

# RAISING THE BAR:

## IPRO's Medicare Quality Improvement Report for New York State (2011–2014)



Quality Improvement  
Organizations

Sharing Knowledge. Improving Health Care.  
CENTERS FOR MEDICARE & MEDICAID SERVICES



The Centers for Medicare & Medicaid Services (CMS) leads a national healthcare quality improvement program, which is implemented locally by an independent network of Quality Improvement Organizations (QIOs) in each state and territory.

## A New Vision For Health Quality

The QIO Program's vision, which is shared by healthcare quality advocates nationwide, is a transformed American healthcare system based on the *Three-Part Aim*. Everyone stands to benefit from this system, in which:

### Patients receive safer and more effective care

From the boardroom to the bedside, hospital executives and front-line staff will become fully committed to making care safer and more patient-centered. Patients and families will actively engage with physicians in making treatment decisions. At hospitals, following standard protocols, like a simple checklist for inserting catheters, will reduce the risk of preventable healthcare-associated infections. Patients and caregivers will work closely with nursing home staff to virtually eliminate pressure ulcers. Adverse drug events like dangerous interactions will be relegated to the past as quality improvement initiatives improve medication reconciliation and reduce errors.

### Americans will be healthier

With the support of QIOs, providers nationwide are harnessing the power of EHR systems, enabling them to identify and notify patients about immunizations and screenings they need. There will be fewer hospitalizations for pneumococcal disease and flu, as well as better survival rates for these and other diseases. Cardiovascular disease will no longer be one of the leading causes of mortality due to better control of risk factors like cholesterol and blood pressure. Best practices from cardiovascular disease prevention may even be applied to other chronic illnesses.

### Healthcare will become more affordable

Close coordination and ongoing communication among health professionals, patients and caregivers means fewer unnecessary and costly re-hospitalizations. Provider coaching of patients and their loved ones about important issues like medication management, follow-up appointments and red flags during recovery will enable patients to transition smoothly and safely to a nursing facility or home. Fewer healthcare acquired conditions and adverse drug events, as well as increased rates of preventive services, will translate into savings for both patients and providers. Greater use of health information technology will eliminate redundant and unnecessary administrative costs and reduce the potential for medical errors.

*As the Medicare QIO for New York State, IPRO works to improve the quality of healthcare provided to the more than three million New York State Medicare beneficiaries. IPRO supports providers across the state with evidence-based, clinical interventions and objective expertise to improve healthcare processes and patient care.*

*We offer healthcare providers a wide range of expertise to help them build the capacity to sustain and expand quality improvement activities. This expertise includes quality improvement techniques like root cause analysis, team communication, clinical data collection, intervention design and deployment, survey administration, and statistical analysis.*



“The improvements in this report show that, with the support of organizational leadership and a collaborative team effort, healthcare providers can achieve real improvements that benefit patients. We are proud to have helped facilitate these improvements.”



—Clare B. Bradley, MD, MPH,  
Senior Vice President/  
Chief Medical Officer, IPRO



The CMS Quality Improvement Program:

- Brings together communities for learning and action to spread evidence-based interventions for better care and achieve national health quality goals;
- Works in partnership with patients, providers, and practitioners across organizational, cultural, and geographic boundaries;
- Innovates efficient, effective improvement strategies that are shared widely to lead rapid, large-scale change;
- Conducts quality improvement activities in a way that puts patients first and equips providers to do the same; and
- Improves the quality of care for individuals, the overall health of diverse populations and the value of healthcare for all Americans.

# Healthcare providers and IPRO have the same goal: safer, more reliable patient care.

## Improving Hospital Care

### Reducing Inpatient Healthcare-Associated Infections

According to the Agency for Healthcare Research and Quality (AHRQ), healthcare-associated infections are the most common complication of hospitalization. Up to 70% of certain infections can be prevented by following existing prevention strategies.



