



BCBSM Physician Group Incentive Program 2012 Program Year

Adoption and Use of Electronic Prescribing Initiative Plan



I. Initiative Overview

The Blue Cross Blue Shield of Michigan (BCBSM) Accelerating the Adoption and Use of Electronic Prescribing Initiative is one of many initiatives of the Physician Group Incentive Program (PGIP). Since its inception in 2005, PGIP has supported and facilitated practice transformation using a wide variety of initiatives to reward physician organizations (POs) for improved performance in health care delivery. As of September 2011, PGIP includes 40 POs from across the state of Michigan, representing nearly 15,000 primary care and specialty physicians who are members of the BCBSM TRUST PPO Network. These physicians provide care to nearly 2 million BCBSM members.

BCBSM's Physician Group Incentive Program encourages all payer collaboration, catalyzing all payer system development, rather than payer-specific system development. Through PGIP, BCBSM is helping to improve the quality of care for all Michigan residents. Patients throughout the state, regardless of payer, benefit from the improved care processes developed through the PGIP provider community. Developing systems of care which are used for all patients helps assure that providers don't have to alter care processes based on whether patients have insurance, or which insurance they have. This is an important factor in ensuring that the best practices and care processes are reliably provided to all patients, all of the time. This all-payer approach to practice transformation is good for patients with coverage from BCBSM and BCN and helps further BCBSM's social mission of cultivating a healthier future for all Michigan residents.

Goals and Objectives

The goal of the e-Prescribing Initiative is to improve the safety, quality and cost-effectiveness of the prescription process through widespread adoption and increased use of electronic prescribing and clinical decision support tools.

The objective of the Electronic Prescribing Initiative is to annually increase the percentage of primary care physicians and specialists who achieve full functionality with full utilization for all prescriptions that can be legally transmitted electronically. *Full functionality* is defined as:

- Vendor meets Medicare requirement standards
- Vendor contractually guarantees at least 96% uptime
- For controlled substances, physicians are able to use e-prescribing system to obtain decision support and complete medication history¹.

Summary of Results

The E-Prescribing Initiative was implemented in 2008, and since that time, there has been an increased trend of PGIP POs, practices and physicians implementing and fully using e-prescribing capabilities; for example:

- The percent of POs participating in this initiative has increased from 94% in 2008 to 97.5% in 2011.
- The number of physicians reported as actively using e-prescribing increased from 3,500 in 2009 to over 6,000 in 2011, (i.e., more than 55% of all PGIP participating physicians).

- As of January 2011, 2,036 PGIP practice units reported full implementation and use of e-prescribing systems, which represents over 6,000 PGIP physicians actively using e-Prescribing; 66% are Primary Care physicians, and 34% are specialists.

II. Background

Health Problem and Significance

The Institute of Medicine's *Preventing Medication Errors* report (2006) estimated that at least 1.5 million preventable medication errors occur in the U.S. each year, costing over \$3.5 billion to treat.² Many of these medication errors resulted in serious adverse drug events.

A serious adverse drug event (ADE) is defined by the FDA as an event that resulted in death, a birth defect, disability or hospitalization; or that was life-threatening or required intervention to prevent harm. Between 1998 and 2005, a total of 467,809 serious adverse events were reported to the Food and Drug Administration's voluntary Adverse Event Reporting System.³

Electronic Prescribing represents an opportunity to improve the safety and efficiency of prescribing pharmaceuticals and reduce healthcare costs. Electronic prescribing employs an automated data entry system to generate a prescription, which is then transmitted electronically from the physician's office to the patient's pharmacy. Most electronic prescribing systems also provide automatic review of a patient's medical history to check for drug allergies, drug-drug interactions and overly high doses of medication. In addition, some electronic prescribing systems can provide prescription history and electronic access to a patient's prescription benefit information (i.e., formulary and eligibility information) which allow prescribers to choose generic drugs or medications that are on formulary and are covered by the patient's drug benefit.

