



**MO HEALTHNET OVERSIGHT COMMITTEE  
NOVEMBER 18, 2008  
MEETING HANDOUTS**

This packet contains the following information:

1. Biography of Newly Appointed Member Representative Rebecca McClanahan
2. Enrollment by Eligibility Category
3. CCIP ASO Outcome Overview – Presentation by George L. Oestreich, Pharm.D., M.P.A., Deputy Division Director, Clinical Services
4. How Are Our Patients Best Served? – Presentation by Ian McCaslin, M.D., M.P.H., Director, MO HealthNet Division
5. Biography of guest speaker Karen Edison, M.D., University of Missouri
6. Missouri Telehealth Network: Advancing Healthcare through Telecommunication – Presentation by Karen Edison, M.D.
7. Section 208.978, RSMo Supp 2007

**Representative Rebecca McClanahan**  
**Missouri House of Representatives, District 2**

Representative Rebecca McClanahan was elected to the House of Representatives in November 2006. She represents District 2, which includes parts of Adair, Putnam and Sullivan Counties. She serves on the House committees of Health Appropriations, Higher Education and Agriculture Policy. She is the third nurse to serve in the Missouri General Assembly.

In addition to her legislative duties, Representative McClanahan is a Mental Health Nursing Consultant. She has spent over 30 years as a Nurse Educator at Truman State University in Kirksville where she was nominated for the Allen Fellowship for Excellence in Teaching and for the William Lee O'Donnell Advising Award.

Representative McClanahan is the Immediate Past Vice-President of the Missouri Nurses Association. She is a charter member of the Rho Omega Chapter of Sigma Theta Tau International Honor Society of Nursing and received the chapter's first award for Leadership Excellence.

A 1969 graduate of Mt. Zion Bible School in Ava, Missouri, Representative McClanahan received her Bachelor of Science Degree in Nursing from Truman State University in 1975. She received her Masters Degree in Nursing from the University of Missouri-Columbia in 1982 and has achieved Doctoral Candidacy at the University of Kansas. Her presentations and publications include analysis of models of health care reform and research regarding substance abuse among nurses.

Representative McClanahan currently resides in Kirksville with her husband, Marvin. They have two children: Andrew and his wife Astrid, and Bryan.



	Participants as of March 2008	Participants as of June 2008	Participants as of October 2008	Percentage of October 2008 Participants	Income Eligibility Maximums (Shown as a Percentage of Federal Poverty Level)
Children	484,750	485,522	488,293	58.4%	300%
Persons with Disabilities	147,208	148,754	150,495	18.0%	85%
Custodial Parents	94,392	92,894	91,936	11.0%	TANF level (approximately 21%)
Seniors	76,808	76,425	76,698	9.2%	85%
Pregnant Women	<u>28,301</u>	<u>28,344</u>	<u>28,707</u>	3.4%	185%
Total	831,459	831,939	836,129		

# CCIP ASO Outcome Overview

## Oversight Committee

**November 18, 2008**

**George L. Oestreich, Pharm.D., MPA**

Deputy Division Director, Clinical Services  
MO HealthNet Division

**Chelmer Barrow, DO**

Medical Director, APS Healthcare



# Program History

- CCIP began enrolling participants in November 2006 (January 2007 patient management began)
- General ASO Enrollment began in June 2008
- As ASO contracting continues regionally, CCIP will merge into the ASO contracts
- MCO's cover only the TANF population (largely mothers and children), therefore ASO or FFS programs will need to provide coordination care for Non-MCO patients in MCO regions

# Hypothetical (Desired) Outcomes

- Expected Impacts from CCIP/ ASO interventions:
  - Healthcare outcomes
    - Improved adherence to objective monitoring
    - Improved medication adherence
    - Improvement of “in-range” monitoring parameters
  - Financial expenditures impact
    - Appropriate service access utilization
    - Appropriate trending of total cost of care
  - Integrated electronic record impact
    - Provider use of electronic tools
    - Provider participation/use of electronic tools
    - Actual use and support of key case management tools
  - Participant/Provider Feedback
    - Recognition/knowledge/acceptance of program
    - Impression of program activities
    - Critical analysis of program and components

# Program Engagement Process

- Identify new eligibles from MOHealthNet Data
- Mail welcome letters to new eligibles
- Conduct telephone outreach campaigns to new eligibles
- Engage participants
- Conduct general and/or disease specific assessments
- Evaluate risk score and assessment findings to assign risk level
- Assign to High, Moderate, or Low Risk Level
- Schedule follow-ups consistent with the risk level, e.g. every 30 days for high risk (case management), every 90 days for moderate risk level (disease management), and every 90 day outreach for health and wellness mailings (low risk level and the case and disease management level).
- Services are provided on an ongoing basis as long as the participant remains eligible for MOHealthNet.

# Direct Services Provided During Engagement Process

- **Included But Not Limited To:**

- Identification of gaps in care, e.g. medications, tests for condition monitoring, preventive care services, and compliance.
- Assistance in locating resources to address social barriers affecting ability to seek appropriate medical / behavioral health care and close gaps in care, e.g. transportation, food, clothing, housing, etc.
- Addressing self-care issues with behavioral change coaching with the goal of increasing compliance with prescribed plans of care.
- Coordinating with the health care team (physicians, social workers, community support workers, etc.) to increase compliance with the plan of care.
- Services described may be provided telephonically or onsite in clinics or health centers



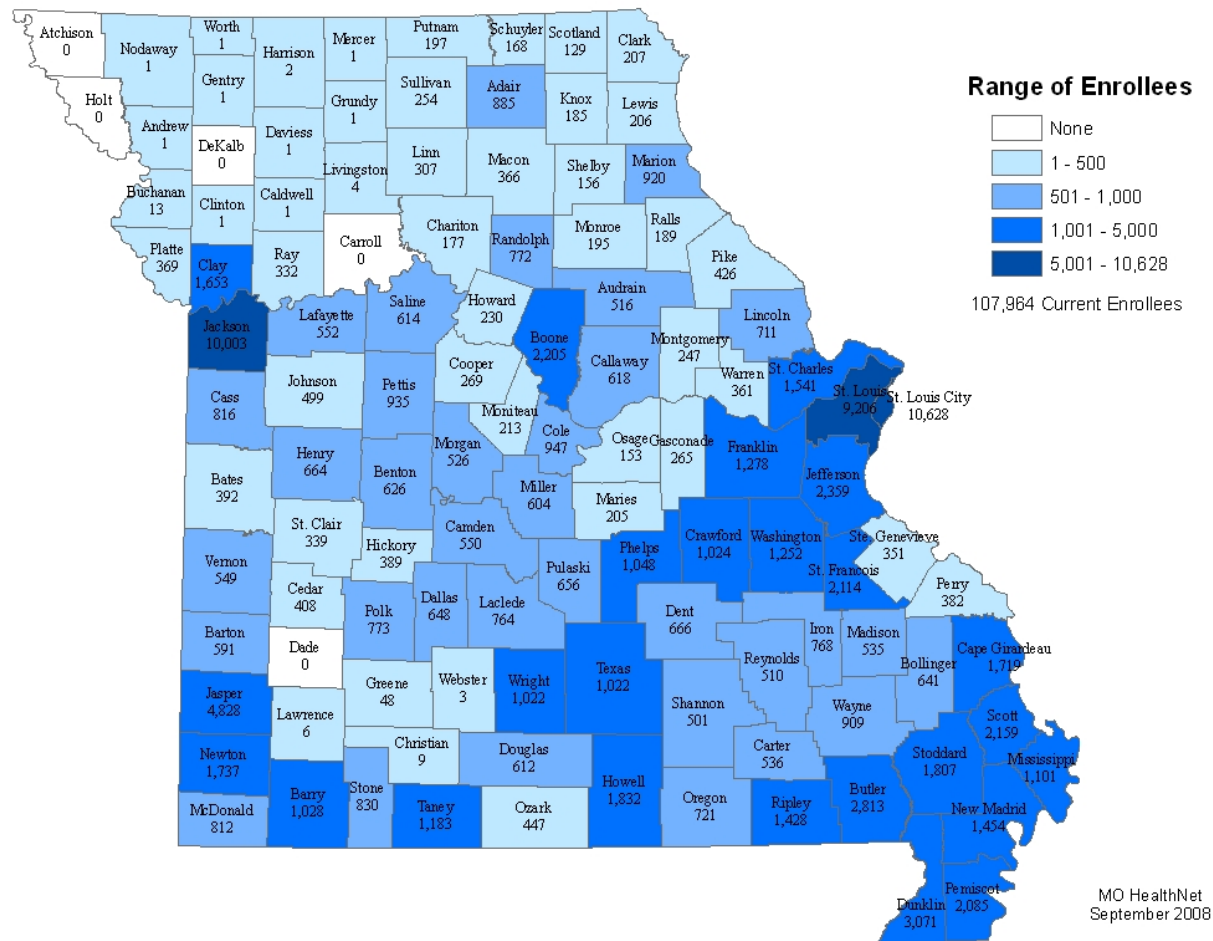
# Outcome Reports

- Medical Outcomes Metrics
- Financial Outcome Metrics
- HealthCare Home Metrics
- Provider Metrics

## Metrics Outcomes Report Through 2nd Qtr - 2008

# Where CCIP Patients Reside

CCIP ENROLLED BY COUNTY



# Methodology and Report Parameters

## Overview of Population

- The total number of participants in the Chronic Care Improvement Program (CCIP) at the end of the reporting period was 103,308.
- The time period analyzed was July 1, 2007- June 30, 2008.
- Of these, 24,700 had been continuously enrolled for at least 12 consecutive months.

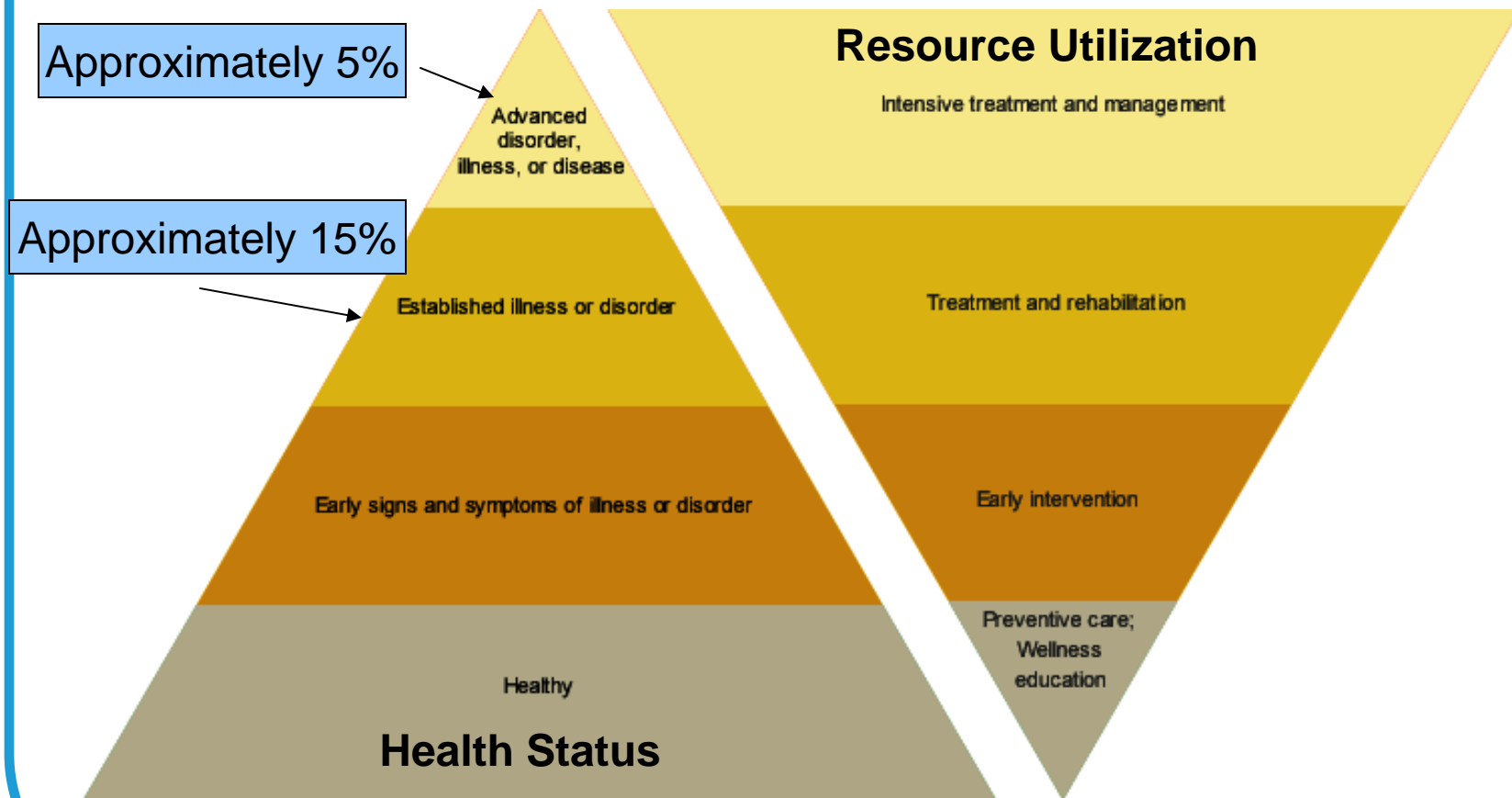
# Methodology and Report Parameters

- The outcomes of the 24,700 continuously enrolled participants were compared to 97,665 MO HealthNet participants who have the same condition and submitted at least one claim for medical services to MOHealthNet during the analysis period, but are not enrolled in CCIP.
- Non-enrolled MO HealthNet participants include those who:
  - Reside in geographic areas that are ineligible for participation in CCIP
  - Are eligible for CCIP but opted out of the program

# Report Parameters

- Period definitions
  - Program Performance
    - Baseline: Jan. 2006 – Jan. 2007
    - Evaluation: Feb. 2007 – Mar. 2008
- Conditions being managed
  - Asthma                      Diabetes                      Sickle Cell Anemia
  - CAD                        COPD
  - CHF                        GERD
- Eligible membership
  - Feb. 2007: 87,201 participants
  - March 2008: 141,420 participants
- Enrolled membership
  - Feb. 2007: 5,225 participants
  - March 2008: 97,790 participants
- Demographics
  - Average Age 51, (Male 47, Female 53)
  - Male 35% Female 65%

# Deployment of Case Management/Disease Management Resources, Target Intensity of effort to Health Status



# A Typical Participant in This Overview

- A 47 year old male
- More than one major targeted disease
- Likely has a major cardiovascular diagnosis and diabetes
- Likely has experienced a major cardiac event
- A third have a major behavior health co-morbidity
- A generally motivated cohort

*Continuously Enrolled 7/1/2007 - 6/30/2008*

24,700

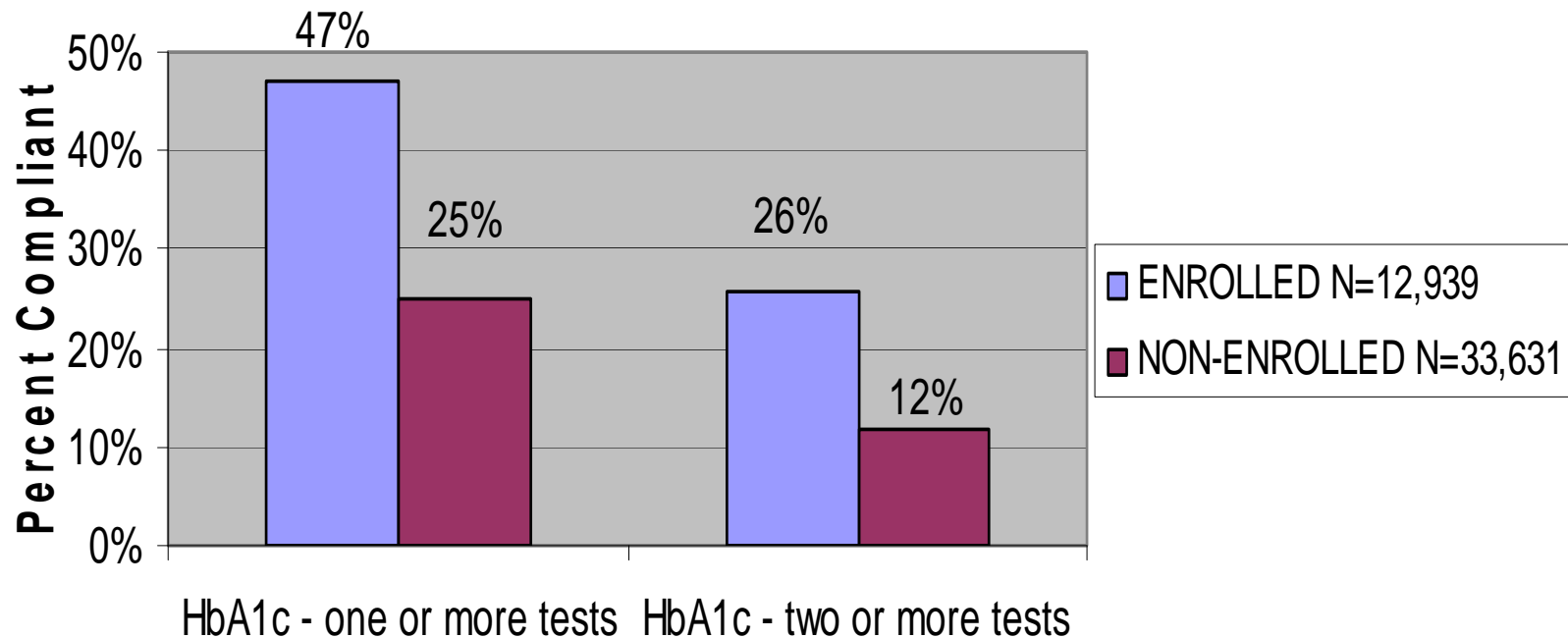
	<i>Number of</i>	
<i>Disease</i>	<i>Individuals</i>	<i>Percentage</i>
Asthma	9,817	39.7%
CAD	16,982	68.8%
CHF	5,746	23.3%
COPD	8,155	33.0%
Diabetes	12,939	52.4%
GERD	12,592	51.0%
Sickle Cell	558	2.3%
Behavioral Disability	8,395	34.0%