#### The New York Experience

Reducing Healthcare-Associated Infections

**62% reduction**  
in central line-associated  
bloodstream infections



Hospitals in New York that have worked with IPRO during its most recent three-year Medicare Quality Improvement Organization (QIO) contract have shown dramatic reductions in the rates of some infections that are common in healthcare settings. Participating hospitals have addressed four major types of infections: central line-associated bloodstream infections (CLABSIs), catheter-associated urinary tract infections (CAUTIs), *Clostridium difficile* infections (CDIs), and surgical site infections (SSIs).

CLABSIs are infections associated with the presence of a central vascular catheter. They are usually serious, causing a prolonged hospital stay and increased cost and risk of mortality. CAUTIs are often caused by prolonged use of the urinary catheter. Reducing the number of days in which a catheter is used is a major intervention for reducing CAUTI as well as CLABSI. On the other hand, CDIs are linked to older patients who take antibiotics and receive medical care while SSIs occur after surgery on the part of the body where the surgery took place.

IPRO has facilitated regional learning and action network (LAN) meetings, as well as webinars and workshops with expert speakers, all focused on the prevention of these infections. IPRO also provided technical assistance to hospital staff, focusing on evidence-based methods for improving processes of care.

**The results of these efforts have paid off: hospitals working with IPRO have exceeded their CLABSI reduction goal of 50%, achieving a reduction of 62%.**

This reduction was even better than the national average—nationally, among facilities engaged by QIOs, there was a 53% relative improvement rate in reduced CLABSI.

Participating hospitals have also met or exceeded urinary catheter utilization goals for the CAUTI project. **While re-measurement is still underway for the CDI measure, hospitals working with IPRO have already surpassed the national improvement goal, with a 21.5% improvement rate.** Nationally, QIOs worked with 667 participating facilities and tracked 85,149 fewer days with urinary catheters for Medicare beneficiaries.



## The New York Experience

Reducing Healthcare-Associated Infections

**21.5% improvement rate**  
in days with urinary catheters



## Improving Nursing Home Care

### Reducing Pressure Ulcers and Eliminating Restraints

Nursing homes are focusing increased attention on improving safety for every resident; the QIO Program is an ally in this effort. IPRO's initial nursing home focus over the past three years was twofold: reducing the incidence of pressure ulcers and eliminating the inappropriate use of physical restraints. Significant progress has been made in both of these areas.

In order to make the greatest impact, IPRO recruited New York nursing homes whose pressure ulcer and restraint rates were higher than average. IPRO assisted these providers with a wide range of technical support, educational resources and performance improvement tools.

IPRO also collaborated with the New York State Department of Health and the three major nursing home trade associations to form the Gold STAMP (Success Through Assessment, Management and Prevention) program, which aimed to prevent pressure ulcers across healthcare settings. IPRO led the coalition's Clinical Work Group, which developed the Pressure Ulcer Resource Guide, and conducted a "train the trainer" program for coaches involved in the program.

Improvements resulting from these efforts have been significant. **Pressure ulcer incidence has dropped from 14.65% to 10.45%. Physical restraint usage has dropped from 6.14% to 1.86%.**



In the second phase of its nursing home work, IPRO recruited nursing homes from across the state to participate in an 18-month learning and action network. The goal of the Nursing Home Quality Care Collaborative is to support nursing home staff in establishing a self-sustaining approach to improving safety and quality of care for their residents. IPRO has facilitated ongoing, collaborative, face-to-face learning sessions in which quality improvement tools, resources, and data were shared. Videos of the sessions have been posted online so that providers unable to participate in the network can benefit. In early evaluation results, participating facilities have shown improvements in a wide range of quality measures.

Nationally, in the 787 participating nursing homes that participated with QIOs in the Pressure Ulcer Reduction initiative, a 38% decrease in the rate of pressure ulcers was achieved. In addition, in the 981 nursing homes that participated with QIOs to minimize the use of physical restraints, a 76% decrease in the physical restraint rate was realized.

