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42ND NATIONAL COUNCIL
mentalhealthandaddictions
C O N F E R E N C E

Missouri : Making the Business Case for Collaborative Care

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History

- > Chronic Care Improvement Program (CCIP)
 - January, 2007- July 2008
- > CMHC Care Coordination and Disease Management (DMHNET)
 - July 2008 – January 2011
- > DM 3700 Out Reach
 - November, 2010 - ongoing
- > Health Care Homes
 - January 2011 - ongoing



CCIP Statewide

- > Community Mental Health Centers have approved 10% of the healthcare home plans of care in the State Medicaid program.
- > Care Coordination with more than 35,000 patient histories have been reviewed in CyberAccess.
- > More than 70% of patients have had a primary care visit within a 12-month period, according to claims; sampled chart review indicates a higher percentage (3 agency sample over 90%).
- > Outcomes review of Missouri Psychiatric Rehabilitation programs indicates substantial off-trend cost savings for the overall healthcare cost after admission to the program.



CCIP CMHC DISEASE MANAGEMENT

- > Clients were Medicaid enrolled with a CCIP eligible medical diagnosis and a serious mental illness enrolled in a CMHC, but may or may not have been enrolled in CCIP.
- > Clients received Psychiatric Rehabilitation services if they were eligible for those services.
- > Average Medicaid annual medical cost for the clients was \$18,672 per year.



A Typical Enrollee

- > 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

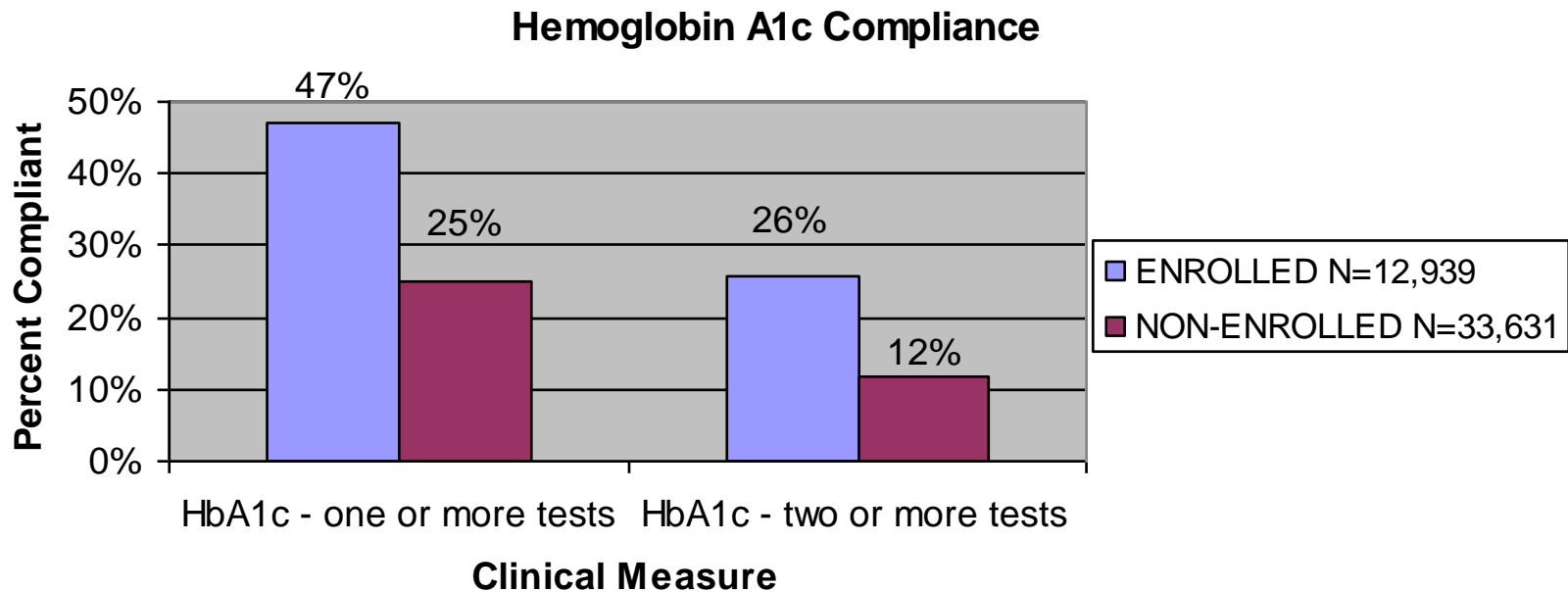
Continuously Enrolled 7/1/2007 - 6/30/2008

