

COUNTY OF LOS ANGELES – DEPARTMENT OF MENTAL HEALTH
PROGRAM SUPPORT BUREAU

MHSA INNOVATION INTEGRATED CARE OUTCOMES:
DATA-INFORMED DECISION MAKING

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WELLNESS • RECOVERY • RESILIENCE

Mental Health Services Act (MHSA) Innovation (INN) Project

- Innovation – time limited learning projects introducing something new to the mental health system for the purpose of either increasing access to underserved groups, increasing the quality of mental health services or promoting interagency collaboration
- Integrating health, mental health and substance use services
- Creation of partnerships between mental health providers and a Federally Qualified Health Center (FQHC)
- Results should inform the future public health and mental health system

MHSA–INN Plan Models

- Integrated Clinic Model (ICM)
- Integrated Mobile Health Team (IMHT)
- Integrated Services Management for Underserved Ethnic Populations
 - African/ African American
 - Native American
 - Asian Pacific Islander
 - Latino
 - Middle Eastern/Eastern European
- Integrated Peer Run Model

The Evaluation Team

- University of California, San Diego,
Health Services Research Center
 - Todd Gilmer, Ph.D., Principle Investigator
 - Harder and Company
 - Ben Henwood, University of Southern California

Evaluating Integration: Key Indicators and Measures

- Level of service integration
 - *The Integrated Treatment Tool- Case Western Reserve University*
 - Domains: organizational, treatment, care coordination
- Health status improvement
 - *PROMIS System- Global Health, Milestones of Recovery Scale*
- Mental Health status improvement
 - *PROMIS System*
 - *Illness Management and Recovery Scale*
- Substance use
 - *PROMIS System*
- Client Satisfaction*
- Community Satisfaction
- Self-Stigma*
- Cost effectiveness
- Post outcomes survey*

* At the six month assessment, and every subsequent six months, clients are randomly selected to take either the Satisfaction with Services Survey, the Post-Outcomes Survey, or the Self-Stigma

