

6. Primary Outcomes: Decrease in overall health care costs (all clinical and drug costs) at remeasurement factoring in an expected increase in health care costs (taking into consideration a projected 5.1% average health cost growth); reduced number of medications at remeasurement (consolidation of a number of distinct medications); decreased hemoglobin A1C and total cholesterol; and increased medication compliance.

7. Evaluation Design and Methods: The primary indicators measured for this project are compliance to medication regimen, costs associated with care, change in the number of distinct medications prescribed, A1C and total cholesterol level. Clinical and pharmacy claims data are obtained from AvMed and Humana health plans.

8. Contact:

FMQAI

Savi Lenis, PharmD, Senior Project Coordinator Task, 1d3, (813) 865-3528

slenis@flqio.sdps.org

Georgia

(QIO name: Georgia Medical Care Foundation)

1. Title: Empowering the Patient to Better Self-Manage Diabetes

2. Objective: Improve patient self-management and therapeutic outcomes in patients with diabetes mellitus using pharmacist-directed medication therapy management (MTM) services.

3. Background: The project design is based on the Asheville Project, which sought to provide education and personal oversight for patients with chronic health conditions. The Georgia Pharmacy Association (GPhA) conducted a similar project in Dublin, Georgia, with an employer group. Georgia Medical Care Foundation (GMCF) has taken the concept of this project and targeted diabetic Medicare beneficiaries.

4. Interventions: GMCF will analyze the effect of face-to-face MTM services provided by community pharmacists.

5. Project Description: The collaboration between the GMCF, GPhA, Community Care Rx, and the Institute for Wellness and Education shares the common goal of empowering patients to appropriately manage their diabetes. The project gives participating pharmacists the opportunity to directly affect Medicare beneficiaries' therapeutic outcomes. It also demonstrates the vital role of the pharmacist as a member of the health care team and the most qualified professional to provide MTM services.

6. Primary Outcomes: Obtain a positive impact of MTM services using patient outcomes that include a reduction in hemoglobin A1C compared with baseline values. Other measures include improvement in patient self-awareness and self-management of their diabetes, satisfaction with MTM services provided by pharmacists, and reduction in overall health care costs.

7. Evaluation Design and Methods: The QIO is coordinating the study of this project. The project involves 100 patients, 50 control patients, and 50 experimental/intervention patients within 10 independent community pharmacist service areas. Patients are selected from 10 counties, with an equal representation of rural and urban settings. There will be 5 community pharmacies (with 10 patients each) in the control group and 5 community pharmacies (with 10 patients each) in the intervention group. This design will enable GMCF to compare patients receiving MTM services with patients not receiving MTM services, and to compare patients in rural versus urban areas. An independent variable that will be measured is the education level of the patients participating, by obtaining data describing literacy and health literacy. Improvement in patient self-awareness and self-management of their diabetes and satisfaction with MTM services will be measured through the use of a survey assessment tool that participating patients will complete at the end of the study period. Health care cost reduction will be measured by acquiring financial and other billing costs from Medicare Parts A and B data, as well as costs of medications and pharmaceutical/diabetic supplies on file with the participating pharmacy, then comparing the 12-month period immediately preceding the study period with the 12-month intervention period.

8. Contact:

Georgia Medical Care Foundation
Bill Wilson, Physician Office Project Manager, (800) 982-0411
bwilson@gaqio.sdps.org

Hawaii

(QIO name: Mountain-Pacific Quality Health Foundation)

1. Title: Improving Beneficiary Understanding of Medication Therapy Management Services Through Collaboration With a PDP/MA-PD/Cost Plan Plus

2. Objective: In this project, the QIO will assist and support the partnering prescription drug plans (PDPs), Medicare Advantage prescription drug plan, and Cost Plus Plan (the Plans) in their provision of medication therapy management (MTM) services.

3. Background: MTM services are designed to improve member understanding, appropriate medication use, and reduce the risk of adverse events.

4. Intervention: This educational intervention is designed to increase the knowledge and positive perception of MTM services to increase beneficiary participation in the Plans' MTM services. The QIO supports the Plans' MTM services program enrollment through activities such as providing educational materials describing the potential benefits of MTM services to providers/physicians, providing information on MTM services to advocacy groups, and helping the partnering plan develop a member survey that will enable the plan to evaluate their MTM program and determine beneficiaries' knowledge and satisfaction with the Plans' MTM services.

5. Project Description: The QIO is working within the Plans' provider networks to promote a consistent message about the value of MTM services for Medicare beneficiaries in order to garner local provider support for these services. Mountain-Pacific Quality Health Foundation evaluates patient satisfaction with MTM services and improvement in medication understanding through MTM services. The QIO maintains ongoing contact with the Plans and evaluates overall satisfaction with the project.

6. Primary Outcomes: Determine patient satisfaction with MTM services and improvement in medication therapy understanding through MTM services.

7. Evaluation Design and Methods: This collaboration utilizes the knowledge and assets of the QIO and Plans with significant resources and presence in the region. By tracking performance and improvement in beneficiaries' medication therapies, the project will be able to evaluate the outcome of the member survey and educational components of MTM services.

8. Contact:

Mountain-Pacific Quality Health Foundation
Mark Eichler, RPh, Pharmacy Programs Manager, (406) 457-5818
meichler@mpqhf.org

Idaho, Nevada, Oregon, Utah, and Washington

(QIO names: Qualis Health [ID/WA], HealthInsight [NV/UT], Aumentra Health [OR])

1. Title: Evaluating Medication Therapy Management in the Western Region

2. Objective: Three QIOs in 5 states and a pharmacy consulting group, Improve RX, are collaborating to evaluate the effectiveness of an audit and feedback style intervention. In such a program plans receive data comparing the performance of their MTM services population and their population as a whole with blinded data from the other plans participating in the project.

3. Background: The project includes 7 participating plans, both national and regional. The participating plans have a mix of standalone prescription drug plans and Medicare Advantage prescription drug plan products.

4. Interventions: The project team meets with each plan quarterly to review and discuss the plan's performance on the quality measures, and the comparison plan performance. The participating plans determine how best to intervene with their MTM services population and/or population as a whole, based on these performance results. The plans have access to a secure Web-based portal that can be used to query which specific patients were included in each stage of the analytic algorithm to calculate quality measure rates. The project team is available to provide assistance as needed with quality improvement planning and implementation.

5. Project Description: The project quality measures address care of patients with diabetes, dyslipidemia, and asthma, and address inappropriate prescribing in general. In Phase I specific metrics include prevalence of lipid-modifying drug prescribing in patients receiving drug therapy for diabetes, measurement of statin adherence, utilization ratio of generically available statins, excessive/overuse of beta-agonist inhaler(s), regular users of beta-agonist inhalers not receiving inhaled corticosteroids, prevalence of drug-drug interactions, use of certain drugs that experts have judged to be generally inappropriate for use in the elderly, and adherence to prescribed antidepressants. These Phase I measures can be calculated from prescription drug utilization data. Phase II measures require integration with Medicare Parts A and B claims.

6. Primary Outcomes: Achieve improvement in measure scores for the plans' MTM services to the Medicare population, using the quality metrics listed under Project Description above.

7. Evaluation Design and Methods: Quality indicators are remeasured at 3-month intervals.

8. Contacts:

Qualis Health

Kathryn Bunt, MPH, Physician Office QI Director, (206) 364-9700, ext. 2259

kathrynb@qualishealth.org

HealthInsight

Sharon Donnelly, MS, Healthcare Redesign/HIT Lead, (801) 892-0155

sdonnelly@healthinsight.org

Aumentra Health

Dave Bourdon, MHS, Senior Healthcare Analyst, (503) 382-3900

Dbourdon@acumentra.org

Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, and Wyoming

(QIO names: Iowa Foundation for Medical Care, Stratis Health [MN], Mountain-Pacific Quality Health Foundation [MT/WY], CIMRO [NE], North Dakota Health Care Review, South Dakota Foundation for Medical Care)

1. Title: Improving Prescribing and Medication Use Through Medication Therapy Management Services: A Multi-State Collaborative

2. Objective: The QIOs will assist and support the provision of medication therapy management (MTM) services by the partnering prescription drug plans/Medicare Advantage prescription drug plans. The QIOs' support will include leveraging established partner relationships, providing data analysis, and acting as an educator and trainer of quality improvement, culture change, and change management.

3. Background: The Region 25 states share similar rural and geographic challenges in implementing this project. Partners for this project are 2 prescription drug plans. Participants are plan members who are eligible for MTM services. The plans' MTM programs will target members with multiple disease states, multiple medications treating those diseases, and whose annual prescription drug expenses are estimated to exceed \$4,000.