\*Includes co-morbid conditions



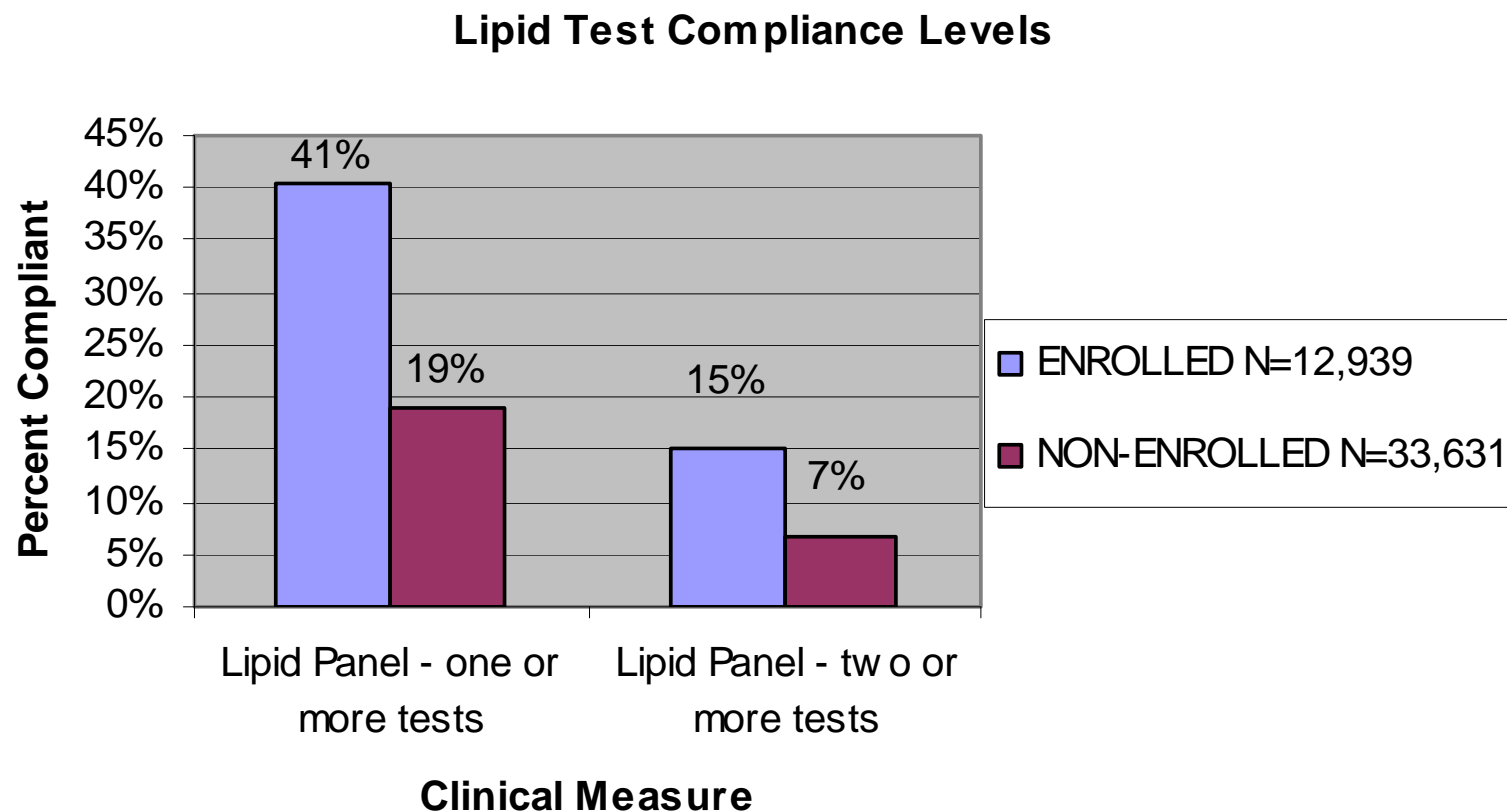
# Missouri CCIP Diabetes Outcomes

## Hemoglobin A1c Compliance



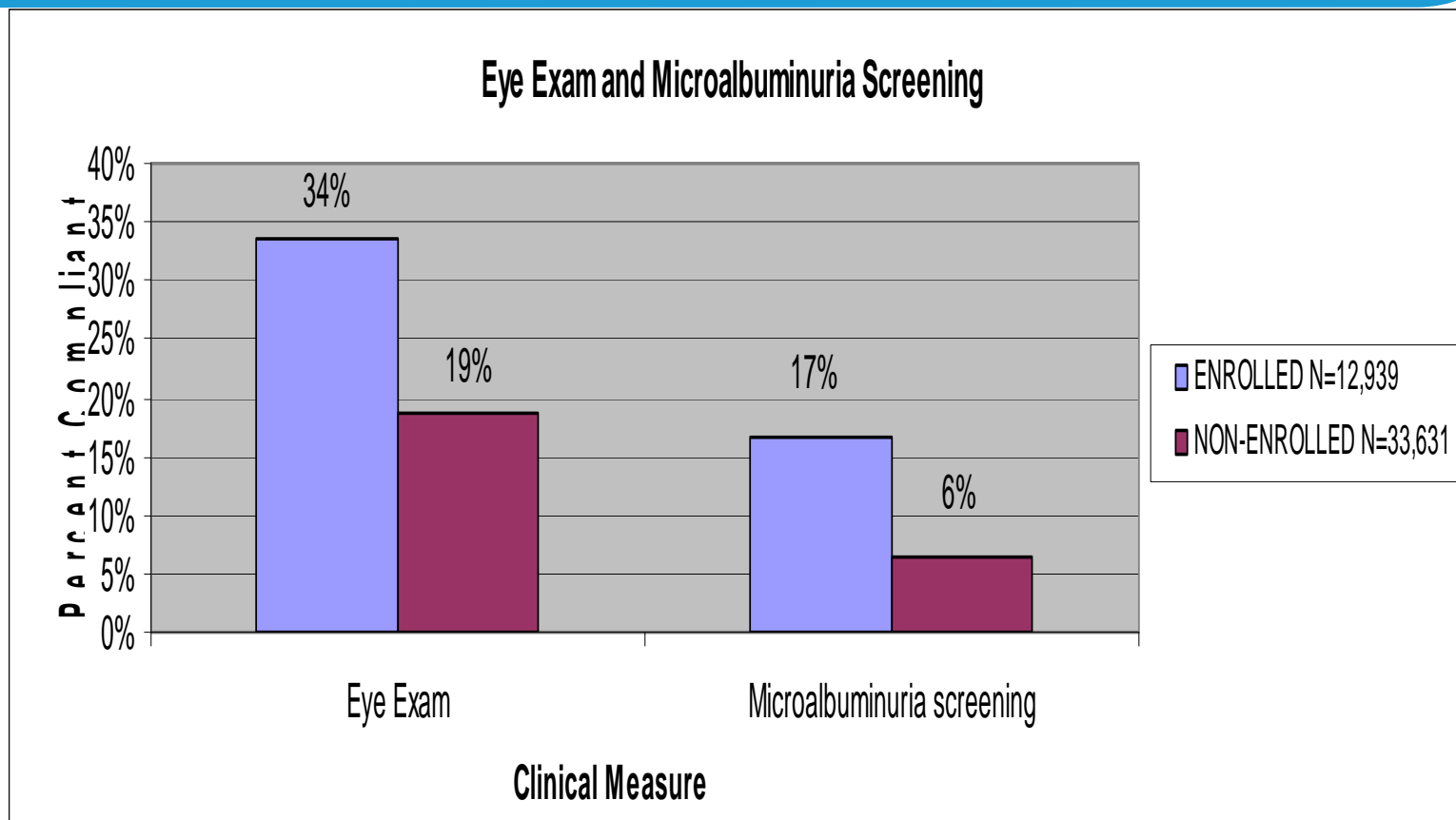
HbA1c testing provides an estimation of average blood glucose values in people with diabetes. Enrollees in the CCIP program received substantially more HbA1c testing than those not enrolled.

# Missouri CCIP Diabetes Outcomes



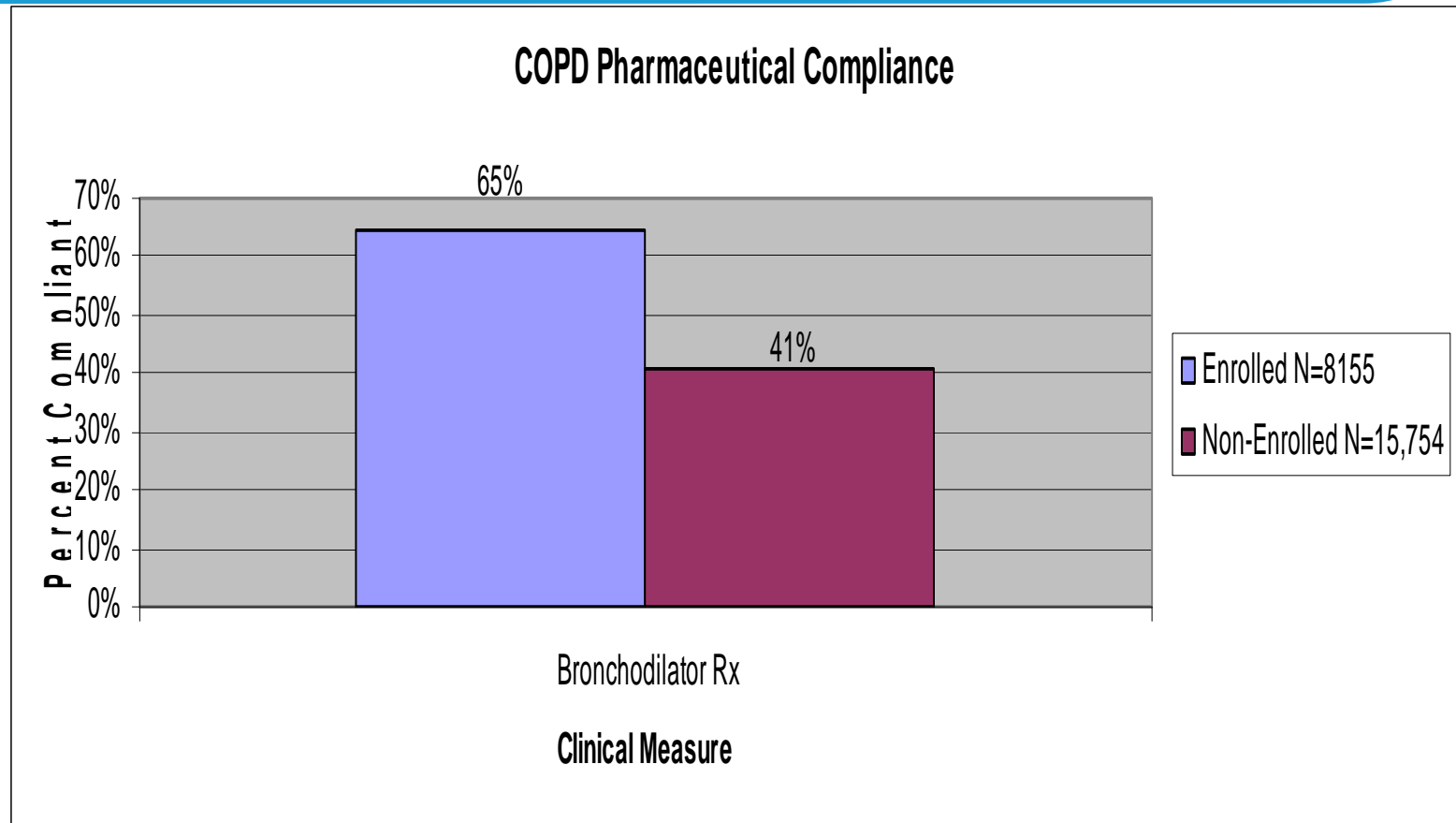
Lipid (cholesterol) testing is recommended for people with diabetes. CCIP enrollees received lipid testing at more than twice the rate of non-enrollees.

# Missouri CCIP Diabetes Outcomes



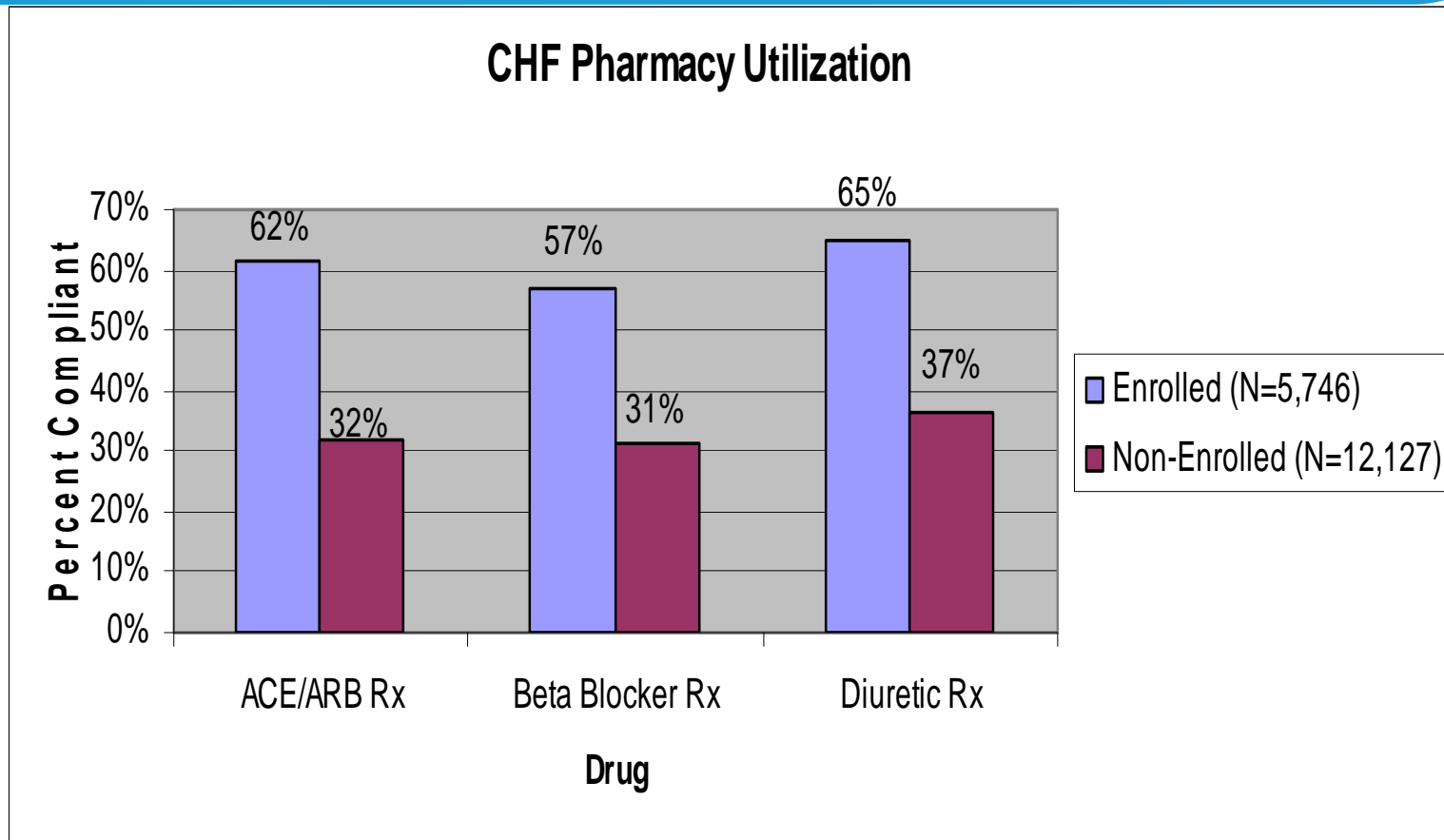
A Dilated Eye Exam and Microalbuminuria testing are two other recommended clinical assessments that should be performed annually on people with diabetes.

# Missouri CCIP COPD Pharmacy Utilization



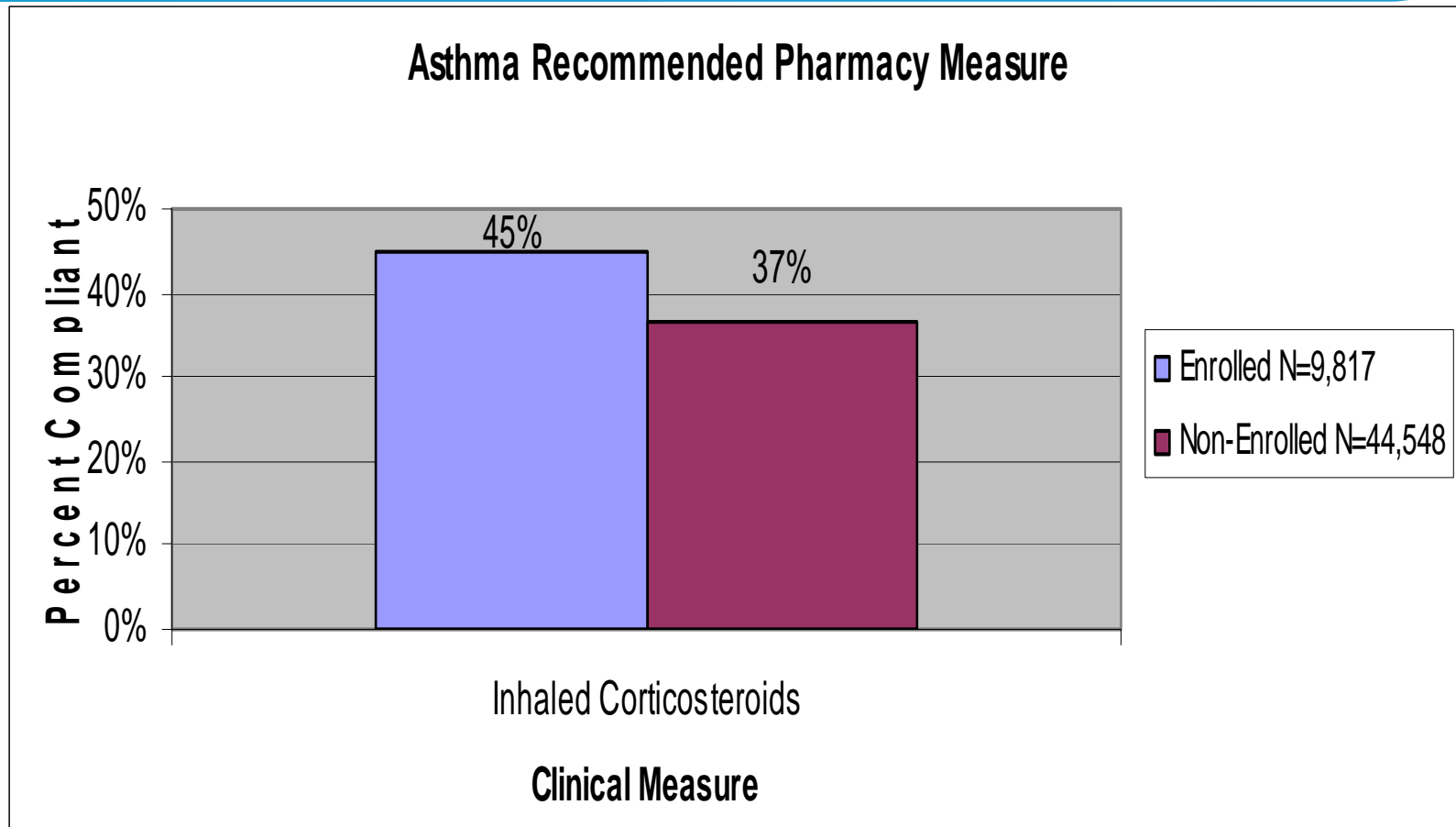
Nearly two-thirds of CCIP enrollees with COPD (emphysema) received treatment with bronchodilator medications, compared to 41% of non-enrollees.

