

HIT Summit
The State of Missouri Electronic
Health Record Initiative
March 29, 2007

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Discussion Outline

- ▲ Missouri E.H.R. Background
- ▲ Missouri ACS Implementation and Solution Details
- ▲ Success Factors and Lessons Learned
- ▲ Opportunity for Payors

Definitions

- ▲ **Electronic Health Record**
 - Integrated Patient Record
 - Typically Payer Funded, Supported and Focused
 - Clinical alerts and administrative functionality
- ▲ **Electronic Medical Record**
 - Provider based clinical record
 - Value of progress notes, lab values, etc.
- ▲ **Personal Health Record**

ACS Government Healthcare Background

- ▲ **Broad customer base**
 - Fiscal Agent for 12 state Medicaid Programs
 - Currently serve 33 states across LOB
 - Process well over 400 million claims per year worth nearly \$50 billion
- ▲ **Deep pool of healthcare experience**
 - Approximately 4,000 employees, specializing in Medicaid and other State health care programs
 - Acknowledged leader in Government Health
- ▲ **Broadest range of services in market**
 - Through acquisition & development, cover full spectrum of program administration technologies and services

Types of e-Health Initiatives

- ▲ **Provider Initiated**
 - RHIOs (Regional Health Information Organizations)
- ▲ **Federally Initiated**
 - National Health Information Network (Federal Sponsored)
- ▲ **Payer Initiated**
 - **Installed, Operational Programs**
 - ➔ **Availity**
 - ➔ **BCBS of Tenn**
 - **Benefits of E.H.R. Accrue to Payer**
 - **Major Funding from Payers**
 - **Access to Date and Scale**
- ▲ *RHIOs and NHIN will help to create standards to accelerate payer success*

Missouri Electronic Health Record Background

Why the Sudden Interest in HIT?

- ▲ National emergency created by Katrina and the prospect of an H5N1 flu pandemic
- ▲ Homeland security
- ▲ Escalating cost of health care and need to control costs through better management
- ▲ Medical errors caused by missing or incomplete patient information

AND SO...

- ▲ Federal administration's initiative to develop nation-wide interoperable HER (NHIN)
- ▲ HIT initiatives in many states
- ▲ RHIOs popping up at exponential pace – 200 to 650 in various stages of development – widespread future unknown
- ▲ Physician practices adopting EMRs – 5-8% now, 25% by year's end

Examples of State Funding and Interest

- ▲ Missouri - \$25 MM Health Information Technology Fund
- ▲ New York State - \$53 MM e-Health Fund
- ▲ CMS Transformation Grants Process - \$150 MM
 - Alabama - \$7.6 MM
 - Arizona - \$11.8 MM
 - Kentucky- \$5 MM
 - District of Columbia - \$10 MM
 - Texas - \$4 MM
 - Florida - \$3 MM
 - West Virginia - \$11.9 MM
 - New Mexico - \$1.5 MM
 - Montana - \$1.5 MM

Medicaid Based EHR – Why?

- Produces savings in-line with CMS interests in Medicaid Transformation Grant activities
- Medicaid is nationally largest payer – Why not Medicaid? Why shouldn't Medicaid be first?
- Most Medicaid programs already have electronic connectivity with 90% of physicians and pharmacies in the state and this base provides a real opportunity for the state to effect change.
- Can do this now, no need to wait for RHIOs or other commercial solutions
- Comprehensive Medicaid solution – includes all Medicaid data, ability to integrate lab, EMR, and other payer data
- “Build it, and they will come.” – Build Medicaid solution and wait for capability to link to other EHR data silos.
- Solution shows savings in other states
- Transforms the use of health information technology in Medicaid

Provider Concerns with Electronic Health Records

- ▲ Provide appropriate care to individual patients and deliver the best possible care.
- ▲ Serve as primary point of care for the individual patient
- ▲ Access a single point or portal for all functions:
 - Complete, integrated history of the recipient
 - Decreased burden of prior authorization programs
 - E-prescribing
 - Automatic identification clinical defects in recipient's profile and medical history.
- ▲ Work as efficiently, but within existing processes requiring minimal change.

State and Federal E.H.R. ACS Implementations and Market Presence

State Commitment to E.H.R.

- ▲ Missouri - \$25 MM Health Information Technology Fund
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The Missouri Example

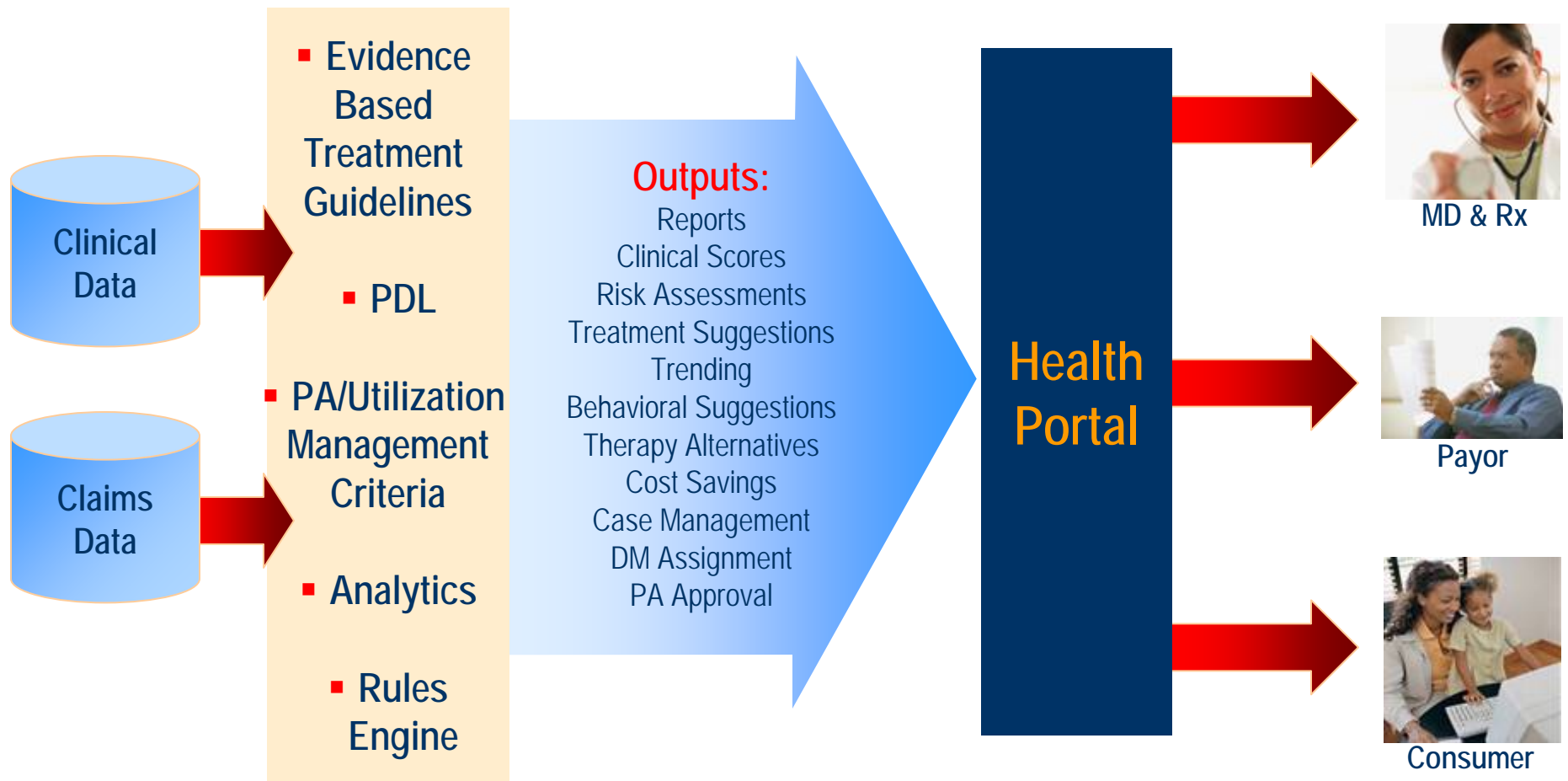
- ▲ **Missouri's Goals for Electronic Health Records Initiative:**
 - Use the Medicaid program as a pilot for state-wide EHR implementation.
 - Improve physician satisfaction and participation in the Medicaid program.
 - Increase the involvement of the pharmacist in the care management process at the point of sale.
 - Use already available administrative, claims and clinical data to more actively manage the healthcare of Medicaid recipients and make data available via web portal.