4. Interventions: The QIOs will provide educational materials outlining the potential benefits of MTM to many providers, such as pharmacists, physicians, and home health agencies. Each QIO will also work with their state's beneficiary outreach organizations and consumer groups to increase their understanding of MTM services. The QIOs will survey plan members regarding their understanding and use of MTM services. QIOs will calculate specific clinical quality indicators using prescription claims data and report the results to each plan.

5. Project Description: MTM services are designed to improve member understanding and use of appropriate medications to reduce the risk of adverse events and yield optimal outcomes of therapy. This project is intended to increase awareness of MTM services, provide information on how plan members view different MTM programs, and explore how MTM affects specific clinical quality indicators.

6. Primary Outcomes: Increase visibility and understanding of MTM services and maximize utilization by eligible beneficiaries, assess members' view of MTM services via survey, review automated MTM services messaging to determine intervention effectiveness, and analyze Part D prescription drug event (PDE) data and calculate clinical indicators.

7. Evaluation Design and Methods: By tracking performance across states, the project may demonstrate differences in the delivery of MTM services both from 2 different plans and between states even when provided by the same plan. Performance indicators include the following:

- Member Survey Data—Information will be collected from a survey instrument developed in collaboration with the partnering plans and the QIOs. The survey will evaluate satisfaction with MTM services whether the beneficiary enrolled or disenrolled.
- Clinical automated MTM services messaging to pharmacists regarding PDEs that trigger messages in relation to specific and significant drug-drug interactions.
- Clinical indicator using PDE data—Percentage of Part D beneficiaries with heart failure enrolled in the plans' MTM program that have prescription claims for angiotensin-converting enzyme inhibitors and/or angiotensin receptor blockers.
- Clinical indicator using PDE data—Medication possession ratio for branded selective serotonin reuptake inhibitors (SSRIs) versus generic SSRIs.

8. Contact:

Denise Hyde, PharmD, RPh, Multi-State QIO Project Coordinator and Quality Improvement Advisor,
CIMRO of Nebraska, (800) 458-4262
dhyde@neqio.sdps.org

Kansas, Illinois, and Missouri

(QIO names: Kansas Foundation for Medical Care, Illinois Foundation for Quality Health Care, Primaris [MO])

1. Title: Enhancing the Impact of Provider and Patient Education on Medication Therapy Management Services Enrollment and Retention

2. Objectives: (1) Maximize enrollment of eligible members in medication therapy management (MTM) services, (2) identify components of successful MTM implementation and delivery, and (3) assist Medicare Part D plans in identifying the impact of MTM.

3. Background: Because MTM delivery is not standardized, evaluation of different delivery methods is critical to inform future modifications under Part D. Low levels of awareness and understanding of MTM by practitioners and consumers limit the use of the MTM component of the Part D benefit.

4. Interventions: (1) Increase awareness of the MTM benefit by practitioners and consumers, (2) identify barriers to MTM implementation, and (3) share lessons learned and performance data among participating plans.

5. Project Description: This project is a multistate collaboration to maximize MTM program enrollment and help plans identify access and delivery components of successful MTM services.

6. Primary Outcomes: Measure utilization in each plan type by eligible plan members' participation in MTM. Analyze medication possession ratio data and prescription costs based on MTM access and delivery program characteristics.

7. Evaluation Design and Methods: Preintervention and postintervention design will be used to evaluate the effectiveness of the QIOs' interventions in improving eligible members' participation in MTM programs. The MTM service effectiveness will be determined by comparing preintervention and postintervention outcome measures. The evaluation will seek to identify program access and delivery differences through qualitative and quantitative comparisons.

8. Contacts:

Kansas Foundation for Medical Care
Kenneth Mishler, PharmD, Senior Vice President, (785) 273-2552
kmishler@ksqio.sdps.org

Illinois Foundation for Quality Health Care
Mary Lukancic, MD, (630) 928-5852
mlukancic@ilqio.sdps.org

Primaris
Catherine Gill, MS, MHA, Director, (573) 817-8300, ext. 320
cgill@primaris.org

Kentucky, Indiana, and Ohio

(QIO names: Health Care Excel [IN/KY] and Ohio KePRO)

1. Title: Improving Pharmaceutical Care in Long-term Care

2. Objective: To improve pharmaceutical care in the long-term care (LTC) resident population with diabetes.

3. Background: Phase I will focus on work with Medicare Advantage prescription drug (MA-PD) plans, prescription drug plans (PDPs), LTC facilities, and LTC consultant pharmacists on improvement opportunities in the care of LTC facility residents with diabetes. The QIOs will identify and prioritize improvement opportunities, and develop facility specific continuous quality improvement (CQI) plans.

4. Intervention: The project incorporates the MTM services model along with a diabetes data collection tool developed by a QIO, in addition to the drug regimen review (DRR) mandated by the Centers for Medicare & Medicaid Services, to assess the value of the pharmacist's role in educating LTC prescribers and staff. LTC consultant pharmacists play an integral role in the medication management of LTC beneficiaries with diabetes, including those on anticoagulation therapy. The QIO and LTC consultant pharmacists will provide educational sessions for medical directors and a multidisciplinary team from each LTC facility. QIOs also will assist each facility to develop and implement a CQI plan. QIOs will develop facility-specific reports indicating performance improvement on their respective projects.

5. Project Description: This 3-state project involves 2 phases in which the identified QIOs will work with MA-PD plans, PDPs, LTC consultant pharmacists, and nursing facilities staff to improve pharmaceutical care to residents with diabetes. Phase I will include LTC facilities regionally located in southeast Indiana; western, central, and southeast Kentucky; and southwest Ohio. Phase II will include LTC facilities dispersed throughout each state. During Phase II, the lessons learned from Phase I will be spread to other LTC facilities in each participating state through regional educational meetings and other communication venues. Phase II also will include evaluation of the effectiveness of strategies and reporting. A consultant from Purdue University School of Pharmacy will provide valuable support and insight in the development and adaptation of the project.

6. Primary Outcomes: Improved pharmaceutical management and therapeutic monitoring of residents with diabetes, as assessed by a set of quality indicators derived from the American Medical Directors Association (AMDA) guidelines for diabetes care in the LTC setting. Each LTC facility is provided data and then selects 2 indicators for focused interventions. Following is a list of the quality indicators included in the data collection:

- Percentage of residents with diabetes prescribed multiple oral hypoglycemic medications
- Percentage of residents with diabetes prescribed multiple hypertensive medications
- Percentage of residents with diabetes receiving insulin prescribed sliding scale insulin dosage
- Percentage of residents with diabetes with documentation of pneumococcal immunization
- Percentage of residents with diabetes angiotensin-converting enzyme inhibitor and/or angiotensin receptor blocker
- Percentage of residents with diabetes receiving antithrombotic therapy
- Percentage of residents with diabetes prescribed a statin (lipid-modifying drug)
- Percentage of residents with diabetes experiencing a hypoglycemic event requiring intervention
- Percentage of residents with diabetes who also have a diagnosis of heart failure who are prescribed thiazolidinedione or metformin
- Percentage of residents with diabetes who have received renal function testing
- Percentage of residents with diabetes receiving warfarin
- Percentage of residents with diabetes prescribed warfarin who have received the International Normalized Ratio test
- Percentage of residents with diabetes having a hypoglycemic event who have been transferred to the hospital for that hypoglycemic event

- Percentage of residents with diabetes who have received a hemoglobin A1C test in the previous 12 months
- Percentage of residents with diabetes having the most recent A1C value within the previous 12-month period reported as equal to or less than 7%
- Percentage of residents with diabetes having the most recent A1C value within the previous 12-month period reported as greater than 7%
- Percentage of residents with serum creatinine results within normal range

7. Evaluation Design and Methods: The QIOs will provide information that will include the number of Medicare beneficiaries with diabetes in the participating LTC facilities and selected medications prescribed to these residents. The LTC consultant pharmacists will document resident diagnoses, medications ordered, laboratory monitoring parameters, recommendations for medication changes, additional labs to be ordered or reordered. These data will be used for a regional comparison of LTC facilities and may enable comparisons between LTC consultant pharmacist on-site review and MA-PD or PDP off-site review.

8. Contacts:

Health Care Excel
 Darlene Skelton, Director, Physician Practice Services, (812) 234-1499
 dskelton@inqio.sdps.org

Health Care Excel
 Janet Pollock, Clinical Coordinator, Physician Practice/Pharmacy/Part D, (502) 454-5112
 jpollock@kyqio.sdps.org

Ohio KePro KePRO
 Bonnie Hollopeter, Manager Physician Office Services, (216) 447-9604
 bhollopeter@ohqio.sdps.org

Louisiana

(QIO name: Louisiana Health Care Review)

1. Title: Reducing Inappropriate Prescribing in the Elderly Through Proactive Interventions

2. Objective: Reduce inappropriate prescribing practices in ambulatory elderly patients.

3. Background: The clinical literature is replete with studies documenting suboptimal prescribing practices, particularly in the elderly population. The project will increase the knowledge and understanding of prescription drug plans and physicians regarding inappropriate prescribing practices in the elderly that have been described in the literature, identify barriers to improvement, and determine if targeted awareness efforts and collaborative relationships can decrease the rate of inappropriate prescribing in the elderly.

