CALIFORNIA TECHNOLOGY ASSESSMENT FORUM℠

Integrating Behavioral Health into Primary Care

Public Meeting

April 2, 2015

Agenda

- **Public Meeting Convened, Topic Overview** | 10:00 am
- **Presentation of the Evidence and Economic Modeling, Q&A** | 10:20 – 11:20 am
- **Public Comments** | 11:20 – 11:50 am
- **Lunch** | 11:50 – 12:20 pm
- **CTAF Q&A with Experts / Deliberation and Votes** | 12:20 – 1:20 pm
- **Break** | 1:20 – 1:35 pm
- **Barriers and Potential Solutions, Policy Roundtable Discussion, Best Practice/Policy Recommendations** | 1:35 – 3:35 pm
- **Reflections from CTAF Panel** | 3:35 – 3:55 pm
- **Summary and Closing Remarks** | 3:55 – 4:00 pm
- **Meeting Adjourned** | 4:00 pm
  - **Download meeting materials: http://tinyurl.com/CTAFBHI**

CTAF Overview

- Core program of the Institute for Clinical and Economic Review (ICER), an independent non-profit research organization that evaluates scientific evidence on the clinical effectiveness and cost implications of medical interventions
- Goal: Help patients, clinicians, insurers, and policymakers apply evidence to improve the quality and value of health care
- Deliberation and voting by CTAF Panel – independent clinicians, methodologists, and leaders in patient engagement and advocacy
- Supported by grants from the Blue Shield of California Foundation and the California HealthCare Foundation

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Topic Overview

Karen K Shore, PhD
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April 2, 2015

I have no conflicts of interest.

How Terms Are Used in this Report

- Behavioral health integration (BHI) into primary care addresses both physical health and behavioral health needs in primary care settings through systematic coordination and collaboration among health care providers
  - Behavioral health broadly defined by AHRQ; this report focused on a subset of behavioral health conditions
- Evidence on clinical effectiveness and cost impact generally limited to mental health conditions, but field evolving to include substance use disorder and other conditions
  - Clinical effectiveness review focused on conditions common in primary care (anxiety and depression)

Context

- High prevalence of behavioral health conditions in population, especially among patients with chronic physical health conditions
- Long history of separate treatment and financing of physical and behavioral health conditions
- Many efforts to integrate behavioral health and primary care over past 20+ years
- Field is evolving – supported by variety of public agencies and private foundations/organizations

Review Components

- Evaluate evidence on comparative clinical effectiveness and value of BHI
- Identify components potentially associated with successful integration
- Assess budget impact of BHI
- Assess barriers to integration and potential innovations/solutions for BHI in California

Environments: National and CA

- Fragmented care in part due to physical and behavioral health services regulated and financed through multiple government agencies
- In CA…
  - Two “realignment” efforts have shifted responsibility for mental health to counties
  - Individuals without private insurance who have disabling mental health conditions typically receive care through county systems (either provided by county directly or via contracts to FQHCs/other providers)
  - Recent consolidation of mental health and alcohol/drug agencies into DHCS

Medicaid Billing Requirements

- Each state Medicaid program has unique billing rules re: behavioral health services
- In CA, Medi-Cal…
  - Limits the types of providers who can bill for specific procedures and diagnoses (physicians, PAs, NPs, clinical psychologists, LCSWs)
  - Does not reimburse for care coordination services
  - Does not reimburse FQHCs for both physical and behavioral services provided on same day

Information Sharing

- HIPAA restrictions on disclosure and use of patient information
- For behavioral health…
  - More stringent criteria for substance use disorder treatment re: sharing data
  - Slower adoption of EHRs by behavioral health providers than by physical health treatment providers
- In CA, laws require clinicians, health plans, and contractors to obtain written permission from patient before behavioral health information can be shared

Purchasing Arrangements/Coverage

- "Carve outs" common – public and private health plans delegate responsibility for behavioral health to MBHOs
  - Often misaligned payment incentives between physical health and behavioral health
  - Provider networks may exclude primary care practices
  - Information exchange is often limited
- In CA as of January 2014, Medi-Cal managed care mental health benefits…
  - Patients with low-to-moderate functional impairment are covered through health plan (not covered previously)
  - Patients with serious functional impairment continue to be served through county mental health plans

Payment and Care Delivery Initiatives

- Accountable care organizations (ACOs)
- Patient-centered medical homes (PCMHs)
- ACA provisions:
  - Section 2703 waivers: health homes
  - Medicaid expansion
  - FQHC expansion
- Telemedicine

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Evidence Review

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April 2, 2015

I have no conflicts of interest.

