

SMRTNET

Secure Medical Records Transfer Network

A Health Information Exchange Infrastructure
for Oklahoma

June 19, 2009



Where Are Your Health Records?

- **Physician(s)**
- **Hospital(s)**
- **Specialist(s)**
- **Pharmacies (local, chain, mail-in)**
- **Laboratories (local, state and national)**
- **Native American facility (Indian Health Service)**
- **Tribal health**
- **Veterans Administration**
- **Mental health**
- **Public health**

Steve has disconnected healthcare providers



Diagnosed
With Asthma
5-27-99

Diagnosed
with IBS
9-30-02

Diagnosed
With Arthritis
4-29-06

Prescribed
medication
for Cholesterol
12-22-05

Diagnosed
With
Arthritis
2-9-05

Foot Surgery
Bone Spur
removal
1-15-02

The providers cannot see all of what is going on with Steve, so his care is more expensive and has more risk.

SMRTNET brings them together

Diagnosed Asthma
5-27-99

Diagnosed
With Arthritis
2-9-05

Prescribed medication
for Cholesterol
12-22-05



Diagnosed With
Arthritis
4-29-06

Diagnosed with
IBS
9-30-02

Foot Surgery
Bone Spur removal
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DATA IN SMRTNET

30 million records
2.7 million patients
30% of prescriptions
Dynamed

Current SMRTNET Members

■ 13 Participants of Greater Oklahoma City

OU Medical Center

Edmond Medical Center

INTEGRIS Baptist Medical Center

INTEGRIS Canadian Valley Regional Hospital

INTEGRIS Southwest Medical Center

Mercy Health Center

Midwest Regional Medical Center

Norman Regional Hospital

Moore Medical Center

St. Anthony's

Oklahoma Heart Hospital

Unity Health Center (Shawnee) has applied

OK City County Health Dept. (OKCCHD) has applied



Current SMRTNET Members

■ Other Data Participants

OK Department of Health

Cherokee Nation

Hastings Hospital

NEO Community Health Center

Tahlequah City Hospital

Northeastern State University

Surescripts

Dynamed

Current Services

- **Integrated ePrescribing**
- **Community health record**
 - ◇ Demographics
 - ◇ Diagnosis
 - ◇ Allergies and reactions
 - ◇ Medications
 - ◇ Laboratory
 - ◇ Immunizations
 - ◇ Providers

Configurations

■ Network of Networks

- ◇ Northeast Oklahoma
- ◇ Oklahoma City Metro
- ◇ Others in development

■ Default Health Information Exchange

- ◇ Statewide

Advantages to Providers

- **More complete medical history**
- **Save time**
- **Prescription refill Hx**
- **Avoid errors**
- **Access from home or other**
- **Best practice defense**
- **Communication with specialists**
- **Identify drug seeking**
- **Qualifies under meaningful use for stimulus**
- **Improve quality outcomes and reporting**
- **Input to provider system**