# Missouri CCIP CHF Pharmacy Utilization



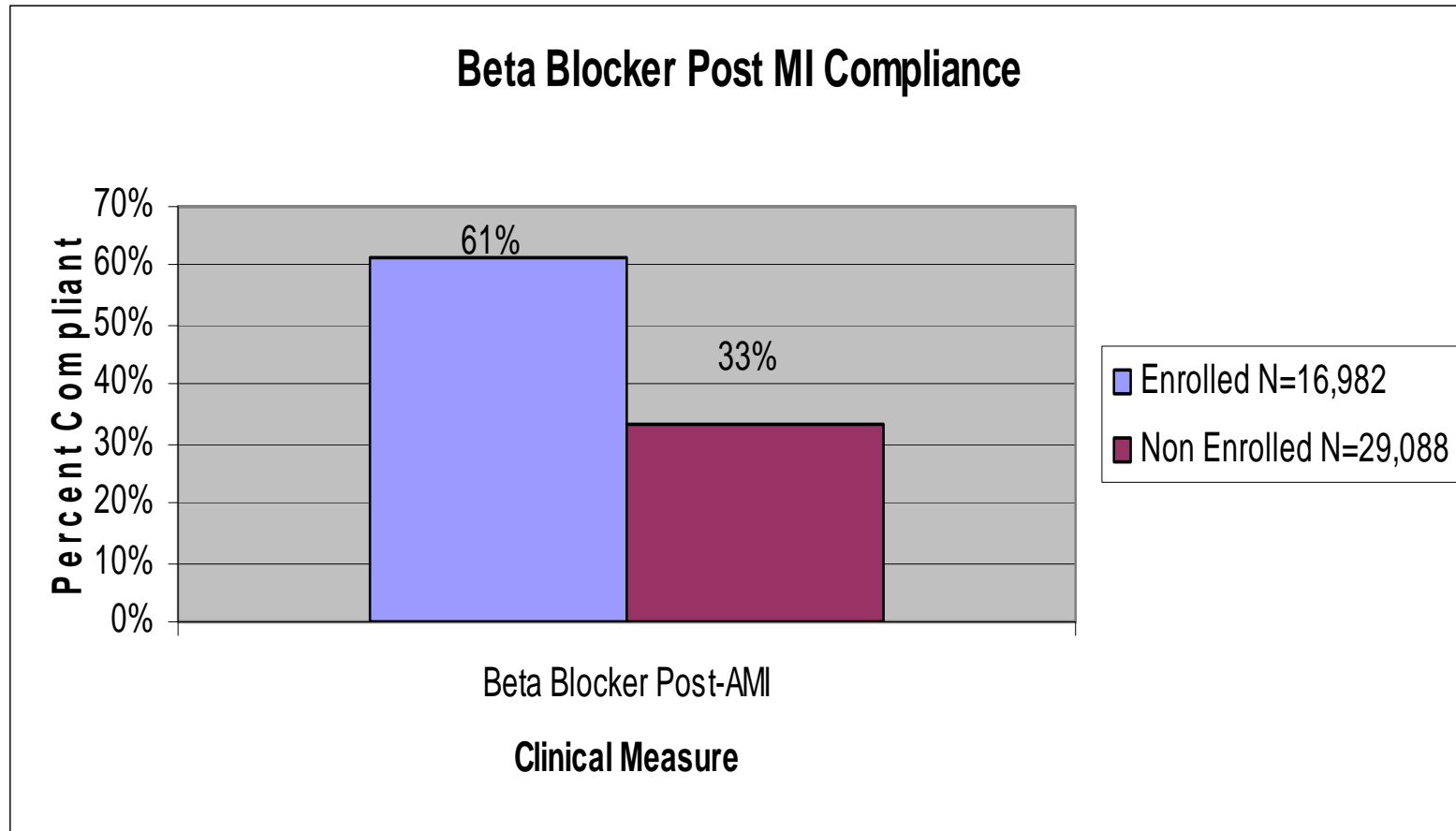
Substantially more CCIP enrollees than non-enrollees with congestive heart failure (CHF) received treatment with recommended cardiac medications.

# Missouri CCIP Asthma Pharmacy Utilization



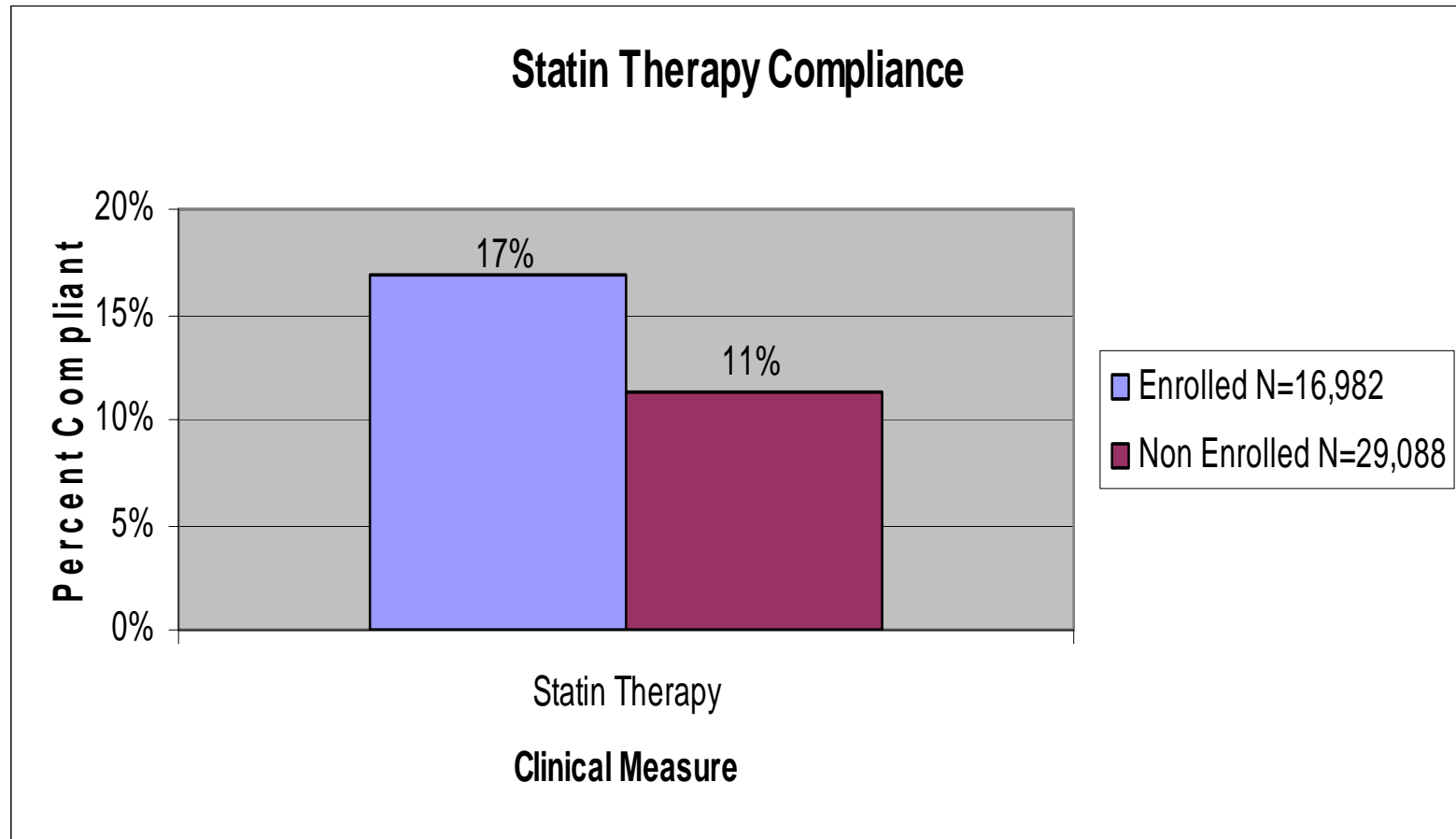
CCIP enrollees with asthma received recommended treatment with inhaled corticosteroids at a greater rate than non-enrollees.

# Missouri CCIP Coronary Artery Disease (CAD) Outcomes



CCIP enrollees with coronary artery disease (CAD) received recommended treatment with beta blocker medications at nearly twice the rate of non-enrollees.

# Missouri CCIP Coronary Artery Disease (CAD) Outcomes



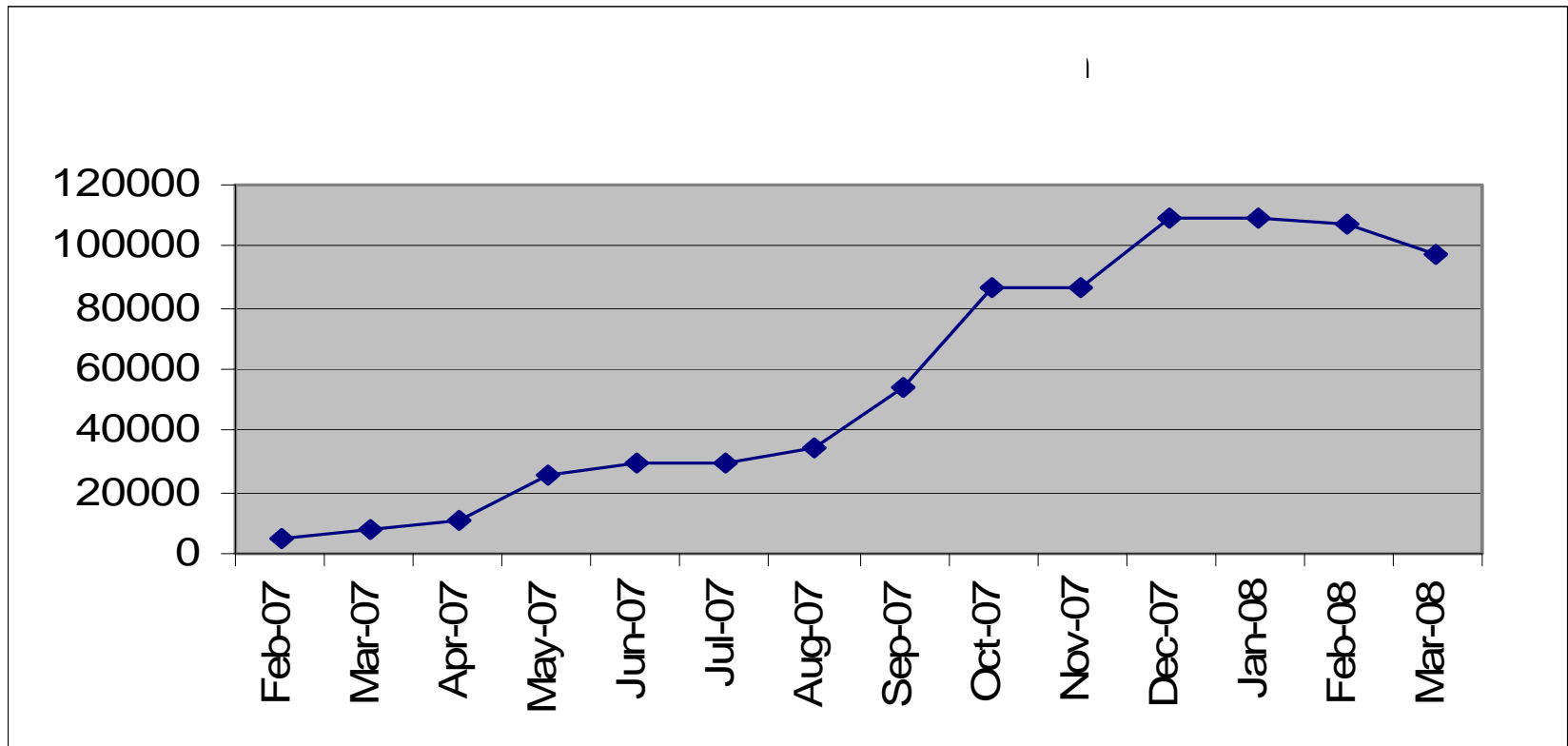
CCIP enrollees with coronary artery disease (CAD) received recommended treatment with statin medications at a greater rate than non-enrollees.



# Utilization of Services

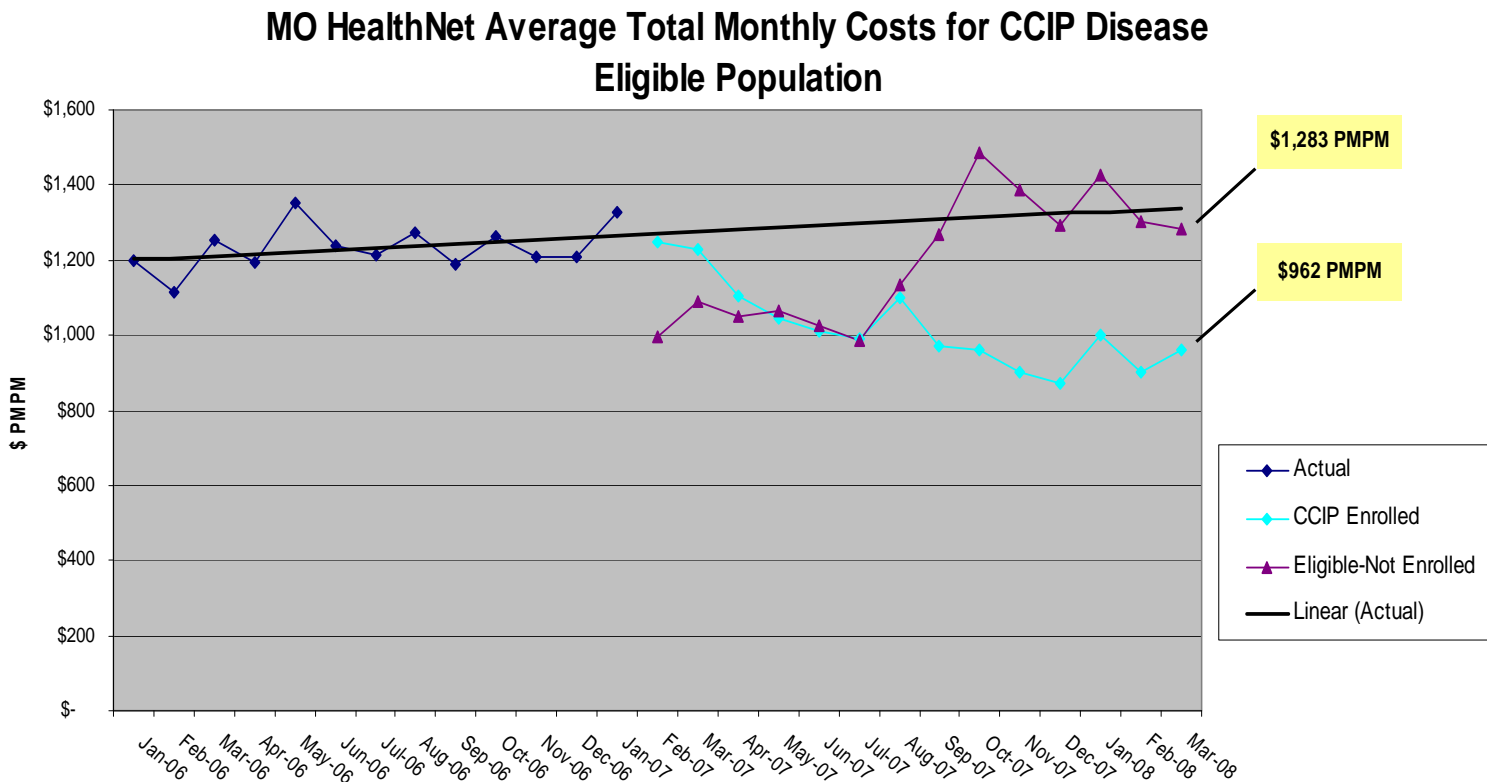
- Use of major interventions
- Relative cost impact “off trend” of utilization changes

# Program Eligibility



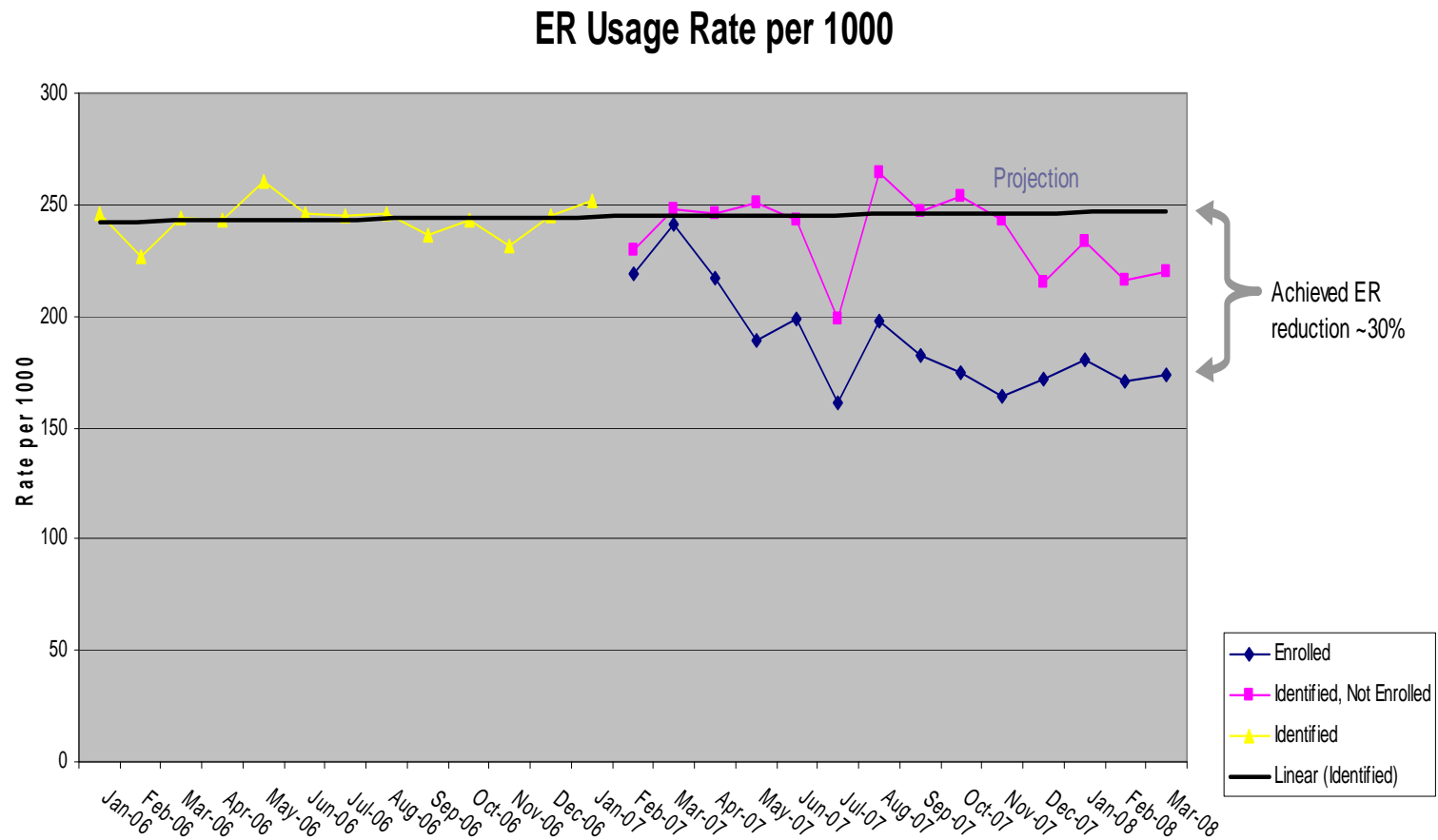
Enrollment in CCIP began in the I-70 corridor (Feb to July 2007) and then grew regionally with the addition of the Northeast (Aug), Southeast (Sept) and Southwest (Oct) regions. December increase due to updated eligibility determinations.