4. Interventions: The Louisiana Health Care Review Pharmacy Practice team will conduct an awareness campaign through press releases and will facilitate dissemination to prescribers of age-related precautionary drug information via the Epocrates electronic drug information system, through real-time, online electronic reminders. The public awareness campaign consists of the following steps:

- distribution of a press release to local media and to appropriate association newsletters
- health plan project partners were asked to distribute the press release information in their pharmacy/physician newsletters
- letters sent to 2,135 primary care physicians in Louisiana
- letters sent to Epocrates (a nationwide electronic drug information system) advising prescribers that age-related warnings did not appear in their software for 4 of the 10 drugs targeted by this project
- letters sent to pharmacists
- a second mailing sent to primary care physicians

The team will also use Katrinahealth.org to improve access to medical and pharmacy information for beneficiaries formerly residing in the state who were displaced outside of Louisiana by hurricanes.

5. Project Description: Because of the need for measurement data the initial project team members will consist of Louisiana Health Care Review, Medicare Advantage prescription drug (MA-PD) plans in the state of Louisiana, and the 2 colleges of pharmacy in Louisiana (Xavier University School of Pharmacy and University of Louisiana School of Pharmacy). A main tactic will be to reach pharmacies and physicians through their MA-PD plans.

6. Primary Outcomes: Interventions will be evaluated by adherence to timeline, follow-through, and the professional expertise of representatives of the participating health plans. The ultimate success of all interventions will be confirmed when there is an improvement in quality indicators. Louisiana Health Care Review will also ask each of the project team members to assess the return on investment they have observed as a result of the interventions.

7. Evaluation Design and Methods: The project will be evaluated by comparing remeasurement rates with baseline rates for each indicator using plan data. Indicators to be measured include (1) total number of prescriptions filled for target drugs/therapeutic classes, (2) prescriptions filled for the targeted drugs/therapeutic classes as a percentage of the total number of prescriptions, (3) the number of unique Medicare beneficiaries receiving 1 or more prescriptions for targeted drugs/therapeutic classes, and (4) Medicare beneficiaries receiving 1 or more prescriptions for the targeted drugs/therapeutic classes as a percentage of Medicare beneficiaries receiving prescriptions.

8. Contact:

Louisiana Health Care Review, Inc.
Linda F Harkey, Quality Improvement Director, (225) 926-6353
lhharkey@laqio.sdps.org

Maine, New Hampshire, and Vermont

(QIO name: Northeast Health Care Quality Foundation)

1. Title: Improve Prescribing Using Part D Data Through Interventions to Decrease the Use of Avoidable and Duplicative Medications in the Medicare Population

2. Objective: Improve prescribing using Part D data through interventions to decrease the use of avoidable and duplicative medications in the Medicare population.

3. Background: Electronic Health Records (EHRs) have shown some promise as a tool for preventing drug therapy problems. Practices benefit from assistance in using these systems to manage care, including drug therapy.

4. Intervention: Direct implementation via ongoing design work, using clinical microsystems. Working through existing relationships in the physician offices, communications with the practices concerning drug therapy problems will be included in the QIO's strategies for EHR implementation and care management.

5. Project Description: The QIO will recruit a subset of the group of physician offices that are successfully working with the QIO to implement EHRs to decrease the prescribing rate for avoidable and duplicative medications. The QIO will use Part D data to inform practice teams and guide their efforts to reduce use of avoidable and duplicative medications.

6. Primary Outcomes: Reductions in the rate of avoidable and duplicative medication use.

7. Evaluation Design and Methods: When appropriate quality indicators become available, the QIO will calculate measures related to avoidable and duplicative medications.

8. Contact:

Northeast Health Care Quality Foundation

Lawrence D. Ramunno, MD, MPH, FAAFP, Chief Quality Officer, (800) 772-0151

Lramunno@nhqio.sdps.org

Massachusetts

(QIO name: MassPRO)

1. Title: Determining the Impact of Medication Therapy Management Services on Patients With Diabetes and Hypertension

2. Objective: Determine if incorporating principles and interventions for disease self-management into medication therapy management (MTM) services can impact patient quality process measures and outcomes.

3. Background: MassPRO will perform the analysis on the data from only those prescription drug plans (PDPs) and Medicare Advantage prescription drug (MA-PD) plans that agree to work with the QIO and submit Part D enrollee data and details of the MTM services provided.

4. Intervention: MassPRO will conduct quarterly conference calls with the participating PDPs and MA-PD plans. MassPRO will develop as a convener, a facilitator, a bridge communicator, and as a confidential source of comparative analyses.

5. Project Description: This project seeks to collaborate with interested PDPs and MA-PDP plans to assess the impact of MTM services on patients with diabetes mellitus (DM) and/or hypertension (HTN).

6. Primary Outcomes: One focus will be in the area of hospitalizations and emergency department (ED) visits. Anticipated reductions in these costs from improved management of DM and HTN with delays and/or reductions in end-stage renal disease, cardiovascular disease (CVD), and amputations will be tracked as data are available.

7. Evaluation Design and Methods: Analytic reports will be generated on a quarterly basis, first for the baseline period and subsequently for the intervention periods. MassPRO will assess each plan for their satisfaction and recommendations for services provided by MassPRO as evidenced by improvement in the following indicators:

- BearingPoint Measures⁴
- Percentage of Part D enrollees (by plan or intervention) participating in MTM services with DM with claims for lipid-modifying drugs
- Percentage of Part D enrollees (by plan or intervention) participating in MTM services with DM with claims for angiotensin-converting enzyme inhibitors and/or angiotensin receptor blockers
- Percentage of Part D enrollees (by plan or intervention) with DM who are enrolled in an MTM program who are hospitalized during the enrollment period
- Percentage of Part D enrollees (by plan or intervention) with DM who have an ED visit during the enrollment period
- Percentage of Part D enrollees (by plan or intervention) with DM who are hospitalized during the enrollment period with CVD, stroke, and or DM.

8. Contact:

MassPRO

Jim Liljestrand, Performance Improvement Advisor, (781) 419-2785

jliljestrand@maqio.sdps.org

Michigan

(QIO name: MPRO)

1. Title: Evaluating Medication Therapy Management Services

2. Objective: Assess the effectiveness of different models of medication therapy management (MTM) services for patients with chronic conditions, including diabetes, hypertension, coronary artery disease (CAD), and/or heart failure.

3. Background: One of the main goals of MTM is to ensure the patient's understanding of and adherence to a treatment plan to improve the patient's self-management ability. This project seeks to assess the impact of different approaches to MTM, based on a comparison of medication adherence and hospital readmissions for the MTM populations.

4. Intervention: The QIO assesses MTM programs offered by 2 Part D plans, PriorityHealth and Humana Inc. Both Priority Health and Humana Inc. use 3 MTM models: telephone-based counseling, comprehensive review by pharmacists (pharmacy-based model), and educational mailings. All MTM members receive monthly mailings. A subgroup is eligible for face-to-face or telephone-based consultations. The plans' call centers may refer members to a chain/community pharmacist for consultation when necessary.

5. Project Description: PriorityHealth is a 450,000-member managed care organization located in western Michigan that provides Medicare Part D benefits through both prescription drug plans and Medicare Advantage prescription drug plans. Whereas the clinical setting for patient care will be individual physician offices, clinics, and hospitals in Michigan, the setting for the MTM services will be dependent on the provider, the plan, and patient-pharmacy locus preference. Similar settings will be defined for Humana Inc. This project seeks to describe and compare the medication utilization, disease characteristics, and demographics of PriorityHealth/Humana Inc. Part D enrollees across both previously applied eligibility thresholds and theorized alternative eligibility thresholds of annual drug expenditures, disease burden, and drug burden.

6. Primary Outcomes: Financial savings from reduced hospital admissions, increased medication compliance, and improved patient safety.

7. Evaluation Design and Methods: MPRO will evaluate PriorityHealth's and Humana's MTM services programs and the experience of plan enrollees without MTM services. Specific measures include hospital readmission rates and patient safety-related indicators (drug-drug interactions, potentially inappropriate medications, and disease-specific medication compliance).

8. Contact:

MPRO
Steven Coon, Project Manager, (248) 465-7356
scoon@miqio.sdps.org

Mississippi

(QIO name: Information & Quality Healthcare)

1. Title: Reducing Therapeutic Duplication of Atypical Antipsychotic Agents

2. Objective: Reduce the number of duplicate prescriptions, as well as direct costs, and encourage adherence to consensus guidelines to avoid increased risks of adverse drug events associated with any atypical antipsychotic (AA) therapy.

