e-Prescribing’s Impact on Cost and Quality: Implications for Pay-for-Performance Initiatives

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WellPoint Northeast
Agenda

• Introduction

• e-Prescribing
  – Overview
  – Costs of poor quality
  – Benefits
  – Current market penetration/barriers to adoption
  – Critical Success Factors
  – Public/Private Sector Initiatives

• Pay-for-Performance Implications
  – Industry trends
  – Incentive components

• WellPoint Programs and Experiences

• Conclusions
Who Is Wellpoint?

- **Leading health benefits company in the nation**
- **Approximately 28 million medical members**
  - Blue plans in 13 states: California, Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri, Nevada, New Hampshire, Ohio, Virginia and Wisconsin
  - Unicare across the country, including significant presence in Illinois, Texas, and Massachusetts
  - HealthLink in Missouri and six other states: Arkansas, Illinois, Indiana, Iowa, Kentucky and West Virginia
- **Major specialty businesses**: pharmacy, dental, vision, life/disability, behavioral health, EAP, workers’ compensation, state-sponsored
- **Nation’s 2nd largest Medicare contractor**
- Over $40 billion in revenues*
- More than 38,000 associates

* For 12 months ending 9/30/2004
Managing Components of Illness

- Episode of Care
- Hospital at center of delivery system
- Quality through the eye of the patient and provider viewed as service quality
- Consumer and employer view access and amount of health care as the gold standard

Managing Overall Health Status and Chronic Illness

- Population health, disease prevention, integrated care for chronic illness
- Pro-active primary care, well integrated with specialty services. Hospitals care for increasingly ill population
- Quality care: improves health and is scientifically based
- Consumer engaged in health promotion and informed decision-making

Technology and information management are key enablers of this vision.
Improving the Care Delivery Process

Migrate from administrative transactions to clinical e-commerce thereby actually improving the care delivery process for better cost and quality outcomes.

Clinical solutions such as e-Prescribing offer a viable mechanism to measurably improve quality while reducing the cost of care.
e-Prescribing Overview

Electronic prescribing refers to the use of computing devices to enter, modify, review, and output or communicate drug prescriptions.

Systems at the higher levels of sophistication afford much greater opportunities for quality improvement, reduction in errors, and improved workflow efficiency.

Source: eHealth Initiative

Decision Support
- EMR Integration
- Electronic Connectivity
- Medications Management
- Supporting Patient Data
- Standalone Prescription Writer
- Reference Information

Source: eHealth Initiative

Systems at the higher levels of sophistication afford much greater opportunities for quality improvement, reduction in errors, and improved workflow efficiency.
e-Prescribing Industry Today

- Physicians write a prescription from mental drug list
- Call to confirm prescription
- Clarify handwriting
  - Dosage?
  - Drug?
- Request changes if required based on benefits
- Check eligibility
- Determine benefit
- Wait
- Read script
- Data enter script
Electronic Connection From Physician to Pharmacy

- Electronic SCRIPT standard
- Reduced wait time
- Legible script
- Reduced double data entry
Electronic Connection From Physician to PBMs

- Eligibility known
- Formulary and preferred drug known at point-of-care
- Patient drug history

- Co-pay minimized

- Manage prescription drug benefits
- Clean and legible script when printed
Healthcare Quality Defect Rates Occur at Alarming Rates

Defects per million

Breast cancer screening (65-69)

Overall Health Care in U.S. (Rand)

Post-MI β-blockers

Outpatient ABX for colds

Hospital acquired infections

Hospitalized patients injured through negligence

Airline baggage handling

Detection & treatment of depression

Anesthesia-related fatality rate

Adverse drug events

U.S. Industry Best-in-Class

Source: modified from C. Buck, GE
Cost of Poor Quality

• Institute of Medicine Reports: To Err is Human and Crossing the Quality Chasm:
  – More than 7,000 deaths and as many as 7% of hospital admissions occur as a result of adverse drug events and medication errors
  – 95% of these events could be avoided through the use of computerized physician-order-entry systems for prescriptions

  ![To Err is Human](image1)

  ![Crossing the Quality Chasm](image2)

• Center for Information Technology Leadership:
  – 8.8 million ambulatory based adverse drug events (ADEs) occur each year of which over 3 million are preventable
  – Medication errors account for 1 out of 131 ambulatory care deaths
Benefits of e-Prescribing

- e-Prescribing can improve quality and safety, increase efficiencies, and reduce cost.
  - Improves patient safety with an “informed” prescription
  - Provides access to more patient information at the point of care
  - Frees resources to provide new, consultative, and value-added services
  - Less waiting and confusion due to clarification calls between pharmacy, payer, and prescriber
  - Reduces errors due to incomplete levels of information and transcription