# Trend Analysis of Total Costs



Average Total Monthly Costs for CCIP-enrolled participants were below projection.  
March 2008 demonstrates a \$321 PMPM savings.

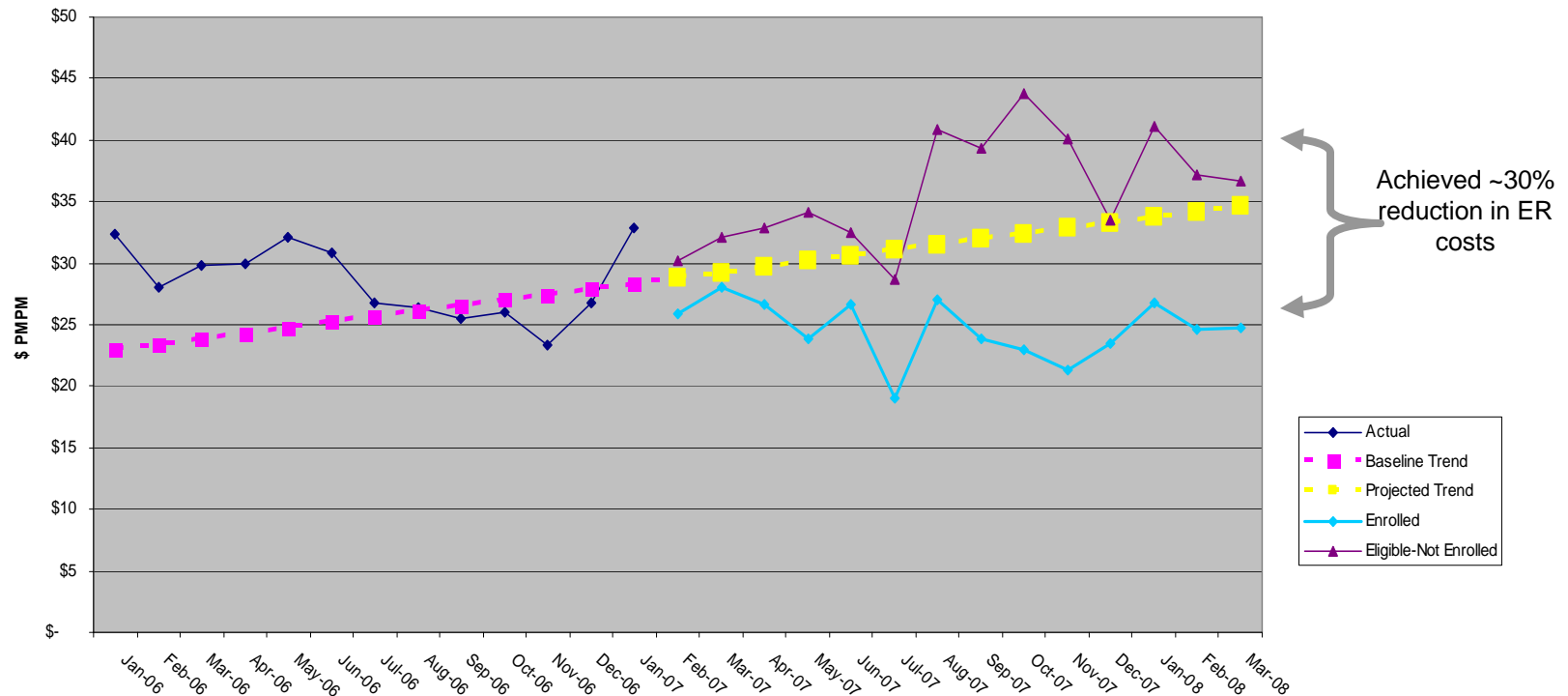
# Trend Analysis of Emergency Room Utilization



ER visits decreased more substantially than projected representing another key cost driver for savings

# Trend Analysis of Emergency Room Costs

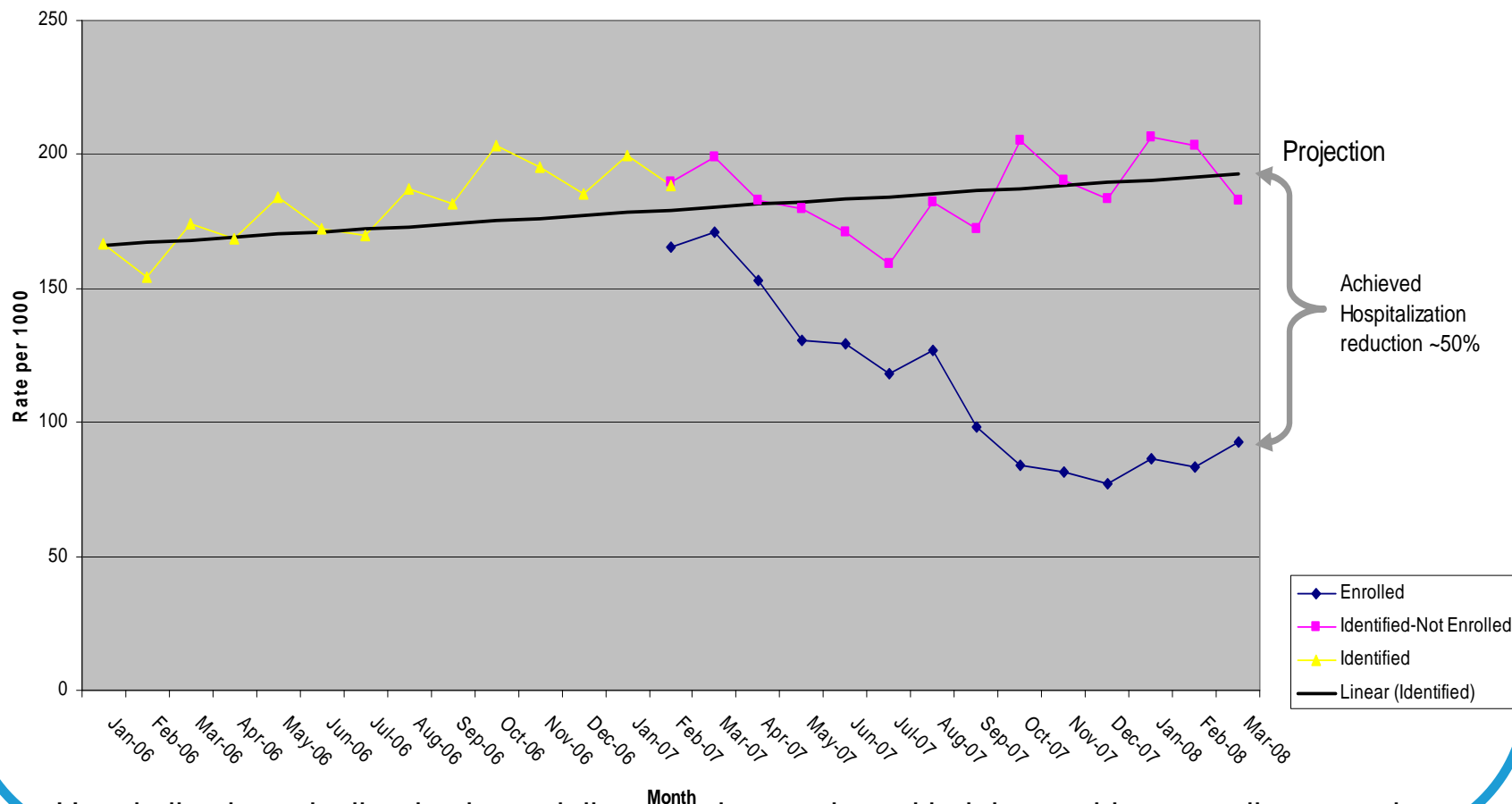
MO HealthNet Average Monthly ER Costs for CCIP Eligible Population



CCIP enrollees had lower-than-projected ER costs and lower ER costs than MO HealthNet participants eligible for, but not enrolled in, CCIP.

# Trend Analysis of Hospital Utilization

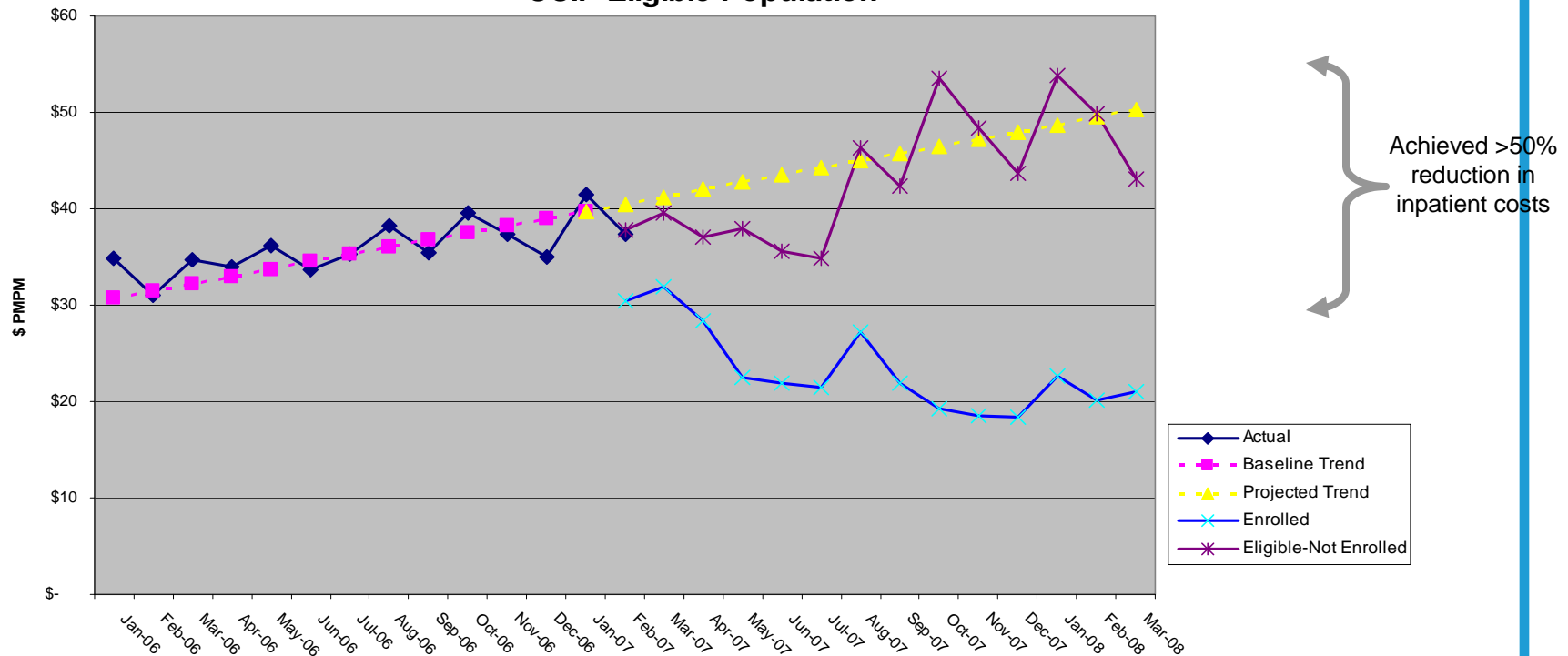
Hospitalization Rates per 1000 Jan 2006-June-2008



■ Hospitalizations declined substantially more than projected helping to drive overall cost savings

# Trend Analysis of Inpatient Costs

MO HealthNet Average Monthly Inpatient Costs for  
CCIP Eligible Population



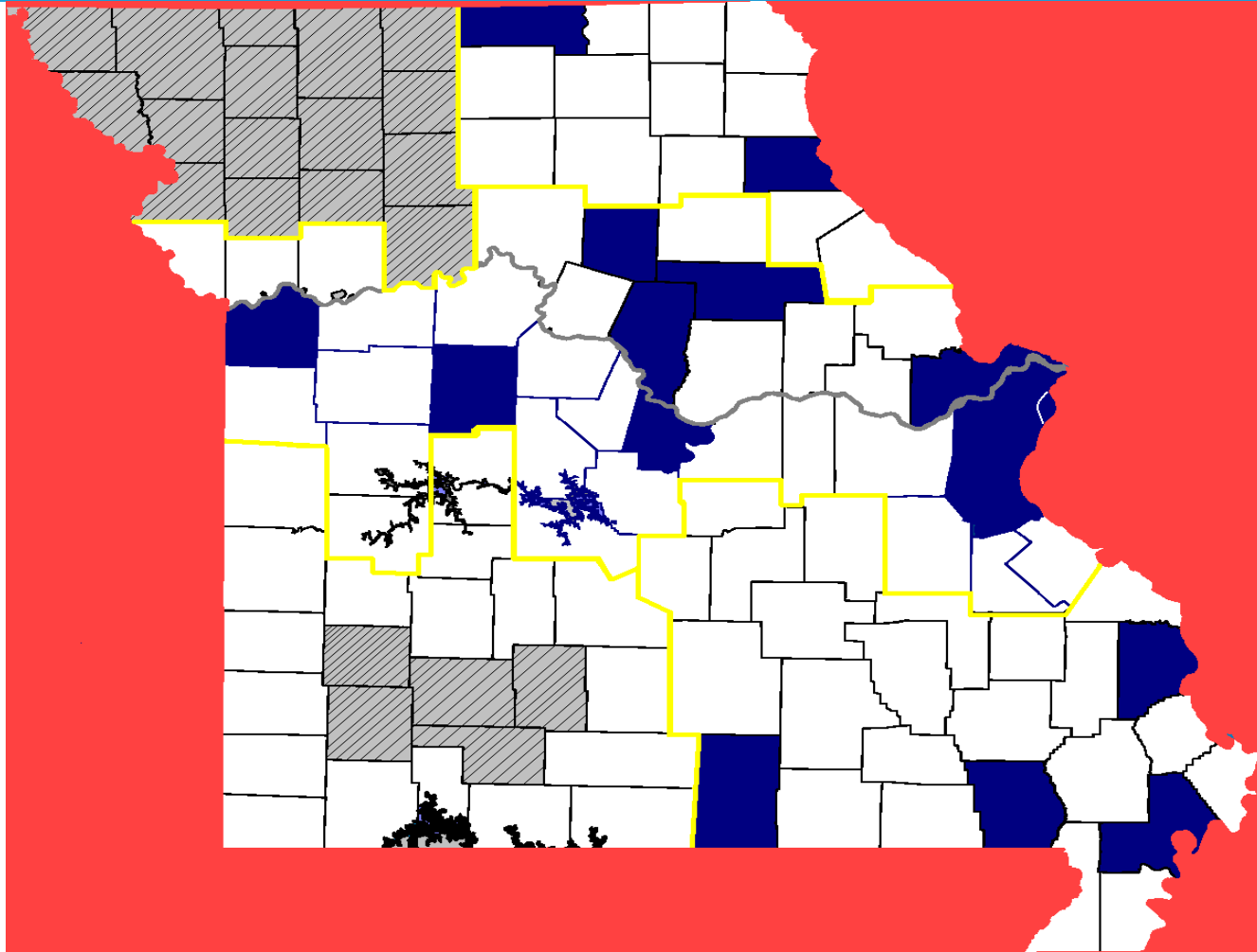
While average inpatient costs had increased during the baseline period, CCIP enrollees have had average inpatient costs below projection and below the inpatient costs of Mo HealthNet participants who are eligible for, but are not enrolled in CCIP.