3. Background: AAs are the treatment of choice for both positive and negative symptoms of schizophrenia. Current consensus guidelines recommend monotherapy when prescribing AAs along with monitoring of weight (body mass index), lipid profiles, and serum glucose to minimize adverse drug events.

4. Intervention: Information & Quality Healthcare (IQH) is working with prescribers, pharmacists, provider organizations, and state agencies to increase awareness of the potential for and risks of duplicate AA therapy, as well as the importance of adhering to consensus guidelines in prescribing and monitoring patients on AA therapy. Educational letters are sent to prescribing physicians and dispensing pharmacies. It is expected that these reminders will result in optimized clinical and economic outcomes.

5. Project Description: IQH identified prescribers and pharmacies that provided services to dually eligible beneficiaries with duplicate AA therapy. IQH provided general interventional letters, outreach, and education to those prescribers and pharmacies identified by Medicaid pharmacy data. On the basis of analysis of Medicaid data for dually enrolled persons, approximately 390 prescribers have beneficiaries on duplicate AA agents. Many of these prescribers are employed by community mental health centers and hospitals regulated by the Mississippi Department of Mental Health. Medicare Part D pharmacy claims from 2 national plans with enrollees in the state were then added, as they became available, so that Medicare Part D enrolled beneficiaries were included in the project. By identifying those prescriber practices and pharmacies with patients on duplicate or single AA therapy, IQH aims to reduce adverse drug events.

6. Primary Outcomes: Increase awareness of duplicate AA therapy and the importance of adhering to consensus guidelines in prescribing and monitoring these agents by optimizing clinical and economic outcomes.

7. Evaluation Design and Methods: By analyzing paid Medicare Part D pharmacy claims, IQH will be able to show the actual medication cost per patient and throughout the targeted population of patients. In an analysis to be performed after the educational intervention, IQH will determine both the reduction in the occurrence of duplicate therapy and the estimated medication cost-avoidance from discontinuation of duplicate therapy. IQH will also monitor practices through the use of Part B data.

8. Contact:

Information & Quality Healthcare

Sue C. Dillon, DO, Clinical Coordinator, (601) 957-1575, ext. 259

sdillon@msqio.sdps.org

New Jersey

(QIO name: HealthCare Quality Strategies, Inc)

1. Title: Managing Medications in Long-term Care Facilities: Beneficiaries With Diabetes

2. Objective: The overall objective of this project is to positively impact the quality of care for Medicare residents with diabetes in long-term care (LTC) facilities. This will be accomplished by improving disease monitoring and the safe and appropriate use of medications through medication management. In addition, the project aims to promote a collaboration of care among consultant pharmacists (CPs), LTC pharmacy providers, and LTC facility staff to meet the individualized needs of the resident with diabetes.

3. Background: Diabetes is a major source of morbidity and mortality in the United States. While risk and severity of acute and chronic complications from diabetes are higher in older adults compared with younger persons with diabetes, the negative health consequences from the disease may be even greater for the elderly LTC resident.

4. Intervention: The CPs will perform monthly chart reviews of the eligible patients using the 7 quality measures chosen for this project to assess the care being given to those with diabetes and its 2 most common comorbidities: hypertension and dyslipidemia. The CPs will enter an intervention note in the chart, when appropriate, as defined for each measure, and record physician responses to the recommendations. Healthcare Quality Strategies, Inc. (HQSI) will analyze the monthly data to generate facility-specific profiles for residents with diabetes, which can be used to monitor the facility's population with diabetes. An education toolkit will be disseminated to project participants to provide a tool for supporting inservices focusing on diabetes care.

5. Project Description: This project incorporates aspects of medication therapy management (MTM) services to improve drug therapy of people with diabetes. MTM has not been well studied in the LTC setting. The mandatory requirement of drug regimen reviews (DRRs) already performed in LTC facilities could either confound or provide a platform for the application of MTM services in this setting. MTM services offer an opportunity to improve the safe and appropriate use of medication and disease monitoring for residents to a greater degree than traditional DRR.

6. Primary Outcomes: It is hoped that this project will demonstrate improvement in the quality measures to support the value of medication management in the LTC environment. Although not specifically measured in this project, the design also encourages communication among health care professionals to improve care that may lead to improved patient outcomes and/or quality of life.

7. Evaluation Design and Methods: The CPs will capture data using an HQSI data collection tool. HQSI will analyze the collected data to evaluate the changes in the quality measures and impact of the interventions.

8. Contact:

Healthcare Quality Strategies, Inc.

Linda DeMarzo, PharmD, MLS, Pharmacy Project Leader, (732) 238-5570, ext. 2074

ldemarzo@njqio.sdps.org

New Mexico

(QIO name: New Mexico Medical Review Association)

1. Title: Improving the Safety and Cost of Medications: The New Mexico Prescription Improvement Coalition (NMPIC)

2. Objective: Promote best practices in prescribing and medication therapy management (MTM) in New Mexico. This coalition is working to promote and assist in the implementation of a statewide e-prescribing module with comprehensive decision-support tools to educate providers about safety in the delivery of prescription medications and MTM services.

3. Background: The New Mexico Prescription Improvement Coalition (NMPIC) is leading physicians in implementing e-prescribing solutions and MTM services as well as promoting clinical champions and their successful strategies statewide. Coalition membership includes New Mexico Medicare Advantage prescription drug plans, Medicare prescription drug plans, pharmacies, and physician practices. Currently, 60 organizations are participating.

4. Intervention: One coalition focus is to establish, review and promote understanding in New Mexico of existing common clinical guidelines for medication monitoring. NMPIC provides evidence-based educational materials chosen for their clinical and/or economic value. NMPIC strives to inform physicians of the evidence regarding clinical appropriateness, therapeutic equivalence within drug classes, and potential cost savings for patients. The coalition developed an e-prescribing model and defined cost savings and outcomes for each setting (see http://www.nmmra.org/resources/Physician/91_797.pdf).

5. Project Description: The New Mexico Medical Review Association (NMMRA) is providing technical assistance and quality improvement tools to coalition members pertaining to e-prescribing and MTM. NMPIC provides user-friendly, up-to-date, and objective information on best practices and lessons learned to both providers and Medicare beneficiaries.

6. Primary Outcomes: Outcome evaluation will be conducted via annual monitoring using the following indicators: drugs to be avoided in the elderly, annual monitoring of patients on persistent medications, lipid-modifying agents in diabetes, beta-blockers in postmyocardial infarction and heart failure, angiotensin-converting enzyme inhibitors/angiotensin receptor blockers in diabetes and heart failure, and diuretics in hypertension.

7. Evaluation Design and Methods: The e-prescribing project will evaluate return on investment for e-prescribing implementation. The project hypothesis is that most of the value identified will not come from reductions in prescription costs but in avoiding hospitalizations as a result of better adherence and fewer medication errors. The MTM pilot clinical outcome measures include: baseline, 6-month and 1-year measurements of hemoglobin A1C, fasting blood glucose, blood pressure, low-density lipoprotein cholesterol, and weight. Additionally, Health Outcome Survey data will be used at baseline, 6 months and 1 year to assess quality of life using a validated survey, the SF-36, as well as questions regarding satisfaction with MTM services. Disease-specific resource utilization, such as emergency department visits, hospitalizations, clinic visits, and medication adherence, will be assessed for enrolled patients. Resource utilization calculations will be performed by the NMPIC Data Workgroup, led by NMMRA with clinical support from the MTM pilot faculty of the College of Pharmacy.

8. Contact:

New Mexico Medical Review Association
Galina Priloutskaya, PhD, MBA, (505) 998-9765
gpriloutskaya@nmqio.sdps.org

New York

(QIO name: IPRO)

1. Title: Decreasing Anticholinergic Drugs in the Elderly (DADE)

2. Objective: Decrease the use of potentially inappropriate anticholinergic drugs (PIADs) in the elderly.

3. Background: Anticholinergic drugs have been shown to contribute to cognitive impairment, falls, low blood pressure, and urinary retention, and many are listed as “potentially inappropriate” for use in the elderly. Despite mounting evidence documenting their harmful effects, and despite the availability of more suitable alternatives, anticholinergic drug use continues to be remarkably common among the community-dwelling elderly. The increasing age of the American population and its growing reliance upon pharmaceuticals suggest that anticholinergic drug use will continue to be a problem unless effective interventions are developed and implemented.

4. Intervention: With input from an expert panel of physicians, pharmacists, nurses, and researchers, IPRO has developed continuing medical education, accredited educational materials, and clinical tools that highlight the problems associated with anticholinergic drug use and that seek to generate dialogue between patients and prescribers to facilitate change (<http://providers.ipro.org/index/presc-drug-plan>). IPRO has partnered with 11 organizations offering Part D plans to more than 250,000 beneficiaries in New York and is working with them to distribute program materials to pharmacists and prescribers across the state. In addition, IPRO will promote distribution of the materials through professional organizations, interest groups, colleges, and other interested parties. Educational programs specifically for beneficiaries are under development.