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%

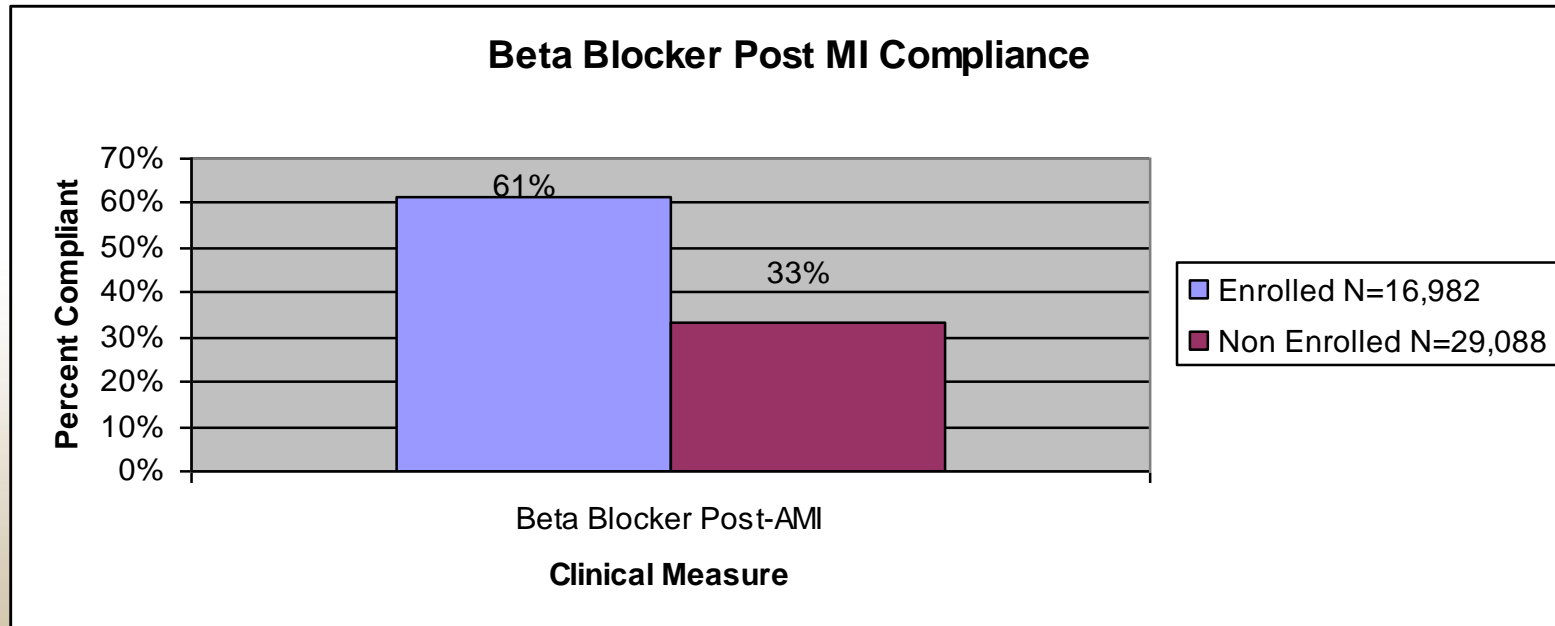
*Includes co-morbid conditions

Missouri CCIP Diabetes Outcomes



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 Coronary Artery Disease (CAD) Outcomes