# Health and Wellness Total Program Parameters

- Includes all patients
- Dashboard metrics begin in April 2008
- Targeted at monitoring program vendor outputs

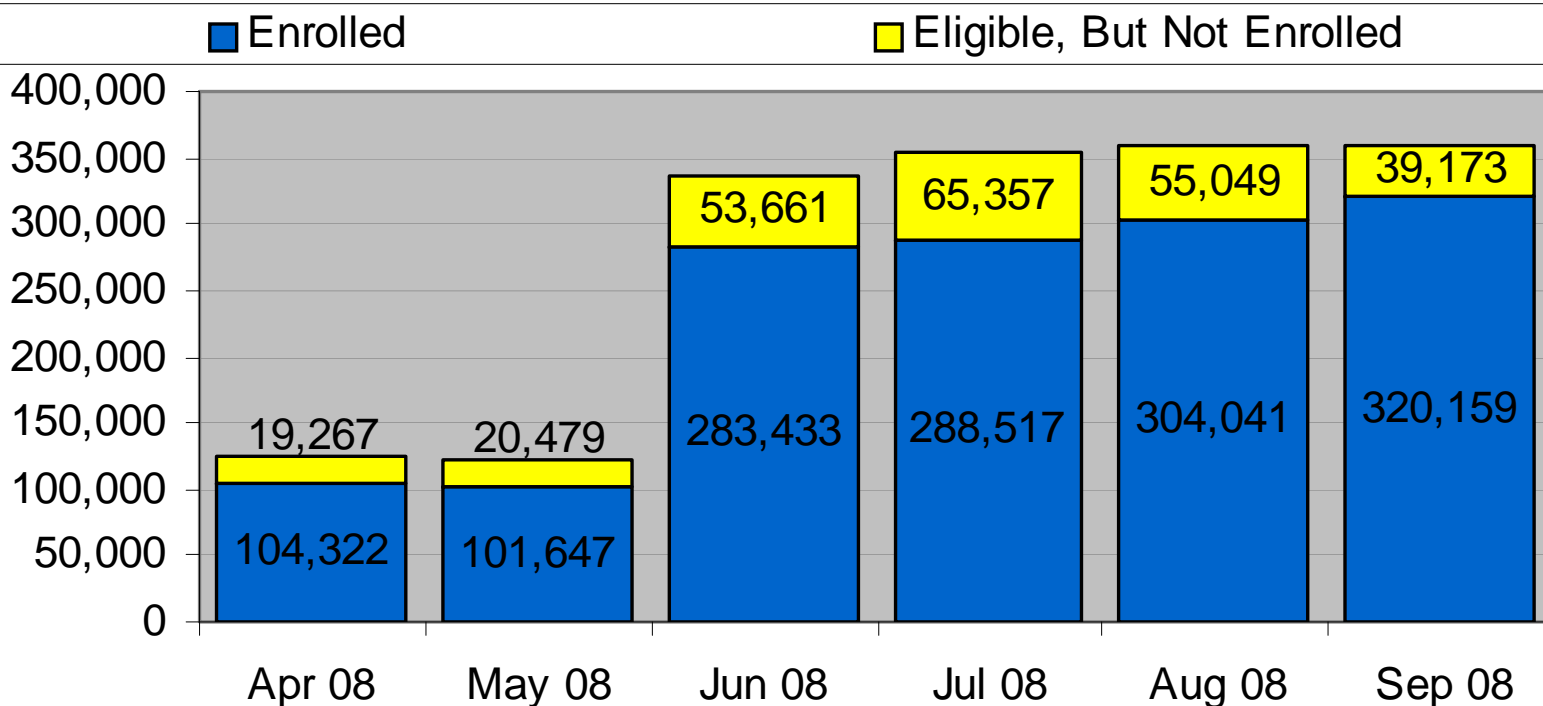


# CCIP/Health & Wellness Program Employees by County



# Health and Wellness Enrollees

## Health & Wellness Enrolled vs. Eligible



# Enrollees by Risk Level

<i><b>Period</b></i>	<i><b>High</b></i>	<i><b>Mod High</b></i>	<i><b>Mod</b></i>	<i><b>Low</b></i>	<i><b>Totals</b></i>
Apr 08	3,749	33,382	45,748	21,443	104,322
May 08	3,756	32,454	44,542	20,895	101,647
Jun 08	15,094	20,679	24,678	222,982	283,433
Jul 08	15,881	21,673	26,401	224,562	288,517
Aug 08	15,666	21,551	26,376	240,448	304,041
Sep 08	15,667	21,505	26,445	256,542	320,159

4.9%

15%  
(6.7 & 8.3%)

# Identified Healthcare Homes

Period	Health Care Homes Identified	Identified by Participant Interview	% Identified by Participant Interview	Total Enrollment	% HCH Coverage	Projected HCHs Identified
Apr 08	104,322	18,724	17.95%	104,322	100%	
May 08	101,647	19,028	18.72%	101,647	100%	
Jun 08	99,620	19,938	20.01%	283,433	35%	
Jul 08	205,633	26,896	13.08%	288,517	71%	
Aug 08	225,903	28,716	12.71%	304,041	74%	
Sep 08	234,951	21,561	9.18%	320,159	73%	
Oct 08	245,575	45,066	18.35%	319,671	77%	
Nov 08						244,952
Dec 08						255,773

# Primary Disease Identified

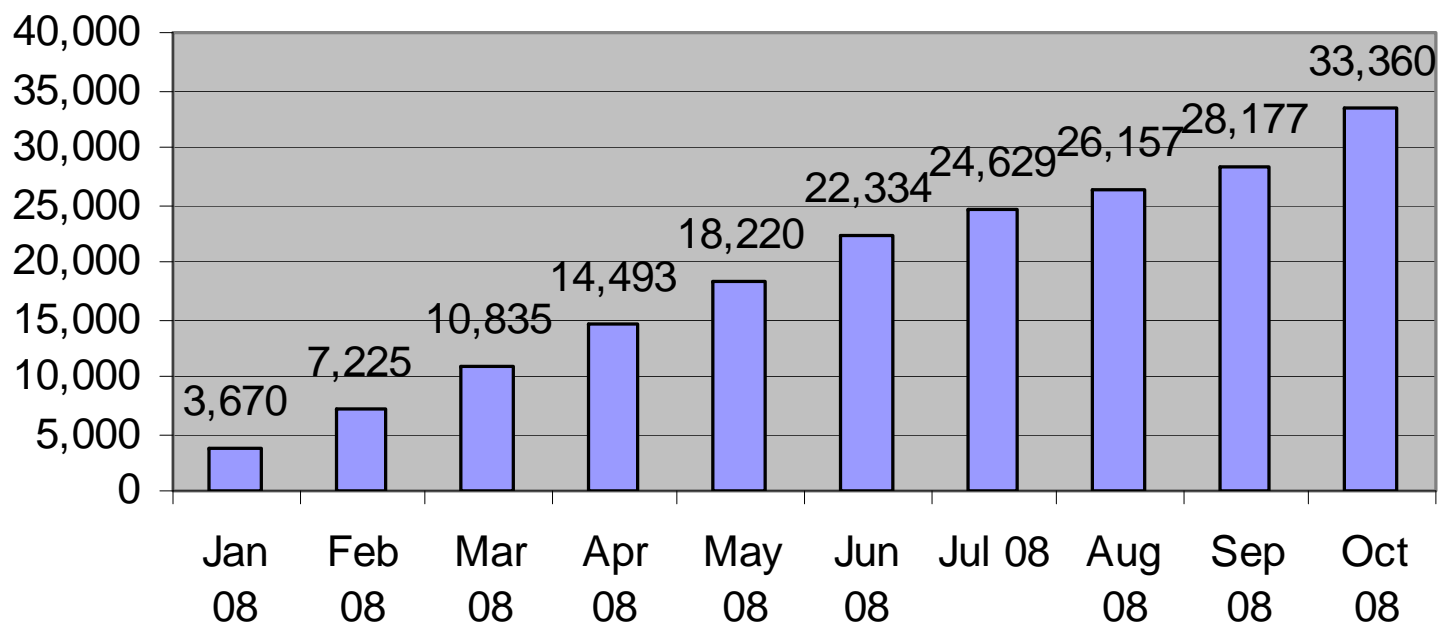
<b>Disease</b>	<b>Primary</b>	<b>Secondary</b>	<b>Combined</b>
<b>CAD</b>	38,393	25,354	63,747
<b>Diabetes</b>	26,909	10,463	37,372
<b>Asthma</b>	21,212	13,121	34,333
<b>GERD</b>	15,841	20,855	36,696
<b>Schizophrenia</b>	4,336	6,815	11,151
<b>Maternity</b>	3,972	6,230	10,202
<b>COPD</b>	3,846	16,346	20,192
<b>Depression</b>	3,477	15,409	18,886
<b>Low Back Pain</b>	1,692	11,345	13,037
<b>Sickle Cell</b>	892	0	892
<b>Cancer - Breast</b>	553	1,675	2,228
<b>Cancer - Colon</b>	161	670	831
<b>Cancer - Prostate</b>	113	561	674
<b>Cancer - Lung</b>	112	778	890
<b>Hemophilia</b>	90	198	288
	121,599	129,820	251,419

# Health and Wellness Breakdown by Region

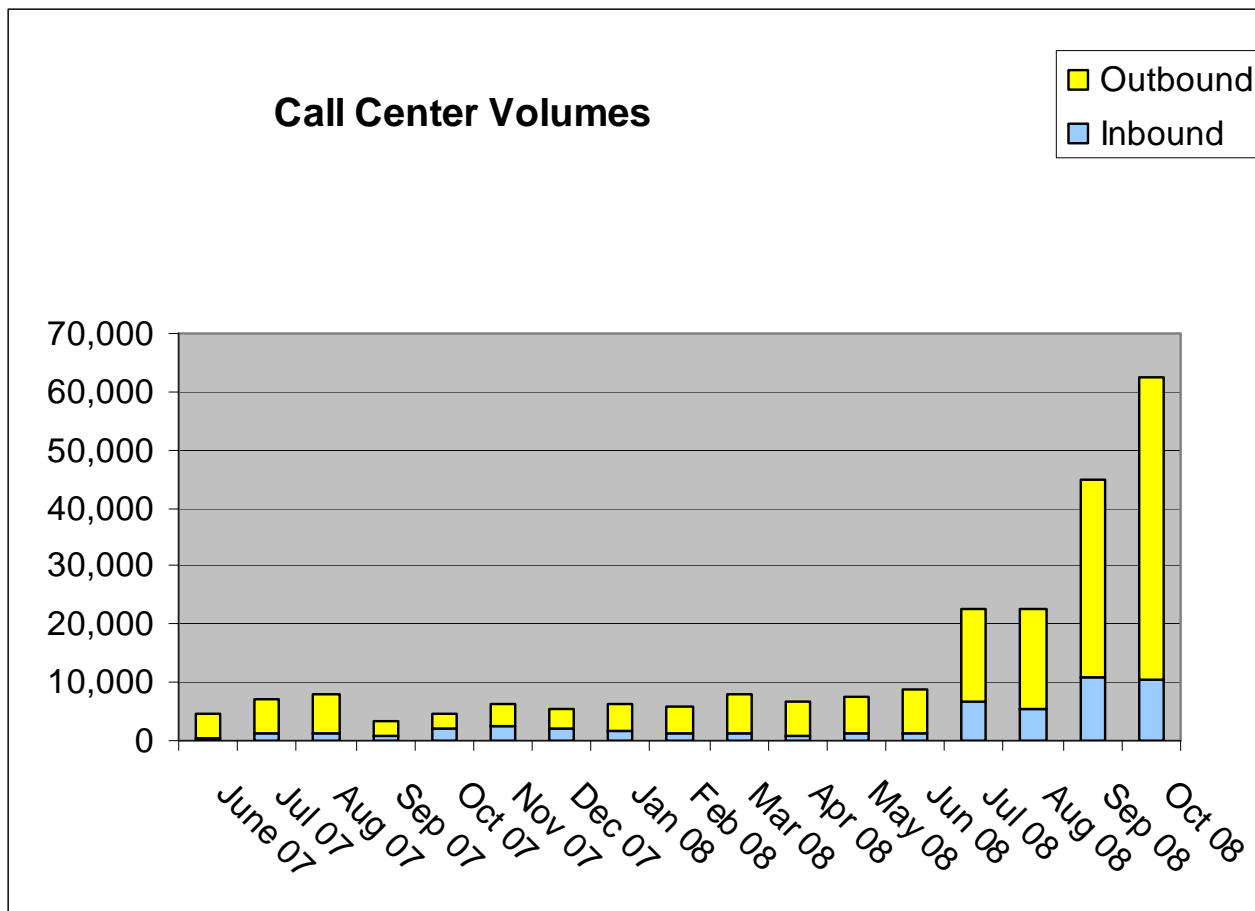
<b>Region</b>	<b>CCIP</b>	<b>ASO</b>	<b>Totals</b>
<b>I-70 Corridor</b>	55,084	77,483	132,567
<b>Northeastern</b>	4,619	8,929	13,548
<b>Northwestern</b>	20		20
<b>Southeastern</b>	29,645	72,419	102,064
<b>Southwestern</b>	17,686	54,235	71,960
<b>Springfield Area</b>	39	0	39
<b>Totals</b>	107,093	213,066	320,198

# Running Assessment Totals

**Health & Wellness Assessments Running Total**

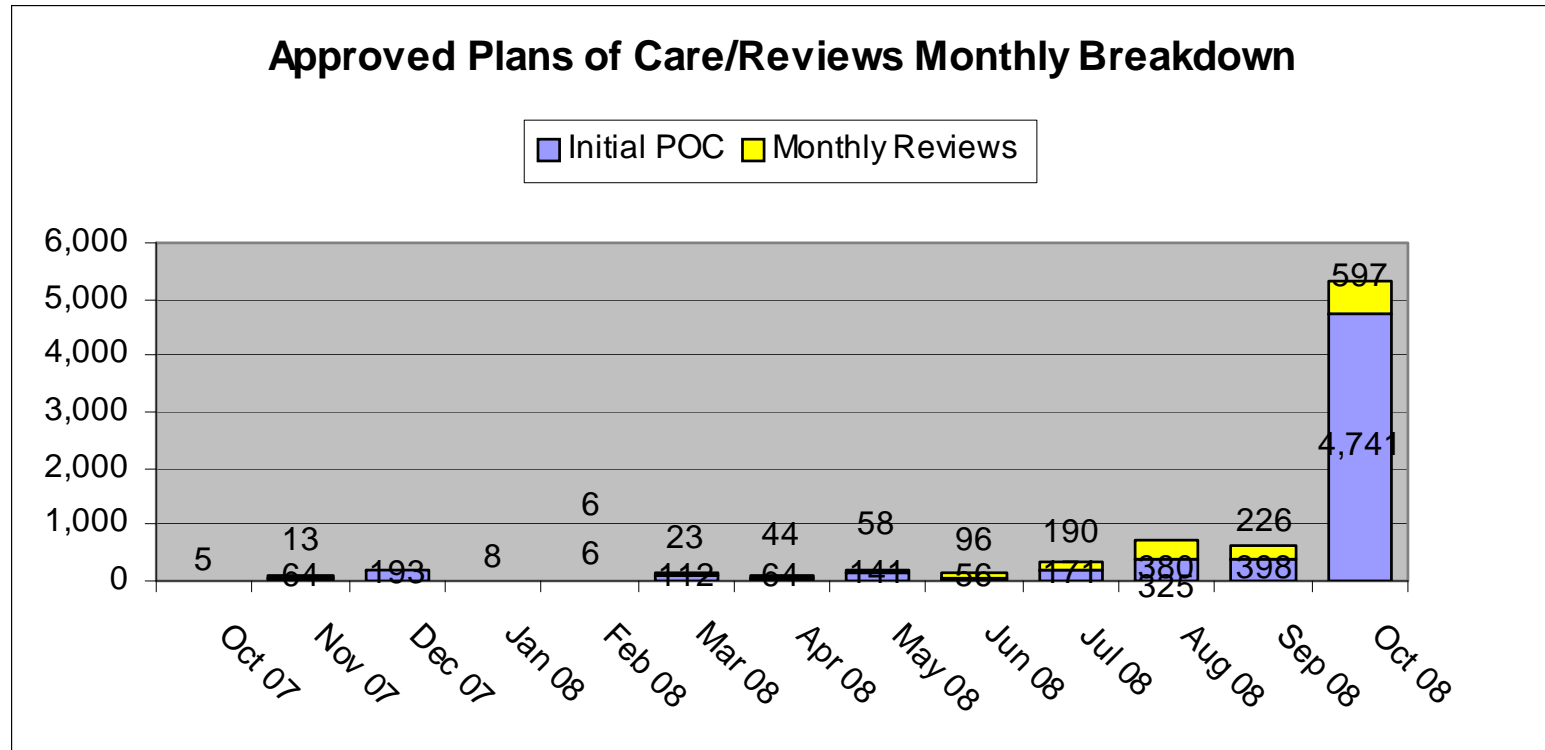


# Call Center Activity



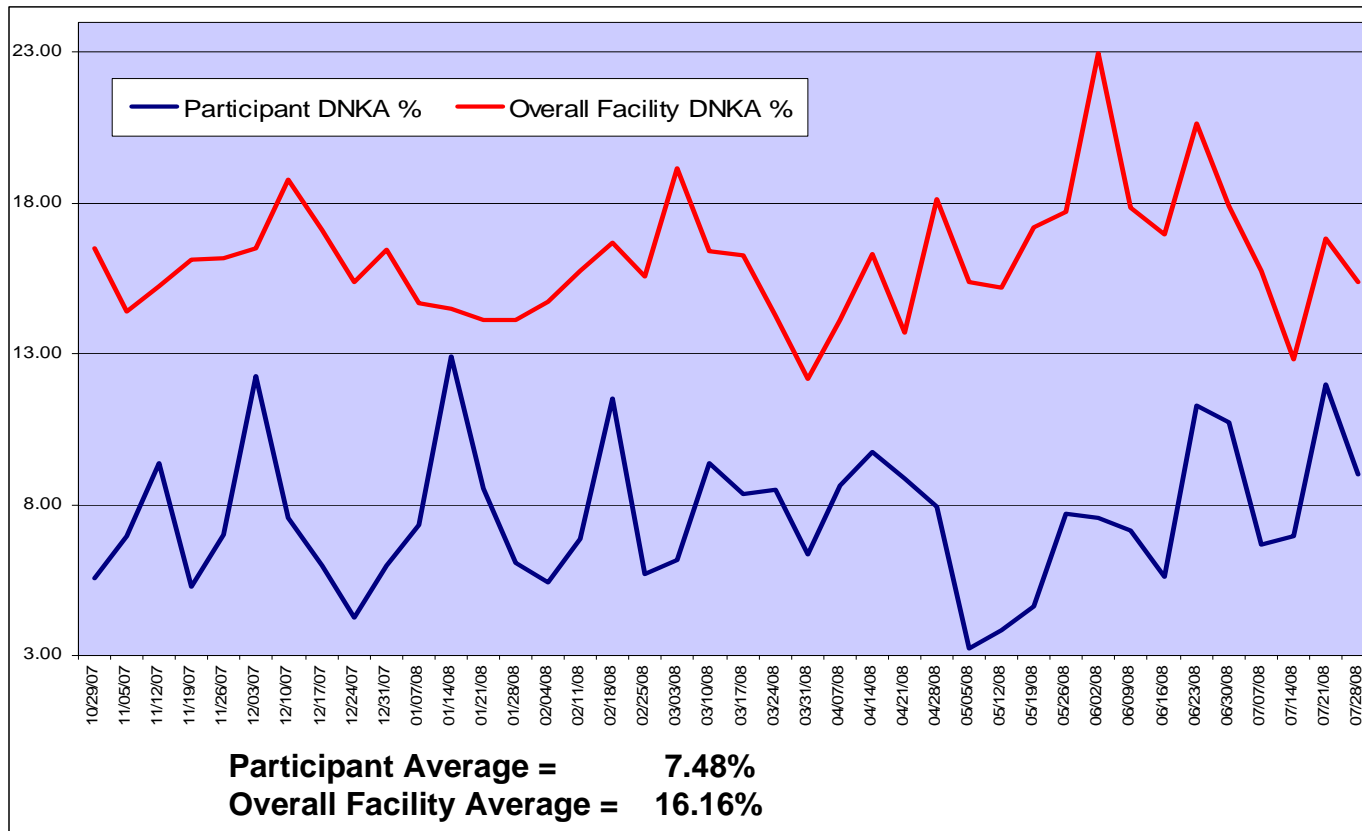


# Approved Plans of Care (POC)



Aggregate total, initial 6339  
Update reviews 1578

# Outreach Quality Indicator Program



*“Did Not Keep Appointment” (DNKA) Averages...Mo HealthNet Health & Wellness Program vs. General Clinic Population Oct. '07 - July '08. (Columbia FQHC)*