On a similar note, 31% of the nation's nursing homes participating in Medicare have been recruited to take part in rapid-cycle improvement projects. Participants benefit from the knowledge, resources and momentum of the campaign.

## The New York Experience Accelerating Quality Improvement

**Preventing  
Pressure Ulcers  
reduction  
from 14.65%  
to 10.45%  
in nursing homes**



**Minimizing the Use of  
Physical Restraints  
reduction  
from 6.14%  
to 1.86%  
in nursing homes**



## Improving Care in Physician Practices

### Optimizing the Use of Electronic Health Records to Improve Prevention and Early Diagnosis

CMS charged QIOs with assisting physicians and other clinicians participating in the Physician Quality Reporting System (PQRS). PQRS uses a combination of payment adjustments and incentive payments to encourage eligible healthcare professionals to report quality information focused on evidence-based preventive measures.

**IPRO recruited 178 clinicians who were eligible to report PQRS measures through their electronic health records (EHRs).** IPRO supported these clinicians through web-based interactive meetings, onsite visits to physician offices, teleconferences, and e-mails. These activities helped participating clinicians submit their data via the PQRS portal, and provided training and consultation to improve their practices' use of EHRs for care management. Practices submitted quarterly data to IPRO on at least three of the following PQRS prevention measures:

- Influenza immunization for patients 50 years and older;
- Pneumococcal immunization for patients 65 years and older;
- Screening mammography;
- Colorectal cancer screening;
- Tobacco use: screening and cessation intervention; and
- Hypertension management and control.



### The New York Experience

Improving Health  
for Populations and  
Communities

**178 clinicians**

were assisted with PQRS EHR reporting

**One hundred sixty-five of the 178 recruited clinicians (93%) successfully submitted PQRS data and received payment from CMS.**

Nationally, QIOs recruited/assisted 1,826 professionals with PQRS EHR 2012 reporting which potentially impacts 4.1 million Medicare beneficiaries. With QIO support, physician offices are harnessing the power of electronic health records and relying on them to coordinate individual care and manage population health.

## Integrating HIT for Meaningful Use And Improved Care Coordination

As required by CMS, IPRO supported practices in using health information technology (HIT) to improve heart health through care coordination, monitoring, patient engagement and spreading of best practices; adopting EHR and successfully demonstrating meaningful use; and promoting participation in the CMS EHR Incentive program.

Based on data supplied by the two Regional Extension Centers (RECs) in New York, IPRO convened a learning and action network (LAN) of physician practices that implemented an EHR in a given time period.

RECs are organizations that receive funding under the Health Information Technology for Economic and Clinical Health Act (HITECH Act) to help healthcare providers with the selection and implementation of EHRs.

The REC LAN comprised 346 practice locations. IPRO provided information to these sites via its electronic newsletter, *EHR Community Pulse: Information for Innovative Practices*, and through telephone and e-mail communication. As a local QIO, IPRO has brought valuable expertise to providers with EHRs who need assistance acting on the clinical quality data they must collect and report, much of which focuses on preventive health measures.



## Saving One Million Hearts

IPRO and the New York State Department of Health (NYSDOH) collaborated in Million Hearts™, a national initiative launched by the U.S. Department of Health and Human Services. Million Hearts seeks to reduce risk factors, including hypertension, smoking and high cholesterol, and increase heart-healthy behaviors such as aspirin use and tobacco cessation among those at risk.