The Missouri Example, continued...

▲ Missouri EHR Goals

- Ensure continuity of care and the consistent availability of patient records as individuals move in and out of Medicaid and in between fee-for-service and managed care.
- Integrate with the state's disease management program and vendor.
- Ensure compliance with all privacy and security laws and requirements.

Comprehensive Model for Electronic Health Records

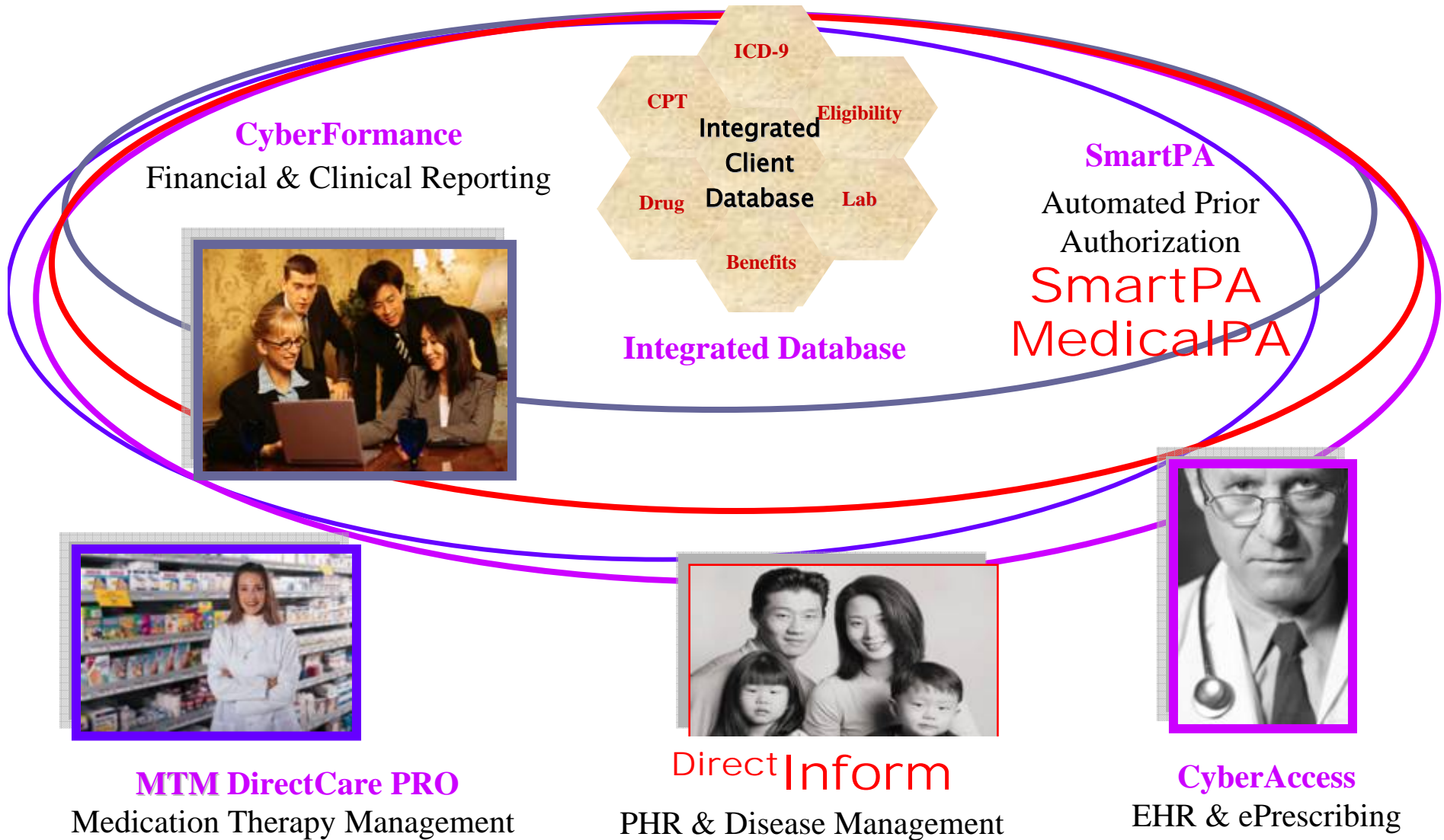


Missouri Electronic Health Record Solution Overview

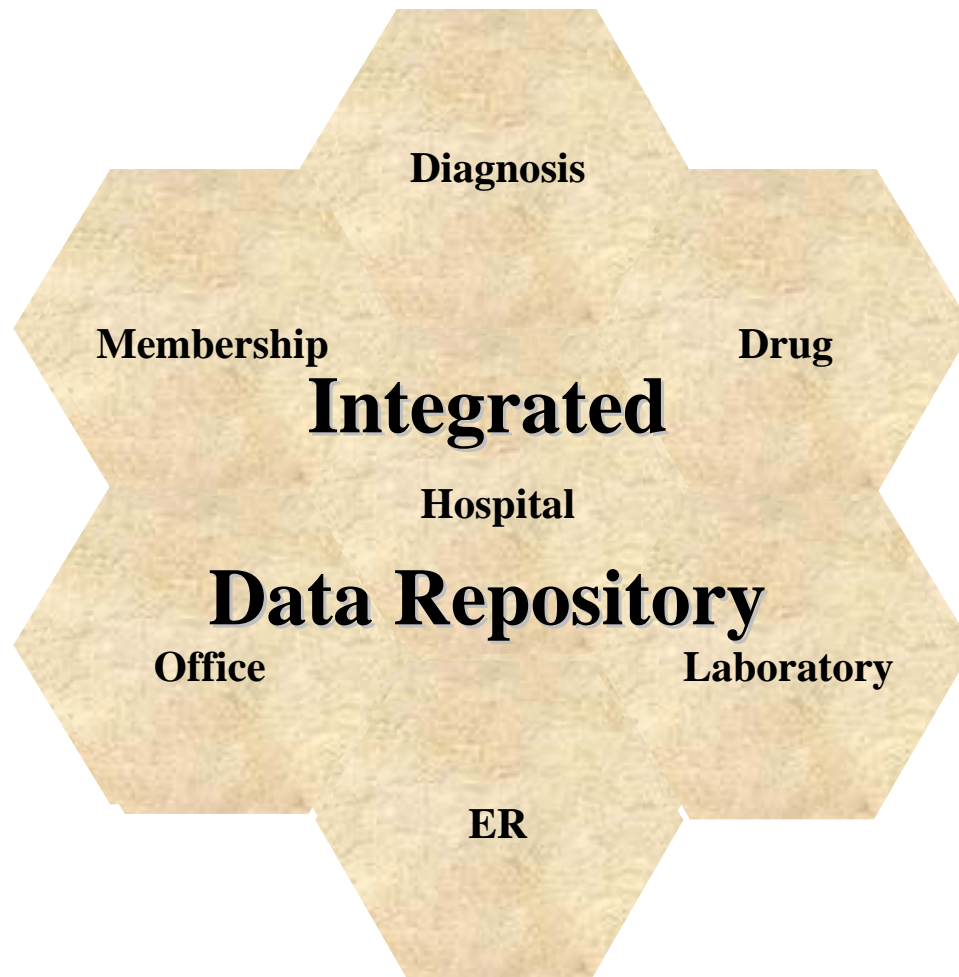
- ▲ **Web-based clinical tools for payers:**
 - Integrated Client Data Base
 - Cyberformance – Integrated financial and clinical reporting
 - CyberAccess – Provider electronic health record, which is printable, and includes: patient history, clinical alerts and education and e-prescribing via web
 - Direct Inform – Patient electronic health record, which is printable, and includes: patient's history, clinical alerts and education via web
 - Medical and Pharmacy SmartPA – Electronic, real-time prior authorization tool.
 - DirectCare PRO – Medication Therapy Management tool for pharmacists.
- ▲ **Features:**
 - Meet privacy and security requirements – HIPAA compliant
 - Web-based
 - Incorporate rules engine technology to allow rapid revision due to changes in policy and/or requirements
 - Incorporates reporting capabilities
 - Fully integrated system