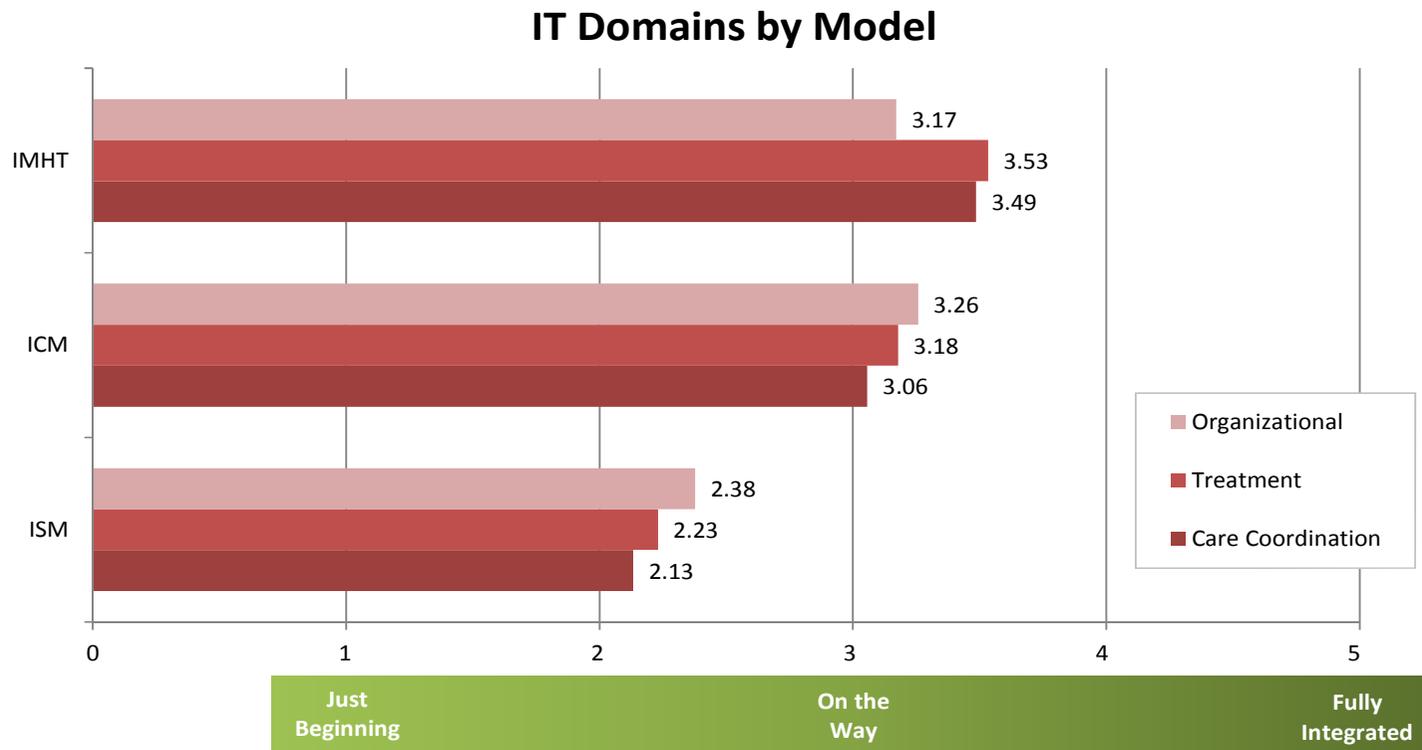
Overview of Client Measures

	# of Items	Collection Frequency	Goal(s) Addressed
PROMIS Global Health	10	Quarterly	<ul style="list-style-type: none"> • Improved physical health outcomes • Improved mental health status • Successful links to integrated health care
PROMIS-derived Alcohol/Substance Use	12	6 months	<ul style="list-style-type: none"> • Successful links to integrated health care
Physical Health and Behaviors Survey	39	6 months	<ul style="list-style-type: none"> • Successful links to integrated health care • Improved utilization of community resources • Decreased use of emergency services (physical or mental) • Culturally sensitive/competent care
CHOIS Supplement	20	6 months	<ul style="list-style-type: none"> • Positive Recovery Factors • Specific Psychiatric Symptoms • Response Inconsistency
Stigma Survey-10	10	6 months	<ul style="list-style-type: none"> • Reduction in General Mental Health Stigma
Client Satisfaction Questionnaire	10	6 months	<ul style="list-style-type: none"> • Culturally sensitive/competent care • Client satisfaction with services • Improved quality of care received
Post-Outcomes Survey	10	6 months	<ul style="list-style-type: none"> • Improved physical and mental health outcomes • Improved community support • Increased consumer self-efficacy

Overview of Clinician Measures

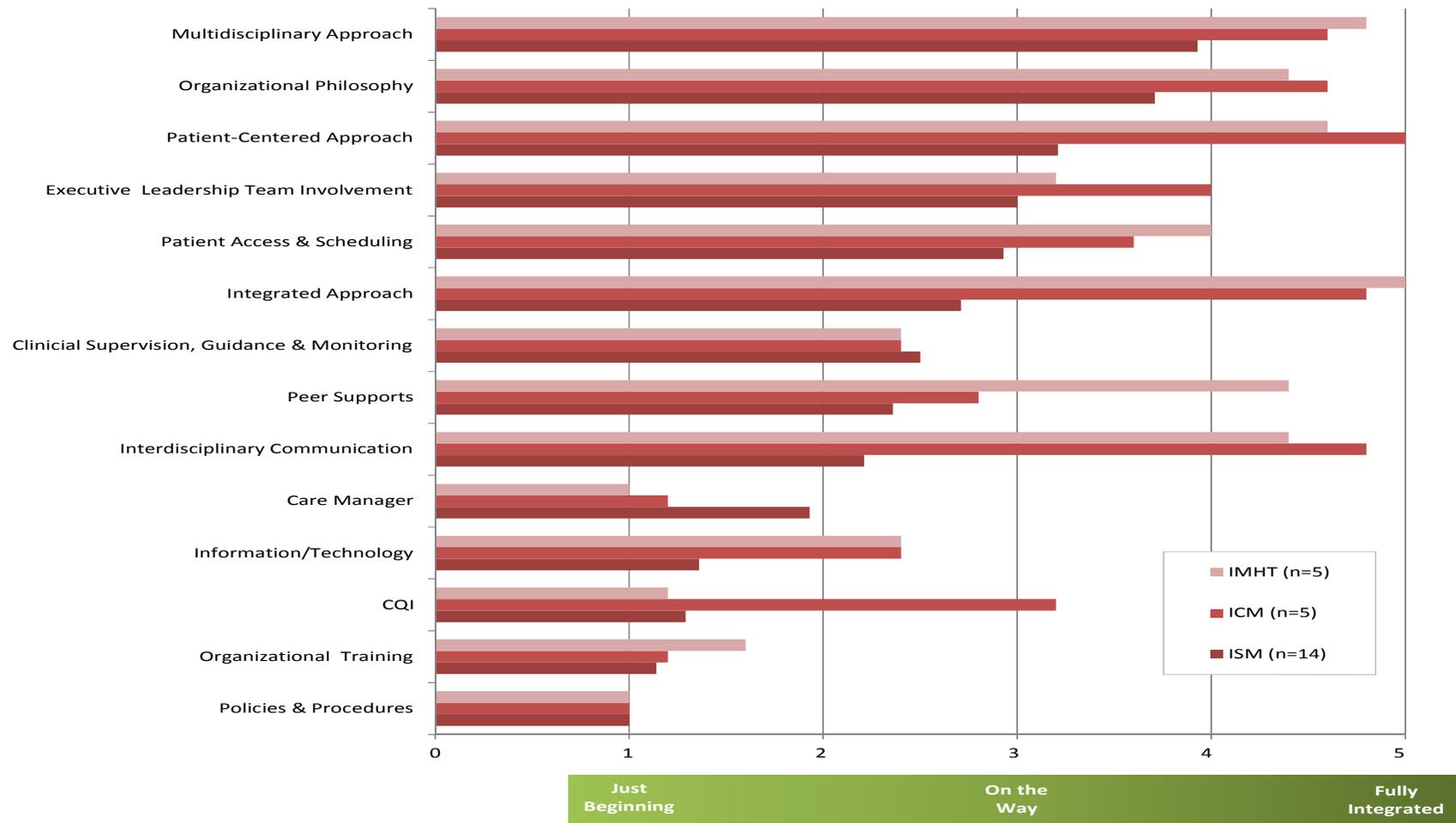
	# of Items	Collection Frequency	Goal(s) Addressed
Physical Health Indicators	10	6 months	<ul style="list-style-type: none"> Improved physical health outcomes
Illness Management & Recovery Scale (IMR)-Clinician Version	18	Quarterly	<ul style="list-style-type: none"> Community improvement/integration into the community Improved quality of care received by client Improved quality of care given by Clinician/Staff Improved mental health outcomes Successful links to integrated health care
Milestones of Recovery Scale (MORS)	1	Quarterly	<ul style="list-style-type: none"> Improved mental health outcomes Increased involvement in care
Staff Satisfaction Questionnaire	TBD	6 months	<ul style="list-style-type: none"> Culturally sensitive/competent care Improved quality of care given by Physician/Staff