5. Project Description: The DADE project is a multifaceted educational campaign seeking to increase the awareness of the problems associated with anticholinergic drug use in the elderly. The project provides tools to prescribers and pharmacists to foster effective communication with beneficiaries, leading to improved patient care and prescribing.

6. Primary Outcomes: IPRO has developed specifications for several quality measures for the project, including the proportion of beneficiaries prescribed PIADs, the proportion of claims that are for PIADs, and the proportion of patients treated for dementia that receive PIADs.

7. Evaluation and Design Methods: Improvement in the quality measures will be assessed through serial analysis of prescription claims data.

8. Contact:

IPRO

Darren M. Triller, PharmD, (800) 233-0360

dtriller@nyqio.sdps.org

North Carolina and South Carolina

(QIO name: Carolinas Center for Medical Excellence)

1. Title: Improving Pharmacologic Therapy and Therapeutic Monitoring for Persons With Heart Failure

2. Objective: Improve adherence to evidence-based drug therapy for heart failure (HF) and improve therapeutic monitoring. The Carolinas Center for Medical Excellence (CCME) will also investigate the relationship of drug therapy adherence and therapeutic monitoring with health outcomes including readmissions, emergency department visits, mortality, and costs.

3. Background: HF is the cause of substantial morbidity, mortality, and costs in the Medicare population. Evidence from randomized clinical trials suggests that appropriate pharmacotherapy with angiotensin-converting enzyme inhibitors (ACEIs), angiotensin receptor blockers (ARBs), and beta-adrenergic blockers reduces HF adverse outcomes and costs.

4. Intervention: The project utilizes academic detailing in the form of on-site visits and teleconferences. CCME distributes practice-level tools and educational materials to participating practices. Practice assessment and guidance regarding care management using electronic systems is provided. A major component of the intervention involves the development, implementation, and pilot testing of a novel patient-level intervention, the Heart Failure Care Kit (HFCK). Pharmacist interventions include education about the importance of ACEIs/ARBs and beta-adrenergic blockers in the ongoing treatment of HF.

5. Project Description: This project focuses on the fee-for-service outpatient primary care setting in North Carolina and South Carolina. This project is conducted by CCME, the Medicare QIO for North Carolina and South Carolina.

6. Primary Outcomes: Improvement in prescribing, adherence, and therapeutic monitoring for drug treatment of persons with HF.

7. Evaluation Design and Methods: CCME plans to use practice-level chart data to assess drug therapy adherence and therapeutic monitoring at least quarterly during 2007. These evaluation measures are drug adherence with ACEIs and beta blockers, and therapeutic monitoring (for potassium levels, blood urea nitrogen, and creatinine). Quarterly adherence rates will also be obtained from prescription drug plan (PDP) claims for patients within participating practices enrolled in participating PDPs. Data to be collected for other process measures include the number of HF patients encountered and the number of HFCKs distributed at participating practices.

8. Contacts:

Carolinas Centers for Medical Excellence (North Carolina)
Mark Massing, Manager of Outpatient Projects and Research, (800) 682-2650
mmassing@ncqio.sdps.org

Carolinas Centers for Medical Excellence (South Carolina)
John Reid, Senior Interventions Specialist, (803) 251-2215, ext. 3245
jreid@scqio.sdps.org

North Dakota

(QIO name: North Dakota Health Care Review)

1. Title: Reconciling Medications: A Hospital, Pharmacy, and Quality Improvement Organization Collaboration

2. Objective: Improve patient safety and test a model for medication reconciliation for patients admitted to and discharged from a hospital.

3. Background: Medication errors and preventable medication-related injuries are critical patient safety issues. An adverse drug event (ADE) is defined by the Institute for Safe Medication Practices as “a deviation in the medication use process (prescribing, dispensing, administering, monitoring) OR undesirable clinical manifestation that is consequent to and caused by the administration or omission of medications.” In the July 2006 Institute of Medicine report, “Preventing Medication Errors,” it is noted that an average of 1.5 million preventable ADEs occur annually in the United States, representing at least a quarter of all medication-related injuries. In a Canadian study of discrepancies between patient medication regimens and patient histories taken at the hospital, Cornish et al. found the most common medication error was the omission of a regularly used medication from the patient admission history. The authors reported that “38.6% of the discrepancies had the potential to cause moderate to severe discomfort or clinical deterioration.”⁵

4. Interventions: Primary project interventions are: (1) providing the participating hospital pharmacists access to patient-level Medicare Part D data, thereby increasing the accuracy of the medication history and enhancing the medication reconciliation process at admission; and (2) medication reconciliation and patient counseling provided by the community-based pharmacists (for patients filling discharge medications at participating pharmacies) using hospital discharge medication information.

5. Project Description: The QIO enhances the accuracy of the prescription medication history upon hospital admission by obtaining the patient’s Part D medication history directly from Part D plans in the state, and improves care after discharge by using community pharmacists to identify duplications, omissions, potential DDIs, and provide education regarding appropriate medication administration and regimen.

6. Primary Outcomes: North Dakota Health Care Review hypothesizes that Medicare beneficiaries who receive the benefit of both the augmented admission history and the postdischarge pharmacy follow-up will have fewer ADEs and that Medicare beneficiaries who receive even 1 intervention component will receive some benefit.

7. Evaluation Design and Methods: All Medicare beneficiaries who are discharged from the participating hospital to the community after an inpatient stay between October 2006 and July 2007 will receive a survey approximately 30 days postdischarge. The survey will obtain information about the patient’s posthospital course relative to ADEs during the 30-day post discharge time frame. The project’s impact will be evaluated by comparing the frequency of ADEs reported by Medicare beneficiaries in an intervention group with those not in an intervention group.

8. Contact:

North Dakota Health Care Review, Inc.
Barbara Groutt, Director of HCQIP, MSA, (701) 852-4231
bgroutt@ndqio.sdps.org

Oklahoma

(QIO name: Oklahoma Foundation for Medical Quality)

1. Title: SPOkE: Safe Prescribing in the Oklahoma Elderly

2. Objective: Determine the prevalence of the use of potentially inappropriate medications (PIMs) in Oklahoma seniors (≥ 65 years of age). The list of PIMs is based on the Beers Criteria.

3. Background: An estimated 25%-39% of older people are prescribed medications deemed potentially inappropriate due to an increased risk for adverse drug events (ADEs), hospitalizations, or death. Safe Prescribing in the Oklahoma Elderly (SPOkE) seeks to decrease use of these medications through education and outreach to physicians, pharmacists, prescription drug plans (PDPs), and beneficiaries.

4. Intervention: An environmental scan survey tool is be widely distributed to physicians and pharmacists to assess items such as their current knowledge of the Beers Criteria and identify the classes of medications most problematic in senior patients. Respondents receive follow-up information and may be identified for academic detailing. Additional interventions include a Web-based continuing medical education (CME) program for physicians (continuing education for pharmacists pending); development of brochures for providers that includes risk factors for ADEs and prescribing principles for older patients; partnering with provider associations, PDPs, and consumer groups to increase awareness about SPOkE; and presentations to providers across the state. Although broad concepts about PIMs and the Beers Criteria will be discussed, SPOkE interventions focus on decreasing use of 10 prescription medications and 2 over-the-counter medications included in the list developed by Beers et al.¹

5. Project Descriptions: Partnering with the University of Oklahoma College of Pharmacy to provide subject matter expertise, the Oklahoma Foundation for Medical Quality (OFMQ) is working to decrease prescribing of PIMs to Medicare beneficiaries in Oklahoma. Interventions are developed for physicians, PDPs, pharmacists, and beneficiaries. Physicians are targeted for interventions in high volume counties and through the results of the environmental scan. Outreach to physicians in community practice includes the distribution of educational material, individual consultation, CME at medical conferences and online training modules, and the development of a group of professionals who receive more intensive support from the QIO. Participating PDPs are asked to develop processes to decrease the use of PIMs in their populations through pharmacy and therapeutics policies and educational avenues they have with their members and physicians. Pharmacists receive education about PIMs and the SPOkE project as identified by the environmental scan and via pharmacy associations.

6. Primary Outcomes: The primary outcome of SPOkE is to decrease use of PIMs in the Oklahoma Medicare population. Secondary outcomes include creating partnerships with PDPs, pharmacists, and physicians to improve medication use and further understanding of mechanisms to improve prescribing.

7. Evaluation Design and Methods: Baseline PIM rate for Oklahoma will be determined by the use of 2 data sets available for fourth quarter of 2005, representing 7% of Medicare beneficiaries. Interim and remeasurement rates will be tracked using Part D plan data received from the Physicians Practice Pharmacy QIOSC (support centers).