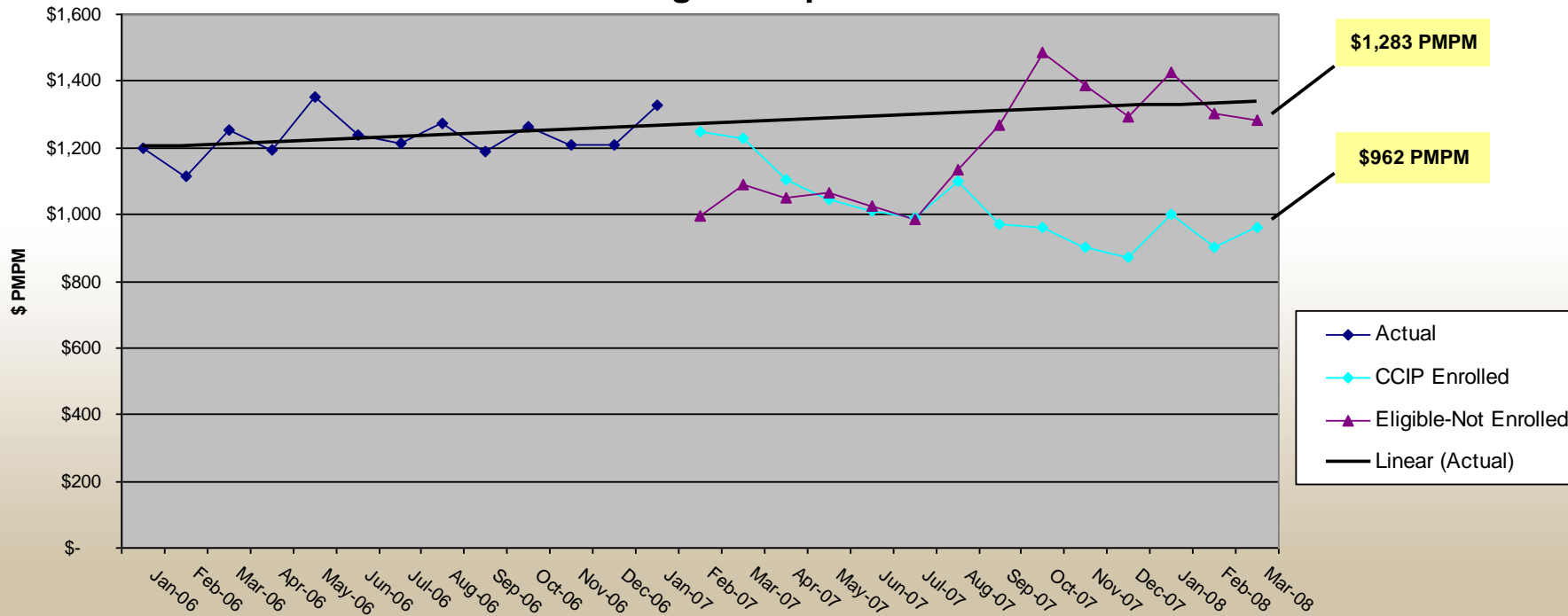


CCIP enrollees with coronary artery disease (CAD) received recommended treatment with beta blocker medications at nearly twice the rate of non-enrollees.