Integrated Treatment Tool: Ratings by Model

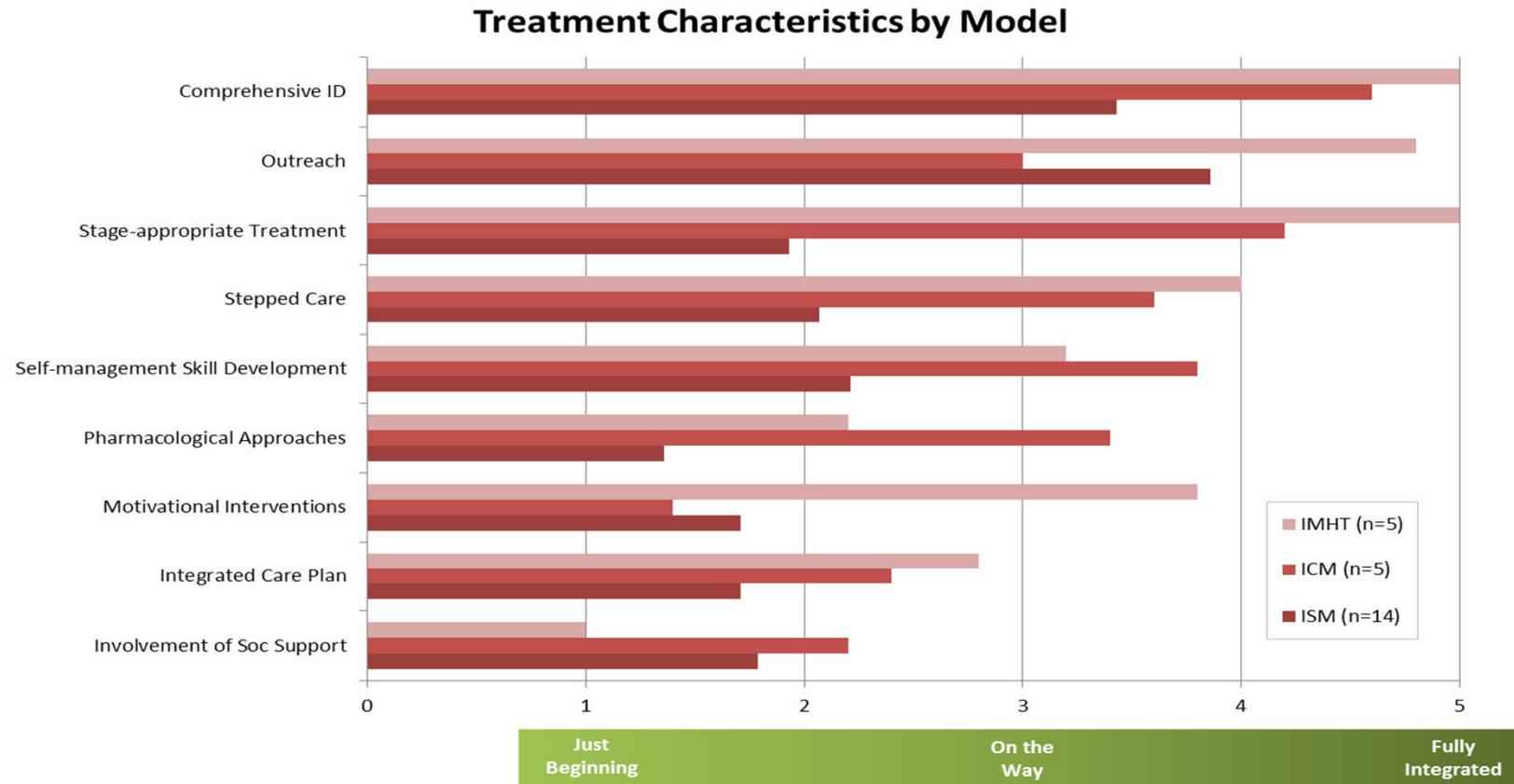


Integrated Treatment Tool: Organizational Domain by Model

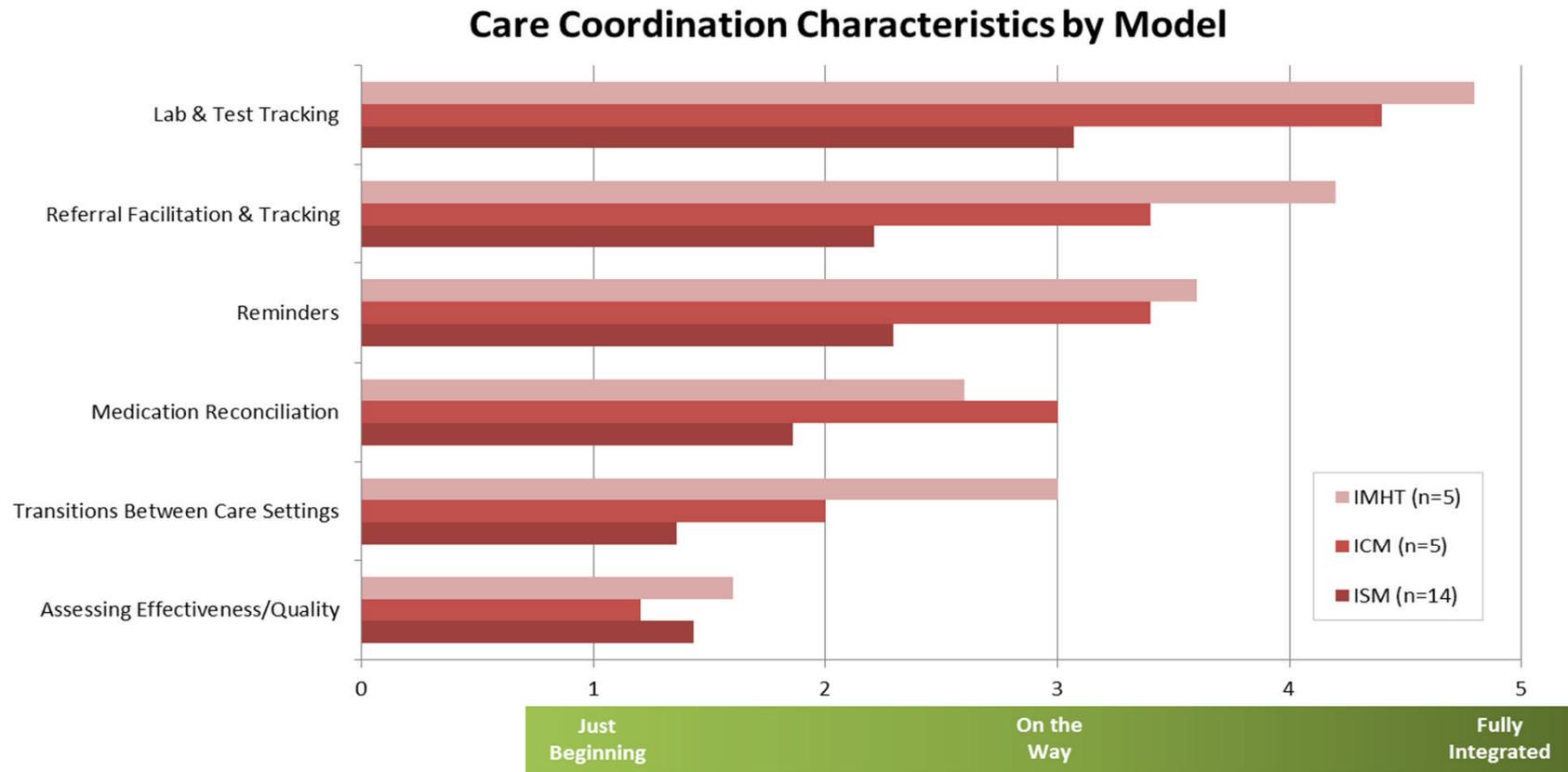
Organizational Characteristics by Model



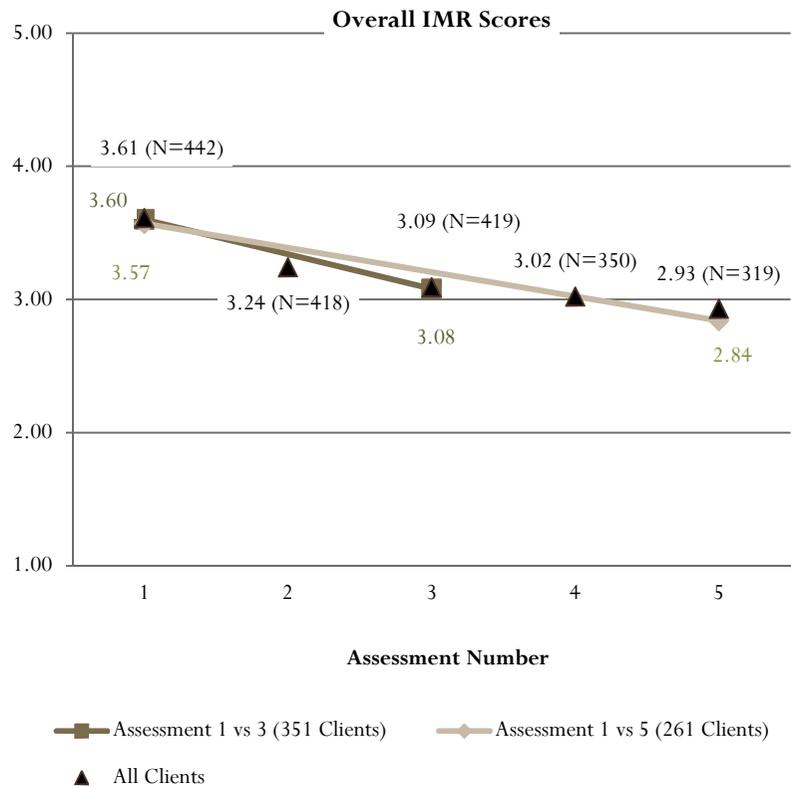