# Observations

- **The frequency of recommended diagnostic testing and pharmacy utilization was consistently greater among program participants than non-enrollees.**
- **When compared to non-enrollees, program participants also experienced:**
  - **Decreased average monthly treatment costs**
  - **Decreased emergency room utilization**
  - **Decreased inpatient hospital admissions**
  - **Decreased no-show rates by > 50%**

# Issues and Concerns

- Changes in contractor leadership
- Slope of the ePOC approvals
- General provider relations
- Communication and coordination of resources
- IT coordination and relationships
- Confirming (cross validation) of report data

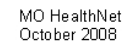
# The Southern Tier of MO HealthNet

- Geo Mapping of Eligible Participants
  - MCO candidates
  - ASO candidates
  - All eligible participants
- Includes Current Eligible (10/2008)  
Participants with No SCHIP Projections



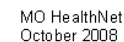
## MO HealthNet MCO and ASO Regions

### Non-Managed Care Eligibles in Southern Counties by Zip Code



## MO HealthNet MCO and ASO Regions

### All Eligibles in Southern Counties by Zip Code





# Discussion

- Questions

Thank you

[George.L.Oestreich@dss.mo.gov](mailto:George.L.Oestreich@dss.mo.gov)

573.751.6961



**How Are Our Patients best Served?**

**Springfield, Joplin, Branson, West Plains  
Public Meetings  
November 2008**

# MoHealthNet Staff

- **Ian McCaslin - Director**
- **Sandra Levels - Director, Operations**
- **George Oestreich - Director, Clinical Services**
- **Karen Lewis - Administrative Liaison**

# What Do I Want for MoHealthNet?

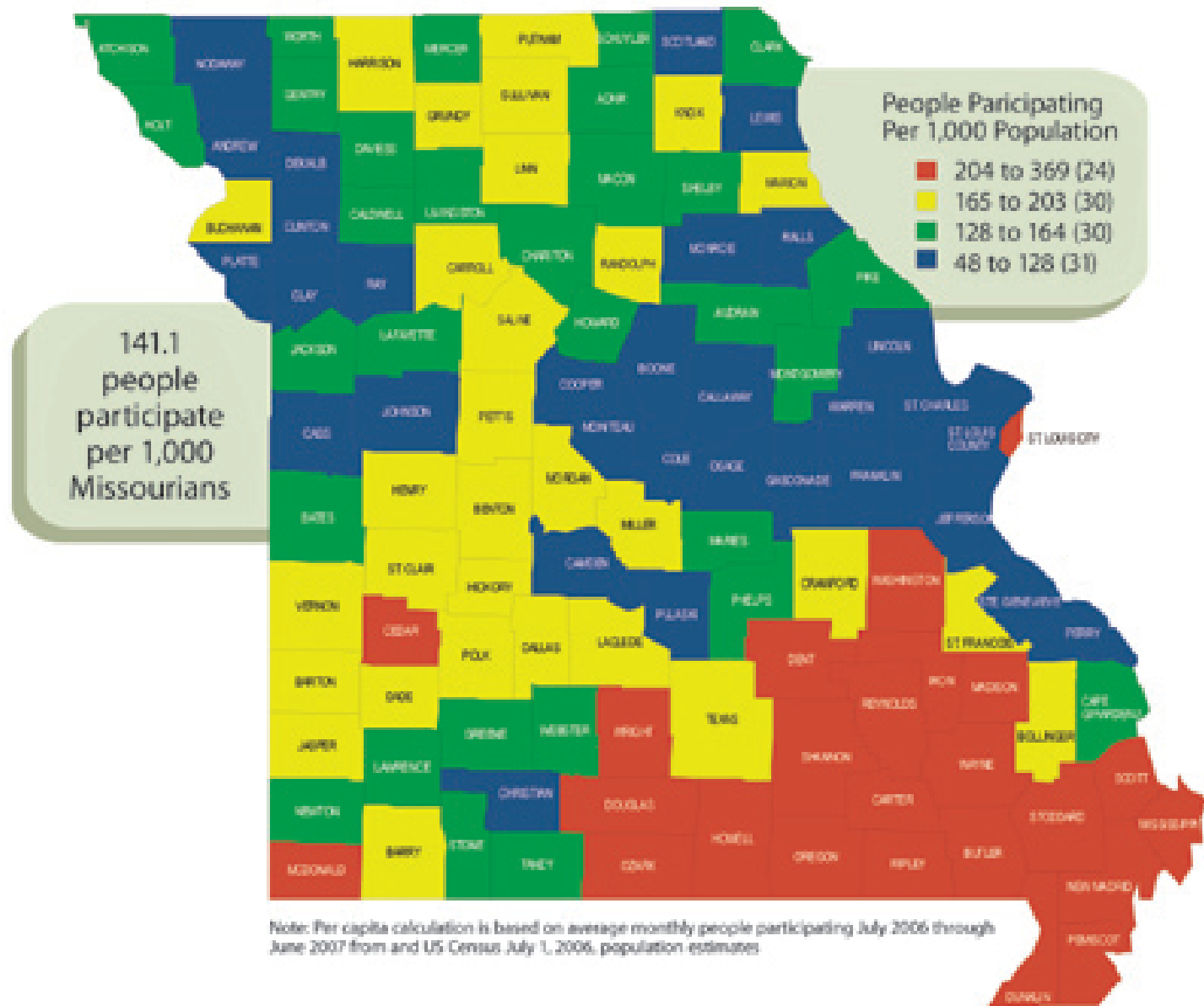
**Strong Focus on Improving:**

- ❑ **Access to Services**
- ❑ **The Quality of those Services Provided**
- ❑ **Accountability to all Missourians**

# Purpose of these Visits

- **We are Here to Discuss the Pros and Cons of Managed Care in the MoHealthNet Program**
- **We are Here to Listen and Learn from You**
- **No Decisions Have Been Made!**
- **There are Many Steps Required to Change**
- **Earliest Possible Start would be July 2010**

## 2007 MO HealthNet Participation Per 1,000 Population



# How are Services Delivered Now?

- **Fee for Service**
- **Doctor and the State - no Health Plan**
- **For Example:**
  - **Child visits the Doctor**
  - **The Doctor bills MoHealthNet**
  - **MoHealthNet pays the Doctor**

# How about in Managed Care?

- **Health Plans contract with State to work in various Regions by County**
- **Health Plans paid directly by State for each Covered Member for all Services**
- **Overall these Services are the Same as in Fee for Service**
- **No Changes in Eligibility**



# Managed Care Enrollment – 383,517\*

## ■ Eastern Region – 189,472\*

- *Harmony Health Plan of Missouri*
- *HealthCare USA*
- *Molina Healthcare of Missouri*

## ■ Central Region – 73,194\*

- *HealthCare USA*
- *Molina Healthcare of Missouri*
- *Missouri Care*

## ■ Western Region – 120,851\*

- *Blue-Advantage Plus of Kansas City*
- *Children's Mercy Family Health Partners*
- *HealthCare USA*
- *Molina Healthcare of Missouri*

\*source: state managed care provider inquiry (MPRI) screens, current to 08/01/08

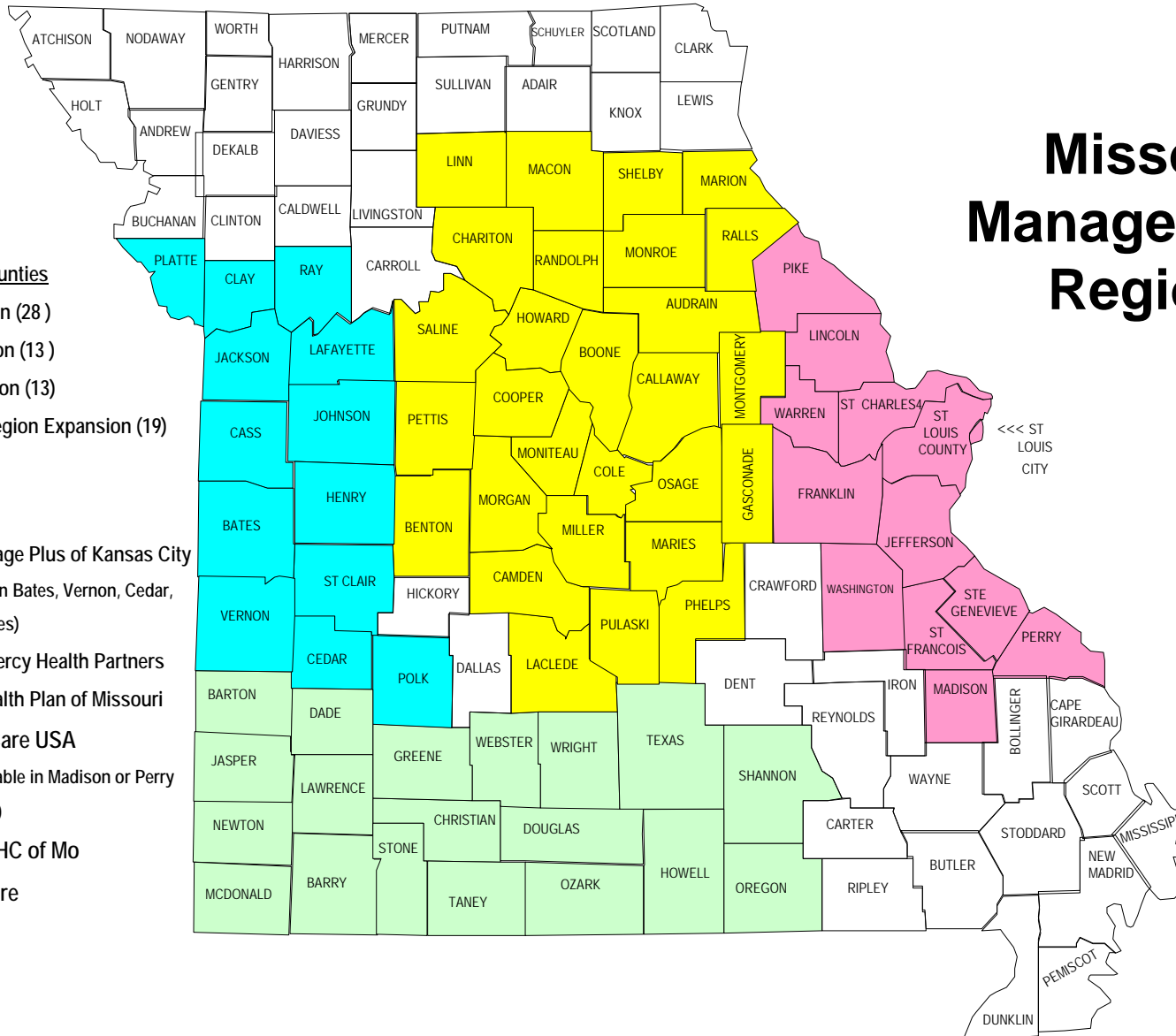
# Missouri Managed Care Regions

## Number of Counties

- Central Region (28)
- Eastern Region (13)
- Western Region (13)
- Southwest Region Expansion (19)

## Health Plans

- Blue-Advantage Plus of Kansas City  
(not available in Bates, Vernon, Cedar, or Polk Counties)
- Children's Mercy Health Partners
- Harmony Health Plan of Missouri
- ■ ■ HealthCare USA  
(not available in Madison or Perry Counties)
- ■ ■ Molina HC of Mo
- Missouri Care



# Who Can be in MoHealthNet Managed Care?

## ■ Not For:

- ❑ Permanent and Totally Disabled
- ❑ The Elderly

## ■ Covered Include:

- ❑ Children
- ❑ Pregnant Women
- ❑ Some Parents and Caretakers



# Benefits Summary

- **Primary and Specialty Physician Care**
- **Maternity**
- **Inpatient and Outpatient Hospital**
- **Mental Health**
- **Pharmacy**
- **Home Health**
- **Laboratory and Diagnostic**
- **Durable medical equipment (DME)**
- **And other services listed in contracts**

# **Additional Benefits**

**Health Plans can offer additional benefits. Examples of some approved additional benefits include:**

- **Circumcisions (non-medically necessary)**
- **Childbirth and breastfeeding classes**
- **Smoking cessation classes**
- **Cell phone program for high risk members**
- **Adult physical therapy if medically indicated**
- **Guest pass and waived joining fee at YMCA**

# Access and Quality

- **Few Tools to Improve these in Fee For Service (the current model)**
  - Beg, Cajole, Appeal to Altruistic Tendencies
  - Rate Increases
  - Public Reporting
  - Pay for Performance
- **Managed Care is only One Way to Improve - There are Other Ways**
  - ASO
  - Primary Care Case Management (PCCM)

# Quality Provisions

## ■ Service Standards

- Distance to get to a doctor
- Days to get an appointment (30 days or less)
- 24 hour telephone availability

## ■ Performance Standards

- Well-child visits
- Better Management of Difficult Pregnancy
- Healthcare Effectiveness Measures



# Member Satisfaction

- **Every Year Member Satisfaction Surveys**
- **During the past three years, member satisfaction has ranged between 75% and 81%**
- **Similar Score to those enrolled in Medicare Plans or Standard Insurance Plans**

# Concerns with Managed Care

- **Some Doctors and Others don't Like Health Plans being in their Business**
- **Not all Doctors and Others Measure up to Higher Standards and are not Included**
- **In the past we have not done as well as we could have in holding Health Plans fully Accountable to provide Services for People**

# So. . . . .

## What did we Hear?

### ■ **Springfield**

- ❑ **> 150 in Attendance**
- ❑ **Signed up in advance to give public comment**
- ❑ **Overwhelming majority behavioral health providers**
- ❑ **Two dental providers, one hospital**
  
- ❑ **Several requests that the Oversight Committee pass a resolution that a behavioral health provider be named to the Committee**
  
- ❑ **Uniform opposition to Managed Care:**
  - **Concerns from their patients' perspective**
  - **The administrative burden perspective**
  - **Their livelihood perspective**
  - **Recurring theme of limits on inpatient days**

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# So. . . . .

## What did we Hear?

### ■ Joplin

- Approx. 30 in Attendance
  - Signed up in advance to give public comment
  - Majority, but less so, were behavioral health providers
  
  - Similar concerns and points raised, with additional questions and comments:
    - Role of public health departments
    - Impact on hospitals of conversion in the FRA accounting
    - Questions about transportation to behavioral health services
    - Role of provisionally-licensed LPC's and LCSW's
    - ? ED utilization under Managed care vs FFS
-

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# So. . . . .

## What did we Hear?

### ■ Branson

- Approx. 15 in Attendance
  - Signed up in advance to give public comment
  - Mix of providers and elected officials!
  
  - Much more broad-based questions and comments:
    - What is the value of a corporate for-profit in the process?
    - How does Managed Care save the state money?
    - What is the impact on provider payment of restricted panels?
    - Urgent Care Centers within Managed Care?
    - How is substance abuse handled?
-

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# So. . . . .

## What did we Hear?

### ■ West Plains

- Approx. 30 in Attendance
  - Signed up in advance to give public comment
  - Broad-based mix of providers, some patients
  
  - Very broad-based questions and comments:
    - What value does Managed Care bring to rural communities, where providers are so very scarce?
    - Concern over administrative burden to small practices
    - Why is Managed Care a better deal for rural hospitals?
    - Impact on CMHC's and public health departments?
    - ? Demonstrated improvement on no-show rates
-

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# Take Home Points

- **Public Input is Always Valuable**
  - **No Champions for Managed Care Heard**
  - **Well-organized Behavioral Health Opposition**
  - **Perhaps Reflective of Public Sign-up Notice**
  - **Less-than-Desired Statements of “What We Have Now is Not Good Enough – the Status Quo Must be Improved”**
-

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# Next Steps

- **Oversight Committee Input**
  - **Meetings' Minutes to the Website for Review**
  - **Timing of ASO Roll-out**
  - **Transition Team and Incoming Legislative Opinion**
-



# Southwest Missouri is Beautiful Country





**Karen Edison, M.D.**

Dr. Karen Edison is an academic physician with expertise in health policy and telehealth. She served as Robert Wood Johnson Health Policy Fellow and then majority health policy staff for the Health Education Labor and Pensions (HELP) Committee in the United States Senate from 1999-2001, where she was instrumental in the legislative expansion of Medicare reimbursement for telemedicine services. She was a key member of the legislative team that drafted the reauthorization of the Community Health Center Programs and spent two years as key staff in a bipartisan coalition that developed the "Patient Safety and Quality Improvement Act", which was signed into federal law in 2005. She returned to Missouri in 2001 where her current titles include Philip C. Anderson Professor and Chair of the Department of Dermatology, Medical Director of the Missouri Telehealth Network, and Co-Director of the Center for Health Policy (CHP) at the University of Missouri in Columbia. As Co-Director of the CHP she has helped to lead work on health insurance access, telemedicine policy, and MO HealthNet data analysis, and has worked to improve health equity and ensure adequately health literacy for all Missourians.