Trend Analysis of Total Costs

MO HealthNet Average Total Monthly Costs for CCIP Disease Eligible Population

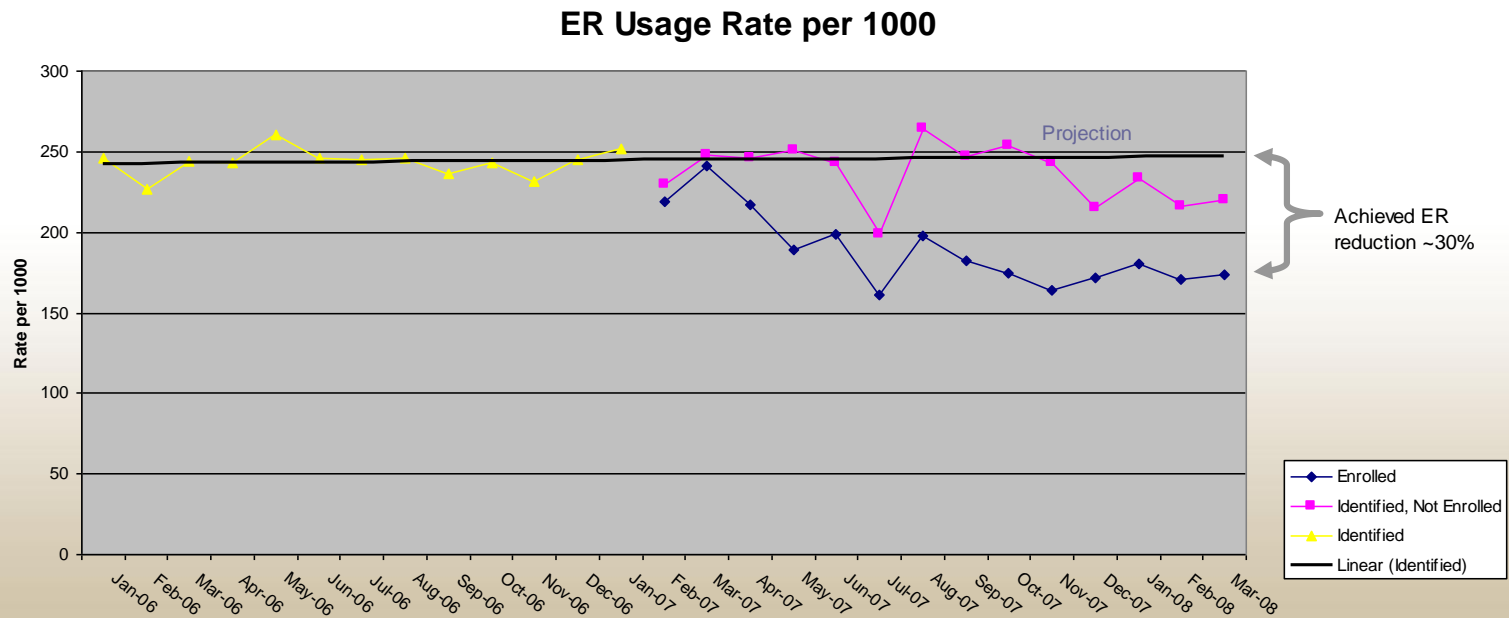


Average Total Monthly Costs for CCIP-enrolled participants were below projection.

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



Cost Savings for clients in CMHCs

Base Period (CY2006)	\$1,556
Expected Trend	16.67%
Expected Trend with no Intervention	\$1,815.81
Actual PMPM in Performance Period (FY2007)	\$1,504.34
Gross PMPM Cost Savings	\$311.47
Lives	6,757
Gross Program Savings	\$25,254,928
Vendor Fees	\$1,301,560
Net Program Savings	\$23,953,368
NET PMPM Program Savings	\$295.41
Net Program Savings/(Cost) as percentage of Expected PMPM	16.3%



CMHC Savings Off Trend

Category	pre CMHC-CM	post CMHC-CM	Net Change	Percent Change
Pharmacy	\$39,367,496	\$30,154,143	(\$9,213,352)	-23.4%
General Hospital	\$23,140,172	\$21,546,466	(\$1,593,706)	-6.9%
Psych Rehab	\$35,378,951	\$37,467,731	\$2,088,780	5.9%
Psychologist	\$463,069	\$144,434	(\$318,635)	-68.8%
Independent Clinic	\$3,549,715	\$4,324,452	\$774,738	21.8%
Overall	\$101,899,402	\$93,637,226	(\$8,262,176)	-16.0%