Integrated Treatment Tool: Treatment Domain



Integrated Treatment Tool: Care Coordination Domain



IMHT IMR Symptom Reduction



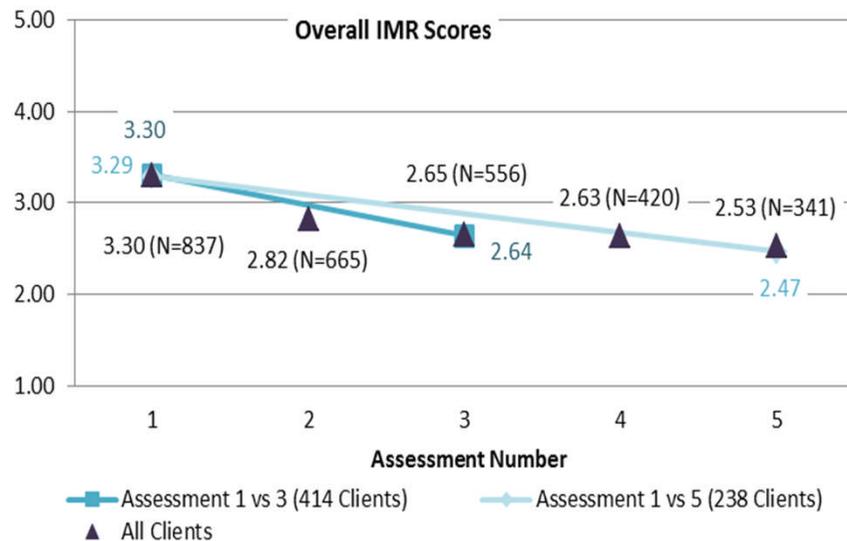
Measures clinician's assessment of mental health symptoms, functional impairment and recovery

Significant Clinical improvement:

1 vs. 3: sig ($p < .001$); 65.2% clinical improvement

1 vs. 5: sig ($p < .001$); 75.1% clinical improvement

ICM IMR Symptom Reduction



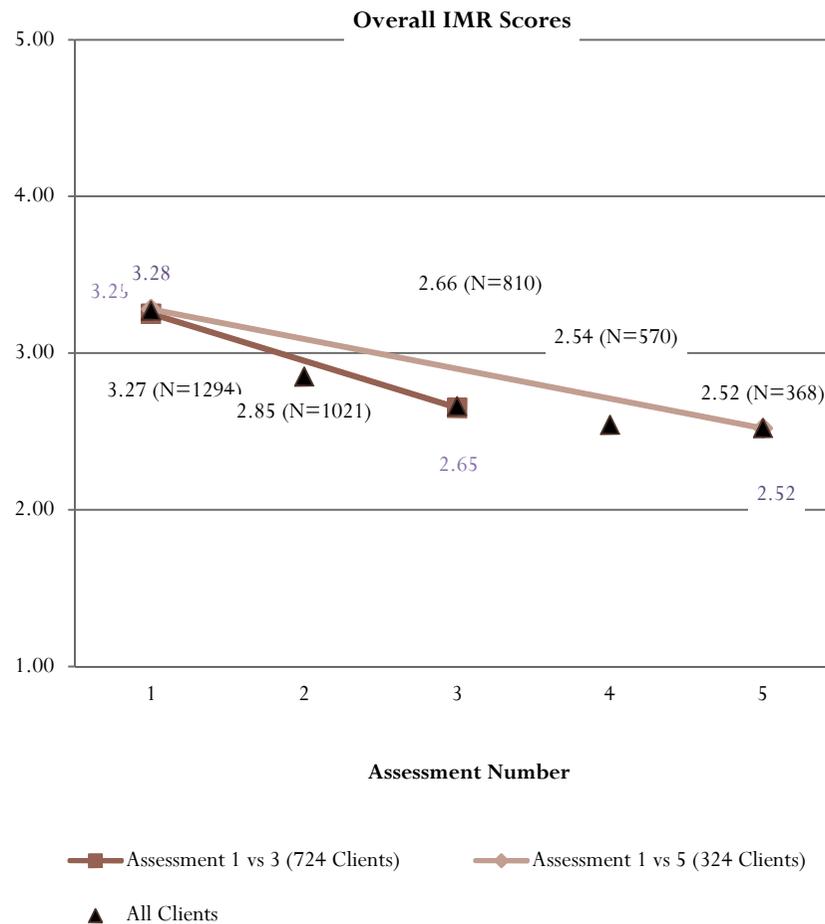
Measures clinician's assessment of mental health symptoms, functional impairment and recovery