Comprehensive Electronic Health Record: Solution Details

ACS Heritage Electronic Health Record Suite

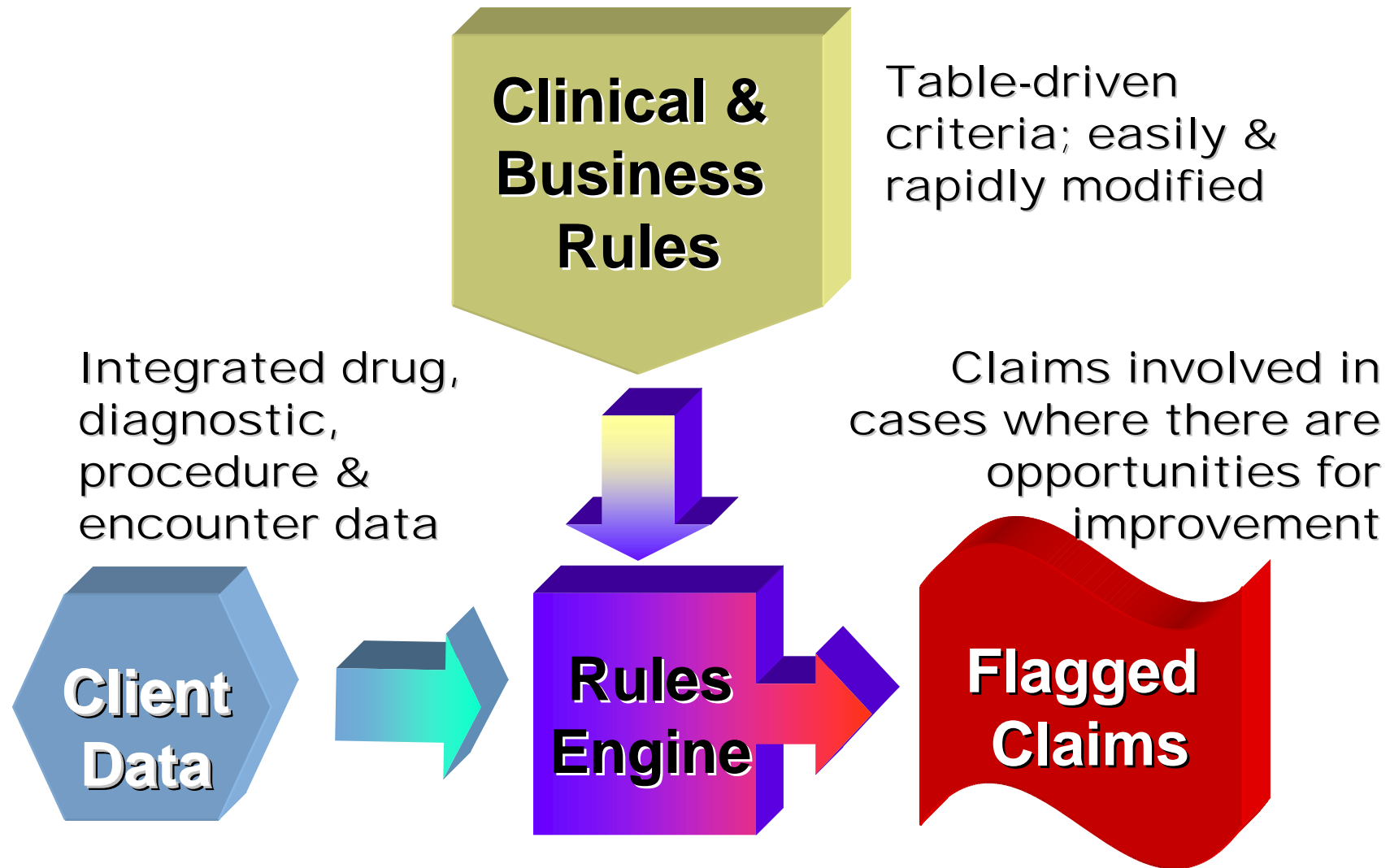


Integrated Data Repository



- ▲ **Integrate diagnosis, procedure, and encounter data**
 - **prescription drug claims**
 - **medical claims**
 - **Lab data**

ACS Heritage Rules System



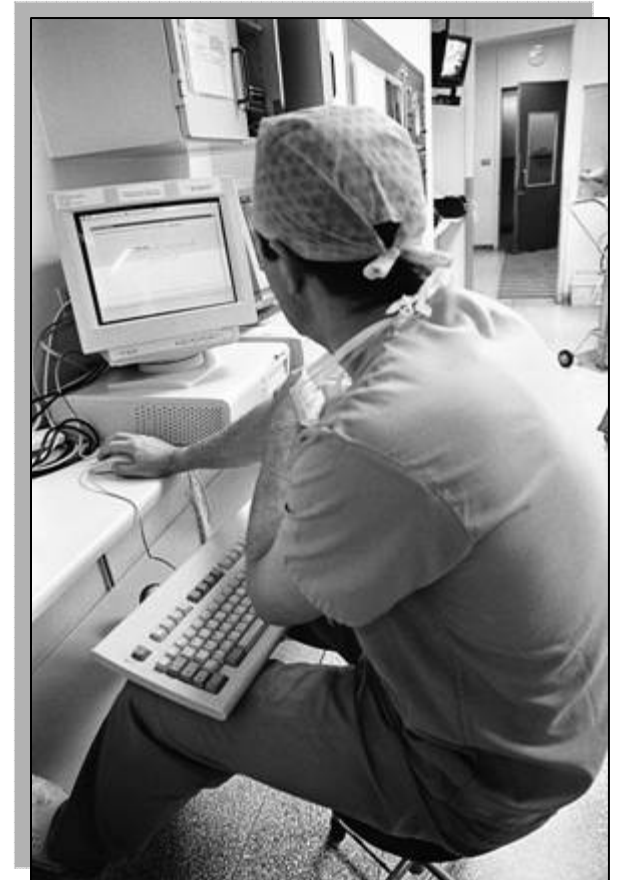
ACS E.H.R. Solution – Physician Web Portal