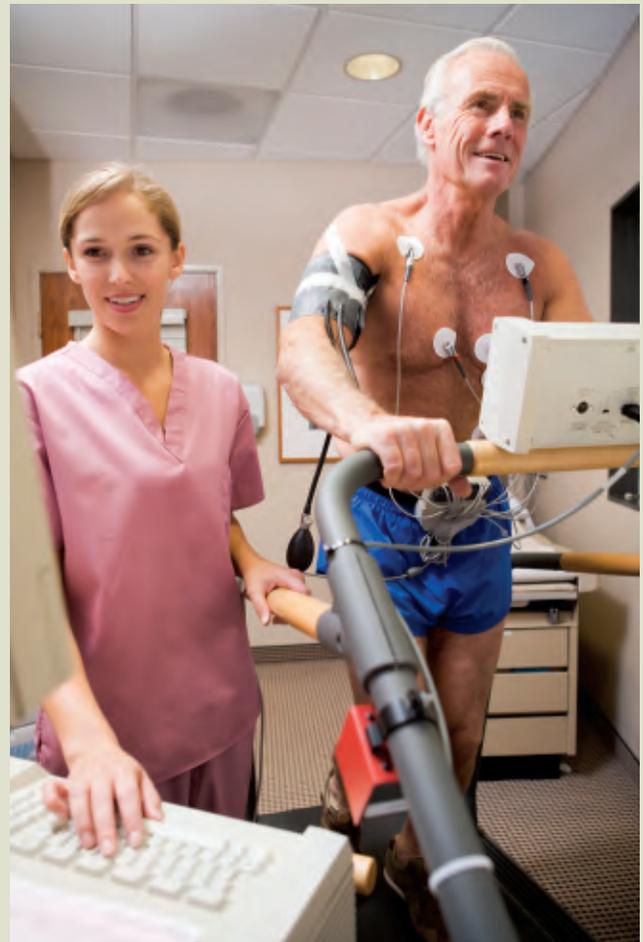


The national goal of the project is to prevent one million heart attacks and strokes by 2017. Through the QIO Cardiac Population Health Learning and Action Networks, 3,048 practices have been working with QIOs across the nation and have the potential to affect 3,364,992 patients.

IPRO's goal was to convene a learning and action network of medical experts, community partners, and clinical offices to improve rates of aspirin therapy, blood pressure control, cholesterol control, and smoking cessation (the ABCS model). Participating physician practices joined this initiative with the goals of using their EHRs to measure improvements in these rates and encourage better cardiovascular health.

IPRO's technical assistance supported practices in better coordinating care; measuring improvement in the health of patients who are at most risk for a heart attack or stroke; linking to care coordination and patient self-management resources; providing access to educational programs, best practices, and tools to improve heart health; and implementing/modifying office operations to focus on patient-centered medical home recognition and clinical data reporting.

**IPRO recruited 181 clinical offices and established a Cardiac Population Health Initiative with the NYSDOH.** The initiative includes provider groups, health plans, academic experts, federally qualified health centers, community based organizations, and representatives from the American Heart Association and the New York Chapter of the American College of Physicians. Practices reported data to IPRO quarterly, at a minimum; some reported to IPRO monthly.



## Engaging Patients and Families In Better Managing Chronic Disease

### Facilitating Diabetes Self-Management

As a result of a successful pilot initiative, IPRO forged strategic partnerships with community-based organizations in order to bring the national *Everyone with Diabetes Counts* (EDC) self-management education (DSME) program to New York City's Latino population. Latino Medicare beneficiaries in New York City have higher rates of Type II diabetes and its complications. The DSME workshops, which have been proven to help people with diabetes better manage their disease, were developed by experts from Stanford University.