Clinical significance:

1 vs. 3: sig ($p < .001$); 70.8 % clinically significant improvement

1 vs. 5: sig ($p < .001$); 79.0 % clinically significant improvement

ISM IMR Symptom Reduction



Measures clinician's assessment of mental health symptoms, functional impairment and recovery

Clinical Significance:

1 vs. 3: sig ($p < .001$); 72.8% clinical improvement

1 vs. 5: sig ($p < .001$); 76.5% clinical improvement

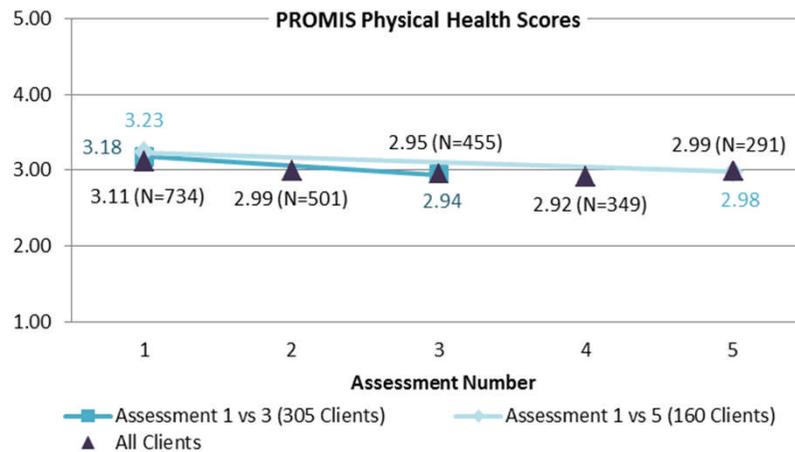
Body Mass Index and Blood Pressure

- IMHT clients experienced an 8.1% increase in BMI (baseline vs. 5th administration, $p=.002$)
- ICM clients experiencing reductions in stage 1 and 2 hypertension and hypertensive crisis

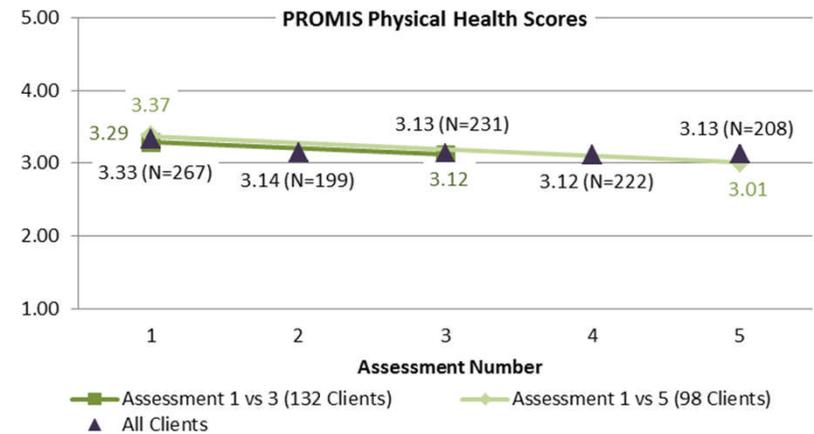
Blood Pressure Categorization					
	Normal	Pre-Hypertension	Stage 1 Hypertension	Stage 2 Hypertension	Hypertensive Crisis
Baseline (All Clients N=934)	36.5%	42.6%	16.3%	3.5%	1.1%
Assessment <u>1</u> vs. <u>3</u> (513 Clients)	35.7% vs. 39.0%	43.9% vs. 46.0%	15.8% vs. 13.5%	3.5% vs. 1.4%	1.2% vs. 0.2%
Assessment <u>1</u> vs. <u>5</u> (300 Clients)	32.0% vs. 37.3%	40.3% vs. 46.0%	20.7% vs. 15.0%	5.7% vs. 1.7%	1.3% vs. 0.0%

