

Advisory Committee on Interdisciplinary, Community-Based Linkages

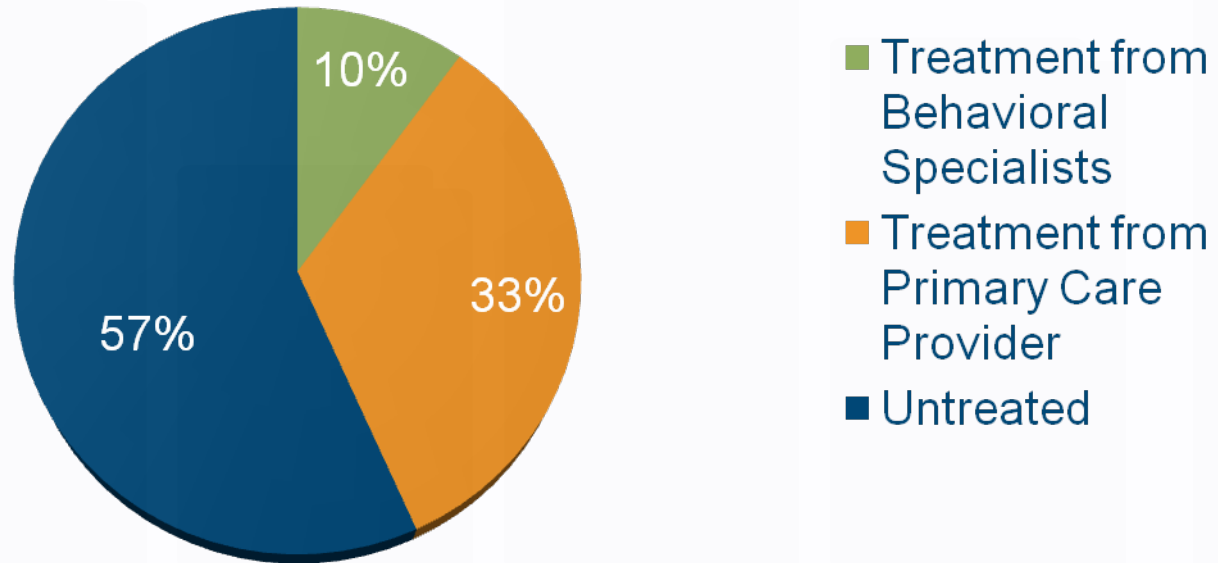
*Provider Payment reform to support integrated
health/behavioral health*