Key Elements of SMRTNET Infrastructure

■ Technology

- ◇ *Defines Integration Standards, Process and developed Timelines*

■ Clinical

- ◇ *Defines Value of Clinical Data Set*

■ Legal

- ◇ *Defines Member Exchange Agreement, Addressed Expansion Issues*

■ Privacy

- ◇ *Addresses HIPPA, Sensitive Data, Patient Notification, Privacy Notice*

■ Marketing

- ◇ *Patient Notification, Public Awareness*

■ ROI

- ◇ *Identifies Measurable and Non-Measurable benefits*

■ Quality Improvement

- ◇ *Identifies Quality Improvements and measurement systems*

■ Governance

- ◇ *Consensus on membership, expansion, and business model*



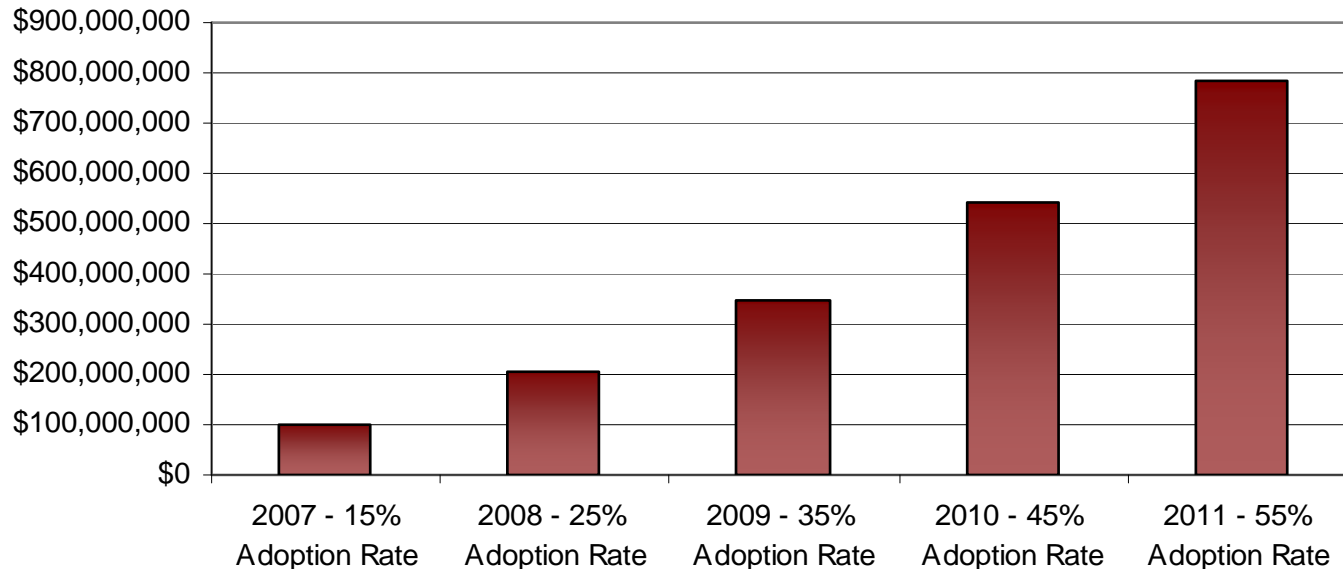
15 Identified TJC Quality Improvements

- **MRSA documentation**
- **Documentation to help prove that patients did not acquire an infection while in the hospital**
- **Tetanus vaccination**
- **Stroke history**
- **Communication of radiology results**
- **Comparing medications ordered to those under use**
- **Communication of medications to next provider**
- **Evaluation of risk for suicide**
- **Need for additional assistance in care**
- **Evaluation of LVS function**
- **Pneumococcal vaccination**
- **Influenza vaccination**
- **GDIS infections**
- **Surgery patients on beta blockers prior to admission**
- **Early recognition of HIV, TB, VRE, pertussis, C diff, and meningitis.**