Medicaid Cost Savings for the 6,757 people

- > OFF TREND SAVINGS OF \$25 million annually.
- > Actual Pharmacy services decreased by \$9.2 million annually or 23%
- > Actual General Hospital services decreased by \$1.5 million or 6.8%
- > Actual Primary Care services increased by \$774,000 or 21%



DMHNET HEIDIS Indicators

- > DM1: Use of inhaled corticosteroid medications by persons with a history of COPD (chronic obstructive pulmonary disease) or Asthma.
- > DM2: Use of ARB (angiotensin II receptor blockers) or ACEI (angiotensin converting enzyme inhibitors) medications by persons with a history of CHF (congestive heart failure).
- > DM3: Use of beta-blocker medications by persons with a history of CHF (congestive heart failure).
- > DM4: Use of statin medications by persons with a history of CAD (coronary artery disease).
- > DM5: Use of H2A (histamine 2-receptor antagonists) or PPI (proton pump inhibitors) medications for no more than 8 weeks by persons with a history of GERD (gastro-esophageal reflux disease).



DMH NET Results

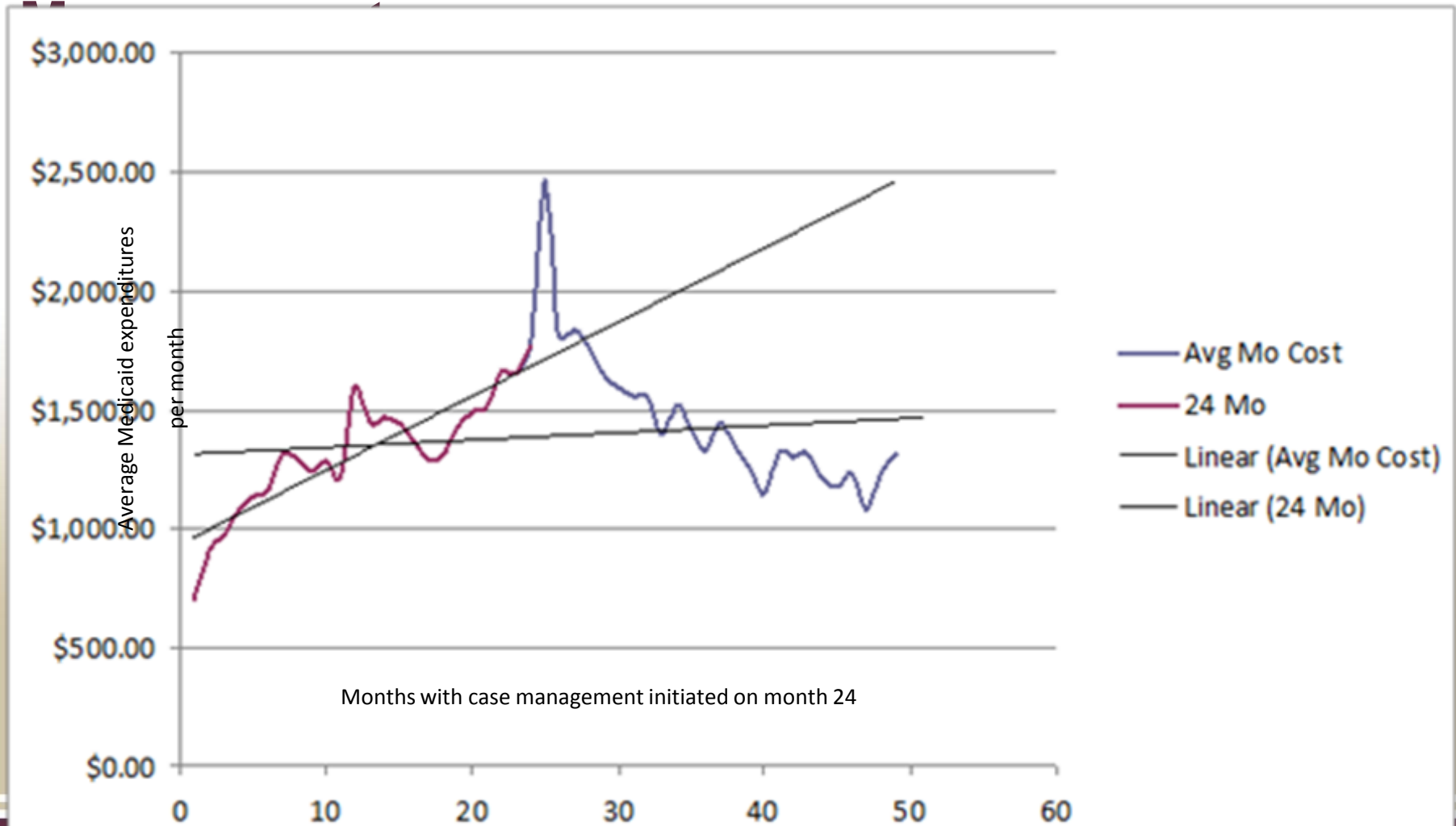
- > Provide specific lists of CMHC clients with care gaps as identified by HEIDIS indicators to CMHC primary care nurse liaisons quarterly
- > Provide HEIDIS indicator/disease state training on standard of care to CMHC MH case managers
- > First quarter focus on indicator one-asthma substantially reduced percentage with care gap
 - Range 22% - 62% reduction
 - Median 45% reduction