According to *The National Progress Report on E-Prescribing and Interoperable Healthcare 2010* the number of prescribers in the U.S. routing prescriptions electronically grew from 156,000 at the end of 2009 to 234,000 by the end of 2010—representing about 34% of all office-based prescribers.⁴ And experts predict that a shift to e-prescribing systems could eliminate more than 2 million ADEs annually, of which 130,000 are life-threatening.⁵

BCBSM Experience

Studies show errors involving prescription medications kill up to 7,000 Americans a year, according to the Institute of Medicine (IOM), and that the financial costs of drug-related morbidity and mortality may run nearly \$77 billion a year.⁶ To reduce preventable medication errors and health care costs, the IOM recommended that all prescribers and pharmacies prescribe electronically.

However, the healthcare industry has been slow to adopt the new technology. BCBSM identified several barriers to the adoption of e-prescribing, including cost, time required to install software and change prescribing behavior, clinicians' reticence about computers, time and resources required to train staff to use e-prescribing tools, and uncertainty about which pharmacies accept electronic prescriptions.⁷ BCBSM multifaceted approach to promoting e-prescribing is aimed at reducing these barriers.

Possible Solutions

- CareFirst BlueCross BlueShield (Maryland): Partnered with DrFirst in 2004 to deploy their system to 500 providers
 - Providers were given a wireless-enabled PDA (personal digital assistant) and Rcopia e-prescribing software, to access drug interaction warnings and formulary/benefit information.
 - Participating providers showed a 4% increase in formulary compliance and a total of 2,800 potential drug interactions and allergy warnings were flagged.⁸
- Horizon Blue Cross Blue Shield of New Jersey: Launched an e-prescribing initiative with Caremark Rx in 2005, spending approximately \$3 million providing 700 physicians with hardware, software, installation and training
- BCBS of Massachusetts: Partnered with Tufts and Neighborhood Health Plan in 2005 to fund an e-prescribing initiative called E-prescribing Collaborative, which served 3,400 physicians
 - BCBS of Massachusetts pays \$1 per member per month to physicians who transmit more than 50% of prescriptions electronically over a two-month period.
- In 2006, Blue Cross Blue Shield of New Hampshire announced a Citizens Health Initiative to reward physicians for adopting e-prescribing using RxHub and SureScripts by October 2008.
- Anthem BCBS collaborates with the NH Citizens Health Initiative to offer physicians access to free software, a free handheld PC and a discounted wireless telecommunications plan.
 - In 2007, Anthem launched a pilot e-prescribing program in collaboration with General Motors, RxHub, and SureScripts in two Ohio communities to help reduce medication errors and the time physicians spend managing prescriptions.
 - The program equips 100 physicians in Dayton and Warren/Youngstown with computer equipment and a free online tool that provides instant access to patient formulary information and medication history. Anthem then provides financial incentives for participating physicians.

A number of initiatives are under way nationally to increase adoption and use of e-prescribing, including the following:

- The Centers for Medicare & Medicaid Services – The Medicare Modernization Act (MMA) of 2003 encouraged Part D-participating prescribers to support an electronic prescription program.
 - The Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) mandates that starting in 2009, Medicare will pay incentives to health care providers for e-prescribing.
 - The amount of the incentive for e-prescribing will gradually decrease over a five-year period, while the penalty for not e-prescribing will subsequently increase. Physicians that implement e-prescribing in their offices can expect an incentive payment equal to 2% of their overall Medicare reimbursement rates in 2009 and 2010, a 1% incentive in 2011 and 2012, and a 0.5% incentive in 2013.
 - The penalty for not implementing e-prescribing will result in a reduction of Medicare reimbursement by 1% in 2012, 1.5% in 2013, and 2% in 2014.