An Actuary's Perspective

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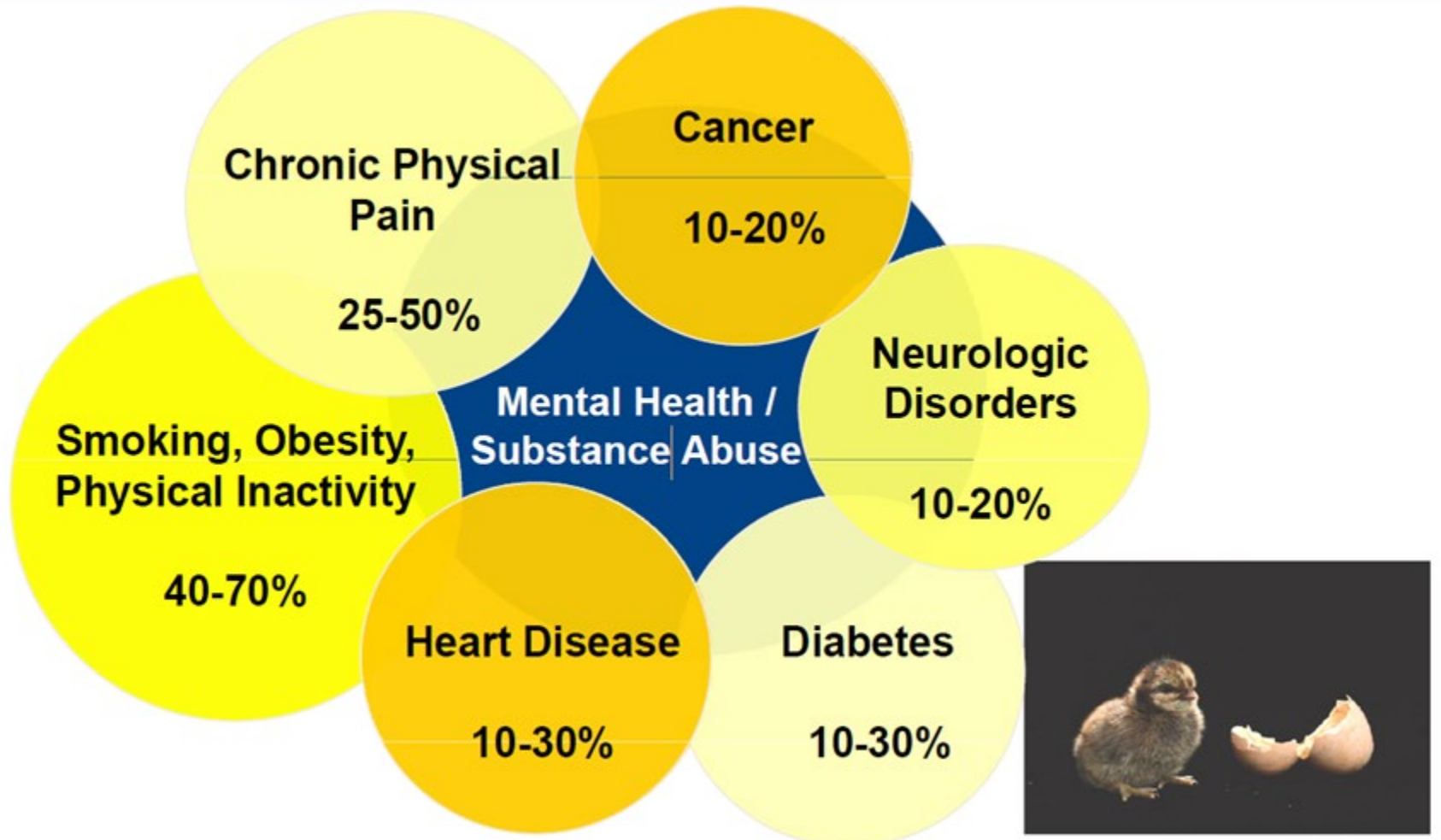
Treatment of Behavioral Conditions

Americans Suffering From a Diagnosable Behavioral Disorder



Source: Kathol and Gatteau – Healing Mind and Body, 2007

Prevalence of Co-morbidities



Unützer, Jürgen. Integrated Behavioral Health Care. Powerpoint Presentation. Seattle , Washington. May 2, 2011.

Findings from an Analysis of Comorbid Chronic Medical & Behavioral Conditions in Insured Populations

- Basis for analysis was detailed claim and membership files for Commercial, Medicare and Medicaid populations
- Commercial and Medicare populations were divided into 4 cohorts:
 1. No MH/SUD
 2. Non-SPMI MH
 3. SPMI
 4. SUD
- Total spending and per member per month (PMPM) costs were separated between Medical, Medical Rx, Behavioral, and Behavioral Rx

Actuarial Analysis of Comorbid Chronic Medical & Behavioral Conditions in Insured Populations - 2017

POPULATION	BEHAVIORAL HEALTH DIAGNOSIS	MEMBER MONTHS	MEDICAL	BEHAVIORAL	MEDICAL RX	BEHAVIORAL RX	TOTAL
COMMERCIAL	<i>NO MH/SUD</i>	1,674,000,000	\$327	\$3	\$90	\$6	\$426
	<i>NON-SPMI MH</i>	246,000,000	\$765	\$33	\$246	\$65	\$1,109
	<i>SPMI</i>	85,000,000	\$700	\$119	\$176	\$159	\$1,154
	<i>SUD</i>	30,000,000	\$980	\$153	\$214	\$73	\$1,420
	<i>TOTAL</i>	2,021,000,000	\$399	\$12	\$113	\$19	\$543
MEDICARE	<i>NO MH/SUD</i>	597,000,000	\$736	\$4	<i>N/A</i>	<i>N/A</i>	\$740
	<i>NON-SPMI MH</i>	23,000,000	\$1,899	\$52	<i>N/A</i>	<i>N/A</i>	\$1,951
	<i>SPMI</i>	31,000,000	\$1,872	\$219	<i>N/A</i>	<i>N/A</i>	\$2,091
	<i>SUD</i>	11,000,000	\$1,943	\$242	<i>N/A</i>	<i>N/A</i>	\$2,185
	<i>TOTAL</i>	656,000,000	\$839	\$16	<i>N/A</i>	<i>N/A</i>	\$855
MEDICAID	<i>NO MH/SUD</i>	577,000,000	\$391	\$6	\$90	\$7	\$494
	<i>MH/SUD</i>	144,000,000	\$957	\$380	\$243	\$128	\$1,708
	<i>TOTAL</i>	721,000,000	\$504	\$81	\$121	\$31	\$737
TOTAL	<i>NO MH/SUD</i>	2,848,000,000	\$425	\$4	\$90	\$6	\$525
	<i>MH/SUD</i>	551,000,000	\$923	\$149	\$230	\$98	\$1,400
	<i>TOTAL</i>	3,399,000,000	\$506	\$28	\$115	\$22	\$671