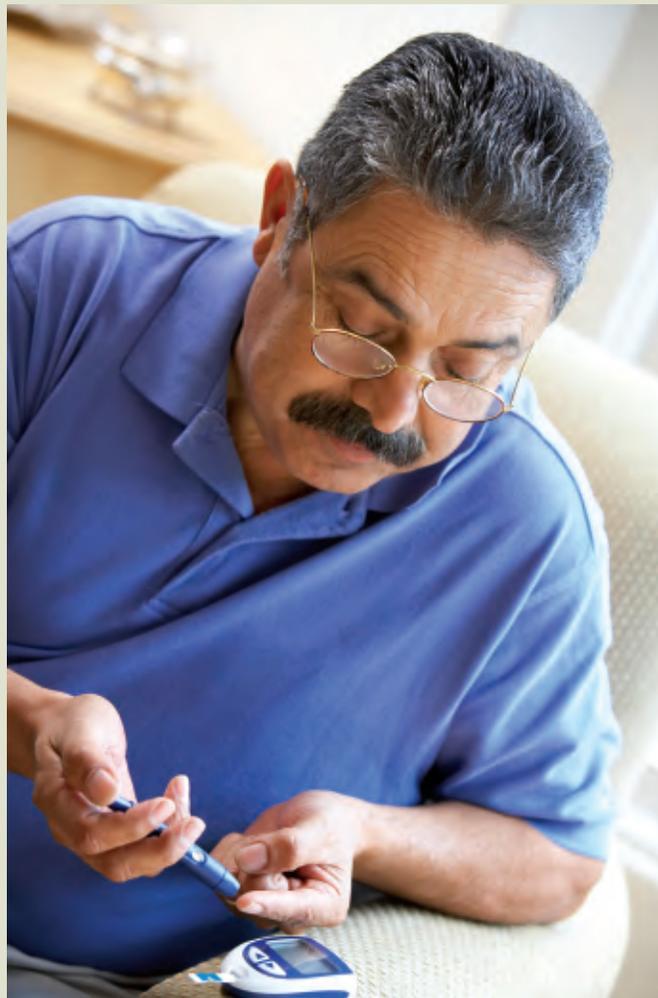
A series of free workshops, held in Spanish and English, empowered Latino seniors to incorporate healthy behaviors into their lives. **More than 3,000 New York City seniors have completed the program, and IPRO is on track to graduate an additional 2,500 Latino EDC participants by the end of the July 2014.**

### Helping Caregivers Manage Loved Ones' Dementia

IPRO has used a "train the trainer" model to provide culturally- and linguistically-appropriate, evidence-based self-management education to caregivers of Latino New York Medicare beneficiaries who have Alzheimer's disease and other forms of dementia. **IPRO aimed to help improve the care provided to 2,000 beneficiaries diagnosed with the symptoms of dementia by training 1,000 caregivers through 100 community-based organizations and workshops.**

In a second pilot initiative, IPRO implemented a hypertension self-management program in partnership with the public hospitals of New York City's Health & Hospitals Corporation.

IPRO's Consumer Health Collaborative, which consisted of representatives from a range of national, state, and local organizations, assisted in advising and extending IPRO's reach on these programs.



## Improving Transitions of Care Across Settings

Experts recognize a significant opportunity to dramatically curtail the rate of avoidable readmissions by better integrating care for populations and communities. Avoidable hospital readmissions place a physical and emotional burden on patients and families and cost Medicare an estimated \$12 billion annually. Interventions for improving care transitions are both known and effective. Nationally, almost 20% of Medicare beneficiaries are readmitted to the hospital within 30 days. It is estimated that up to 76% of these rehospitalizations may be preventable. The QIO Program helps communities with high readmission rates form local coalitions, identify the factors driving avoidable hospital readmissions in their area, find ways to better coordinate care, and encourage patients to manage their health more actively so they can remain safely at home or in a nursing facility after hospital discharge.

In order to prevent avoidable hospital readmissions, IPRO has helped to develop and assist 20 community coalitions across New York State, working intensively with two of these communities. Each community consists of a cohesive group of healthcare providers with existing referral patterns.

In all 20 communities, IPRO assisted with community-based root cause analyses of readmission drivers; implementation of evidence-based quality improvement interventions; and intervention effectiveness evaluation.

In the two communities where we have worked most intensively, IPRO facilitated monthly meetings to identify the most common causes of hospital readmissions, and to seek solutions through sharing of ideas and experiences.

Prior to starting this project, CMS took baseline measurements of 30-day all-cause rehospitalizations for Medicare Fee for Service (FFS) beneficiaries based on claims data for these patients. Remeasurement was done following IPRO's Care Transitions interventions.