- Potential impact
  - CITL estimates savings from avoidance of ADEs greater than $2 billion nationally
  - e-prescribing could prevent 1.3 million provider visits, 190,000 hospitalizations, and 136,000 life threatening ADEs per year

Studies suggest that national savings due to universal adoption could be as high as $29 billion.
### Numerous Evidence of e-Prescribing Value

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
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<tbody>
<tr>
<td>CAQH</td>
<td>Study of 100 physicians for 1 year indicated 1 out of 73 prescriptions were cancelled or changed due to warnings of a drug interaction or allergic reaction</td>
</tr>
<tr>
<td>CGEY</td>
<td>CGEY reported health plans may save $0.75 - $3.20 per prescription</td>
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</table>
| Group Health, Inc.            | • Office staff reduced phone calls with pharmacists by 75%  
• $600/week savings  
• 2 - 3 hours/day of office staff savings | |
| Tufts University              | • e-Prescribing pilot reported 30% fewer phone calls from pharmacists resulting in improved office efficiency  
• 50% of survey respondents reported switching to a preferred drug therapy when prompted | |
| Kaiser Permanente             | Mid-Atlantic region reported 35% of physicians who receive a drug alert make a change in their prescription                               |
Market Penetration

• Despite some initial successes, e-Prescribing is not widely used
• It is estimated that only 5 - 18% of physicians and other clinician types are using e-Prescribing
• Less than 5% of the estimated 3 billion annual prescriptions ordered are electronic

A number of barriers stand in the way of universal adoption in the practice:

– Cost of buying and installing a system
– Time / workflow impact: Initially, increased time compared to paper prescribing
– Time to review warning
– Safety improvements not fully publicized
– Standards/interoperability

Source: eHealth Initiative
Making e-Prescribing Work: What Will It Take?

- **Applications** – robust, easy to use
- **Standards** - clinical data standards promoting interoperability
- **Interconnectivity** – between entities and applications
- **Capital** – up-front costs (implementation and IT infrastructure), on-going operations
e-Prescribing Roadmap

- Intuitive systems
- Improved and universal communications
- Effective standards
- Incentives to reconcile financial costs and benefits
  - Appropriate data sharing
  - Well executed clinical decision support
  - Advanced communication functions
  - Maximum clinical and financial value
Public Sector Activity

• President Bush’s executive order in April 2004 to deploy health information technology over the next 10 years

• President Bush’s appointment of David Brailer as the national coordinator of health information technology

• The 2003 Medicare Modernization Act, and the proposed rule for ePrescribing and the Prescription Drug Program

• Grants from the U.S. Department of Health and Human Services’ (HSS) Agency for Healthcare Research and Quality (AHRQ)
  – Recent award of about $139 million for more than 100 grants and contracts for health IT demonstration projects in 38 states
Private Sector Initiatives

• The private sector is developing incentive structures that promote IT implementation

  – **WellPoint** - capital for 19,000 contracting network physicians to promote e-Prescribing and paperwork reduction.

  – **BCBSMA and Tufts Health Plan** - $3 million initiative to provide electronic prescribing software to 3,400 clinicians in their networks who write a large number of prescriptions.

  – **Bridges to Excellence** - additional compensation of up to $55 per patient for investing in information systems and care management tools, including electronic prescribing.

Private sector initiatives include both investments in infrastructure and Pay-for-Performance incentives.
Pay-for-Performance Implications
P4P - Mechanism to Reward and Improve Clinical Performance

• No one disputes that there’s room for improvement in reimbursement methodologies:

  “There are three ways to pay a physician - fee for service, capitation and salary - and they are all bad.”
  James Robinson
  UC Berkeley 2000

  “Private and public purchasers should examine their current payment methods to remove barriers that currently impede quality improvement, and to build in stronger incentives for quality enhancement.”
  - IOM Recommendation 10

• Industry literature repeatedly emphasizes the financial and human costs associated with poor quality:
  – Industry experts estimate poor quality in health care costs a typical employer $1,350 (overuse, under-use, misuse and waste) for each covered employee each year. - MBGH, 2002
  – The direct and indirect costs of diabetes are $98 billion annually - MBGH, 2002
  – A 1999 IOM report estimated that medical errors in the inpatient setting caused between 44,000 and 98,000 avoidable deaths each year.
P4P Key Industry Trends

- Expanding P4P to PPO and self-insured (ASO) products

- Incentivizing specialist physicians as well as primary care physicians (PCPs)

- Use of tiered fee schedules instead of annual bonus payments

- Supplementing (and sometimes supplanting) HEDIS measures with measures that result in positive savings *(generic drug substitution and efficiency) and adoption of clinical information technology by providers*

- Demonstrating return on investment, or ROI (what would have been the outcome in the absence of the P4P program?)