Actuarial Analysis of Comorbid Chronic Medical & Behavioral Conditions in Insured Populations – 2017

Costs (millions)

POPULATION	BEHAVIORAL HEALTH DIAGNOSIS	MEDICAL	BEHAVIORAL	MEDICAL RX	BEHAVIORAL RX	TOTAL
COMMERCIAL	<i>NO MH/SUD</i>	\$546,567	\$5,723	\$151,010	\$9,210	\$712,510
	<i>NON-SPMI MH</i>	\$188,311	\$8,054	\$60,595	\$16,020	\$272,980
	<i>SPMI</i>	\$59,185	\$10,093	\$14,907	\$13,442	\$97,627
	<i>SUD</i>	\$29,157	\$4,540	\$6,362	\$2,164	\$42,223
	<i>TOTAL</i>	\$805,447	\$24,795	\$228,992	\$38,959	\$1,098,193
MEDICARE	<i>NO MH/SUD</i>	\$439,163	\$2,145	<i>N/A</i>	<i>N/A</i>	\$441,308
	<i>NON-SPMI MH</i>	\$42,859	\$1,165	<i>N/A</i>	<i>N/A</i>	\$44,024
	<i>SPMI</i>	\$58,535	\$6,865	<i>N/A</i>	<i>N/A</i>	\$65,400
	<i>SUD</i>	\$20,882	\$2,602	<i>N/A</i>	<i>N/A</i>	\$23,484
	<i>TOTAL</i>	\$550,751	\$10,455	<i>N/A</i>	<i>N/A</i>	\$561,206
MEDICAID	<i>NO MH/SUD</i>	\$225,370	\$3,442	\$51,839	\$4,270	\$284,921
	<i>MH/SUD</i>	\$138,067	\$54,820	\$35,093	\$18,422	\$246,402
	<i>TOTAL</i>	\$363,437	\$58,263	\$86,932	\$22,692	\$531,324
TOTAL	<i>NO MH/SUD</i>	\$1,211,100	\$11,310	\$202,849	\$13,480	\$1,438,739
	<i>MH/SUD</i>	\$508,535	\$82,203	\$113,075	\$48,171	\$751,984
	<i>TOTAL</i>	\$1,719,635	\$93,513	\$315,924	\$61,651	\$2,190,723

What IMBH Programs have worked?

- Multifaceted Diabetes and Depression Program (MDDP) – medical savings of \$39 PMPM observed over 18 months
- Pathways program for diabetes & depression - \$46 PMPM saved, or about 5% over 2 years
- IMPACT program for depression among the elderly - \$70 PMPM saved over 4-year period, or about 10%
- Missouri CMHC health homes in 2012 – independent living increased by 33%, vocational activity increased by 44%, overall healthcare costs decreased by 8%
- Observed savings of between 9% and 16% of value opportunity

Projected Healthcare Cost Savings Through Effective Integrated Medical-Behavioral Integration - 2017

PAYER TYPE	ANNUAL COST IMPACT OF INTEGRATION
COMMERCIAL	\$19.3 - \$38.6 BILLION
MEDICARE	\$ 6.0 - \$12.0 BILLION
MEDICAID	\$12.3 - \$17.2 BILLION
TOTAL	\$37.6 - \$67.8 BILLION

Integrated Medical-Behavioral Options

- Care managers, team based care, treatment planning, warm handoffs, hallway consults, referrals for treatment
- On site psychologists, nurse practitioners, therapists, other licensed behavioral professionals
- Full time or part time
- Psychiatrists on site or via tele-psychiatry

Payment Model Reform Principles

- Fee-for-Service will possibly work temporarily; however, the incentives just are not aligned for Quadruple Aim Objectives
- Primary Care practices generally do not have the funds to pursue integrated care under the current fee-for-service model
- There is an administrative burden to just adding more fee-for-service codes
- New payment models must incorporate Quadruple Aim objectives
- Good data is a requirement - financial and clinical
- Buy-in from all parties is necessary

Payment Model Reform Ideas

- Primary Care Capitation, including primary physical and behavioral healthcare services and care coordination/management
- Cap rates must be population-specific and risk adjusted
- Options in Cap Rate for the addition of different levels of behavioral service responsibilities
- Risk Sharing or Gain Sharing of certain non-primary care services
- May require setting risk adjusted targets PMPM for different member populations (commercial, Medicaid, Medicare) for IP facility, OP facility, other physician specialists, Rx and other included services.