Methods

- More than 25 systematic reviews
  - AHRQ 2008
  - Cochrane collaboration 2006, 2012, 2015
- Updated search using Cochrane search criteria
  - Additional publications from same trials
- Quality: ICER adapted from AHRQ
  - Note: blinding of participants not possible

Study selection

- Males and females, any age
- ≥ 50% with anxiety or depression
- Include studies of patients with chronic medical conditions
  - Diabetes, hypertension, heart disease, asthma, COPD

Results – Study Description

- 94 randomized trials
  - > 25,000 patients
- 85% in primary care (78/94)
- 73% in the United States
- 100% based on the Collaborative Care Model*
  - No trials of co-location in primary care
  - No studies of integrated, collaborative treatment plan

* Collaborative Care Model (CCM) is an approach that integrates treatment for mood and anxiety disorders into primary care settings and has these components: 1) care coordination and care management, 2) regular/proactive monitoring and treatment to target using validated clinical rating scales, and 3) regular supervision of case manager by a mental health professional.

Results

- System
  - Integrated HMO 30%
  - VA 18%
  - Non-integrated 47%
  - Multiple 5%
- Integrated care
  - Medication management only 38%
  - Psychological therapy only 12%
  - Both 50%

Outcomes: Depression and Anxiety

- Change in score
  - Continuous measure
- Response to therapy
  - ≥ 50% reduction in score
- Remission
  - Reduction in score below threshold
- Adherence to medical therapy

Meta-analysis Outcome

- Standardized mean difference (SMD)
  - Combines continuous outcomes
  - Average change / standard deviation
  - ~ 0.2 is small, 0.5 moderate, 0.8 large

Depression Example

- IMPACT trial: www.impact-uw.org/about/
  - Largest: 18 clinics, 1,801 depressed patients
    - California, Indiana, North Carolina, Texas, Washington
    - HMO, FFS, IPA, VA & inner city public health clinics
  - Systematic screening + PCP identified
  - Care manager: education, care management, medication management, brief psychotherapy

IMPACT Trial Outcomes at 1 Year

	Integrated	Usual Care	P
Score (SCL-20)	1.7 to 1.0	1.7 to 1.4	<0.001
Response (≥50%)	45%	19%	<0.001
Remission	25%	8%	<0.001
Antidepressant use	73%	57%	<0.001
Satisfaction with depression care	76%	47%	<0.001

Depression Summary

- Integrated care improves outcomes (79 studies)
  - SMD 0.28, 95% CI 0.23-0.33
  - Median absolute increase in response: 18.4%
  - Median absolute increase in remission: 16.7%
- High certainty of small net benefit
  - P<0.001, consistent, meta-analysis significant in 2000
  - The effect size is small to moderate

Anxiety Example

- CALM study (modeled on IMPACT study)
  - 17 clinics, 1,004 patients
  - PCPs identified patients
  - Non-expert care managers: education, care management, medication management, brief psychotherapy

CALM Trial Outcomes at 1 Year

	Integrated	Usual Care	P
Score (BSI-12)	16.2 to 8.1	16.3 to 10.8	<0.001
Response (≥50%)	64%	45%	<0.001
Remission	51%	33%	<0.001
Appropriate counseling	49%	27%	<0.001
Satisfaction with anxiety care	3.9/5	3.4/5	<0.001

Anxiety Summary

- Integrated care improves outcomes (7 studies)
  - SMD 0.33, 95% CI 0.19-0.47
- Moderate certainty of small net benefit
  - P<0.001, consistent, fewer studies, wider CI
  - The effect size is small to moderate

Other Medical Conditions: Diabetes

- Seven randomized trials
- Depression scores
  - SMD 0.32, 95% CI 0.11 to 0.53
- Hemoglobin A1c decrease
  - 0.33%, 95% CI 0.0% to 0.66%
- **Summary**: Low certainty of a small net benefit among patients with both depression and diabetes because the A1c benefit is of borderline statistical and clinical significance

Quality of life (QOL)

- Mental health QOL (Vitality, social functioning, anxiety/depression limits accomplishments over 4 weeks, felt peaceful and calm, etc.)
  - SMD 0.20 to 0.26 through 24 months ($p<0.001$)
  - SMD 0.10 beyond 24 months (NS)
- Physical health QOL (general health, pain, physical health limits activities, accomplishments, work over past 4 weeks)
  - SMD 0.10, 95% CI 0.02 to 0.17 between 13 and 24 months
- **Summary**: High certainty of a small benefit in mental health QOL. Low certainty of a small benefit in physical health QOL.