# **Missouri Telehealth Network:**

*Advancing Healthcare through  
Telecommunications*

**November 18, 2008**

**Karen E. Edison, MD**  
**Chair, Department of Dermatology**  
**Medical Director, Missouri Telehealth**  
**Network**  
**Co-Director, Center for Health Policy**  
  
**University of Missouri**

- **Why we do it?**
- **How we do it?**
- **Lessons learned**

# **MTN aims to .....**

- enhance access to care to underserved and captive populations of Missouri,**
- provide educational opportunities for health care providers, and**
- further homeland security efforts related to disaster preparedness.**

# Why Telehealth?

- Health care providers are in short supply throughout Missouri
- Many patients have significant barriers to accessing health care
- The technology is more affordable and of better quality now



# Why do we do it?

- **Safety Net Hospital – care for uninsured and vulnerable populations**
- **Location – largely rural practice**
- **Academic mission – obligation to find ways to deliver high quality care at lower cost**

# Rural Populations

- **Nearly one-third of Missouri's population lives in rural areas**
- **In comparison with urban Missourians, rural residents have**
  - **Higher poverty rates**
  - **A larger percentage of elderly**
  - **Tend to be in poorer health**
  - **Have fewer physicians, hospitals, and other health resources**
  - **Face more difficulty getting to health services**

Diagnosing and treating  
disease early saves patients  
from suffering and saves  
money

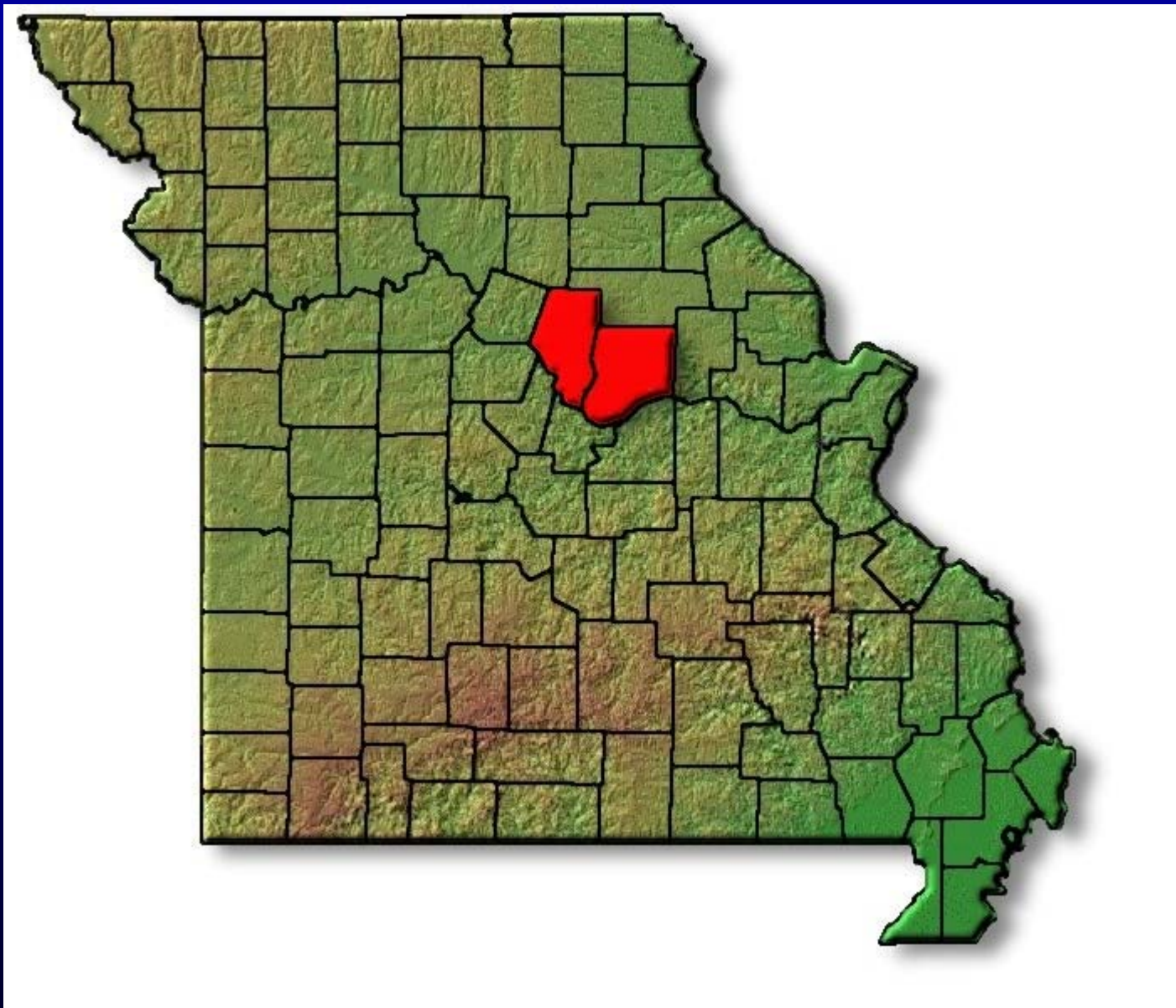
## How does it work?

- **A semi-private network using the Internet Protocol (IP) to deliver two way interactive audio and video for clinical encounters**
- **on the Missouri Research and Education Network (MOREnet)**

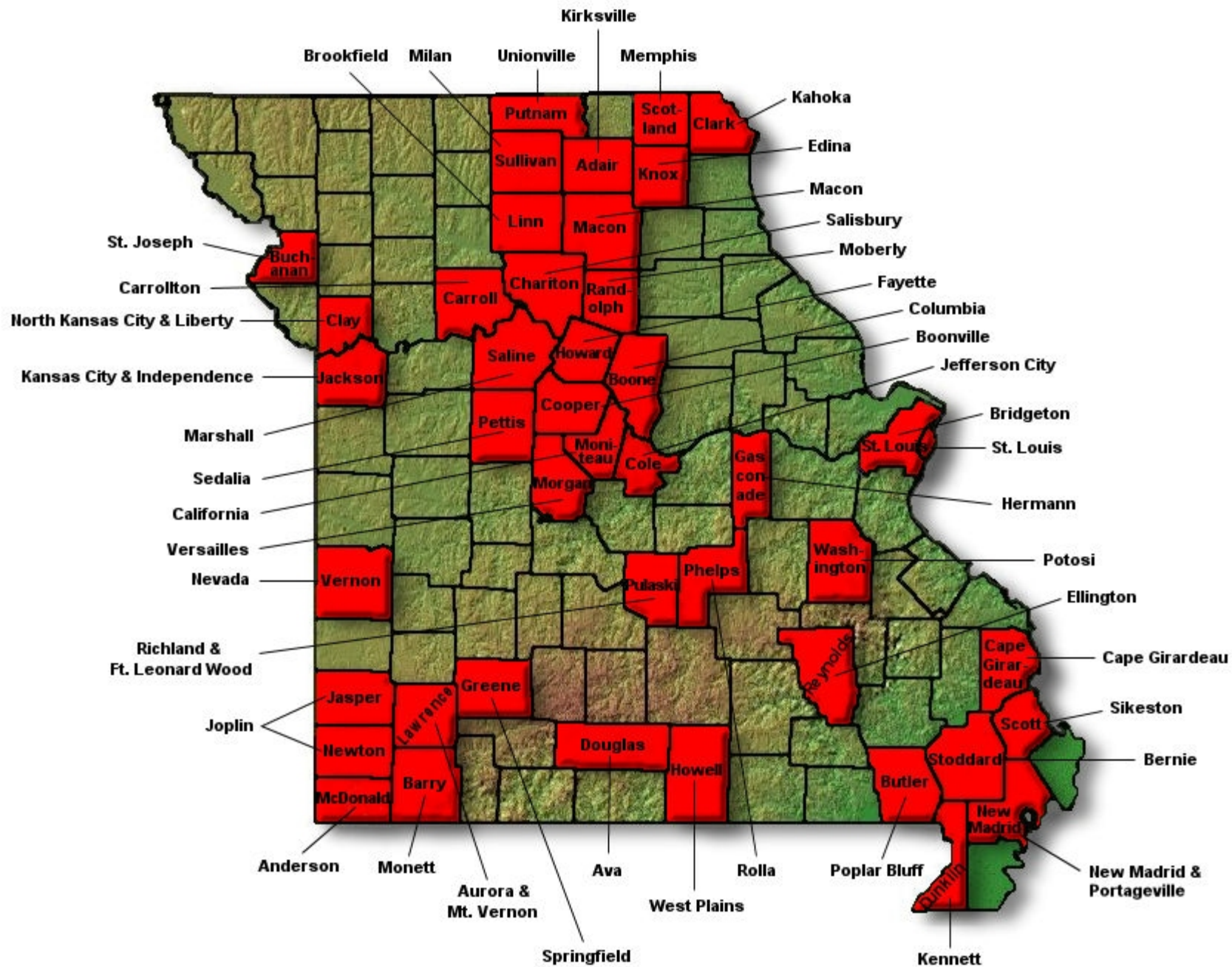
# The Missouri Telehealth Network

- **Broadband Connections**
- **Any site can call any other site directly**
- **It is now integrated into the everyday practice medicine**

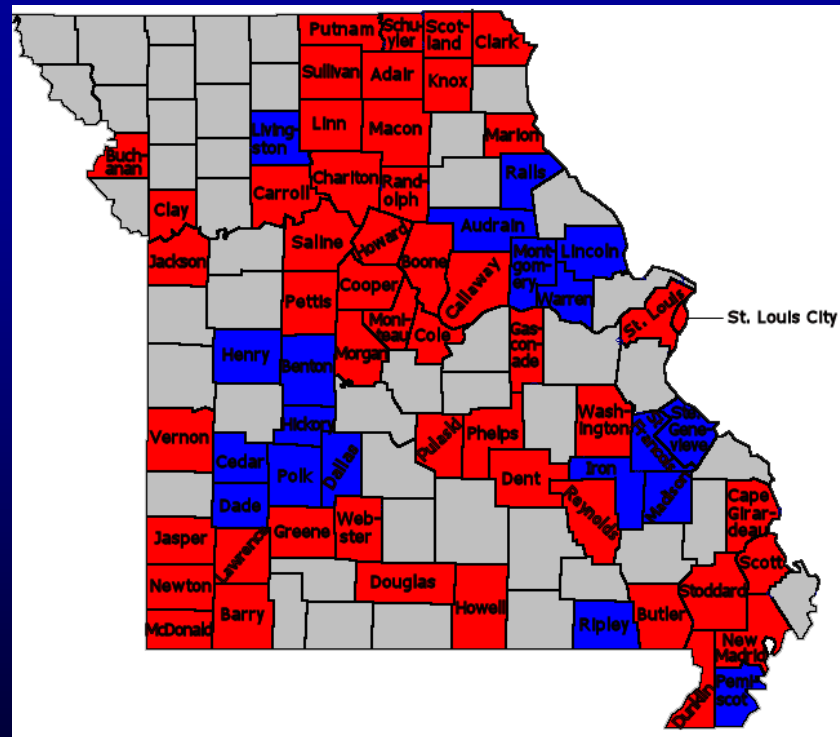
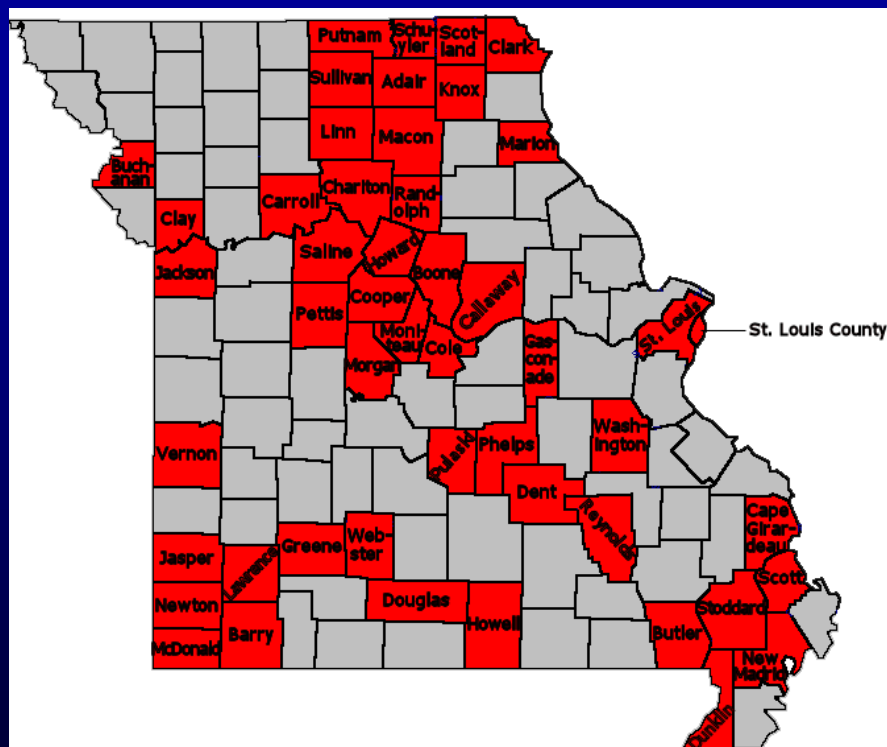
# MTN - 1995







# Current MO Telehealth Coverage and Planned Expansion by County





# FCC pilot

- **Missouri received \$2.3 M**
- **MTN & Pathways**
- **3 year project**
  - **Discounts line charges**
  - **Builds out networks**
- **No funds for operations**
- **MOREnet – creating dedicated health care network – 2G**

- **35 Hospitals**
- **27 Federally Qualified Health Care Centers**
- **12 Community Mental Health Centers**
- **14 Specialty Medical Clinics**
- **1 Cancer Hospital**
- **3 Rural Health Clinics**
- **2 Rehab Hospitals**
- **2 Schools of Medicine**
- **2 Mental Health Hospitals**
- **1 Army Hospital**
- **2 Nursing Home**
- **1 State Habilitation Center**
- **1 School of Nursing**
- **1 School of Health Professions**
- **1 Center for Health Ethics**

# Today's Environment



# Equipment

- Patient site or provider site
- Approx. \$9000 for Polycom, monitor, cart and 3 yr service agreement
- Mobile for use in multiple rooms

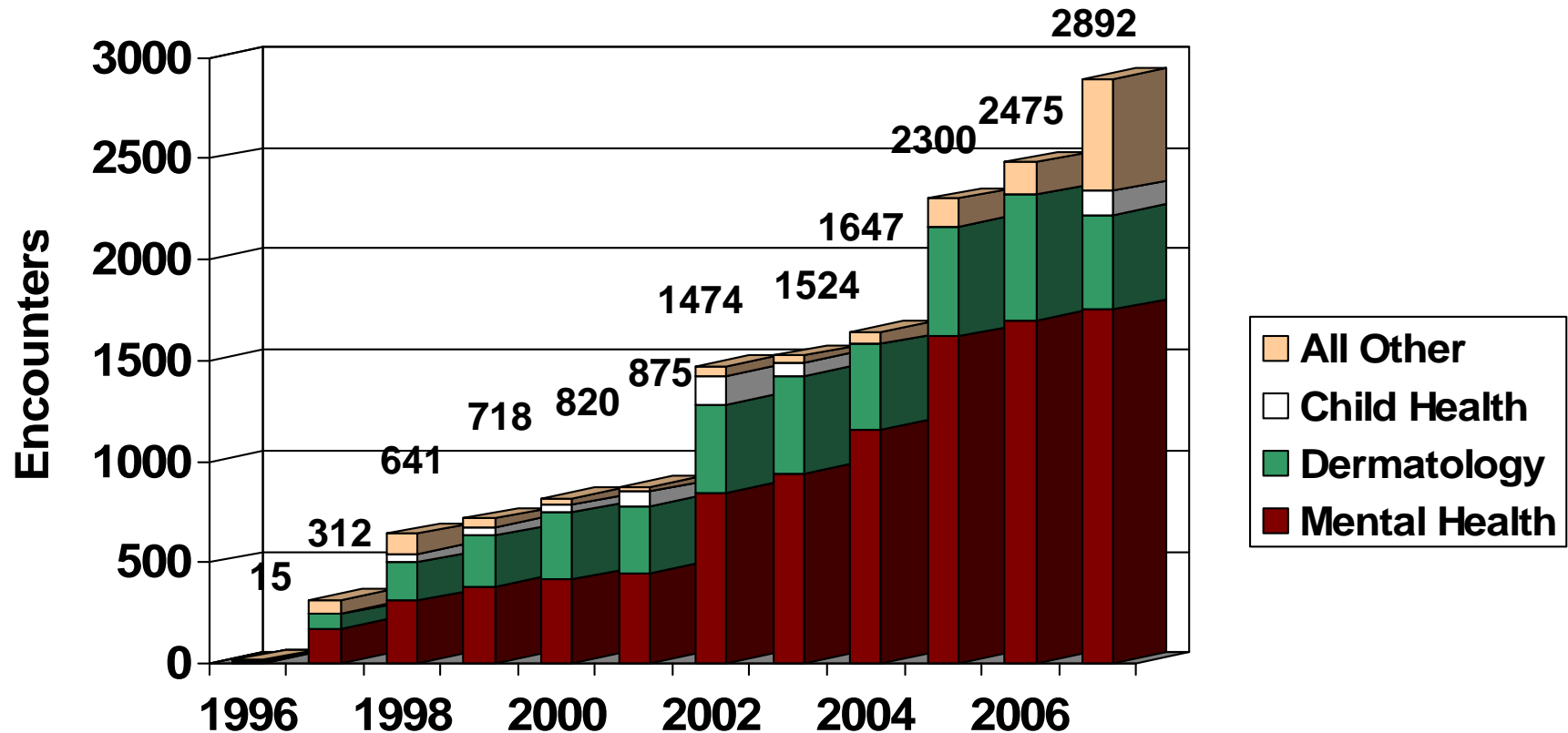


# Equipment

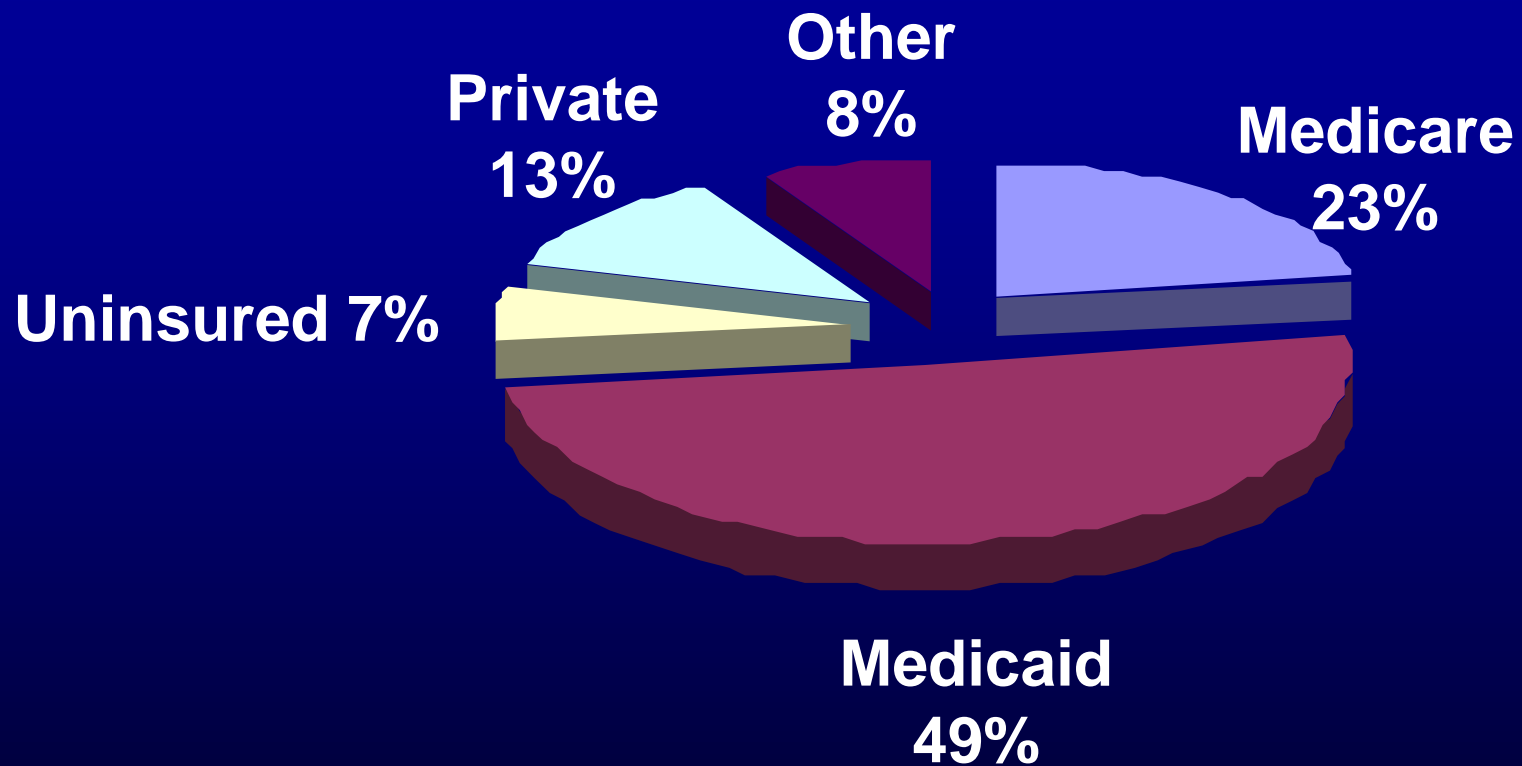
- **Provider site**
- **\$6620 Polycom HDX4000**
- **With 3 year service agreement**
- **Operates as Polycom and computer monitor**



# Interactive Encounters 1996 – 2007



# Telehealth Consultations by Payer Type



To date, more than 15,693  
interactive video encounters in  
15 specialties and 90,660  
teleradiology exams have been  
conducted.