▲ Features:

- Web Based Electric Health Records including both medical and medication history
- Evidence-based “gaps-in-care” analysis – 40 Disease states
- Online Medical and Drug Precertification Requests
 - View Preferred Agents/Services
 - Request a PA Online
 - Immediate Feedback on PA Request from SmartPA
- E-prescribing

▲ Benefits:

- Reduced medical errors
- Increased medical efficiency and effectiveness
- Reduced or eliminated duplication of procedures
- Available in ER setting
- Clinical Decision Support – Evidence-based “gaps-in-care” analysis
- Reduction of medical and medication risk
- Improved coordination of care



Physician EHR Tool

The screenshot displays the CyberAccess EHR interface for a patient named Jane Doe. The breadcrumb trail is Home > Patient Info > Review Profile. The patient's name is Jane Doe, and the patient ID is 000000. The interface includes navigation links for Home, Patient Info, Drug History, and Medical History. A search bar is present with a 100% zoom level and options for Find, Next, and Select a format. The main content area is titled 'Test Super User Practice' and 'Heritage, Inc. Patient Profile Report'. It shows patient details: Patient Name: Jane Doe, Sex: F, Patient ID: 000000, Date of Birth: 02/14/1957. Below this is an 'Alert Message for Paid Drug Claims' section with a table of alerts:

Alert Key	Message
A	Incr ADE: Beta Blocker use w/ depression
B	Underutilization of long acting opioid
C	Incr ADE: Fibrate & Renal Dysfunction

Below the alerts is a 'Paid Drug Claims Sorted by Therapeutic Class' table:

Class	Service Date	Drug Name	Qty	Days	Refill	Alerts	Phys
Analgesics and Antipyretics							
	6/9/2006	PROPOXY-N/APAP 50-325 TAB	80	10	0	B	A
	5/12/2006	HYDROCODONE/APAP 5/500 TAB	80	6	0	B	A
	5/9/2006	OXYCODONE W/APAP 5/325 TAB	60	5	0	B	A
	4/29/2006	OXYCODONE W/APAP 5/325 TAB	40	10	0	B	A

Two callout boxes highlight key features: 'Patient-specific alerts & recommendations' points to the alert messages, and 'Patient's full drug and medical history are provided' points to the drug claims table.

Physician EHR Tool

The screenshot displays the 'CyberAccess' EHR interface. At the top right is a 'Logout' link. Below the logo, the patient information is shown as 'Patient Info For - Doe, Jane'. A navigation bar includes 'Home', 'Patient Info', 'Drug History', and 'Medical History'. Action links include 'Print Patient Profile', 'Check Drug/e-Prescribe Drug', and 'Pre-Certify Service'. The main form is titled 'Test Super User Practice' and contains the following fields:

- Prescriber: Dr. Russell Myers (dropdown)
- Date: 7/23/2006
- Patient: Doe, Jane
- Drug: (dropdown with 'Select' button)
- Pharmacy: PEOPLES HEALTH (dropdown)
- Quantity: 0 (input field)
- : 0 (input field)
- : 0 (input field)
- Sig: (text area)
- Substitution Permitted
- Dispense as Written
- Check For Approval (button)

Two callout boxes provide additional information:

- Check to see if drug meets payers PA and PDL criteria** (points to the drug selection area)
- Approved prescriptions can be transmitted electronically to the pharmacy** (points to the pharmacy dropdown)

DirectCarePROSM: Pharmacist EHR Tool

- ▲ **Web-based Medication Therapy Management solution**
 - Client sets criteria and Intervention fee
- ▲ **Leverages Pharmacist-Patient Relationship**
 - Maximizes Benefit of the Numerous Pharmacist-Patient Interfaces
- ▲ **Provides Pharmacist with:**
 - Patient Medical & Prescription History
 - List of identified care management issues
 - Simple web interface to guide and report encounter
- ▲ **Pharmacist Documents Encounter**
 - Encounter becomes a record on EHR

- ▲ **Benefit:**
 - Reduced medical errors
 - Increased medical efficiency
 - Improved population health
 - Engaged pharmacy community

Pharmacist EHR Tool

http://3.29.19.44 - Manage My Account - Microsoft Internet Explorer

File Edit View Favorites Tools Help

POSCE
For
Pharmacists

Encounter Actions for OJEVAAR, OTTO

Opportunities | Drug Claims | Diagnosis | Procedures | Other Claims | Home

Encounter Actions

[View](#) Encounter : Diabetic ACE/ARB Encounter Reserving Pharmacy : KANSAS CITY PHARMACY

Intervention	Intervention Description
View Diabetic without ACE or ARB	Diabetic without ACE or ARB
View Diabetic Hypertensive, No BP Meds	Diabetic Hypertensive, No BP Meds

Status : Transmitted
Reservation Date : 9/1/2005 2:59 PM
Reserving Rph : SMITH, JOHN
Expiration Date : 9/8/2005 2:59 PM

Encounter Action
Diabetic without ACE or ARB

1. Is the enroller currently receiving ACE inhibitor therapy from an alternate source? Yes No

2. Is the enroller a candidate for ACE inhibitor therapy? Yes No

3. Is the enroller a candidate for ACE inhibitor therapy that the enroller is not a candidate for an ACE inhibitor? Yes No

4. Is the enroller a candidate for ACE inhibitor therapy that is contraindicated: Is enroller a candidate for ACE inhibitor therapy? Yes No

Diabetic Hypertensive, No BP Meds

Level of Effort: 1-5 minutes

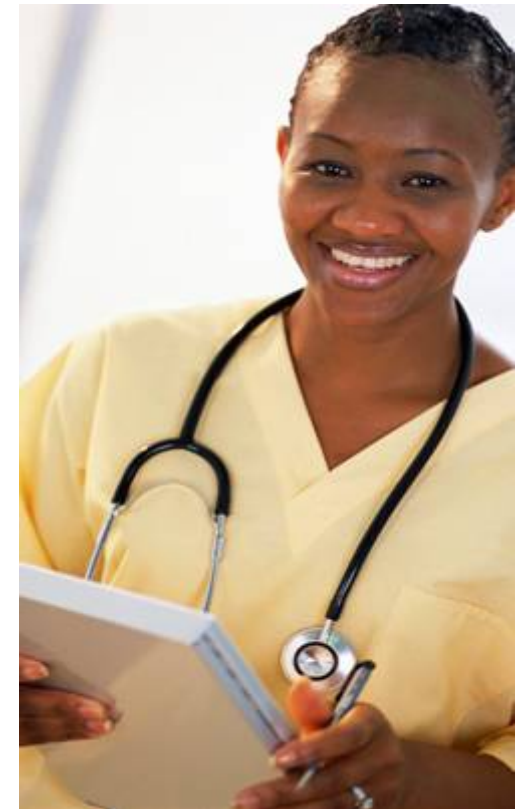
Encounter Notes

[Print Reminder](#) [Print to PDF](#) [Save Action](#) [Completed-Not Billed](#) [Submit Bill](#) [Close](#)

**Encounter
Actions**

DirectInform™: Patient EHR Tool

- ▲ **On Line Personal Health Record for Recipients**
 - Clinical & Financial Alerts
 - Healthcare and Disease Education
 - Health/Medication Optimization
 - Therapy Follow-up Recommendations
 - Printable Personal Medical Profile
 - Physician Access for ER Visits



Patient EHR Tool

Home Logout

DirectInform™
Empowering Employees

Welcome Carl Osborn Sunday, July 23, 2006

Home Health Recommendations Health To Do List History Benefit Cost Tracker Health Resources Account Help

Carl, welcome to the new home for your health information.