8. Contact:

Oklahoma Foundation for Medical Quality

Lesley Maloney, PharmD, Medication Systems Management Specialist, (405) 840-2891, ext. 104

lmaloney@okqio.sdps.org

Pennsylvania

(QIO name: Quality Insights of Pennsylvania)

1. Title: Improving Prescribing Using Part D Data

2. Objective: Decrease inappropriate drug prescribing in the elderly.

3. Background: Studies link prescription drug use by the elderly with adverse drug events that contribute to hospitalization, increased length of hospital stays, increased duration of illness, nursing home placement, and falls and fractures that are further associated with declines in physical and social function in the elderly. Highmark Blue Cross Blue Shield (Highmark) has developed a Drugs to be Avoided in the Elderly (DAE) Clinical Performance Indicator List that includes the National Committee for Quality Assurance Health Plan Employer Data and Information Set (HEDIS) DAE list as well as some additional Beers list¹ drugs that have strong anticholinergic or adverse central nervous system effects or the potential for drug-drug interactions.

4. Intervention: Quality Insights of Pennsylvania (QIP) and Highmark are preparing a joint letter that will be sent to the 50 physician practices that will receive face-to-face detailing regarding DAE, as defined by the Highmark Clinical Performance Indicator list. A second letter from Highmark and QIP will be sent to the 100 practices that will receive reports detailing their prescribing activity for DAE and polypharmacy. Highmark will provide QIP analysts with the Part D data to develop the reports that QIP will provide to practices. A report generated for each physician within a practice will list prescriptions written for DAE and note which patients received these prescriptions. A list of patients currently filling prescriptions for 10 or more medications within a defined time period will also be provided to each physician. QIP project staff will make a total of 3 visits to each of the 50 practices: 1 at baseline to provide the reports and interventions to assist the physicians and staff with improvement, 1 in February 2007, at the halfway point for the project, and 1 in September 2007 at the completion of the project.

5. Project Description: The project includes 50 practice sites that will receive detailed reports, and QIP will conduct on-site visits for academic detailing. Additionally, 100 practice sites will receive the detailed reports. Practices were divided into 3 groups (A-C) in such a way as to be representative of practices generally. The ratio of the number of family practices to the number of internal medicine practices within each group is roughly equivalent to the underlying target population (58:42). Group A receives no intervention and no reports. Group B receives only reports and access to interventions. Group C receives all interventions and face-to-face detailing.

6. Primary Outcomes: QIP will analyze the data quarterly for each of the practices to evaluate impact on the frequency of prescribing of DAE of face-to-face detailing and reports versus providing reports alone.

7. Evaluation and Design and Methods: Quarterly summaries will be used to determine the effectiveness of the reports provided and the interventions offered to the practices. It is hypothesized that those practices receiving face-to-face detailing will see the greatest improvement.

8. Contact:

Quality Insights of Pennsylvania
Anita Somplasky, Director, (877) 346-6180
asomplasky@pa3qio.sdps.org

Puerto Rico

(QIO name: Quality Improvement Professional Research Organization)

1. Title: Improving the Quality of Care of Part D Enrollees Diagnosed With High Blood Pressure and Prescribed Diuretics

2. Objective: Achieve annual serum potassium testing of Part D enrollees with high blood pressure (HBP) who are being treated with diuretic therapy.

3. Background: This project includes beneficiaries enrolled in 1 of 2 Medicare Advantage prescription drug plans/prescription drug plans (MA-PD plans/PDPs) who have agreed to participate. Hypokalemia is a documented side effect of diuretics. Monitoring serum potassium when patients with HBP are on chronic therapy with diuretics is particularly relevant due to the potential serious complications brought about by low serum potassium.

4. Intervention: Educational material for physicians is produced by the QIO and distributed via the MA-PD plan and PDP. The QIO's educational activities consist of quarterly newsletters on the clinical topic and related subjects. The QIO expects to coordinate with the MA-PD plans to distribute the newsletter to its providers. The QIO will provide content including a description of the project targeted to physicians and information targeted to beneficiaries.

5. Project Description: This collaboration between the Quality Improvement Professional Research Organization (QIPRO) and the PDP and MA-PD plan identifies Medicare beneficiaries who are diagnosed with HBP and are prescribed a diuretic. Prescription drug event data and Part B claims data will be reviewed to determine whether serum potassium monitoring occurred once a year.

6. Primary Outcomes: Increase in serum potassium testing of Part D enrollees with HBP who are receiving diuretic therapy.

7. Evaluation Design and Methods: The QIO performs quarterly monitoring following the first educational intervention. QIPRO consults and shares monitoring results with the QIO support centers, and seeks their feedback. Return on investment for intervention components and any improvement in the testing rate will be analyzed.

8. Contact:

Quality Improvement Professional Research Organization
Haydee Maldonado, (787) 641-1240, ext. 6140
hmaldonado@prqio.sdps.org

Rhode Island

(QIO name: Quality Partners of Rhode Island)

1. Title: Assessing and Improving Medication Use in Diabetes Using Part D Pharmacy Data

2. Objective: Improve patient health outcomes by promoting the effective and efficient use of evidence-based drug therapies among beneficiaries having diabetes.

3. Background: Diabetes mellitus is a highly prevalent condition that increases risk for a range of micro- and macrovascular diseases. Numerous studies have provided evidence that the risk of untoward health outcomes in diabetes can be reduced by medications for hyperglycemia, dyslipidemia, and hypertension. Epidemiologic studies have revealed that such drug therapies are often not prescribed when indicated. Moreover, patient adherence to these therapies is frequently poor.

4. Intervention: Quality Partners of Rhode Island's (QPRI) approach is multifaceted. QPRI is collaborating with a health plan that provides case-management services to a population of patients who are dually enrolled in Medicare and Medicaid. QPRI is providing expertise and tools for addressing medication-use issues common in diabetes. The QIO is also collaborating with multiple other prescription drug plans (PDPs) to measure and improve medication use among Part D plan enrollees with diabetes. QPRI's efforts include outreach to larger provider groups, targeted academic detailing, and provider profiling.

5. Project Description: This project aims to measure and improve the quality of medication use among Medicare Part D plan enrollees with diabetes, focusing on the prescribing of and adherence to angiotensin-converting enzyme inhibitors (ACEIs) or angiotensin receptor blockers (ARBs), and the use of lipid-modifying medications (e.g., statins). QPRI also aims to promote the use of lower-cost therapies where available. The project includes Medicare beneficiaries residing in community and LTC settings and receiving pharmacy benefits through Medicare Part D plans. A key Part D PDP partner is Blue Cross & Blue Shield of Rhode Island, which manages the largest Medicare Advantage prescription drug plan in the state. The QIO is also working with several other Part D PDP providers. In collaboration with faculty from the University of Rhode Island College of Pharmacy, QPRI is coordinating the acquisition of data from PDP partners, composing quality indicator rates, and sharing this information and associated resources with plans and providers.

6. Primary Outcomes: The primary outcome to be assessed is improvement in the use of ACEIs/ARBs and lipid-modifying medications among Medicare beneficiaries with diabetes. Additional outcomes of interest include drug plan and provider satisfaction with the program and its components, and the recognition of Quality Partners as a resource for promoting quality improvement under Medicare Part D.

7. Evaluation Design and Methods: QPRI's evaluation of the acceptance and effectiveness of this approach will be viewed from multiple sources. Quantitatively, project success will be evaluated in terms of improvement in rates of use of and adherence to ACEIs/ARBs and lipid-modifying therapies. Sources of qualitative data will include pharmacists and physicians from collaborating drug plans and community physicians who will be surveyed with regard to their perception of the program's utility and effectiveness.

8. Contact:

Quality Partners of Rhode Island
Lynn Pezzullo, RPh, Manager, Pharmacy Services, (401) 528-3222
lpezzullo@riqio.sdps.org

Tennessee

(QIO name: Center for Healthcare Quality: QSource)

1. Title: Improving Patient Self-Management Through Medication Therapy Management Services

2. Objective: Increase patient knowledge about medication therapy management (MTM) services and increase patient participation within those programs through work with Medicare Part D plans, beneficiaries, and pharmacists engaged in the quality improvement project.

3. Background: Using the 8 dimensions of the MTM taxonomy as defined by the Physician Practice Pharmacy QIO support center,⁶ QSource works with participating Part D plans and/or pharmacy providers to determine the scope of the project and determine project plans, implementation milestones, and overall measurement criteria for the project(s).

4. Interventions: The QIO aids participating health plans in targeted marketing and educational projects that are designed to facilitate patient knowledge and understanding, stimulate interest in MTM services, and ultimately drive program participation numbers. The QIO works with participating health plans to evaluate those components as well as monitor patient feedback regarding the project's successes and failures via Consumer Assessment of Healthcare Providers and Systems survey outcomes.