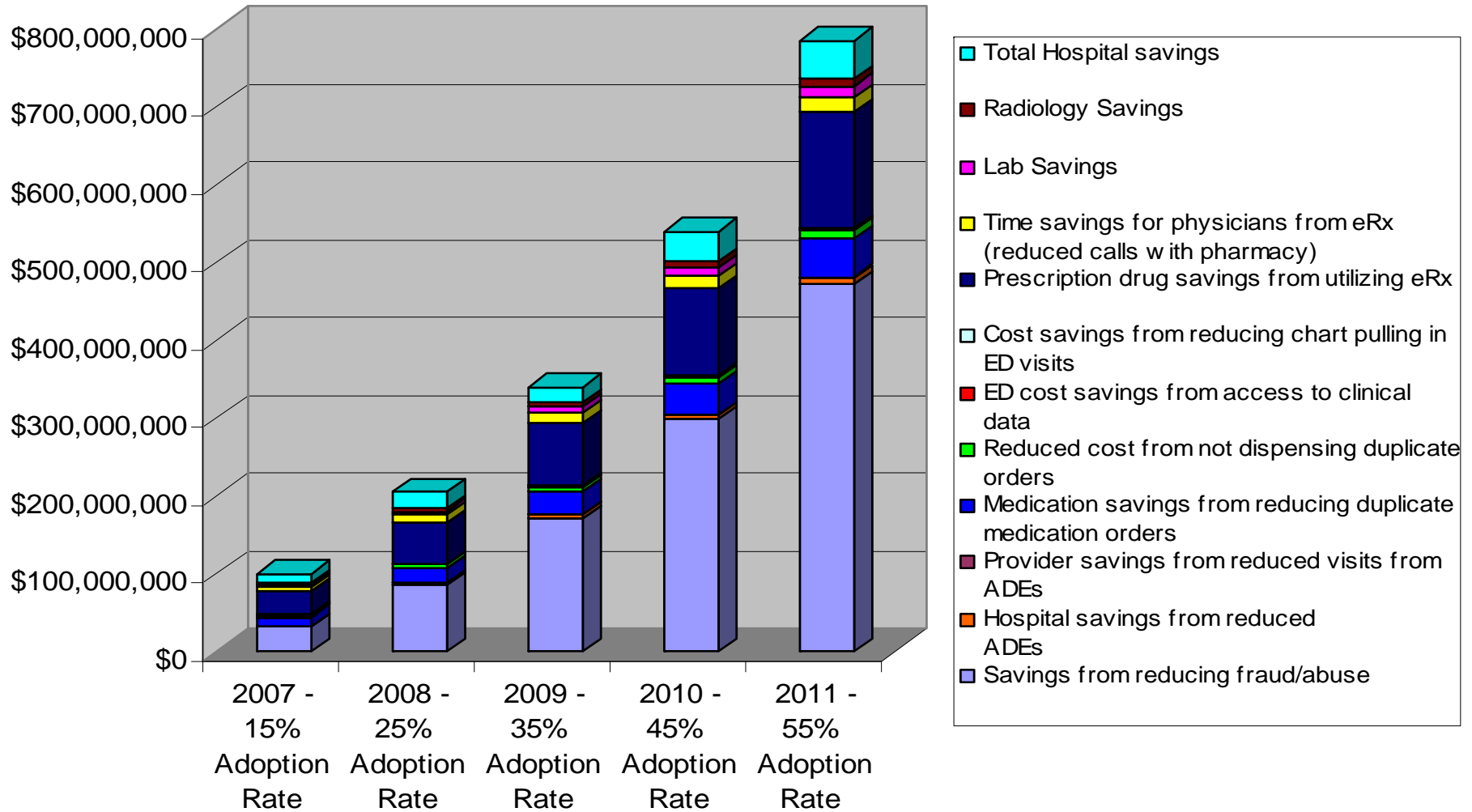
Cost Savings for Statewide Adoption of SMRTNET

Year	All Oklahoma	State Govt.	Medicaid	Deaths Avoided
2007	\$ 100.6 million	\$ 20.1 million	\$ 10.1 million	101
2008	\$ 205.1 million	\$ 41.0 million	\$ 19.8 million	172
2009	\$ 349.7 million	\$ 69.9 million	\$ 32.3 million	247
2010	\$ 539.8 million	\$ 107.9 million	\$ 48.2 million	325
2011	\$ 784.8 million	\$ 156.9 million	\$ 67.7 million	407