Please note If you are new to ACS PPO or EPO benefits for 2006, no medication or medical claims history is available. However, DirectInform will capture your history from 1/1/2006 forward.

Health Recommendations	Savings Opportunities
<p>There are 15 recommendations you should be aware of.</p> <p>Click here for details...</p>	<p>We have calculated that you could potentially save...</p> <p>\$18.33 Monthly</p> <p>\$219.96 Annually</p> <p>Click here for details...</p>

Family Member Access
View information for:
Carl Osborn
Change your family member's access to your information.

Health Profile
This report will summarize your recent medical activity and highlight your potential cost savings.
[Print Health Profile PDF](#)

Learn More
Learn who has access to my Personal Health Information (PHI).
[Review DirectInform's privacy statements.](#)
[Manage your Direct Inform account.](#)
[Find answers to the most Frequently Asked Questions.](#)
[Lost? View the site map.](#)
[Need to contact a Customer Support Specialist?](#)

Health Recommendations: Manage your health by acting on personalized recommendations based on your medical and medication claims history.

To Do List: Create your personalized healthcare "To Do" action list.

Tracker: Understand where your money goes! Your medication and expense summary is provided.

Resources: Health resources and links concerning medical diseases, other health topics are provided for easy reference.

Account: Easily and quickly manage your Direct Inform web account.

Done Internet

**Recommendations
fueled by patient's
claims history**

Patient EHR Tool

DirectInform™
Empowering Employees

Welcome Carl Osborn Sunday, July 23, 2006

[Home](#) [Health Recommendations](#) [Health To Do List](#) [History](#) [Benefit Cost Tracker](#) [Health Resources](#) [Account](#) [Help](#)

Health Recommendations - Your recommended health actions based on your medication and medical claims history are provided.

Click on the message for additional details.

Click on the check box beside the health recommendation to add to "to-do" list. [Print Health Recommendation Report](#)

To Do	Message	Recommendation	Remove Recommendation
<input type="checkbox"/>	Blood Pressure Monitoring	Take your blood pressure routinely and report any big changes to your healthcare provider.	<input type="checkbox"/>
<input type="checkbox"/>	Blood Sugar Testing	Use test strips to check your blood sugar every day.	<input type="checkbox"/>
<input type="checkbox"/>	Yearly Dental Exam	Make an appointment with your dentist to get a check up.	<input type="checkbox"/>
<input type="checkbox"/>	Yearly Eye Exam	Make an appointment to meet with an eye doctor to get a eye exam.	<input type="checkbox"/>
<input type="checkbox"/>	Yearly Foot Exam	Make an appointment with your doctor to get a foot exam.	<input type="checkbox"/>

Page 2 of 3

Family Member Access
View information for:
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Change your family member's access to your information.

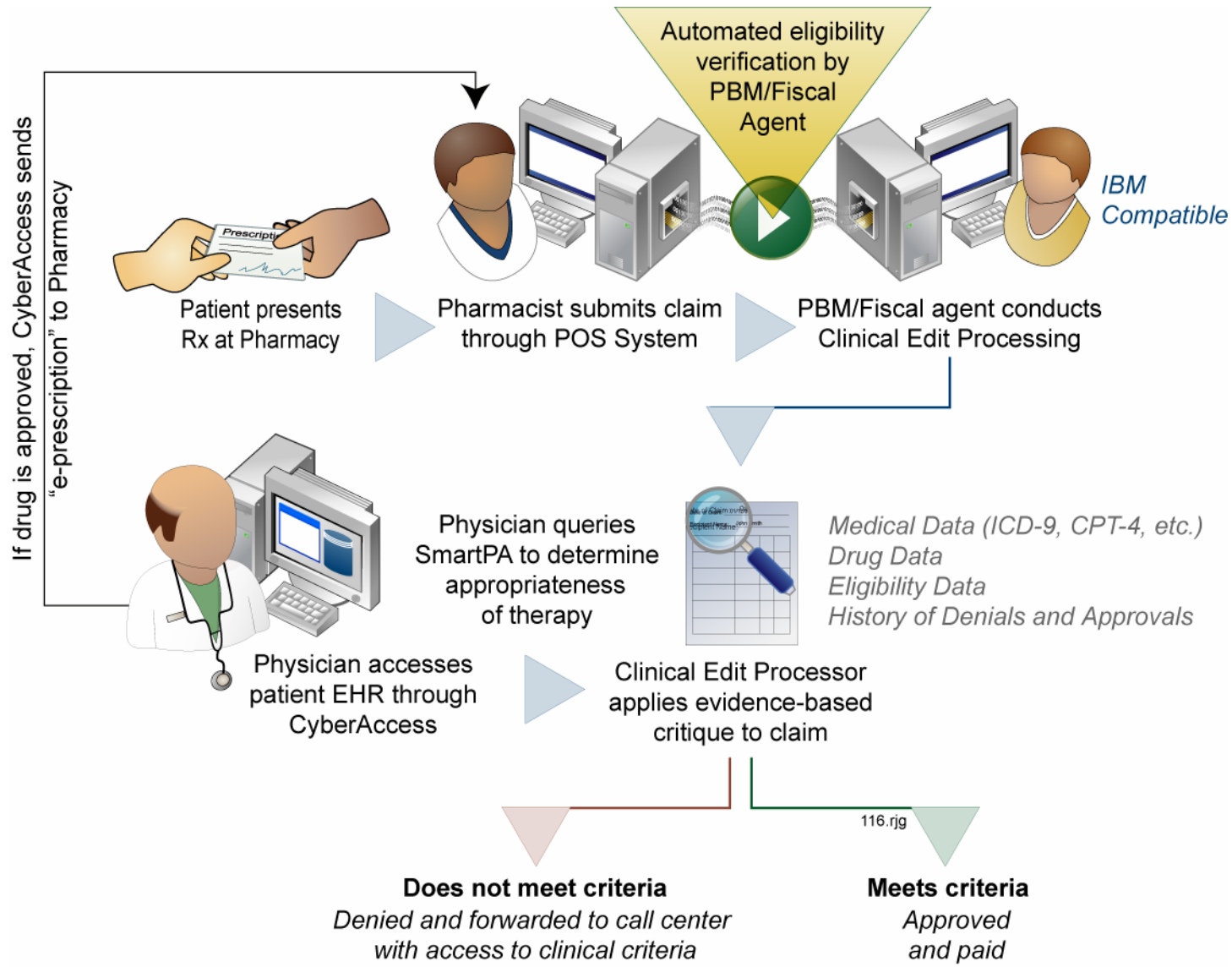
Health Profile
This report will summarize your recent medical activity and highlight your potential cost savings.
[Print Health Profile PDF](#)

[FAQ](#) [Contact Us](#) [Privacy](#) [System Requirements](#) [Terms and Conditions](#)

Internet

**Actionable
patient-specific
recommendations**

SmartPA: Physician and Pharmacist Prior Authorization Tool



SmartPA: Physician and Pharmacist Prior Authorization Tool

- Automated Evidence-Based Prior Authorization System
- **Medical data** – SmartPA Uses Medical (ICD-9, CPT, etc.) *and* Pharmacy Data to Determine the Appropriateness of Medications
- Fully Integrated System
- Experience – **Eleven** Clients with Different Claims Processors

SmartPA: Physician and Pharmacist Prior Authorization Tool - SureScripts Article

Finding Relief in E-Prescribing

“Overall, physicians indicated that it was important to increase the efficiencies in their practice by decreasing the phone calls and faxes surrounding the refill authorization process. Even more important was getting relief from the hassles of obtaining prior authorizations from third parties. And the idea of getting a complete prescription history across providers presents, at first blush, an irresistible opportunity.”