5. Project Description: This project involves a 3-pronged approach that uses Part D and/or Medicare Part A data to assist plans with the identification, recruitment, and education of patients for MTM services. QSource assists the plans with identification of members (estimated 20,000 lives) who are candidates for MTM services. In addition, QSource uses an advisory panel to help design provider and beneficiary educational materials designed to stimulate interest in MTM service activities. QSource partners with Cariten Health, Windsor Medicare, and HealthSpring prescription drug plan to improve patient education, awareness of, and access to MTM services.

6. Primary Outcomes: The primary desired outcome of the project is to improve patients' understanding of medication therapy and its potential side effects. A secondary outcome is to maximize the number of beneficiaries eligible for MTM services who are offered those services.

7. Evaluation Design and Methods: QSource will provide progress reports. QSource will also provide quarterly reports to the participating plans as defined in the project scope. Working with the participating plans, QSource will assist with systematic review of targeted beneficiary profiles through retrospective claims analysis and review of beneficiary profiles.

8. Contact:

QSource

Raymond Dawson, Director of Operational Services, (800) 528-2655

rdawson@tnqio.sdps.org

Texas

(QIO name: TMF Health Quality Institute)

1. Title: Analyzing Formulary Impact on Medicaid/Medicare Patients Participating in the Medicare Part D Prescription Drug Program

2. Objective: Investigate and analyze the impact of formularies on dually enrolled Medicaid/Medicare beneficiaries participating in Medicare Part D as of January 1, 2006.

3. Background: The January 2005 issue of the *American Journal of Managed Care* concentrated on the debate of Medicaid patients' access to prescription drugs. Important clinical and cost implications associated with formularies were discussed. One study showed a statistically significant increase in outpatient hospital visits and physician office visits after a Preferred Drug List (PDL) (a formulary) was implemented. Another study explored the effect of drug access restrictions on antihypertensive medications after PDL implementation and found that Medicaid patients were more likely to discontinue therapy. As hypertension has serious clinical impact and challenges this population, the potential economic and quality of life issues also could have critical impact.

4. Intervention: This project will analyze quarterly data from participating prescription drug plans (PDPs) on adherence and persistence of statins and atypical antipsychotics, comparing pre-January 1, 2006 Medicaid baseline data with post-January 1, 2006 dual-eligible Part D drug data. TMF is supplying aggregate quarterly data to the participating PDPs on adherence and persistence rates, compared in blinded aggregate form with their participating PDP peers. These conditions were selected because of their prevalence, their quality of life impact in the dual-eligible population, and because publicly funded health systems have historically borne huge costs due to the nonadherence to these drug classes.

5. Project Description: TMF is partnering with the University of Texas at Austin, College of Pharmacy, Center for Pharmacoeconomic Studies to investigate and analyze the effect of formularies on adherence and possibly other aspects of care provided to Medicaid/Medicare recipients participating in the Medicare Part D drug program as of January 1, 2006. The analysis is conducted on administrative claims data for dual-eligible Medicaid and Medicare enrollees with dyslipidemia and schizophrenia in the State of Texas during calendar years 2005-2007.

6. Primary Outcomes: Promote adherence and persistence of medication therapies for patients with dyslipidemia and schizophrenia. Secondary outcome is to understand whether formulary use is associated with changes in adherence and persistence.

7. Evaluation Design and Methods: TMF plans to evaluate the impact and success of the interventions by using (1) the Texas Medicaid Vendor Drug Paid Prescription database, (2) Texas Medicaid Medical Management Information System, (3) Medicare Parts A and B claims (if available), and (4) Part D prescription drug event pharmacy claims warehouse data along with PDP data on a quarterly basis evaluating:

- Medication possession ratio scores of study medications (statins and atypical antipsychotics) by physician, region, and state
- Persistence score of study medications (statins and atypical antipsychotics) by physician, region, and state
- Physician score of statin and atypical antipsychotic prescribing pattern compared with PDL listing for PDPs (>70% is passing score).

8. Contact:

TMF Health Quality Institute
Jim Turpin, Quality Improvement Consultant, (512) 334-1644
jturpin@txqio.sdps.org

Virginia

(QIO name: Virginia Health Quality Center)

1. Title: Evaluating Warfarin Management by Community Pharmacists

2. Objective: Evaluate and compare health outcomes and cost effectiveness in Medicare beneficiaries taking warfarin whose warfarin therapy is managed either by pharmacists coordinating with physicians or by physicians.

3. Background: Warfarin is a challenging medication to use due to its narrow therapeutic range. Under-anticoagulation can lead to thromboembolic disorders. Overanticoagulation can cause major bleeding, which could result in morbidity and fatalities. Effective use of warfarin requires frequent monitoring of coagulation status and dose adjustment as needed. A large body of literature suggests that elderly patients are at a higher risk than younger adults for adverse events from warfarin, although not all studies support this finding. There are numerous clinically significant drug-drug interactions involving warfarin that cause considerable morbidity and mortality. Given their use of multiple medications, including nonprescription and herbal products, elderly patients are at increased risk for warfarin-drug interactions.

4. Interventions: Provide patient and/or caregiver educational programs regarding the safe use of warfarin. Patients are tested for the International Normalized Ratio (INR) at regularly scheduled intervals, and warfarin dosage is adjusted as needed to maintain a therapeutic INR. Physicians receive reports of all INR findings and therapy changes for their patients. In addition, during the study pharmacists report all INR measurements. Pharmacists are required to successfully complete a training program on warfarin anticoagulation. The Virginia Commonwealth University School of Pharmacy is responsible for developing and implementing this program.

5. Project Description: This project compares health outcomes among Medicare beneficiaries taking warfarin whose therapy is managed by pharmacists or by traditional medical care. Additionally, it compares the cost effectiveness of pharmacist-managed anticoagulation services rendered in community pharmacies with traditional medical care.

6. Primary Outcomes: The project is expected to demonstrate that improved health outcomes can be obtained from community pharmacists managing warfarin therapy and that this medication therapy management (MTM) is cost-effective.

7. Evaluation Design and Methods: The Medicare Advantage prescription drug (MA-PD) plan identified approximately 85 patients suitable for this study based on criteria that they have been on warfarin therapy longer than 6 months. The MA-PD plan will send patients letters explaining the program and giving them the option to choose pharmacist management of their warfarin. Participation is offered at no charge to the patient. Patients will self-select to participate in the program (intervention group) or continue with current physician management (control group).

Descriptive baseline characteristics between the pharmacist-managed patients and the traditional medical care patients will be compared using the appropriate statistical methods. Intervention data (number of MTMs, dosing adjustments, and patient INR levels) will be obtained from pharmacists. Postintervention data emergency department (ED) visits and admissions will be provided by the MA-PD plan. Data provided by the MA-PD plan will be monitored during the course of the study. Postintervention rates for bleeding episodes, use of transfusions, thrombotic events, hospitalizations, and ED visits for warfarin-related adverse events for the intervention and traditional care groups will be calculated using data provided by the MA-PD plan. For intervention patients, pharmacists will report all INR measurements and will calculate the percentage of "time in therapeutic range."

Medicare reimbursement rates will be used to estimate the cost of care needed to treat complications associated with warfarin therapy and to compare costs between the 2 groups. The hypothesis is that the cost of program, including pharmacist MTM services and additional lab testing, will be approximately offset by the reduction in costs for physician visits to manage warfarin. The program will seek to identify savings from reductions in ED visits, hospitalizations, and treatment cost for warfarin-related adverse events. Physician office visits for the 2 groups will be compared for this purpose.

8. Contact:

Virginia Health Quality Center
Patrick Toomey, Director Physician Office Projects, (804) 289-5350
ptoomey@vaqio.sdps.org

Washington, DC, and Maryland

(QIO name: Delmarva Foundation)

1. Title: Enhancing the Impact of Medication Therapy Management Services in a Medicare Population

2. Objective: Reduce drug-drug interactions (DDIs) and the incidence of prescribing potentially inappropriate medications (PIMs) in Medicare beneficiaries enrolled in a regional prescription drug plan (PDP).

3. Background: This collaboration between the Delmarva Foundation, Medi-CareFirst BlueCross BlueShield, University of Maryland School of Pharmacy, and Howard University School of Pharmacy seeks to improve the safety and quality of prescription drug therapy via use of medication therapy management (MTM) services in community-based pharmacies.