PROMIS Global Health Results

**ICM 40.6% clinical improvement
(1 vs. 5)**



**IMHT 46.9% clinical
improvement (1 vs. 5)**



MORS Rating Improvements

ISM

61.2% clinical improvement

ISM MORS Ratings						
Rating #	Milestones of Recovery	Baseline (All Clients N=1226)	Matched Samples			
			Assessment 1 vs. 3 (N=645)		Assessment 1 vs. 5 (N=294)	
1	Extreme Risk	0.7%	0.5%	0.3%	0.3%	0.0%
2	High Risk / Not Engaged	3.1%	2.0%	0.9%	1.7%	1.0%
3	High Risk / Engaged	19.4%	17.7%	4.5%	17.3%	4.4%
4	Poorly Coping / Not Engaged	8.7%	7.1%	6.2%	6.1%	3.7%
5	Poorly Coping / Engaged	48.1%	53.2%	36.6%	55.8%	29.9%
6	Coping / Rehabilitating	16.4%	16.3%	40.0%	15.3%	39.8%
7	Early Recovery	2.8%	2.6%	9.6%	3.4%	16.7%
8	Advanced Recovery	0.8%	0.6%	1.9%	0.0%	4.4%

IMHT

73.5% clinical improvement

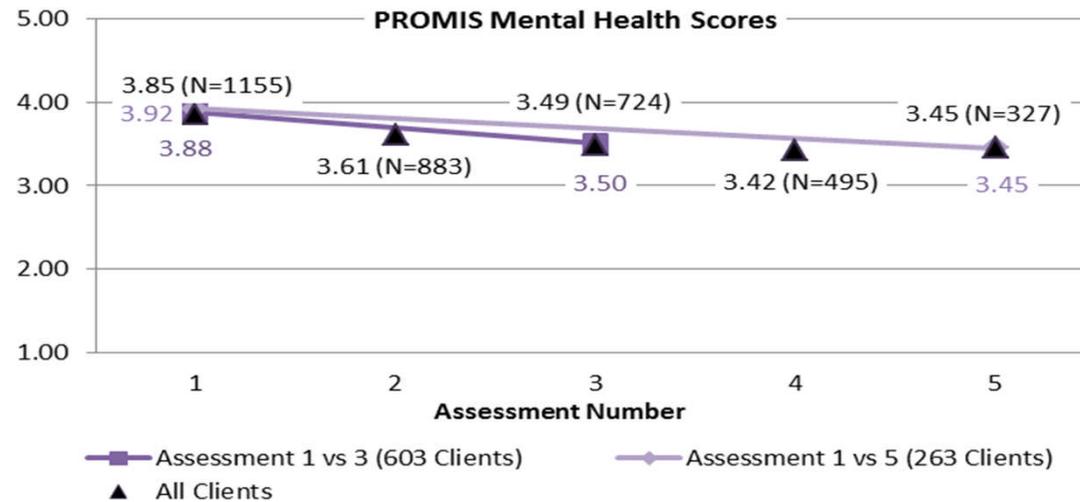
(1 vs. 5)

IMHT MORS Ratings						
Rating #	Milestones of Recovery	Baseline (All Clients N=434)	Matched Samples			
			Assessment 1 vs. 3 (N=322)		Assessment 1 vs. 5 (N=249)	
1	Extreme Risk	3.0%	3.1%	3.1%	4.4%	1.6%
2	High Risk / Not Engaged	8.8%	9.0%	4.7%	7.2%	3.6%
3	High Risk / Engaged	62.0%	60.6%	26.1%	61.8%	13.3%
4	Poorly Coping / Not Engaged	6.2%	6.8%	5.3%	5.2%	9.6%
5	Poorly Coping / Engaged	17.1%	17.1%	46.3%	17.7%	43.0%
6	Coping / Rehabilitating	2.8%	3.1%	12.7%	3.2%	26.5%
7	Early Recovery	0.0%	0.0%	1.9%	0.0%	2.4%
8	Advanced Recovery	0.2%	0.3%	0.0%	0.4%	0.0%