Patient Satisfaction

- 30/34 studies reported higher satisfaction with integrated care (22/34 with $p<0.05$)
- 10 studies used a continuous measure
  - SMD 0.31, 95% CI 0.13 to 0.49, $p<0.001$
- Summary: High certainty of small to moderately greater satisfaction with integrated care because of the large number of studies, consistent findings, and low p-value, though the SMD was only 0.31.

Summary of the Evidence

- High certainty of improvements in depression, quality of life, and patient satisfaction with collaborative care compared to usual care
- Low to moderate certainty of improvements in anxiety and in diabetes (in those with depression)
- The magnitude of the net benefit was small to moderate for all outcomes
  - Clinically significant for depression and anxiety
- Limited data beyond collaborative care model

Public Comments Received

- The literature represents the Collaborative Care Model (CCM) with very little on other forms of integration
  - CCM effective with or without co-location and systems integration
- The benefits of the CCM are large
- The literature on the Patient Centered Medical Home not included

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Care Value and Health-System Value Analysis

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April 2, 2015

I have no conflicts of interest.

Economic Analysis Components

- Care Value: summarized existing literature on costs and cost-effectiveness of BHI
  - Variability in settings, implementation, and intensity precluded development of generalizable BHI model
- Health-System Value:
  - Identified publicly-available resources for estimating planning, implementation, and ongoing costs of BHI
  - Estimated budgetary impact of implementing BHI in an accountable care organization (ACO)

Results: Costs and Cost-Effectiveness of BHI

- Evaluated 18 RCT-based economic evaluations, nearly all based on CCM approaches
- BHI consistently more effective than usual care, but also more costly over 6 months – 2 years
  - When observed, offsets primarily in specialty mental health services and in inpatient/emergency department care for specific subpopulations (e.g., patients with diabetes)
  - Longer-term studies have demonstrated the potential for cost-neutrality or even overall cost savings, but limited in number/quality
- Estimates of cost-effectiveness have met generally-accepted thresholds for cost-effective interventions in the US ($15,000 - $80,000 per QALY gained vs. usual care, 2014 dollars)

Results: Costs and Cost-Effectiveness of BHI (2)

Author, Year	Sample Size	Incremental Costs of Integrated Care (2014 $/Patient)	Cost per QALY Gained (2014 $)
Lave, 1998[136]	276		
+Medication		$1,328 – $1,494	$16,292 - $30,802
+Psychotherapy		$1,521 - $1,960	$27,644 - $61,144
Simon, 2001 (a)[137]	407	$1,603 - $3,935	$35,200 - $79,200
Simon, 2001 (b)[138]	228	$568 - $929	$31,302 - $62,605
Schoenbaum, 2001[139]	1,356		
+Medication		$666	$24,530 - $58,347
+Psychotherapy		$771	$15,165 - $34,365
Simon, 2002[140]	386	$20 - $412	$32,475 - $65,700

Source: Neumeyer-Gromen A, et al. Disease management programs for depression: a systematic review and meta-analysis of randomized controlled trials. Medical Care, 2004:42(12)1211-1221.

Results: Costs and Cost-Effectiveness of BHI (3)

- Observational studies have shown potential for cost savings with BHI over 2-5 years, but studies have quality concerns (e.g., site/provider selection bias, imbalanced intervention and control groups)
- Across all study designs, costs of BHI may be understated
  - Most studies estimated costs of delivering intervention to diagnosed patients but did not include costs of planning and implementation
  - Some studies did not include costs of screening

Cost Categories: Estimating Budget Impact of BHI

- Planning Costs
  - Current patient flow
  - Current staff salaries, FTEs, fringe percentages, etc.
  - Amount of time spent on BHI planning for each staff type
  - Current direct expenditures, indirect expenses, and overhead
- Start-Up Costs
  - Staff training
  - Administration
  - Fixed costs (e.g., equipment purchases)
  - Overhead
- "Steady State" Costs
  - Percent of staff time devoted to intervention and incremental costs associated with treatment
  - Overhead expenses attributable to BHI
  - New capital expenses and depreciation of existing assets

Sources: Prescription for Health (P4H), Advancing Care Together (ACT), SAMHSA, Advancing Integrated Mental Health Solutions (AIMS), Dodoo MS, Krist AH, Cifuentes M, Green LA. Start-up and incremental practice expenses for behavior changes interventions in primary care. Am J Prev Med. 2008; 35(5S): S423-S430.