Colorado SIM Actuarial Reports - Overview

- Cost & Utilization
 - Practice Level and Aggregate by Cohort
 - Quarterly and Annual Results by Incurred Date
 - Allows for Snapshots and Time Series Analysis
 - PMPM costs, annual utilization per K, average costs per unit
- Return-on-Investment (ROI)
 - From CMMI (Payer) Perspective
 - Healthcare Cost Savings (Avoided Healthcare Costs) across all covered lives/populations
 - Baseline healthcare costs in starting calendar year; projected costs thereafter by cohort
- Same Data Sources

SIM Cost & Utilization and ROI Reports

- Data Sources
 - NPI Rosters
 - Attribution
 - APCD

- LOB
 - Commercial
 - Medicaid
 - Medicare (FFS and MA combined)

- Service Category
 - Inpatient Facility
 - Outpatient Facility
 - Professional
 - Rx

Methodology

- Only used complete data (slow reporting; runout issues)
- Large Claim exclusion (\$250K per CY)
- Minimum eligibility (6 months per CY)
- Conservative (low end of ranges) trend assumptions
- Risk adjustment
- Sensitivity of trends assumed

Proposed Cost Impacts

- Healthcare utilization and cost **reductions**: Inpatient Physical, Inpatient Behavioral, Emergency Services, Ambulance, SNF
- Healthcare utilization and cost **increases**: primary and specialty medical professional, behavioral professional, diagnostic testing, imaging (non-complex), labs, prescription drugs – medical and behavioral

Total – Cohort 1 (PCPs + CMHCs)

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Total Projected Healthcare Cost Savings Estimates – PCP & CMHCs combined – Cohort 1						
Line of Business	Calendar Period	Projected PMPM	Actual PMPM	Savings PMPM	Member Months	Total Savings
Commercial	2016	\$401.73	\$391.01	\$10.72	557,943	\$5,981,926
Medicaid	2016	\$318.96	\$315.31	\$3.66	2,105,941	\$7,697,508
Medicare	2016	\$1,129.72	\$1,059.71	\$70.01	484,513	\$33,922,208
Total	2016	\$458.40	\$443.28	\$15.12	3,148,397	\$47,601,642
Commercial	2017	\$424.55	\$396.72	\$27.83	547,099	\$15,226,405
Medicaid	2017	\$348.92	\$350.10	(\$1.18)	2,048,610	(\$2,415,183)
Medicare	2017	\$1,296.68	\$1,092.52	\$204.17	497,170	\$101,505,237
Total	2017	\$514.65	\$477.69	\$36.96	3,092,879	\$114,316,459

Total – Cohort 2

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Total Projected Healthcare Cost Savings Estimates – PCP Practices – Cohort 2						
Line of Business	Calendar Period	Projected PMPM	Actual PMPM	Savings PMPM	Member Months	Total Savings
Commercial	2017	\$401.27	\$382.73	\$18.54	567,350	\$10,521,349
Medicaid	2017	\$334.89	\$361.22	(\$26.33)	1,054,812	(\$27,767,965)
Medicare	2017	\$1,026.33	\$926.74	\$99.59	340,225	\$33,884,697
Total	2017	\$473.96	\$465.48	\$8.48	1,962,387	\$16,638,081

Total – Pediatric Practices – Cohort 1

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Total Projected Healthcare Cost Savings Estimates – Pediatric Practices – Cohort 1						
Line of Business	Calendar Period	Projected PMPM	Actual PMPM	Savings PMPM	Member Months	Total Savings
Commercial	2016	\$188.64	\$184.62	\$4.02	117,017	\$470,354
Medicaid	2016	\$157.53	\$168.66	(\$11.13)	775,220	(\$8,628,179)
Medicare	2016	\$487.88	\$421.01	\$66.86	6,817	\$455,790
Total	2016	\$164.09	\$172.65	(\$8.57)	899,054	(\$7,702,036)
Commercial	2017	\$194.11	\$176.06	\$18.05	118,044	\$2,130,621
Medicaid	2017	\$173.17	\$196.69	(\$23.52)	756,763	(\$17,799,697)
Medicare	2017	\$688.10	\$437.54	\$250.56	7,275	\$1,822,837
Total	2017	\$180.22	\$195.92	(\$15.70)	882,082	(\$13,846,239)