**Improving  
Transitions of Care  
Nearly \$1 billion  
in cost savings nationally  
from combined QIO Programs**

**In the two communities that IPRO focused its most intensive efforts at remeasurement, rehospitalization rates showed between 30% and 40% relative improvement. The relative improvement rate for all 20 communities was 19%.**

Throughout the United States, over 14 million Medicare beneficiaries live in the communities served by the QIO Program. By working with QIOs, communities across the country have collectively saved over 27,000 people from being readmitted to the hospital and over 95,000 people from being admitted to the hospital. This amounted to nearly \$1 billion in cost savings from the national QIO program.

New York's community coalitions have been successfully supporting seamless patient transitions between hospitals and homes, as well as skilled nursing facilities and home healthcare. These improvements have addressed medication management, post-discharge follow-up, patient care plans, and patient education, among other key areas.

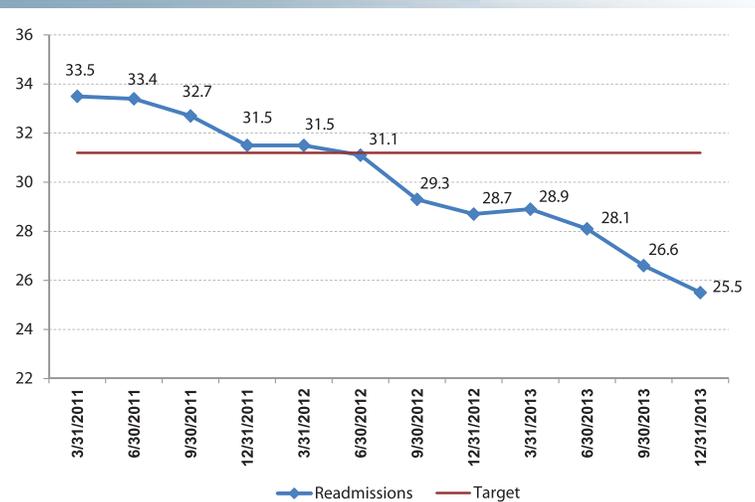
IPRO was one of 14 QIOs selected by CMS for an earlier care transitions project. As reported in a study published in the *Journal of the American Medical Association (JAMA)*, communities working with IPRO and other QIOs showed nearly twice the reduction in hospitalizations and rehospitalizations as those not working with QIOs. Based on IPRO's success in implementing community-wide interventions with this pilot project, which focused on the state's upper Capital Region, CMS also awarded IPRO a special study that examined clinical care and cost for people in long-term care facilities in Eastern New York. As part of the QIO



Program's activities targeting avoidable readmissions, IPRO has contributed to a national goal of reducing avoidable hospital readmissions by 20% by the end of 2014.

### IPRO Engaged Communities

30-Day All Cause Readmissions per 1,000 Medicare Beneficiaries



## Preventing Adverse Rx Events

Over the last three years, IPRO helped ambulatory care facilities across New York protect their patients by focusing on the safe use of anticoagulants to prevent adverse drug events.

Evidence-based guidelines, published in 2012 by the American College of Chest Physicians, cite the need to carefully manage anticoagulants. While the anticoagulant warfarin is a vitally needed medicine for many patients, it is often responsible for serious adverse events. It is among the top five drugs contributing to emergency department visits.

Recognizing these risks, CMS initiated a national three-year QIO project on anticoagulant safety. In New York, IPRO led an initiative to encourage best practices in safe anticoagulant management and formed the New York Anticoagulation Coalition. The Coalition, which was guided by two of the nation's leaders in anticoagulant safety, was an open-membership organization that included leading professional organizations, as well as practitioners from around the state.

The IPRO Coalition brought together clinical pharmacists, primary care practices, and other ambulatory care providers who care for at-risk older patients with multiple chronic conditions. The project emphasized improved time in therapeutic range (TTR) for warfarin—a key measure that concerns whether the drug is being



used safely—in order to help prevent adverse events in Medicare beneficiaries. Providers who joined this effort contributed to a national goal of reducing 265,000 adverse drug events per year.