- CMS has proposed giving physicians additional "hardship" exemptions that will prevent them from being penalized by Medicare for not prescribing electronically in 2011. The hardship exemptions include exempting penalties to physicians that practiced in a rural area with limited Internet access, or in an area where few pharmacies accept online prescriptions; physicians must apply for an exemption to avoid penalties.⁹
 - CMS has estimated the cost of implementing and maintaining an e-prescribing system to be approximately \$3000 per prescriber for start-up, and \$80-\$400/month per prescriber for ongoing operation (or \$3880/year, on average) for the first three years.¹⁰
- SureScripts – Links physician offices with pharmacies.
 - Launched in 2001 by the drugstore industry to allow doctors to electronically transmit prescriptions to U.S. pharmacies, SureScripts now operates the Pharmacy Health Information Exchange.
 - SureScripts makes medication history, formulary and eligibility services available to physicians using SureScripts certified software.
- RxHub – Links physicians with payers.
 - Formed in 2001, RxHub electronically routes up-to-date medication history and pharmacy benefit information to physician offices and hospitals from Pharmacy Benefit Managers (PBMs).
 - RxHub also transmits electronic prescriptions to mail-order pharmacies for the Southeast Michigan e-prescribing Initiative (SEMI).
- Software Companies – A number of software companies offer e-prescribing products. BCBSM's Pharmacy Services area has a partnership with DrFirst National e-prescribing Patient Safety Initiative™ – This coalition of health care organizations and technology companies plans to reduce medication errors by making Allscripts Web-based e-prescribing software (eRx NOW™) available for free to all U.S. physicians (www.nationaleRx.com).
- Center for Improving Medication Management – a collaborative effort of SureScripts, Medical Group Management Association, BCBSA, American Academy of Family Physicians, Humana and Intel Corp, focusing on best practices in processing electronic prescriptions and improving patient compliance.
- The Drug Enforcement Administration (DEA) issued a final rule in 2010 permitting electronic prescribing of controlled substances, expanding the scope of medications eligible for electronic submission.
 - Controlled substances (Schedule II, III, IV, and V controlled substances) constitute between 10 and 11% of all prescriptions written in the United States, and 90% of prescribers write prescriptions for controlled substances.¹¹
 - The DEA requires prescribers use a "two-factor" credentialing process, consisting of two of the following: something you know (password); something you have (hard token) or something you are (biometric) to authenticate their identity.
 - Currently, electronic prescribing technology vendors and others are in the process of enhancing their systems to meet the DEA requirements. Pilots are currently underway in California, Texas and Virginia, and it is anticipated that the electronic prescribing of controlled substances components will be available in fall 2011.

As described, there are numerous electronic prescribing vendor products in the market. BCBSM's Pharmacy Services area currently has a partnership in place with Dr First.

BCBSM Experience

Blue Cross Blue Shield of Michigan and Blue Care Network have been active supporters of technology to improve prescribing efficiency, reduce medical errors and increase generic prescribing. For example:

- General Motors, Ford and Chrysler collaborated with BCBSM, other health plans, and Medco to support the Southeast Michigan e-prescribing Initiative (SEMI) which was launched in February 2005:
 - The goal of SEMI is to reduce prescription errors, miscommunications, and patient wait times.
 - The SEMI coalition has grown to include additional partners including Health Alliance Plan, Henry Ford Medical Group, Medco Health Solutions, Inc., SureScripts and CVS Caremark Corporation.
 - As of summer 2011, SEMI includes over 6,500 prescribers who are generating nearly a million electronic prescriptions monthly.
 - A severe or moderate drug-to-drug alert was sent to physicians for more than 3.5 million prescriptions, resulting in nearly 1 million of those prescriptions being changed or canceled by the prescribing doctor.
 - Physicians received nearly 334,000 medication allergy alerts.
- In 2006, BCBSM and Partnership for Michigan's Health, comprised of the Michigan Health & Hospital Association, Michigan State Medical Society, and Michigan Osteopathic Association, released the findings of a statewide inventory on health information technology and electronic health records in Michigan. Recommendations include promoting e-prescribing as a fundamental building block to EHR.
- In 2007, BCBSM Pharmacy Services and DrFirst piloted a BCBSM e-prescribing system, where providers access the system online through WebDENIS, the BCBSM Provider Portal, which allows them to electronically send prescriptions to the patient's pharmacy of choice.
 - Since 2007 this program has provided over 1,200 prescribers in Michigan access to an e-prescribing program through the secured BCBSM provider Web portal. Over 4.3 million prescriptions have been generated and prescribers have been presented with over 1 million safety alerts of which about 1 in 5 were acted upon.
 - An estimated 450,000 drug interaction alerts generated may have resulted in avoiding over 650 adverse drug events including 23 permanent disabilities, and, at a minimum, 5 deaths.¹²

III. Initiative Description

Specific Area of Focus

PGIP aims to promote the adoption and use of e-prescribing in all PGIP practice units, in order to reduce preventable medication errors and health care costs.