- **Psychiatry**
- **Dermatology**
  - Peds derm
- **Radiology**
- **Neurology**
- **Child Psychiatry**
- **Orthopedic surgery**
- **ENT**
- **Vascular surgery**
- **Onc/surgery**
- **Rheumatology**
- **Gastroenterology**

- **Endocrinology**
- **Autism**
- **Genetics**
- **Burn Clinic**
- **Pediatric Specialty**
- **Burn Clinic**
- **Trauma**
- **Ethics Consultations**
- **Home Care**
  - Dz management
  - Hospice
  - Wound Care

Care for captive or difficult  
to transport patients

# Marshall Habilitation Center

- **90-95% Medicaid**
- **400 severely and permanently disabled**
- **Psychiatry, dermatology, neurology, and general surgery telehealth visits**
- **So far, total transports avoided - 479 with a savings over \$200K.**
- **Better Quality at Lower Cost**

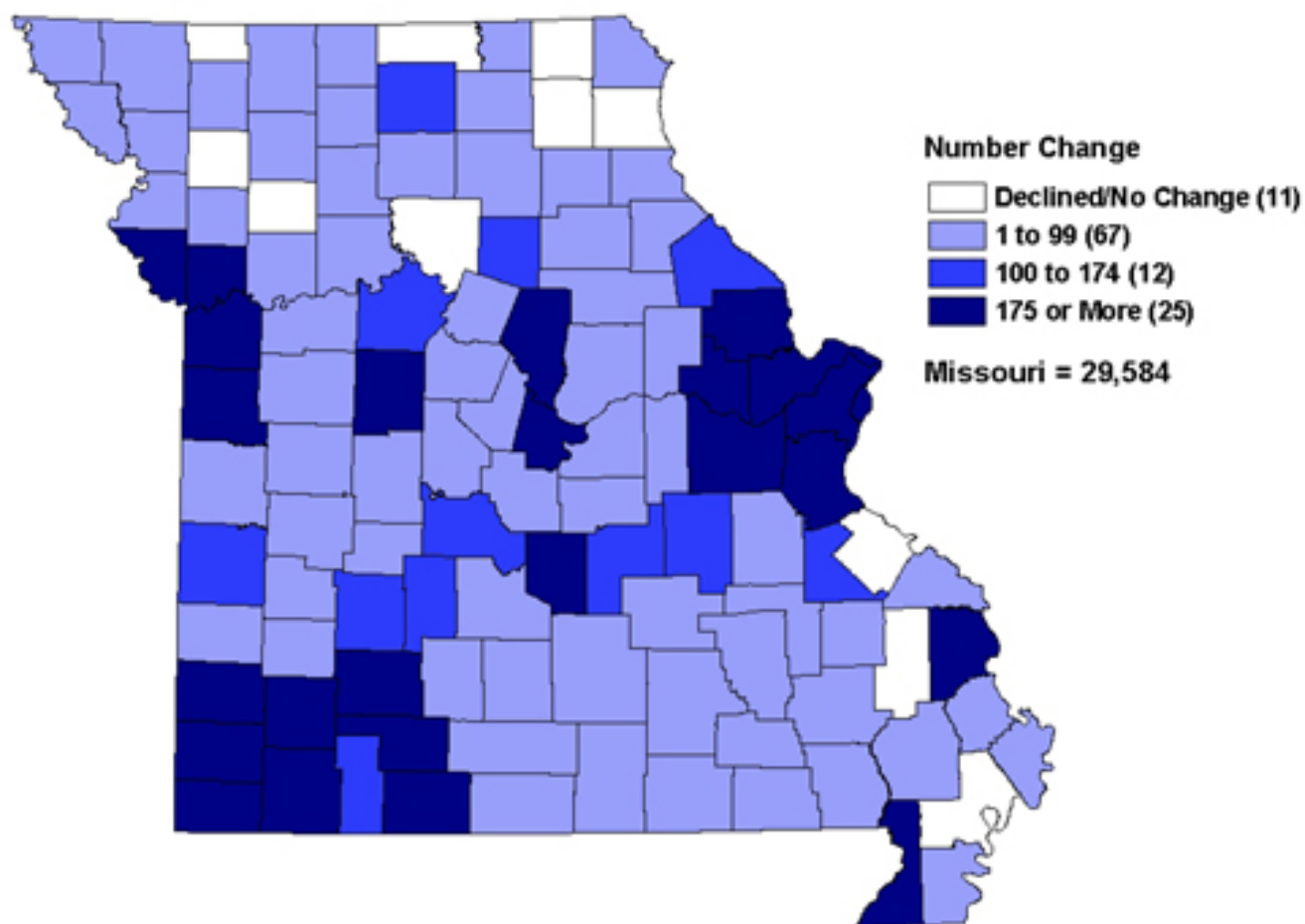
**Using technology to meet our  
growing health care challenges**

- **Aging population**
- **Health care workforce shortage and maldistribution**
- **Racial/ethnic health care equity**
  - **Cultural competency and low English proficiency**
- **Bioterror and emerging infectious disease preparedness**

**Tele-interpretation**

**Rapidly growing service**

## Change in Hispanic Population in Missouri, 2000-2004



Source: USDC, Census Bureau, Federal State Cooperative for Population Estimates  
Prepared by: University of Missouri Extension, The Office of Social and Economic Data Analysis - (OSEDa)  
Map Generated on 08.11.2005

# **Bioterror and emerging infectious disease preparedness**



- **Level 5 – full integration of telehealth with EMR**
  - **Level 4 – Hybrid telehealth**
  - **Level 3a – Live interactive telehealth**
    - **3b – Store-and-Forward telehealth**
  - **Level 2 – Email, fax**
  - **Level 1 – Snail mail, telephone**
- 

**The Value of Provider-to-Provider  
Telehealth Technologies, C!TL - 2007**



## Canon Optura 600

Video/Still camera with a resolution of 4 megapixels for still images.



# **Why do we love the hybrid model of teledermatology?**

- **Closely mimics in person care**
- **Allows for develop of the doctor/patient relationship**
- **Sometimes you need to talk to the patient**

# **Lessons Learned**

- **Telemedicine is simply a tool used to deliver health care at a distance**
- **Use the experts!**
- **It must be integrated into the everyday way health care providers practice**

**People are more important  
than the technology**

# MTN Team

- **Weldon Webb, Director of Rural Health Programs**
- **Karen Edison, Medical Director**
- **Rachel Mutrux, Director**
- **Pamela Kelly, Assistant Director**
- **Mirna Becevic, Clinical Coordinator**
- **Kyna Bylerly, Clinical Coordinator**
- **Mary Beth Schneider, Training Coordinator**
- **Deb Denham, Administrative Associate**
- **Shanda Cash, Administrative Assistant**
- **Mark Fairley, Head technical dude**
- **Aaron Woolridge, User Support Analyst**

# Who Funds Telemedicine?

- Medicare reimburses if the patient is in rural area in an approved originating site.
- MO Health Net reimbursement begins soon.....
- Many private insurers provide telehealth reimbursement coverage.
- Missouri Foundation for Health funded visits for the uninsured if in their service area until earlier this summer.

**Who Benefits the Most?**

**The PATIENT**

**&**

**The Taxpayer**



# Savings to Patients in FY08

	MO HealthNet Patients	All Patients
Number of Trips	764	2,892
Number of Miles	140,748	<b>577,272</b>
Total Dollars	\$82,337	<b>\$337,704</b>

**“... Telehealth provides a huge savings for our family! My husband takes off a day of work for these trips...**

**The trip to Columbia is 3 1/2 hours one way for our family. The price of gas, food, etc. makes these trips very difficult at times.**

**Thank you for providing this cost effective alternative!”**

# Our Dream.....

Every person will have access  
to quality health care –  
delivered by the appropriate  
provider, in a timely and  
affordable manner, no matter  
where they choose to live.



## **Collodion baby**

**lamellar ichthyosis or non-bullous congenital  
ichthyosiform erythroderma**

## **Management**

**emollients and humidified incubator until the  
“membrane” has time to shed - then  
aggressive emollient use**

## **Monitor for overheating**

**sweating is usually impaired and this is a hot  
climate**

# **Future directions for MTN**

- **Collaborating with other systems/partners**
  - St. Luke's, Pathways, Citizen's Memorial
  - Div. of Youth Services, MHD managed care
- **Tele-interpretation**
- **Diabetic retinopathy screening**
- **Telestroke**

- **Telecorrections**
- **School based telehealth**
- **TeleICUs**
- **High risk OB**
  - **ANGELS in Arkansas**
- **Funding for uninsured**

# Premature Births in Missouri

- **The March of Dimes' Premature Birth Report Card**
  - “Healthy People 2010” objective -  $< 7.6\%$
- **Missouri's grade in 2008 = F**
  - Preterm birth rate is 13.3%, 34<sup>th</sup> in the nation
  - MO HealthNet covers 46.82% of all births in Missouri



# Arkansas: ANGELS model to improve obstetrical care

Utilizes statewide telehealth and clinic network, provides education and support for obstetric providers, case management services, 24-hour call center, and evidence-based guidelines development and distribution

Collaboration between Arkansas Medicaid and the University of Arkansas for Medical Sciences

# **Missouri Telehealth Roundtable**

# The objectives...

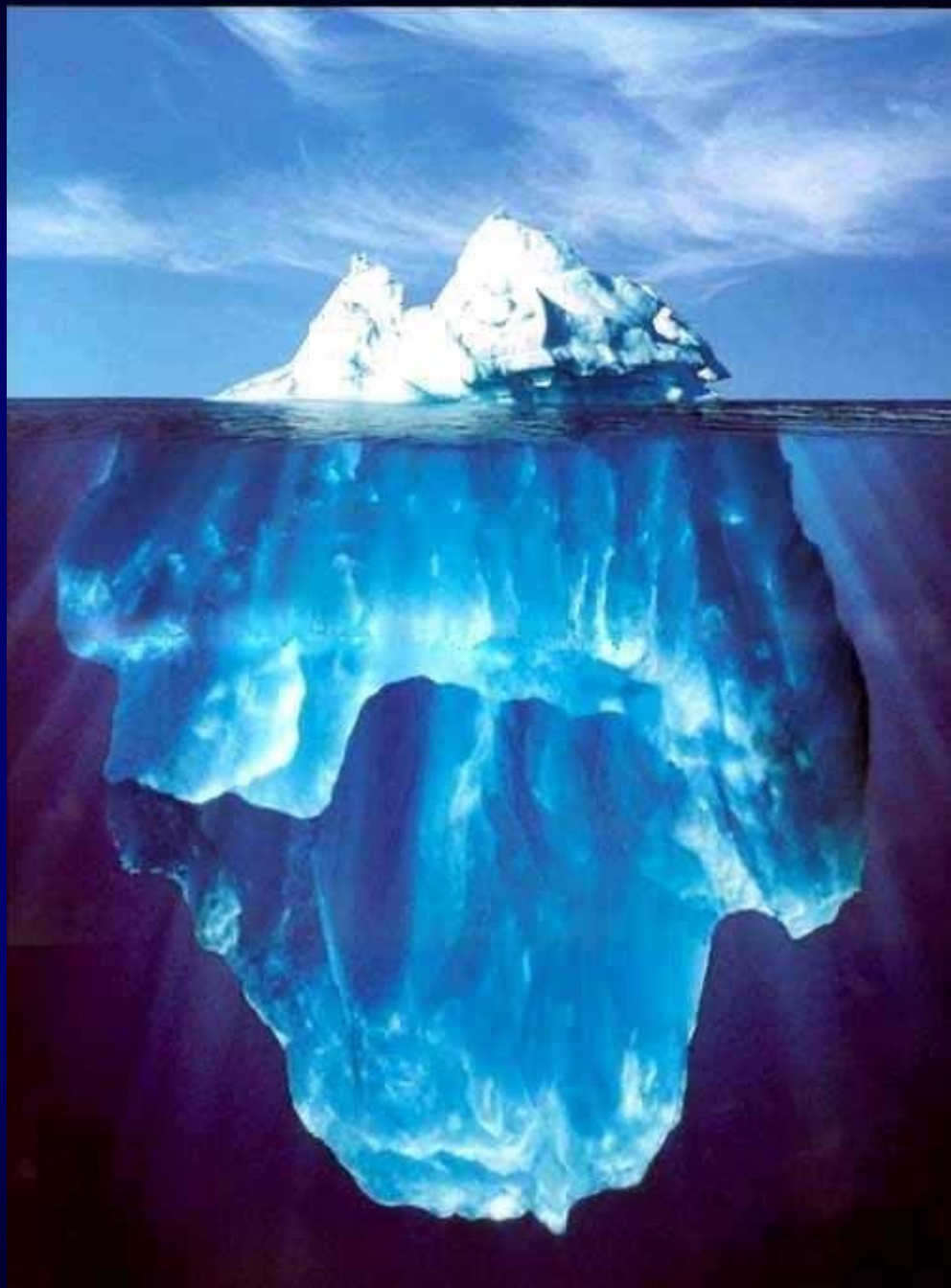
- **assessing current telehealth activity in Missouri;**
- **reviewing recent and pending state and federal telehealth legislation;**
- **developing and propose state telehealth legislation and public policy; and**
- **reviewing and discussing current and future state of telehealth infrastructure in the state**

# Missouri Telehealth Roundtable

- |                    |                             |
|--------------------|-----------------------------|
| • Rachel Mutrux    | Missouri Telehealth Network |
| • Bill Mitchell    | MOREnet                     |
| • Dan Ross         | MO OA                       |
| • Debbie Nolan     | MO DHSS                     |
| • Denni McColm     | Citizen's Memorial Hospital |
| • Dennis Canote    | Pathway's Behavioral Health |
| • George Oestreich | MO DSS                      |
| • Janice Pirner    | MPCA                        |
| • John Heard       | NEMTN, ATSU                 |
| • Keith Crumley    | Army, National Guard        |
| • Kevin Cagg       | Heartland Health            |

# Missouri Telehealth Roundtable

- **Leslie Porth** MHA
- **Mark Stansberry** BJC
- **Mike Caputo** Wash U
- **Pamela Kelly** Missouri Telehealth Network
- **Paul Monda** MO DHSS
- **Robert Donnelly** MO DED
- **Robert Reitz** MO DMH
- **Steve Kropp** St. Luke's
- **Weldon Webb** Missouri Telehealth Network
- **Bruce Horwitz** University of Missouri
- **Ben Colley** MOREnet
- **Karen Edison** Missouri Telehealth Network



**The technology tidal wave  
will not stop**

**We can let it overtake us or we  
can use it to improve the care  
we deliver to our patients**

**It is our choice**

# Questions?





# *Missouri Revised Statutes*

## **Chapter 208** **Old Age Assistance, Aid to Dependent Children and General Relief** **Section 208.978**

August 28, 2008

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### **Report on fund--recommendations--expiration date.**

208.978. 1. The MO HealthNet oversight committee shall develop and report upon recommendations to be delivered to the governor and general assembly relating to the expenditure of funds appropriated to the health care technology fund established under section 208.975.

2. Recommendations from the committee shall include an analysis and review, including but not limited to the following:

(1) Reviewing the current status of health care information technology adoption by the health care delivery system in Missouri;

(2) Addressing the potential technical, scientific, economic, security, privacy, and other issues related to the adoption of interoperable health care information technology in Missouri;

(3) Evaluating the cost of using interoperable health care information technology by the health care delivery system in Missouri;

(4) Identifying private resources and public/private partnerships to fund efforts to adopt interoperable health care information technology;

(5) Exploring the use of telemedicine as a vehicle to improve health care access to Missourians;

(6) Identifying methods and requirements for ensuring that not less than ten percent of appropriations within a single fiscal year shall be directed toward the purpose of expanding and developing minority-owned businesses that deliver technological enhancements to health care delivery systems and networks;

(7) Developing requirements to be recommended to the general assembly that ensure not more than twenty-five percent of appropriations from the health care technology fund in any fiscal year shall be contractually awarded to a single entity;

(8) Developing requirements to be recommended to the general assembly that ensure the number of contractual awards provided from the health care technology fund shall not be fewer than the number of congressional districts within Missouri; and

(9) Recommending best practices or policies for state government and private entities to promote the adoption of interoperable health care information technology by the Missouri health care delivery system.

3. The committee shall make and report its recommendations to the governor and general assembly on or before January 1, 2008.

4. This section shall expire on April 15, 2008.

(L. 2007 S.B. 577)

Expires 4-15-08

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