Total Healthcare Cost Trend Pre-/Post CMHC Enrollment

- > Selection Criteria – 636 persons identified
 - Newly enrolled in CMHC case management
 - At least nine months of Medicaid claims in each of the preceding two years and two years following CMHC enrollment
- > Methodology
 - Calculate total monthly Medicaid costs PMPM 424 months pre and post-enrollment
 - month zero is 24 months prior to enrollment, month 24 is the month of enrollment, 148 is 24 months after enrollment
 - Calculate linear regression trend lines

Total HealthCare Utilization Per User Per Month Pre and Post Community Mental Health Case





CMHC Outcomes comparing admission to annual assessments

- > Independent Living increased by 33%
- > Vocational Activity increased by 44%
- > Legal Involvement decreased by 68%
- > Psychiatric Hospitalization decreased by 52%
- > Illegal Substance use decreased by 52%
- > IN ADDITION- Study shows CMHCs services substantially decrease overall medical cost



Disease Management 3700 Initiative

- > DM 3700 is a collaborative, two-year project between the DMH and MO HealthNet, beginning November 1, 2010.
- > Targets high cost Medicaid consumers who have a chronic physical health condition and an identified mental health condition.





Change in Business Model

> old model

- Client, family, or healthcare referral makes a call if the consumer seeks services, and they have to be evaluated for eligibility to receive services.

> **New Model**

- High cost, high risk outreach to selected consumers that the payer has selected for services.





Old Model



NEW Model





Target Population

- > \$25,000 minimum cost for previous 12 months or risk predicted to have high cost
- > A diagnosis of schizophrenia, schizoaffective disorder, bipolar disorder, or recurrent major depression
- > Not a consumer of public mental health system in previous 12 months
- > Excluded nursing home, developmental disability, hospice and renal failure
- > Average cost of group over \$50,000 per year

Physical Health Demographic

35% COPD

34% Asthma

32% Diabetes

11% Congestive Heart Failure (CHF)





Cost Savings Including Cost of Intervention

- > 1298 clients enrolled for over 6 months
 - \$346 PMPM actual cost savings
 - \$5.4 Million annualized
 - \$619 PMPM **trended** cost savings
 - \$9.6 Million annualized



Discussion





Discussion