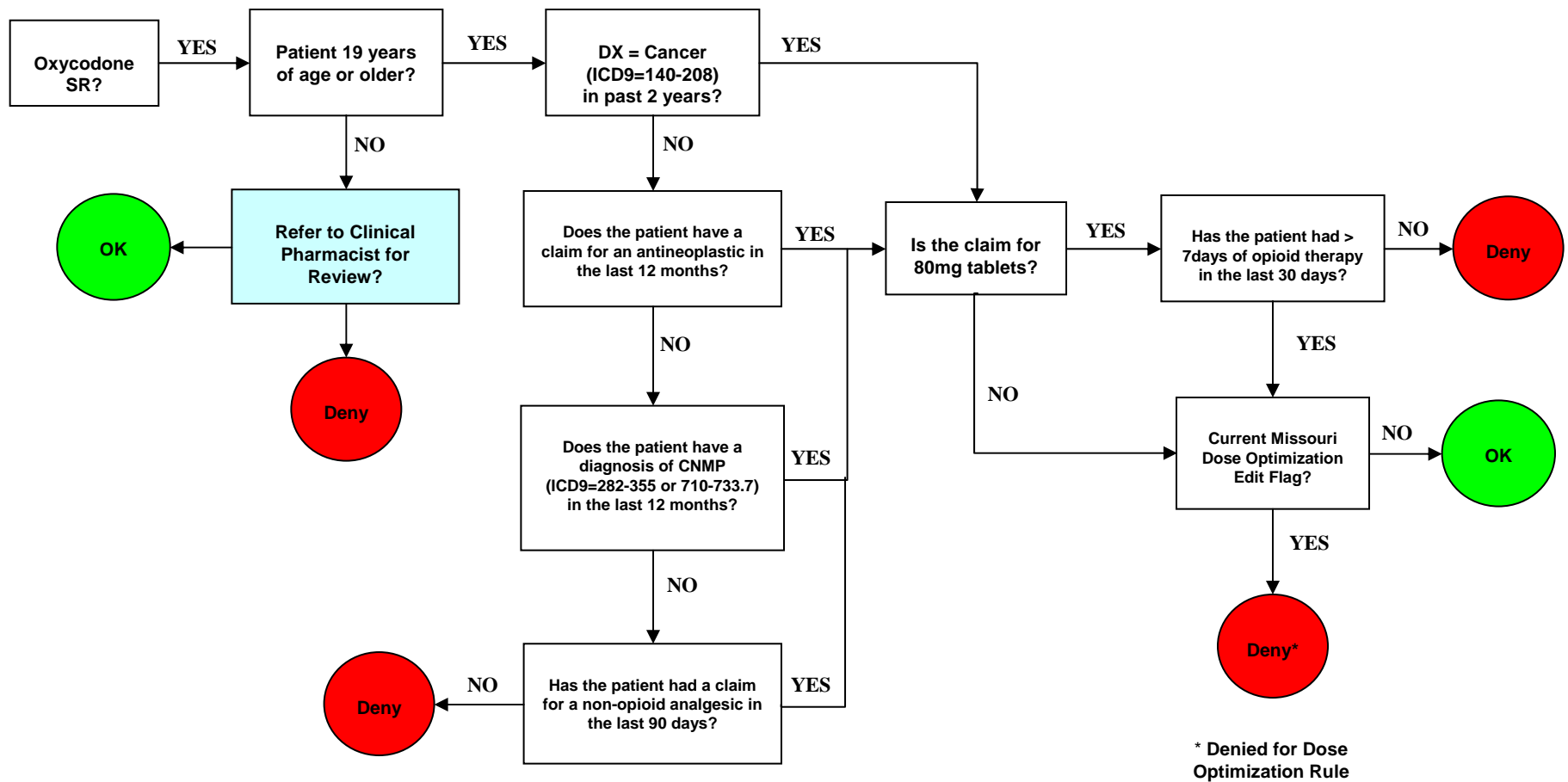
Potential Outcomes	Physician Opportunity Index Ranking	Pharmacist Opportunity Index Ranking
Improve legibility and accuracy of prescriptions	11	3
Improve access to patient drug instructions and clarifications.	12	12
Decrease time and effort of renewal authorization	4	10
Decrease calls and faxes between physician practices and pharmacies	3	9
Decrease the waiting time for prescriptions at the pharmacy for your patients	9	14
Improve physician access to prescription dosing, indication and precaution information	10	13
Improve your ability to track and monitor patient medication adherence	5	5
Improve physician ability to identify potential drug interactions (drug, food, allergy)	6	11
Improve patient safety and therapeutic outcomes	7	8
Improve physician and pharmacist access to formulary information	8	4
Improve physician and pharmacist access to a complete patient prescription history (across providers)	2	2
Decrease hassles associated with prior authorization process	1	6
Increase brand loyalty with patients	NA	7
Increase revenues through patient adherence program opportunities	NA	1

SmartPA Results: Oxycontin Clinical Edit

- ▲ **Approval Criteria:**
 - Patient 19 years of age or older, and
 - Any of the following:
 - Dx = "Cancer", or
 - Dx = "Chronic Non-Malignant Pain"
 - Start Patients on lowest strength unless they developed Opiate Tolerance