Target Population

The E-Prescribing Initiative is available to all PGIP participating Primary Care Physicians and specialists.

Criteria for Participation

To participate in this initiative, POs must currently participate in BCBSM's Physician Group Incentive Program and apply to participate in the Adoption and Use of Electronic Prescribing Initiative.

BSBCM Deliverables

BCBSM will provide bi-annual Progress Report templates and a database for the collection of Self-Reported e-prescribing data, so that POs can adequately fulfill their reporting requirements associated with this initiative.

Note: BCBSM reserves the right to modify its evaluative and administrative processes related to the Initiative.

PO Expectations/Deliverables

POs participating in the PGIP Electronic Prescribing Initiative are expected to:

1. Update their self-reported data each incentive reporting period with information about each Practice unit's current status relative to e-prescribing, indicating whether Practice unit:
 - Is actively engaged in implementing a qualified e-prescribing system, or
 - Has a qualified e-prescribing system implemented and in use by one or more physician champions, while actively taking steps to train the rest of the practice unit for full implementation within six months, or
 - Has all physicians in the practice actively using qualified e-prescribing system and engaged in developing capabilities to track e-prescribing use and results, where feasible
2. Submit a Progress Report each incentive reporting period, which does the following:
 - Captures information on current e-prescribing vendor, including status relative to Medicare e-prescribing qualifications standards
 - Lists current e-prescribing vendor reporting capabilities and costs
 - Identifies clinical and administrative leads for Initiative
 - Provides summary information, if available, on monitoring and follow-up activities to ensure maximum use of e-prescribing system
 - Describes overall status of PO e-prescribing program and efforts to develop/procure tracking and reporting capabilities, barriers encountered, and collaborative activities with other POs
3. Provide to BCBSM documentation and/or demonstration of monitoring activities that do the following:

- Provide tools used for monitoring all Practice units' e-prescribing use volumes
- Provide timely follow-up with Practice units regarding any decreases in e-prescribing volumes
- Highlight interactions with Practice units as necessary to promote and ensure maximum possible use of e-prescribing
- Provide tools used for monitoring and assessing e-prescribing outcomes (i.e., alerts by type of alert, prescription changes, etc.), where available

To be considered “qualified,” an e-prescribing vendor must comply with Medicare Part D 2009 e-prescribing standards, which require that vendors are able to perform the following tasks:

- Generate a medications list
- Select medications, transmit prescriptions electronically and perform alerts (including automated prompts that offer info on the drug being prescribed, potential inappropriate dose or route of administration, drug-drug interactions, allergy concerns, and warnings/cautions).
- Provide information on lower cost alternatives
- Provide formulary or tiered formulary information, patient eligibility, and authorization requirements from the patient’s drug plan

Incentive Model and Payment Methodology

The initiative has two incentive payment periods:

- January 1 – June 30 (6 months)
- July 1 – December 31 (6 months)

Physician Organizations receive incentive payments commensurate with their performance on implementing e-prescribing during the six-month incentive payment period. At the end of each six-month incentive payment period, POs are expected to complete the following reporting requirements in a timely manner:

- Submit a progress report for activities implemented during the previous six months, identifying best practice accomplishments, challenges encountered, and outlining plans to overcome barriers to success
- Update their self-reported data, identifying all tasks implemented by each participating practice unit
- POs are encouraged to maintain high-level implementation plans, to assist them in tracking progress and recording key milestones
- POs are also strongly encouraged to participate in workgroups and webinars related to their PGIP involvement, and to collaborate with their fellow POs to share best practices.

Performance payments will reflect the percent of the POs total physicians that complete an initiative capability. POs employing a phased approach to practice unit involvement in an initiative will not be financially penalized since there is no time limit for implementation of e-prescribing capabilities.

POs complying with Initiative expectations will be paid up to \$2,000 per physician (PCP or specialist) in installments over the course of two years (i.e., four payments of \$500). Eligible physicians must belong to a practice unit that is:

- Actively engaged for no longer than one incentive reporting period in implementing a qualified e-prescribing system or in the process of extending use of a qualified e-prescribing system from physician champions to all physicians
- Actively using a qualified e-prescribing system by all physicians

The incentive payment is pro-rated by the number of attributed members per physician using an adjustment factor. Starting with the July 2011 payment, the POs that have not met their maximum per physician payment (up to \$2,000/physician) will continue to get \$500 increments until they reach the maximum payment; the POs that have met their maximum payment will be paid only for physicians new to PGIP and the payment will be a one-time payment of up to \$2,000/physician.