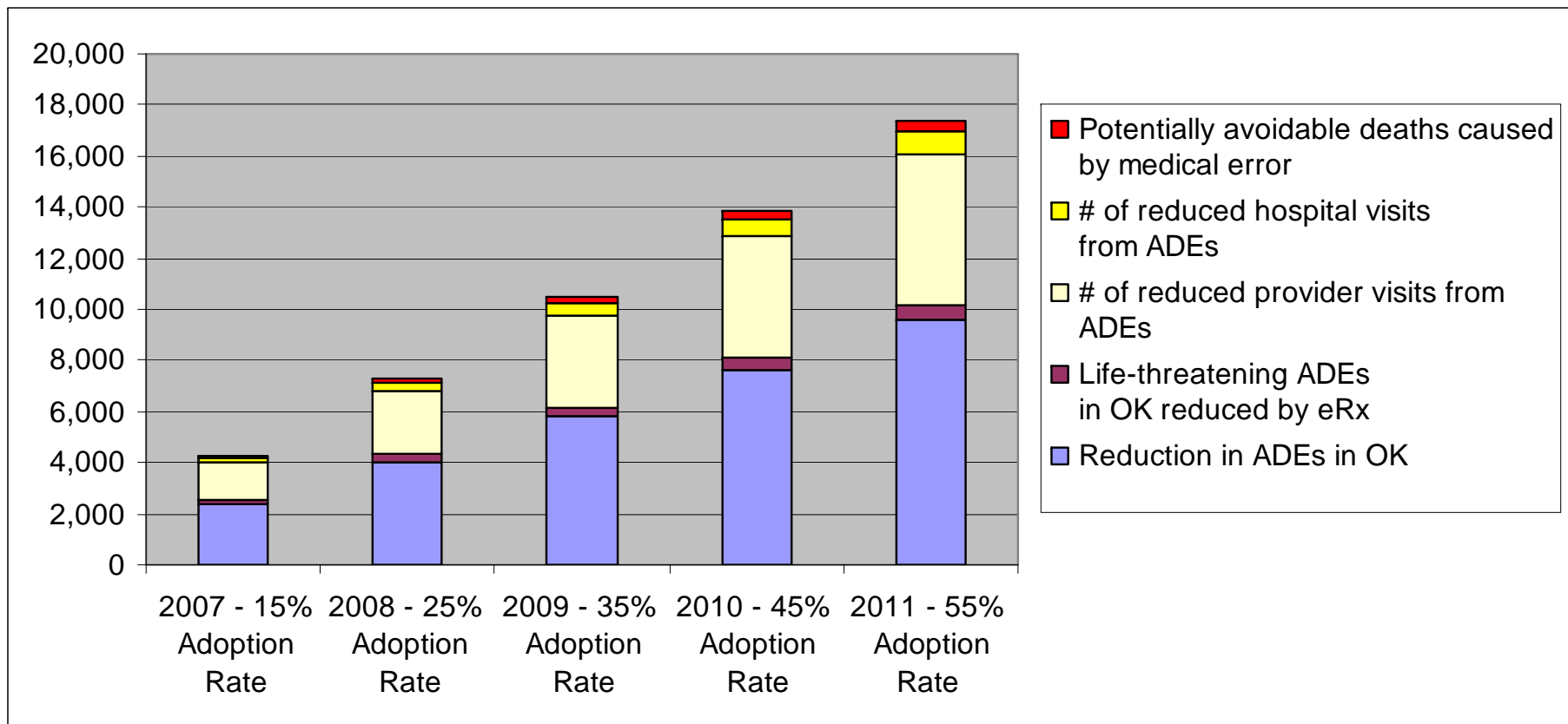
Total Cost Based on Percentage of Providers Using System



Fraud, Abuse and Cost Benefits Based on Statewide Initiative



➤ **Prescription Savings and Fraud and Abuse are the largest areas for potential savings**