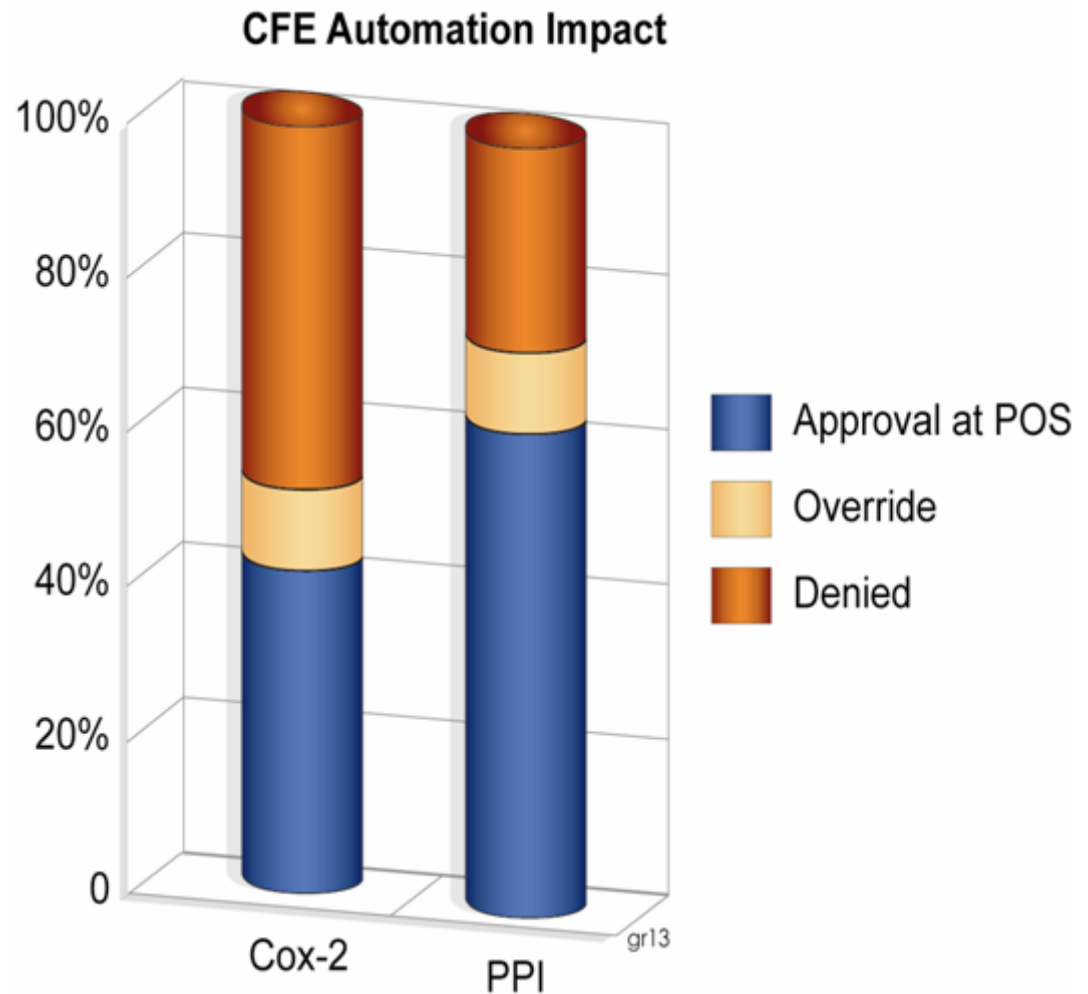
SmartPA: Oxycontin Edit continued...

Clinical Edit



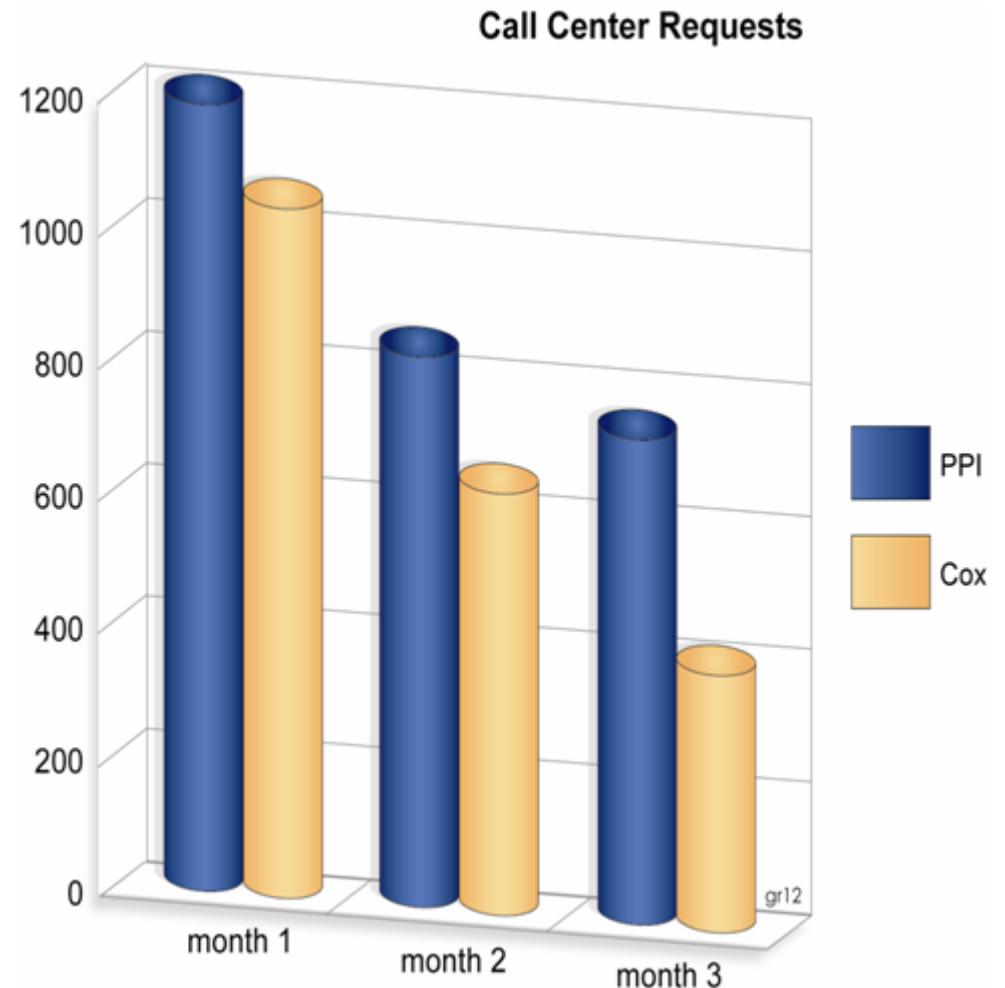
SmartPA: Automation Impact

- ▲ As Much as 60%-80% of PA Requests Can Be Automated
 - Lessens Burden on Recipients
 - Enhances Provider Relations
 - Preferred Prescribing Patterns Encouraged & Reinforced