The Coalition also formed three task forces to address significant issues in anticoagulation management: the Peri-Procedural Task Force, which looked at anticoagulation management around surgery and other interventional procedures; an EHR Task Force, which promoted the addition of anticoagulation management enhancements to electronic health records; and the Point of Care (POC) Task Force, which analyzed Medicare claims data in order to identify ethnic and geographic disparities in POC testing. The methodology used in this analysis will be shared with QIOs nationally.

Direct collaboration with a number of New York integrated health systems enabled IPRO to use electronic data sources to calculate warfarin TTR and identify adverse drug events.

Throughout the United States, QIOs worked with 27,650 Medicare beneficiaries and prevented 44,640 ADEs.

### Reducing Potential for Adverse Drug Events

**44,640**

potential adverse drug events were prevented nationally



## New Tool Helps Clinicians Manage Anticoagulants

While a number of papers in peer-reviewed journals discuss guidelines for peri-procedural use of anti-coagulants, there has not been a simplified reference guide to anticoagulant use that clinicians can quickly refer to when planning invasive procedures. The Peri-Procedural Task Force reviewed hundreds of pages of evidence-based guidelines to create a unique, easy-to-use tool known as “MAP” (Managing Anticoagulation in the Peri-Procedural Period). The tool, which consists of a series of scenarios organized in grids, can be printed on a single sheet of 11” x 17” paper to provide clear guidance on how each individual case should be handled.

The MAP tool addresses the complexity of using, reducing, or eliminating anticoagulants—including warfarin and the four novel agents now available—before, during, and after surgery, as well as after common procedures such as colonoscopy. The MAP tool is expected to be useful for surgeons, gastroenterologists and even dentists.

Surgery and invasive medical interventions increase the risk of bleeding, but withholding anticoagulants increases the risk of thrombosis. The MAP tool helps clinicians guide their decision making concerning these risks and enables them to make more informed choices on whether to interrupt oral anticoagulation for a medical procedure. If anticoagulation is interrupted, the tool also provides guidance on whether to “bridge” with injectable anticoagulants.

**The MAP tool was reviewed by the Anticoagulation Forum and has been added to its “Anticoagulation Centers of Excellence” page so anticoagulation specialists across the United States can utilize it.**



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### Management of Anticoagulation in the Peri-Procedural Period

#### A TOOL FOR CLINICIANS

Despite the considerable efficacy of antithrombotics and the increased number of oral anticoagulants now available, preventable bleeding and thrombotic events are still unacceptably common. While recently marketed agents require less laboratory monitoring, problems with the clinical management of anticoagulated patients persist, particularly in the peri-procedural period.

Surgery and invasive medical interventions increase the risk of bleeding, while withholding anticoagulants increases the risk of thrombosis due to the underlying condition(s) for which anticoagulation was originally prescribed. The clinical team must therefore balance these competing risks and make educated decisions regarding the decision to interrupt oral anticoagulation for a medical procedure and, if interrupted, whether to “bridge” anticoagulation with injectable anticoagulants, such as low molecular weight heparin (LMWH) in warfarin treated patients.

This guide is intended to:

- Assist clinicians in the simultaneous evaluation of procedure-related bleeding risk and underlying risk of thrombosis
- Guide decisions regarding the interruption of anticoagulation and the use of anticoagulant “bridging”
- Provide detailed guidance for drug dosing and laboratory monitoring in the peri-procedural period
- Encourage clear communication between clinicians involved in prescribing anticoagulants and performing invasive procedures

This material was created in April 2014 by the multidisciplinary members of the Peri-Procedural Task Force of the New York State Anticoagulation Coalition and IPRO, the Medicare Quality Improvement Organization for New York State, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents do not necessarily reflect CMS policy. 1050W-NY-AIM7.3-14-01  
5/01/2014

**New York State's QIO**  
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