NOTE: BCBSM reserves the right to use discretion in making incentive payments based on the data and relative PO performance.

IV. Evaluation

Two participation based metrics self-reported by participating POs are used to evaluate the PGIP e-prescribing Initiative and calculate payment of the incentive; the metrics include:

1. Full e-prescribing system in place and used by physician champions
2. Full e-prescribing system in place and used by all physicians

Progress Reporting

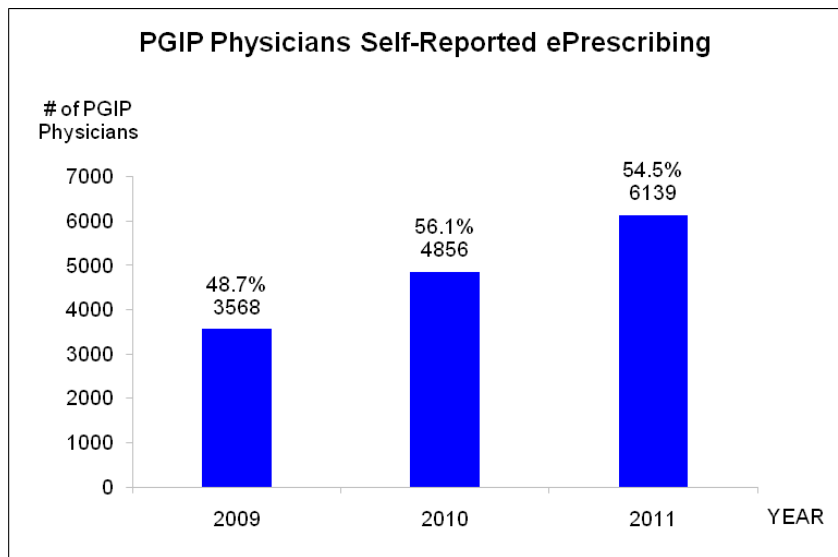
Please see Appendix II for E-Prescribing Progress Report questions.

V. Results

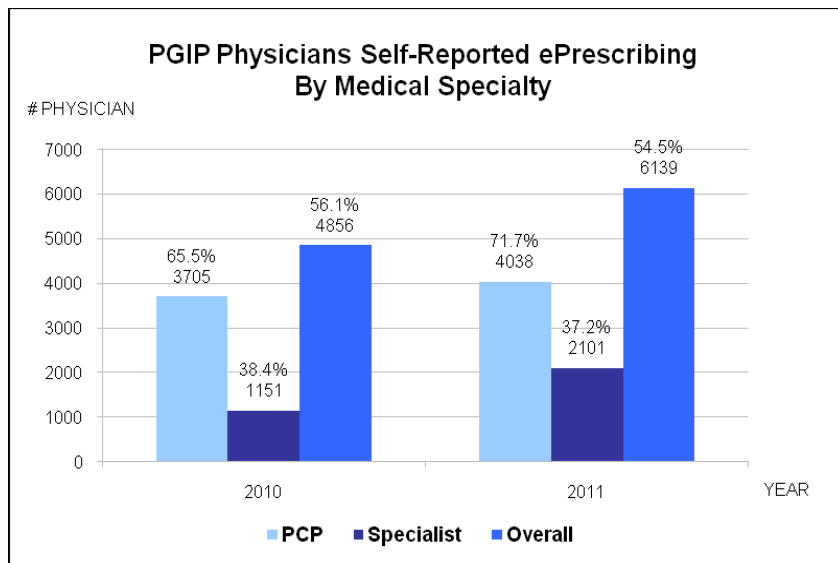
Since the E-Prescribing Initiative began in 2008, of the number of PGIP POs, practices and physicians implementing and fully using e-prescribing capabilities in Michigan has increased, based on their self-reported data:

- In 2008, 94% of all PGIP POs elected to participate in E-Prescribing Initiative and in 2011 97.5% of POs participated.
- As of January 2011, the number of PGIP practice units that reported fully implementing and utilizing e-prescribing was 2,036.
- In 2009, approximately 3,500 physicians, representing 50% of all PGIP physicians, reported actively using e-prescribing in 2011 that number increased to over 6,100 PGIP physicians (more than 55% of all PGIP participating physicians).