4. Interventions: The multifaceted intervention approach includes the following activities: (1) send an informational letter to all Medi-CareFirst enrollees by the PDP upon enrollment and the start of the project; (2) develop a pharmacist assessment of MTM services tool, cosigned by the QIO and both colleges of pharmacy and send it to all enrolled pharmacists (assessment to be conducted premeasurement and postmeasurement); (3) conduct two 1-day seminars on MTM services at the respective colleges of pharmacy (faculty will include representatives from the colleges of pharmacy, American Pharmacists Association, the PDP, and the QIO); (4) provide monthly MTM services communications to participating pharmacists via the Medi-CareFirst sub-contractor; and (5) colleges of pharmacy will encourage community pharmacists' participation in the project and adoption of MTM services.

5. Project Description: The project is carried out in community-based and ambulatory care pharmacies in Maryland and Washington, DC, which participate in Medi-CareFirst BlueCross BlueShield's pharmacy network. The colleges of pharmacy provide professional detailing and the educational component of the project. Medi-CareFirst provides enrollees open access to any pharmacy or MTM-trained pharmacist in its network, with no threshold of diagnoses or polypharmacy to access MTM services. Pharmacies are reimbursed by Medi-CareFirst for providing MTM services.

6. Primary Outcomes: Decrease the incidence of PIMs and DDIs by utilizing MTM services. Increase the use and enrollment of pharmacists providing MTM services as measures of pharmacist and patient acceptance of MTM services.

7. Evaluation Design and Methods: Delmarva analyzes quarterly claim reports for MTM pharmacist services, for both the DDI and PIM measures. Process measures include (1) recruitment numbers for both pharmacists and enrollees to track members' acceptance and perceptions of value of the Medi-CareFirst MTM services program; (2) number of beneficiaries that receive medication review, consultation, and education and monitoring; (3) perceptions and satisfaction measurement of participating pharmacists to include premeasurement and postmeasurement of their awareness of MTM services.

8. Contact:

Delmarva Foundation

Carmen Tyler Winston, Vice President, Quality Improvement Programs, (202) 496-6559

winstonC@dfmc.org

West Virginia

(QIO name: West Virginia Medical Institute)

1. Title: Increasing Use of Generic Statins in Beneficiaries With Diabetes

2. Objective: Reduce cost and improve the quality of prescription drug use in Medicare beneficiaries with diabetes by increasing the use of generic statins.

3. Background: National reports suggest that use of lipid-modifying medications in Medicare beneficiaries more than tripled between 1995 and 1996 and between 2002 and 2003, from 29.1 to 91.8 prescriptions per 100 people over 2 years. West Virginia ranks high in prevalence of conditions for which the drugs are indicated; e.g., 21.1% of West Virginians over age 65 said they had diabetes in 2005, and 50.6% of those who reported cholesterol testing said they were told it was elevated. This means that roughly one half of the 90,000 beneficiaries discharged from hospitals in West Virginia in a year have one of these conditions, or approximately 4,000 per month statewide.

4. Interventions: West Virginia Medical Institute (WVMI) will (1) provide attending physicians data on the frequency of use of different lipid-modifying drugs in their hospital after baseline analysis; (2) provide hospital discharge planners formulary information for the major prescription drug plans; (3) calculate readmission rates for beneficiaries with diabetes, by principal diagnosis and calculate the proportion avertable through lipid-modifying therapy; and (4) develop a communication program for beneficiaries and physicians on the theme of avoiding the prescription benefit's coverage cap or "donut hole," and the cost savings of generic medications.

5. Project Description: WVMI will select at least 2 hospitals in geographically distinct markets for participation in the project, which will target prescribing performance of physicians in the hospital's service area. This project will focus on hospitals as a convenient place to identify drug use patterns and educate physicians.

6. Primary Outcomes: WVMI will assess rates of generic statin use in patients with diabetes in both hospitals and document changes from baseline to remeasurement. The QIO will assess changes by measuring the confidence limits around the pre- and postintervention and relative risk of generic statin prescription in both groups. WVMI will compute the total estimated cost of the interventions from the cost accounting system, and compute relevant costs.

7. Evaluation Design and Methods: The methodology is a simple pre- and poststudy with control groups. Despite the controls, it is subject to external influences. WVMI can assess, but not control, externalities. Because data limitations make the project high risk, the QIO is also pursuing an alternative implementation from the original plan. WVMI will link hospital pharmacy data to claims data to identify physicians and hospital service areas (using beneficiary ZIP code). The BearingPoint measures,[†] when calculated for West Virginia, should provide a check on the estimated proportion of beneficiaries with diabetes receiving lipid-modifying agents.

8. Contact:

West Virginia Medical Institute
Becky Fain Cochran, MSN, HCQIP Director, (304) 346-9864, ext. 4245
bcochran@wv2qio.sdps.org

Wisconsin

(QIO name: MetaStar)

1. Title: Reducing the Use of Medications Known to Pose Unnecessary Risk in the Elderly

2. Objective: Decrease the use of medications considered to be potentially inappropriate for use in the elderly.

3. Background: Articles have been published identifying drugs that are likely to create a higher risk of adverse effects in the elderly population. The project design is to provide academic detailing to prescribers in collaboration with prescription drug plans (PDPs) in order to decrease the use of drugs that should be avoided by the elderly. Quality indicators measure the use of a selected group of such medications.

4. Intervention: Educational documents will be sent to prescribers and pharmacists who are treating the beneficiaries identified as taking the high-risk medications. When the PDPs have identified beneficiaries with claims for 1 or more of the targeted medications, the PDPs will produce beneficiary-specific medication profiles using the agreed upon format. Similarly, reports will be sent to each pharmacy identified on each profile. A mailing will be prepared for each prescriber and pharmacy, including their patient list, information about the high-risk medications, relevant literature, and alternative therapy recommendations. The PDPs will mail the packets. A feedback mailer will be included with each patient profile allowing the prescriber to give their response to the intervention and to ascertain customer satisfaction information.

5. Project Description: The intent of this project is to decrease the use of avoidable drugs in the elderly through information distribution to prescribers. Partners in this project are Medicare PDPs that have voluntarily agreed to participate. Part of their role will be to mail intervention materials prepared by MetaStar to prescribers and pharmacists. Letters will be sent to both parties recommending modifications to the drug regimens of those beneficiaries receiving targeted medications.

6. Primary Outcomes: Reduce the use of medications that pose unnecessary risks in the elderly and promote provider awareness of the risks of these medications.

7. Evaluation Design and Methods: Many Medicaid programs have employed this model to alert prescribers and pharmacists to dangerous drug-drug interactions that are identified using prescription drug claims data. In this project informing prescribers and pharmacists of the potential risk associated with targeted medications will be supported by documents that recommend changes to the medication regimen and will encourage prescribers to act.

8. Contact:

MetaStar, Inc.

Bill French, RHIA, CPHQ, CPHIT, MBA, Vice President, e-Health Strategies, (608) 441-8246

bfrench@wiqio.sdps.org

REFERENCES

1. Fick DM, Cooper JW, Wade WE, Waller JL, Maclean JR, Beers MH. Updating the Beers Criteria for potentially inappropriate medication use in older adults. *Arch Intern Med.* 2003;163(12):2716-24.
2. Gelbach SH, Wilkinson WE, Hammond WE, et al. Improving drug prescribing in a primary care practice. *Med Care.* 1984;22(3):193-201.
3. Fleming T, ed. *Red Book 2007: Pharmacy's Fundamental Reference.* 2007 ed. Pharmacy's source for product information and prices on prescription drugs, OTC items, and reimbursable medical supplies.
4. Performance measures developed by BearingPoint, Inc., as a contract to the Centers for Medicare & Medicaid Services that are applicable to the Medicare PDPs and Medicare Advantage prescription drug (MA-PD) plans.
5. Cornish PL, Knowles SR, Marchesano R, et al. Unintended medication discrepancies at the time of hospital admission. *Arch Intern Med.* 2005;165:424-29.
6. FMQAI, the Physician Practice Pharmacy QIO Support Center (QIOSC), under contract with the Centers for Medicare & Medicaid Services (CMS), created a taxonomy for medication therapy management (MTM) services, built on the following 8 elements of MTM. For the entire taxonomy and related materials, visit <http://www.fmqai.com/Professionals-Providers/PPPQIOSC/Resources/> and look for the Medication Therapy Management Directory.
 1. Mode of Communication (e.g., face-to-face, written, telephone)
 2. Elements of MTM (e.g., medication therapy review, medication action plan, health screening)
 3. Selection Criteria (e.g., drug cost; number of diseases; number of medications)
 4. Single/Multilevel MTM (e.g., "one size fits all," intervention intensity depends on criteria)
 5. Setting (e.g., retail pharmacy; long-term care facility, hospital)
 6. Practitioner (e.g., pharmacist, physician)
 7. Participant Identification (e.g., physician, PBM [pharmacy benefit manager], self-identified)
 8. Outcome Evaluation (e.g., medication measures, quality of life, clinical benchmarks)



JMCP

JOURNAL OF MANAGED CARE PHARMACY®

Supplement