Budget Impact Analysis: Assumptions

- Large CA ACO (200,000 lives)
- Primarily employed, privately-insured population (3% prevalence of major depression)
- 4 months start-up, remainder of year is implementation/ongoing intervention
- New hires of 40 RN care managers and 10 psychiatrist consultants
- Change in job role for medical assistants to conduct depression screening; no additional hires
- Only small modifications of EHR system required, no other major IT expenses
- Additional capital expenditures assumed for workspace for new hires
- All patients in panel assumed to have one screening encounter during year

BHI: Start-up and Ongoing Expense Estimates, 200K member ACO

Type of Expense	Total Cost ($)	Total Cost ($PMPM)
Start-Up Expenses (4 months)		
General startup	$23,268	$0.01
Additional training	$16,365	$0.01
Total Start-Up Expenses	$39,633	$0.02
“Steady State” Expenses (8 months)		
Screening	$313,524	$0.13
Direct Staff	$3,730,560	$1.55
Overhead	$2,736,000	$1.14
Total Ongoing Expenses	$6,780,084	$2.83
TOTAL FIRST-YEAR EXPENSES	$6,819,717	$2.84

Budget Impact Analysis Summary

- Start-up and screening costs relatively modest
- Direct staff and overhead costs major drivers of increased PMPM
- Incremental estimated PMPM expense of BHI in first year of implementation: $2.84
  - Likely on higher end of investment given assumed new hires and creation of co-located workspace

Budget Impact Analysis Summary

Measure	ACO Perspective	Medi-Cal Perspective
Base PMPM	$26*	$552**
% increase from BHI implementation ($2.84)	10.9%	0.5%
--if 5% offset in total health care costs assumed ($1.84)‡	7.1%	0.3%

*Taylor EF, Dale S, Peikes D, et al. Evaluation of the Comprehensive Primary Care Initiative: First annual report. Mathematica Policy Research. 2015.
**Kaiser State Health Facts. Medicaid spending per full-benefit enrollee, California, 2011 (updated to 2014 dollars using medical CPI).
‡Based on assumed annual total health care costs of $8,000 per patient with depression

Economic Analysis Summary

- Care Value:
  - Incremental clinical benefit over usual care but at increased cost
  - BHI interventions fall within generally-acceptable thresholds for cost-effectiveness ($15-80K per QALY gained vs. usual care)
- Health System Value:
  - Economic studies have shown that BHI interventions increase costs, at least in the short term
  - Evidence on longer-term cost offsets limited to specific subpopulations and/or subject to methodologic concerns
  - Start-up and ongoing costs of BHI, while variable, likely to represent substantial increase in primary care PMPM but more modest change from a payer perspective

Public Comments Received: Model

- Better to target model to populations more severely incapacitated by behavioral health issues – more likely to show cost offsets in these populations

Public Comments

Lunch
11:50 – 12:20

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Questions for Deliberation

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Comparative *Clinical Effectiveness* Example Question

Is the evidence "**adequate**" to demonstrate that "**intervention A**" is superior to "**comparator B**" for patients with "**condition X**"?