- The percentage of physicians with ePrescribing capabilities fully in place and in use (self-reported by physician organizations) has increased from <10% in 2008 to over 55% as of January 2011.
- Among the 6,139 physicians actively utilizing e-prescribing as of January 2011, 66% are Primary Care physicians, and 34% are specialists.



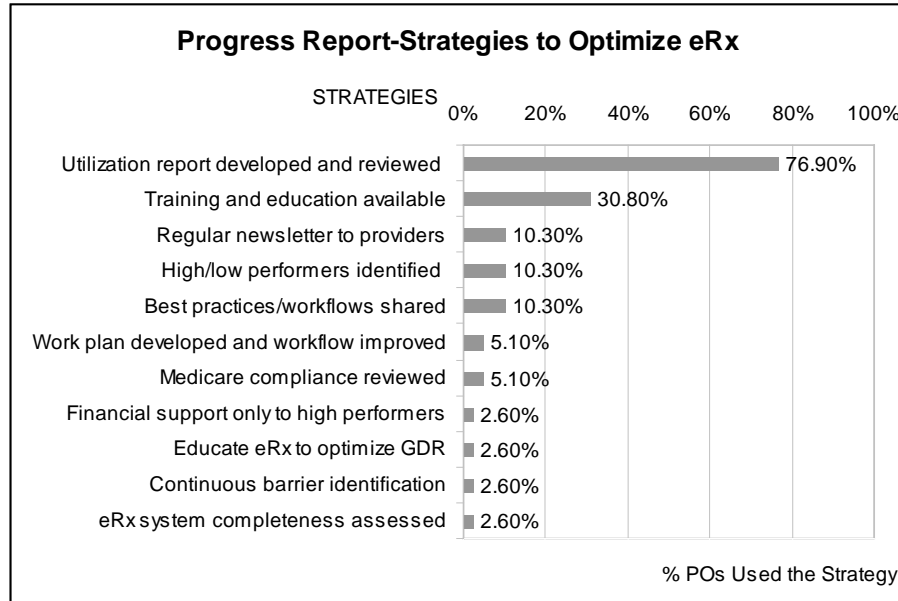
Data Source: Self-Reported Data (SRD)—Number and Percentage of physicians belongs to practice units that were reported as “Full e-prescribing system in place and used by all physicians”.



Data Source: Self-Reported Data (SRD)—Number and Percentage of physicians that were reported as “Full e-prescribing system in place and used by all physicians” break down by PCPs and Specialists.