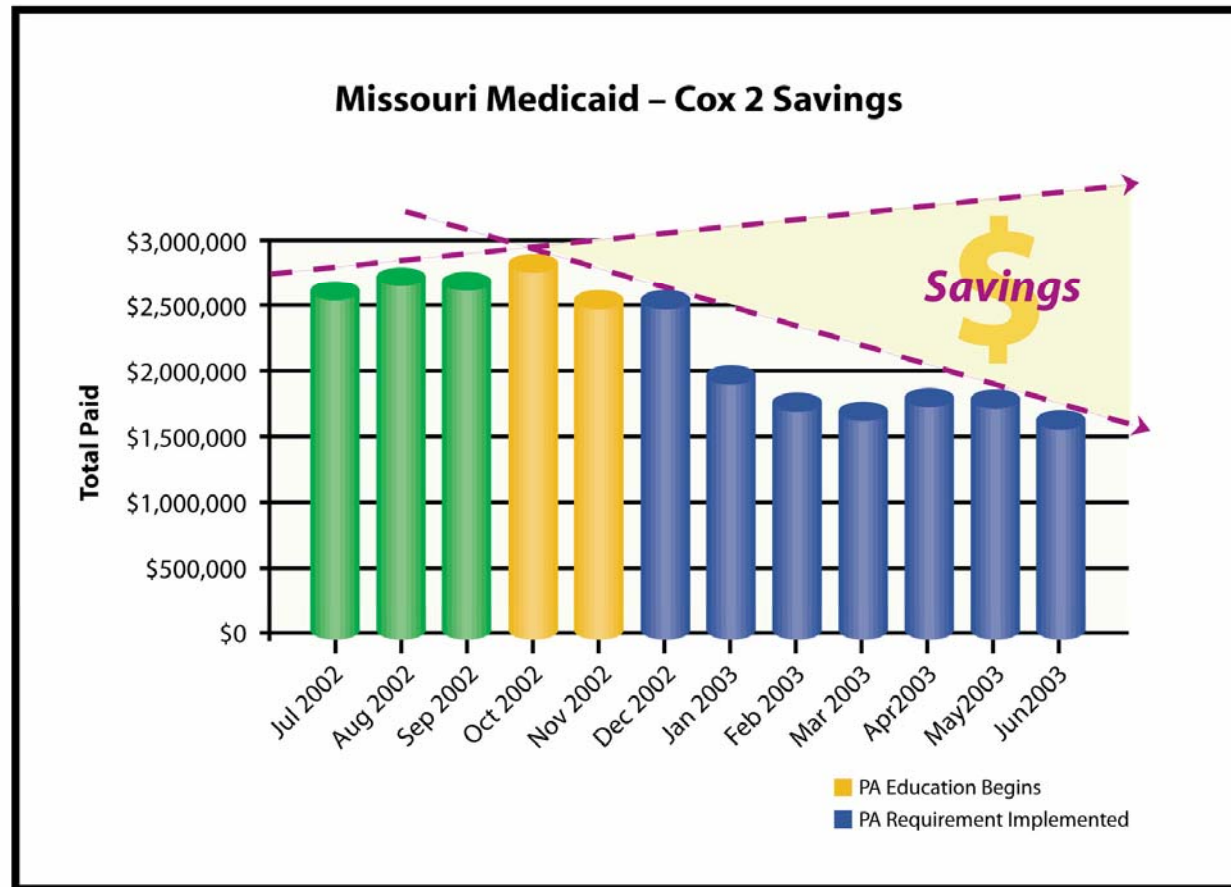


SmartPA: Call Center Impact

- ▲ **Integrated Call Center Application**
 - Reduces Gaming
 - Provides Patients' Full Medical and Pharmacy Data to Operator
 - Provider Education



Missouri: COX-2 Clinical Edit, continued...



Missouri Results to Date

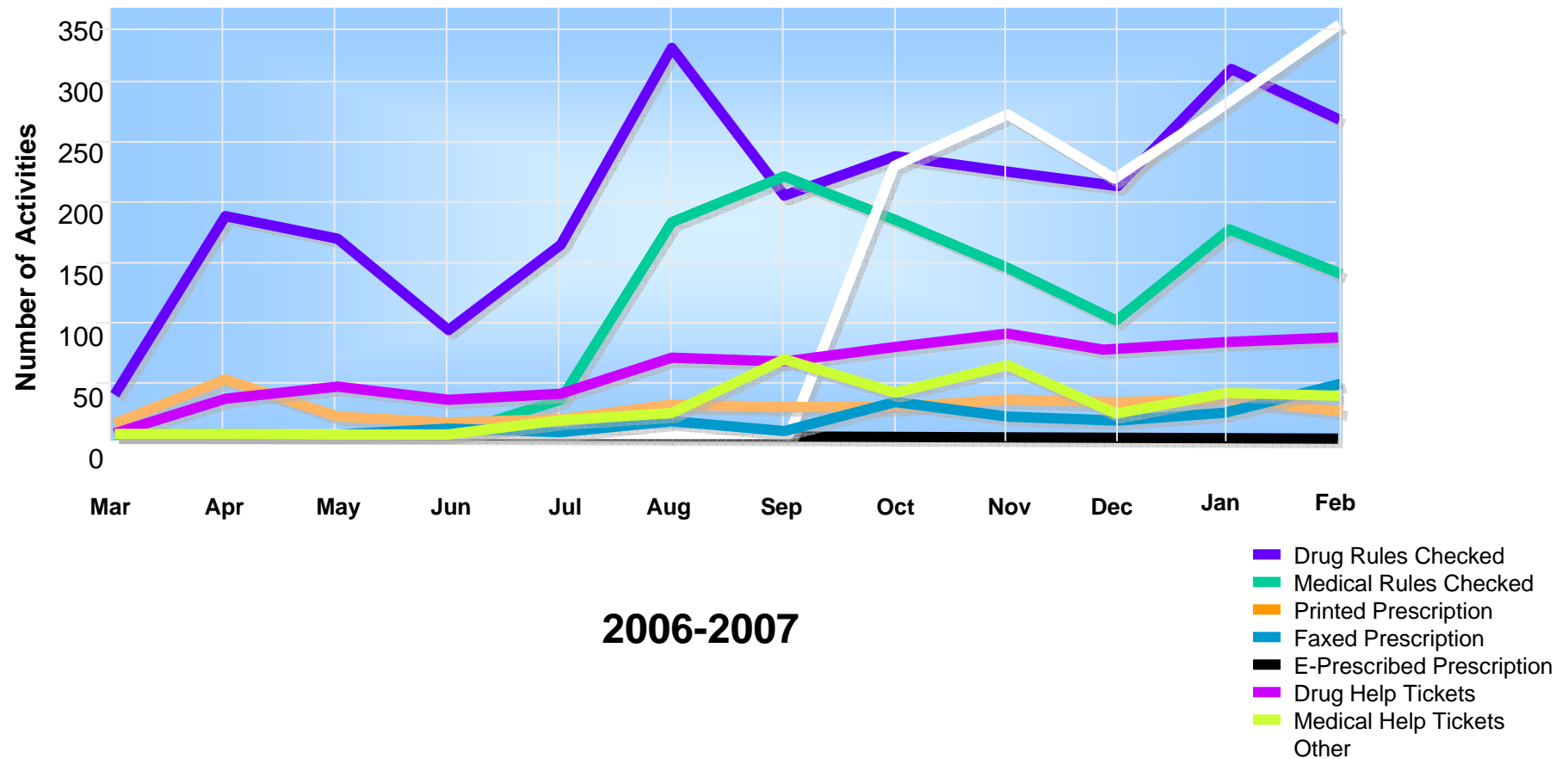
- ▲ Statewide, 3600 physicians are enrolled & educated about EHR capabilities:
 - 15 field representatives are educating providers and their staff in the office setting
 - 50% of physicians are regularly using the EHR.
- ▲ Data from multiple sources has been integrated into the health record:
 - Medicaid claims, including pharmacy, and HMO encounter claims are integrated
 - Lab data from 2 national labs and 1 regional lab is integrated
 - Clinical data from a major providers' electronic medical record system is integrated
 - Medicare data integration is forthcoming.

Missouri Results to Date, continued...

- ▲ **DirectRxPRO for pharmacists has been implemented:**
 - Real time clinical alerts engage pharmacists in care management at the point of sale
 - First state to gather & integrate lab and HL7-like clinical data into an electronic patient record
- ▲ **Health records are integrated with the disease management vendor's system, providing a complete medical history of the individual for care managers.**

Missouri EHR Provider Utilization

CyberAccess Logging Information



2006-2007

Lessons Learned

- ▲ Providers will access a single portal for all functions:
 - Complete, integrated history of the recipient
 - Decreased burden of prior authorization programs
 - E-prescribing
 - Automatic identification clinical defects in recipient's profile and medical history
- ▲ Providers expect technology to fit within existing processes that require minimal change
- ▲ Point of Care Solutions Can Influence Provider Practice Patterns
- ▲ *The primary benefit of E.H.R. accrues to Payers*

Key Success Factors for Payer Based E.H.R.

- ▲ **Provider Adoption**
 - **Functionality**
 - Ease administrative burdens
 - Clinical alerts and value
- ▲ **E.M.R. Integration**
 - Within Providers Existing Processes
- ▲ **Privacy**
 - Data Security
 - User Authentication
- ▲ **MultiPayer Initiatives Must Emerge**