1. **Yes**
2. **No**

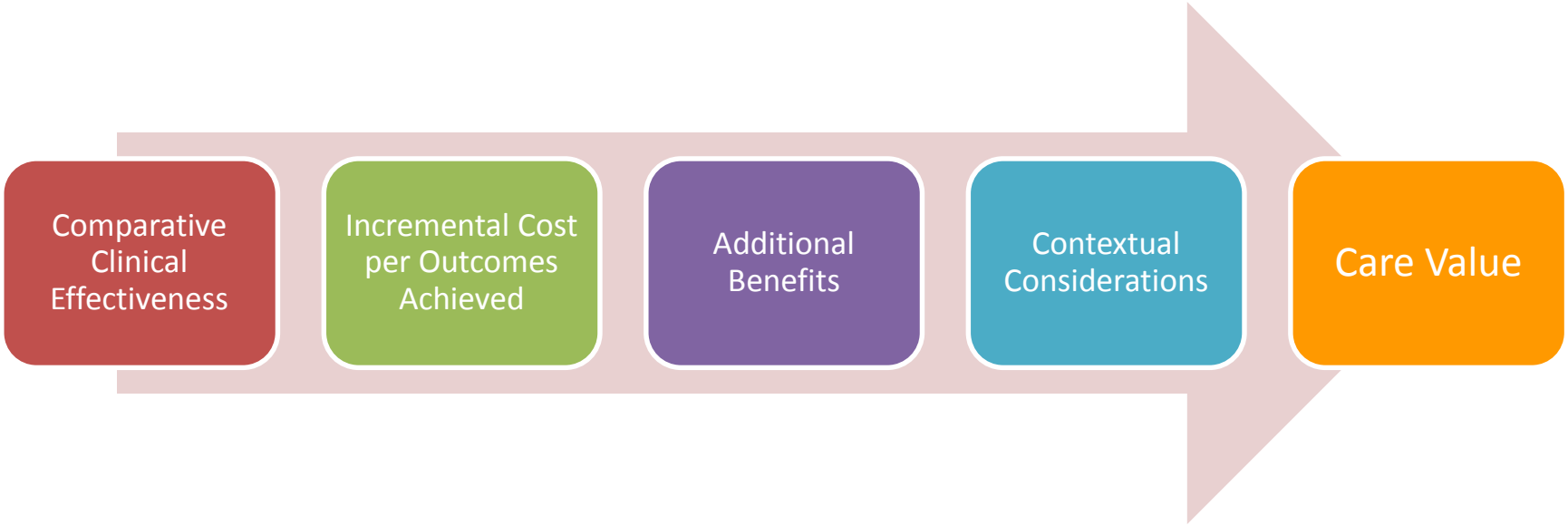
Care Value Example Question

From the perspective of a Medicaid program, what is the care value of "**intervention A**" vs "**comparator B**"?

A. **Low**

B. **Reasonable**

C. **High**



Health System Value Example Question

Assuming baseline pricing and payment mechanisms, what would be the **health system value** of "**intervention A**" for a state Medicaid program?

A. **Low**

B. **Reasonable**

C. **High**

Practice Question

Which is your favorite baseball stadium (and no, you don't actually have to watch the game)?

1. **AT&T Park: San Francisco Giants**
2. **Coors Field: Colorado Rockies**
3. **Fenway Park: Boston Red Sox**
4. **Petco Park: San Diego Padres**
5. **Safeco Field, Seattle Mariners**
6. **Yankee Stadium: New York Yankees**

CCM vs. Usual Care: Outcomes

Q1a. Is the evidence adequate to demonstrate that interventions to integrate behavioral health into primary care using the *Collaborative Care Model (CCM)* have better outcomes than usual care in terms of *improvement in anxiety and/or depression*?

1. **Yes**
2. **No**

CCM vs. Usual Care: Outcomes

Q1b. Is the evidence adequate to demonstrate that interventions to integrate behavioral health into primary care using the *CCM* have better outcomes than usual care in terms of *physical health outcomes in patients with diabetes?*

1. **Yes**
2. **No**

CCM vs. Usual Care: Outcomes

Q1c. Is the evidence adequate to demonstrate that interventions to integrate behavioral health into primary care using the *CCM* have better outcomes than usual care in terms of *physical health outcomes in patients with other medical conditions?*

1. **Yes**
2. **No**

Other BHI vs. Usual Care: Outcomes

Q2a. Is the evidence adequate to demonstrate that interventions to integrate behavioral health into primary care *other than the CCM* have better outcomes than usual care in terms of *improvement in anxiety and/or depression*?

1. **Yes**
2. **No**

Other BHI vs. Usual Care: Outcomes

Q2b. Is the evidence adequate to demonstrate that interventions to integrate behavioral health into primary care *other than the CCM* have better outcomes than usual care in terms of *physical health outcomes in patients with diabetes?*

1. **Yes**
2. **No**

Other BHI vs. Usual Care: Outcomes

Q2c. Is the evidence adequate to demonstrate that interventions to integrate behavioral health into primary care *other than the CCM* have better outcomes than usual care in terms of *physical health outcomes in patients with other medical conditions?*

1. **Yes**
2. **No**

CCM vs. Usual Care: Patient Satisfaction

Q3. Is the evidence adequate to demonstrate that interventions to integrate behavioral health into primary care using the *CCM* improve *patient satisfaction* vs. usual care?

1. **Yes**
2. **No**

Other BHI vs. Usual Care: Patient Satisfaction

Q4. Is the evidence adequate to demonstrate that interventions to integrate behavioral health into primary care *other than the CCM* improve *patient satisfaction* vs. usual care?