- Deploying balanced scorecards and actionable results reporting, coupled with careful movement toward increased transparency as a non-financial incentive

- The rising role of CMS as a P4P market driver

Source: *The Evolution of Pay-for-Performance Models for Rewarding Providers*

by Geof Baker, President, and Beau Carter, Senior Health Policy and Strategy Consultant, Med-Vantage, Inc., San Francisco
Several components of the balanced scorecard are impacted by e-Prescribing.

Source: The Evolution of Pay-for-Performance Models for Rewarding Providers
by Geof Baker, President, and Beau Carter, Senior Health Policy and Strategy Consultant, Med-Vantage, Inc., San Francisco
WellPoint is providing incentives related to e-Prescribing in several PCP and specialty programs throughout the country.

<table>
<thead>
<tr>
<th>Region</th>
<th>PCP</th>
<th>Specialty</th>
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<tbody>
<tr>
<td>Northeast</td>
<td>Generic Rx Rate, Technology Adoption</td>
<td>Generic Rx Rate</td>
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<tr>
<td>Southeast</td>
<td>Generic Rx Rate, Technology Adoption</td>
<td>Generic Rx Rate, Technology Adoption</td>
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<tr>
<td>Midwest</td>
<td>Generic Rx Rate</td>
<td>Generic Rx Rate</td>
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<tr>
<td>West</td>
<td>Generic Rx Rate, Appropriate Rx Usage</td>
<td>Generic Rx Rate, Appropriate Rx Usage</td>
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</table>
WellPoint e-Prescribing - Incentives and Experiences

• **Anthem Quality Insights (AQI) - Northeast P4P Platform**
  – Primary Care quality incentive program
    • 100 point program with up to a 6% increase above existing reimbursement levels for qualifying physician groups
    • e-Prescribing (15 points of 25 technology points)
    • Generic prescribing (25 Points)

• **WellPoint (Legacy Plans - CA, GA, WI, MO)**
  – Funded $40 million investment in technology packages
    • Paperwork reduction package
    • Prescription Improvement Package

• **WellPoint Northeast – Quality Program Pilot**
  • Three year initiative
  • e-Prescribing system implementation
  • Clinical outcomes measurement
## AQI Physician Program Framework

<table>
<thead>
<tr>
<th>Pay-for-Performance Program Component</th>
<th>Measure</th>
<th>Points</th>
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<tbody>
<tr>
<td><strong>I Outcomes</strong></td>
<td></td>
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</tr>
<tr>
<td>Diabetes</td>
<td>HbA1C and LDL outcomes levels</td>
<td>10</td>
</tr>
<tr>
<td><strong>II Process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>Appropriate Screenings (HbA1C, DRE, LDL)</td>
<td>40</td>
</tr>
<tr>
<td>Asthma</td>
<td>Appropriate Medications</td>
<td></td>
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<tr>
<td>CAD</td>
<td>One LDL screening</td>
<td></td>
</tr>
<tr>
<td>Immunizations (Child and Adolescent)</td>
<td>HEDIS/Combo 2 Standard</td>
<td></td>
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<tr>
<td>Adolescent Well-Care</td>
<td>Annual Visit</td>
<td></td>
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<tr>
<td><strong>III Pharmacy</strong></td>
<td>% of Generic Prescription above the market usage</td>
<td>25</td>
</tr>
<tr>
<td><strong>IV Technology Infrastructure</strong></td>
<td>In production and in use with Anthem patients</td>
<td>25</td>
</tr>
<tr>
<td>E-Prescribing</td>
<td></td>
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<tr>
<td>EMR</td>
<td></td>
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<tr>
<td>Chronic Disease Registry</td>
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100
WellPoint Technology Investment

- 25,000 network physicians selected for participation
- 19,000 accepted
- 86% chose the paperwork reduction package
- 14% (2,700 physicians) chose the prescription improvement package
- 2,000 physicians have registered
- Approximately 200 physicians are active users
- 30,000 e-Prescriptions submitted to-date
WellPoint Technology Investment

• Formal evaluation will be conducted to assess program impact
  – Establishment of baseline, quarterly measurements beginning in 2005

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<tr>
<th>Areas of measurement</th>
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<tbody>
<tr>
<td>Formulary compliance</td>
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<tr>
<td>Generic utilization</td>
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<tr>
<td>Utilization rate of e-prescribing tool</td>
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<tr>
<td>Physician office operational efficiency (number of pharmacy and mail order calls/faxes into the physicians' office, number of chart pulls)</td>
</tr>
<tr>
<td>Medication error avoidance / Patient safety</td>
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<tr>
<td>Pharmacy operational efficiency (number of rejected claims and prior authorization requests)</td>
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</table>
Summary of Lessons Learned