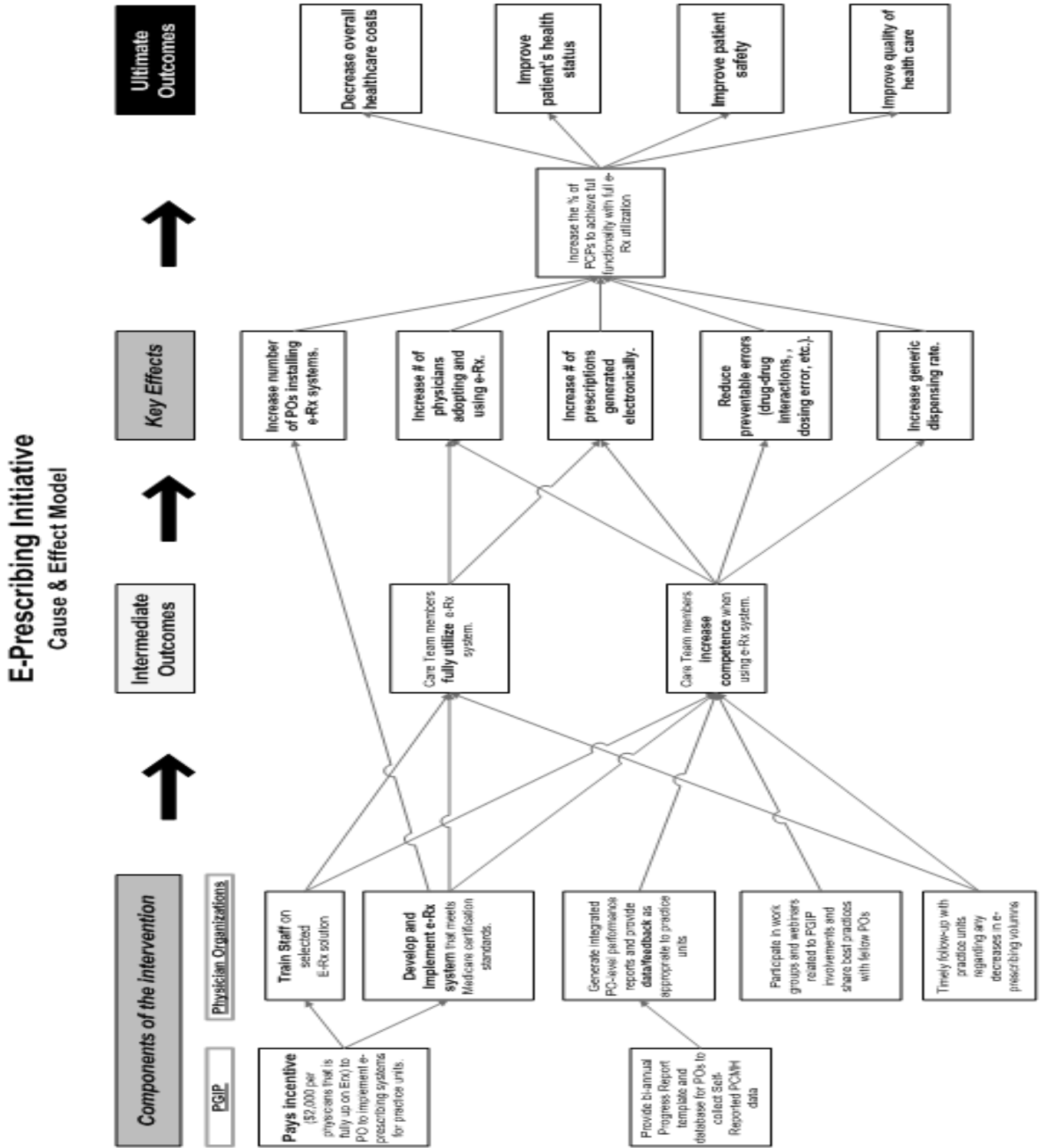
Based on PO feedback from the spring 2011 Progress Report, common strategies POs used to optimize e-prescribing include:

- E-prescribing use reports : e-prescribing utilization/activity reports developed by payers, vendors or providers and reviewed at the leadership or provider level
- E-prescribing training and education for providers: training and education for initial activation and ongoing support by designated trainers or through virtual or on-site training programs
- Regular e-prescribing communications to practices: regular newsletter from vendors or POs



Data Source: 2011 Spring Release Progress Report—Percentage of POs using different strategies to optimize e-prescribing in 2011

Appendix I: Cause and Effect Diagram



Appendix II: Example of ePrescribing Progress Report questions

1. What proportions of your PO's practices have a fully functioning e-prescribing system?

A full function e-prescribing system complies with Medicare Part D 2009 e-prescribing standards, which require that vendors are able to perform the following tasks:

- Generate a medications list
- Select medications, transmit prescriptions electronically and perform alerts (including automated prompts that offer info on the drug being prescribed, potential inappropriate dose or route of administration, drug-drug interactions, allergy concerns, and warnings/cautions).
- Provide information on lower cost alternatives
- Provide formulary or tiered formulary information, patient eligibility, and authorization requirements from the patient's drug plan

- None
- Less than half of the practices
- About half of the practices
- More than half, but not all practices
- All practices
- Don't know

2. What proportions of prescriptions are submitted electronically by your PO's providers?

Electronic submission is defined as the prescription is transmitted and received electronically in the pharmacy.