Total – CMHCs

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Total Projected Healthcare Cost Savings Estimates – CMHCs – Cohort 1						
Line of Business	Calendar Period	Projected PMPM	Actual PMPM	Savings PMPM	Member Months	Total Savings
Commercial	2016	\$457.92	\$447.41	\$10.52	9,624	\$101,220
Medicaid	2016	\$683.25	\$661.44	\$21.80	169,516	\$3,696,023
Medicare	2016	\$1,882.88	\$1,770.93	\$111.95	25,915	\$2,901,065
Total	2016	\$824.28	\$791.62	\$32.67	205,055	\$6,698,308
Commercial	2017	\$549.47	\$490.70	\$58.77	8,992	\$528,427
Medicaid	2017	\$705.92	\$655.71	\$50.21	164,464	\$8,258,115
Medicare	2017	\$2,135.68	\$1,795.04	\$340.64	28,127	\$9,581,321
Total	2017	\$898.44	\$807.32	\$91.12	201,583	\$18,367,863

Elements Contributing to ROI

- Total Cost of Care – Cohort 1 (CMMI & actuarial metric)

Line of Business	2015	2016	2017	2018
Commercial	\$466	\$439	\$459	\$469
Medicaid	\$308	\$305	\$339	\$378
Medicare	\$1,154	\$1,181	\$1,162	N/A

- IP Hospital Physical Admits – Cohort 1 (actuarial metric)

Line of Business	2015	2016	2017	2018
Commercial	\$75	\$55	\$60	\$53
Medicaid	\$34	\$31	\$31	\$35
Medicare	\$127	\$135	\$134	N/A

Elements Contributing to ROI

- ER Use – Cohort 1 (actuarial metric)

Line of Business	2015	2016	2017	2018
Commercial	\$23	\$24	\$27	\$25
Medicaid	\$20	\$21	\$19	\$19
Medicare	\$16	\$16	\$16	N/A

- Rx – Physical Use – Cohort 1 (actuarial metric)

Line of Business	2015	2016	2017	2018
Medicaid	\$41	\$46	\$58	\$62

Readmission Rates

- 30 Day Physical Readmit Rate – Cohort 1 (CMMI metric)

Line of Business	2015	2016	2017	2018
Commercial	9.72%	7.85%	4.36%	5.39%
Medicaid	7.20%	4.12%	3.18%	2.12%
Medicare	11.55%	6.41%	4.88%	N/A

- 30 Day MH/SUD Readmit Rate – Cohort 1 (CMMI metric)

Line of Business	2015	2016	2017	2018
Commercial	15.15%	11.57%	10.47%	26.53%
Medicaid	7.92%	3.44%	3.69%	4.27%
Medicare	8.65%	3.28%	4.45%	N/A

Risk Scores by Practice Type & LOB

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Average Normalized Risk Scores by Practice Type, Line of Business, and Year for Cohort 1

Practice Type	2015 Risk Score			2016 Risk Score			2017 Risk Score		
	Commercial	Medicaid	Medicare	Commercial	Medicaid	Medicare	Commercial	Medicaid	Medicare
Mixed Primary Care	1.057	1.133	0.952	1.069	1.163	1.062	1.100	1.248	1.194
Pediatric	0.551	0.613	0.686	0.491	0.520	0.517	0.493	0.562	0.711
Internal Medicine	1.813	1.013	1.150	1.594	1.086	1.340	1.751	1.296	1.525
CMHC	1.446	1.919	1.364	1.426	2.204	1.542	1.648	2.220	1.710

ROI through 2017

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- The estimated healthcare cost savings for all SIM Cohort 1 PCP practices and CMHCs combined in 2016 is approximately \$47.6 million, which represents 3.3% of projected healthcare cost levels during 2016.
- The estimated healthcare cost savings for all SIM Cohort 1 and Cohort 2 PCP practices and CMHCs combined in 2017 is approximately \$131.0 million, which represents 5.2% of projected healthcare cost levels during 2017.
- Combined, the projected savings through 2017 is \$178.6 million, or approximately 4.5% of projected healthcare

Questions?

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