1. **Yes**
2. **No**

CCM vs. Usual Care: Care Value

Q5. Given the available evidence, what is the *care value* of the *CCM* vs. usual care?

A. **Low**

B. **Reasonable**

C. **High**

CCM vs. Usual Care: Health System Value

Q6. Given the available evidence, what is the overall *health system value* of the *CCM?*

A. **Low**

B. **Reasonable**

C. **High**

Other BHI vs. Usual Care: Care Value

Q7. Given the available evidence, what is the *care value* of integration interventions *other than the CCM* vs. usual care?

A. **Low**

B. **Reasonable**

C. **High**

Other BHI vs. Usual Care: Health System Value

Q8. Given the available evidence, what is the overall *health system value* of integration interventions *other than the CCM?*

A. **Low**

B. **Reasonable**

C. **High**

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Barriers and Potential Solutions

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April 2, 2015

Barriers

Category	Specific Issues
Reimbursement and payment	• Payment rewarding volume rather than outcomes • Limitations on billing
Culture and historical influences	• Separate silos for behavioral health and physical health • Different norms around training, licensing, and certification • Ongoing stigma
Technology/ information sharing	• Limited data sharing via electronic health records (EHRs) • More restrictive confidentiality laws for behavioral health • Fragmented communication among providers
Provider training and capacity	• Limited training of providers outside their specialty areas • Scope of practice concerns • Shortage of psychiatrists overall and shortage of other behavioral health providers who are bilingual; geographic disparities in provider supply
Service capacity and delivery	• Limited community resources for patient referrals • Service capacity gaps • Confusing care pathways and transitions

Solutions: State/county

Mechanism	Strategies
1115 Waiver application	Technology/information sharing • Data system infrastructure and enhancement – use of EHRs Provider training and capacity • Cross system training, particularly of MH/PC providers re: substance use Service capacity and delivery • Multidisciplinary teaming • Comprehensive care coordination services • Peer providers • Psychiatry and primary care consultation • Expansion of SBIRT for substance use Payment • Increased use of shared savings/shared risk
Prop 63/MHSA	Innovation Funds • LA county: integrated clinic model – 4 sites deliver mental health, physical health, and substance use services on-site, using a multi-disciplinary team approach • Sonoma county: integrated community health model – train an integrated, multi-disciplinary team of peer health educators, physicians, nurses, psychiatrists, behavioral health specialists, and care managers

Other Potential Solutions (1)

Mechanism	Strategies
New reimbursement and payment strategies	• Alternative payment models (e.g., capitation, incentives shared savings and/or shared risk) • Enhanced capitation for care management services and collaborative care in integrated settings • Pay for phone psychiatry consults to primary care • Use P4P to reward clinical improvement and have withholds for inappropriate care • Allow for same-day billing of physical and mental health services provided by two separate providers • Increase reimbursement of evidence-based practices • Increase payment for non-physician providers • Reduce restrictions on types of providers who can bill for certain services (e.g., MFTs in Medi-Cal)

Other Potential Solutions (2)

Mechanism	Strategies
Improved screening, referral, and treatment processes	• Use standard, validated screening and assessment tools • Use peer navigators to engage and help patients • Proactively complete consent and releases of information to facilitate care management and coordination
Increase and ensure service adequacy for patients with complex conditions	• Improve care transitions • Expand telemedicine • Provide team-based care with shared care plans • Strengthen provider networks
Improve consumer choice	• Use peer providers • Promote culturally competent and relevant services

Policy Roundtable Participants

- **Marty Adelman, MA, CPRP**, Behavioral Health Program Manager, Council of Community Clinics
- **Maribel Cifuentes, RN**, Deputy Director, Advancing Care Together, University of Colorado, Denver
- **Efrat Eilat, MBA, PhD**, Special Advisor for Integrated Systems, CA Department of Health Care Services
- **John Fortney, PhD**, Associate Director for Research, University of Washington AIMS Center
- **Neha Patel, LPC**, Manager Community Transformation – West Region, Enhanced Personal Health Care Program, Anthem, Inc.
- **Susan Plass**, retired, patient
- **Kathan Vollrath, MD, MPH**, Clinical Associate Professor, Medicine – General Medical Disciplines, Stanford Health Care
- **Kenneth Wells, MD, MPH**, Center Director, UCLA Neuropsychiatric Institute & Hospital; Senior Scientist, RAND

Reflections from CTAF Panel

Summary and Closing Remarks

Meeting Adjourned