- None
- Less than half of the prescriptions
- About half of the prescriptions
- More than half, but not all prescriptions
- All prescriptions
- Don't know

3. If not all prescriptions are electronically submitted by your PO's providers, what barriers exist that prevent full implementation of e-prescribing in your PO's practices:
(Select all that apply)

- Inadequate training of practice staff
- Inadequate financial resources within practices
- Inadequate staff resources within practices
- Other PGIP initiatives are higher priority
- E-prescribing requires more time to execute in the course of the workflow process

- Transitions from standalone e-prescribing systems to EMRs and difficulty monitoring e-prescribing utilization with the EMRs
 - PO hasn't established a workplan for improving e-prescribing patterns among practices
 - Lack of provider or practice unit "buy-in" for the initiative
 - Lack of communication of PO goals and PGIP e-prescribing initiative to practice units
 - Patients resistant to electronic prescriptions, prefer handwritten
 - Pharmacy resistant to electronic prescriptions, prefer handwritten
 - Other
- Please explain:

4. What types of e-prescribing utilization reports does your PO create?
(select all that apply)

- PO level
- Practice Unit level
- Provider level
- We do not produce e-prescribing utilization reports

5. For what proportion of the practice units does your PO create E-prescribing utilization reports?

- None
- Less than half of the practices
- About half of the practices
- More than half, but not all practices
- For all practices
- Don't know

6. For what proportion of the practice units does your PO review E-prescribing utilization reports?

- None
- Less than half of the practices
- About half of the practices
- More than half, but not all practices
- For all practices
- Don't know

7. Do you identify practice units that have "low" e-prescribing utilization patterns?

- Yes
- No

If yes, how do you define "low" e-prescribing utilization?

8. What resources does your PO offer practice units to improve their e-prescribing system use?
(select all that apply)

- E-prescribing utilization reports
- E-prescribing best practices/protocols are shared (example workflow best practices)

- E-prescribing training program for initial activation of the software/system
- E-prescribing training program for ongoing support in the initiative
- Regular e-prescribing communication/newsletters
- Identification of the practice as a low e-prescribing performer
- Other

Please explain:

9. Does your PO promote the use of the e-prescribing software as a method to identify opportunities for prescription of generic drugs?

- Yes
- No

Appendix III: PGIP Contacts

For additional information on the Radiology Management Initiative, contact the following Initiative leads:

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Endnotes

¹ In the future, when the technology for ePrescribing controlled substances becomes widely available, this initiative will support use of ePrescribing for controlled substances.

² Preventing Medication Errors. Washington, DC: *National Academies Press*, 2006, p. 5.

³ Moore, TJ. Serious Adverse Drug Events Reported to the Food and Drug Administration, 1998-2005. *Archives of Internal Medicine*, Sept. 10, 2007.

⁴ Year 2010 The national progress report on e-prescribing and interoperable Healthcare. Available at: <http://www.surescripts.com/pdfs/national-progress-report.pdf>

⁵ Johnston D, Pan E., Middleton B, Walker J., Bates DW. The Value of computerized order entry in ambulatory settings. Boston, MA: *Center for Information Technology Leadership*; 2004.

⁶ A Call to Action: Eliminate Handwritten Prescriptions Within 3 Years! Available at: <http://www.ismp.org/Newsletters/acutecare/articles/Whitepaper.asp>

⁷ Questions and Answers. E-prescribing: National e-prescribing Patient Safety Initiative (NEPSI). Available at: <http://www.fhin.net/eprescribe/Technology/eRxNow/NEPSIeRxFAQs.pdf>

⁸ E-prescribing – CareFirst. Blue Cross Blue Shield Association Blues Works for Providers 2007 Winning Program. Available at: <http://www.bcbs.com/innovations/blueworks/provider/e-prescribing.html> .

⁹ Robert Lowes. CMS Proposes More Loopholes for E-Prescribing Penalty; *Medscape Medical News*, July 19, 2011.

¹⁰ Mary Ellen Schneider, Incentives, penalties predicted to push doctors to e-prescribing. Available at: http://findarticles.com/p/articles/mi_hb4393/is_9_39/ai_n29463168

¹¹ DEA Congressional Testimony by Office of Division Control (DEA) 12/4/2007

¹² Saul N. Weingart, MD, PhD et al, An Empirical Model to Estimate the Potential Impact of Medication Safety Alerts on Patient Safety, Health Care Utilization, and Cost in Ambulatory Care; *Arch Intern Med*. 2009;169(16):1465-1473.