• e-Prescribing is not high on most physicians’ radar screens
  – Significant gulf between literature reports and our actual experience

• Office managers do not understand nor value e-Prescribing
  – Reaching the actual physician requires a thoughtful approach

• Free is not cheap enough
  – Significant percent of physicians were concerned with price after 1 year

• Significant concerns with a health plan delivering a clinical IT solution exist in the physician community
  – High levels of distrust in physician community that a payer could or would or should be involved with clinical information technology solutions
Summary of Lessons Learned

• Deployment of a mobile solution is complicated and time consuming
  – Deployment of wireless access points and mobile devices is a process, not a product

• Nearly all vendors are not ready for large-scale implementations; they are accustomed to 100s of physician deployments; not thousands
  – In order for this initiative to pan out, a robust EMR and e-Prescribing marketplace is needed but does not exist

• PDAs are still not sufficiently robust for physician interest and objectives
  – Watch for integration of PDAs with 802.11 wireless and seamless cell phone network access for continuous, geographically broad network access
  – Notebook / tablet PCs may offer a more compelling solution
e-Prescribing – WellPoint Northeast Experience

• **Target Provider**
  - A group practice in the Northeast (26 physicians)
  - WellPoint Northeast conducting a three year quality program involving the implementation of an e-Prescribing system

• **Control Group**
  - A representative sample of providers within the same geographic area
  - Not using e-Prescribing system(s)

![Target and Control Group Demographics](image)

- 62% Family Practice
- 19% Internal Medicine
- 19% Pediatrics
Preliminary findings - Q3 2003 compared to Q3 2002

**Rx PMPM**

<table>
<thead>
<tr>
<th>% Increase</th>
<th>Target Group</th>
<th>Control Group</th>
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<tbody>
<tr>
<td>8</td>
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**Generic Rx Scripts**

<table>
<thead>
<tr>
<th>% Increase</th>
<th>Target Group</th>
<th>Control Group</th>
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<tbody>
<tr>
<td>5</td>
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</table>
Preliminary findings - Q3 2003 compared to Q3 2002

PMPM trend, generic prescribing rate, and average cost per Rx all showed improvement, but aggregate PMPM of target group still above control group due to higher utilization patterns.

**Average Cost per Script**

**Aggregate PMPM**

PMPM trend, generic prescribing rate, and average cost per Rx all showed improvement, but aggregate PMPM of target group still above control group due to higher utilization patterns.
e-Prescribing – WellPoint Northeast Experience

• Preliminary conclusions
  – Preliminary results are favorable and consistent with industry findings on benefits associated with e-Prescribing
  – Cost avoidance is directly attributable to the increase in generic utilization
  – Results cannot be extrapolated to the broader provider community
    • Target group is relatively sophisticated has experience with previous technology implementations
    • Smaller, less sophisticated providers will more likely experience greater barriers to adoption
    • Members using high cost injectables may be potentially skewing results
    • Pilot program is not complete
    • Prescribing rates of target group are significantly higher than control group

Initial analysis focused on Rx cost and utilization, outcomes are being measured but attributing benefits solely to e-Prescribing is not feasible.
Key Findings

• Potential benefits associated with e-Prescribing in the areas of quality, safety, increased efficiencies and lower costs are well documented

• Early market data shows promising results, but adoption is lagging

• Challenges exist primarily for smaller, less sophisticated providers... but that is the majority of the market

• Legislation and public and private sector investments and incentives will continue to be needed to drive adoption
Key Findings

• Standards and interoperability are critical to achieve scale and critical mass

• Pay-for-Performance programs are evolving as a key vehicle for incentive provision…multiple models exist focusing on technology implementation and adoption, generic prescribing rates, and improvement in outcomes

• e-Prescribing solutions will evolve as EMR adoption increases

• Aligning economic interests across the healthcare delivery system will be a critical success factor
The Timing is Right

• **Greater Awareness**
  – Increasing purchaser interest in quality as a factor in buying decisions
  – IOM reports & Medicare reform boost quality measurement

• **Public and Private Sector Increasing Support**
  – Payer Incentive Programs
  – President’s proposal to improve quality through electronic medical records
  – MMA Standardization mandate and Gov’t. funding
  – Leapfrog’s next leap

• **IT Enhancements Make Better Care Possible**
  – Plans accelerating technology adoption
  – Market investing in applications and interoperability