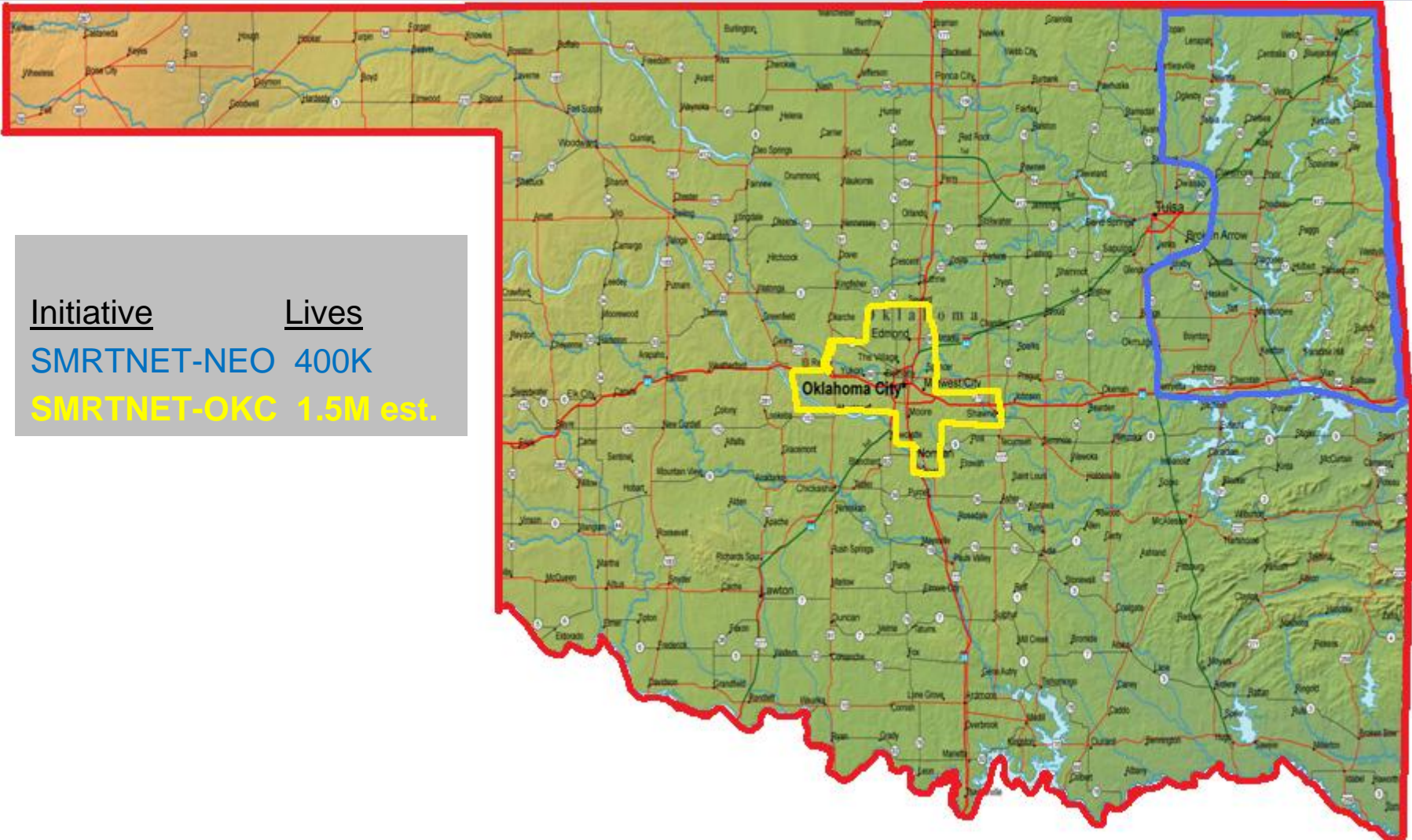


- **Throughout Oklahoma, by 2011 over 29,000 Adverse Drug Events (ADEs) will have been avoided, 1,300 potential lives saved, and nearly 21,000 provider and hospital visits avoided due to reduced Adverse Drug Events.**
- **An ADE is any unexpected or dangerous reaction to a drug or unwanted effect caused by the administration of a drug.**

General Information Security Concepts

- **Only network providers**
- **Nobody can make a “list” of patients**
- **No Data Mining**
- **Only treatment and HIPAA related**
- **Relationship based**
- **Data is identified and sent by source**
- **Data rights remain with sending source**
- **Only released when needed**
- **Patient ability to opt out**
- **128 bit encryption**

State Geography/Strategy



<u>Initiative</u>	<u>Lives</u>
SMRTNET-NEO	400K
SMRTNET-OKC	1.5M est.

Cost Savings and Patient Safety Return on Investment for Individuals Directly Covered by the State of Oklahoma

■ Patient Safety

- ◇ 474 fewer ADEs in year 1 growing to over 1,900 in year 5
- ◇ Approximately 1,900 life-threatening ADEs eliminated
- ◇ Eliminate 20 potentially avoidable deaths as a result of medical error in year 1 with a 5 year accumulation of over 240 avoidable deaths
- ◇ Over 4,150 provider and hospital visits avoided as a result of avoided ADEs

■ Cost Savings

- ◇ High capacity for fraud and abuse cost savings, which reach \$94.5 million in year 5
- ◇ \$5.9 million in year 1 from drug savings by utilizing ePrescribing. By 2011, savings reach \$29.5 million.
- ◇ Over \$1 million in year 1 savings by reducing redundant lab and radiology tests, which grows to over \$4.4 million in 2011

For more Information, please contact

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