PROMIS Mental Health Ratings Improve

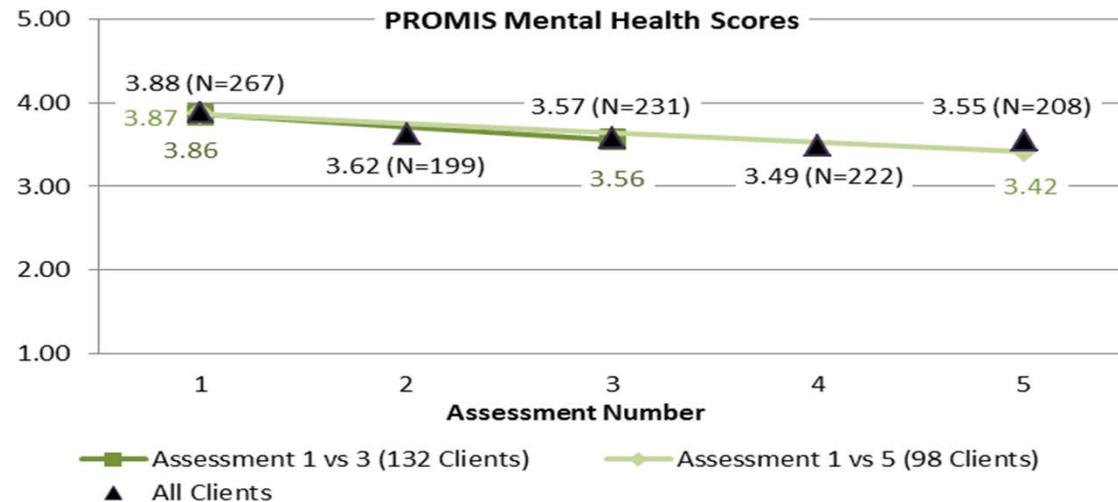
ISM

51.7% clinical improvement



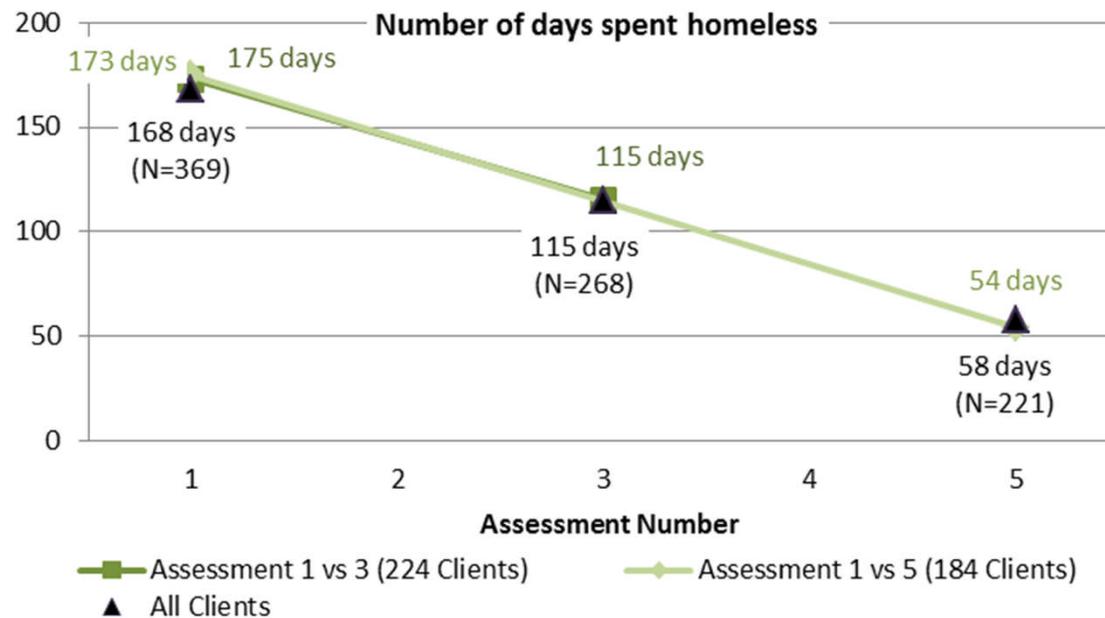
IMHT

60.2 % clinical improvement



Impacting Substance Use, Satisfaction and Homelessness

- All models demonstrate reductions in substance use
- All models demonstrate very high rates of service satisfaction
- IMHT reduced homelessness



Emergency Room Use – IMHT and ICM

IMHT - In the past 6 months, how many times did you go to an emergency room?					
	None	1-3 times	4-6 times	7-10 times	More than 10 times
Baseline (All Clients N=265)	32.1%	44.9%	14.7%	3.4%	4.9%
Assessment <u>1 vs. 3</u> (124 Clients)	34.7% vs. 48.4%	42.7% vs. 35.5%	14.5% vs. 11.3%	4.0% vs. 1.6%	4.0% vs. 3.2%
Assessment <u>1 vs. 5</u> (96 Clients)	36.5% vs. 67.7%	46.9% vs. 24.0%	10.4% vs. 7.3%	4.2% vs. 1.0%	2.1% vs. 0.0%

ICM- In the past 6 months, how many times did you go to an emergency room?					
	None	1-3 times	4-6 times	7-10 times	More than 10 times
Baseline (All Clients N=713)	64.4%	29.3%	3.6%	1.1%	1.5%
Assessment <u>1 vs. 3</u> (294 Clients)	64.6% vs. 69.7%	27.2% vs. 24.1%	5.1% vs. 4.4%	0.7% vs. 0.7%	2.4% vs. 1.0%
Assessment <u>1 vs. 5</u> (153 Clients)	60.1% vs. 68.6%	30.7% vs. 27.5%	7.2% vs. 3.3%	0.7% vs. 0.7%	1.3% vs. 0.0%

Increases in Meaningful Use of Time

IMHT increased the number of clients attending school

Attend school?	
Baseline (All Clients N=264)	4.5%
Assessment <u>1 vs. 3</u> (123 Clients)	5.7% vs. 12.2%

ISM increased the number of clients employed and attending school

ISM - During the past 6 months, which of the following have you done?	
	% Engaged
Have paid employment?	
Baseline (All Clients N=1128)	26.5%
Assessment <u>1 vs. 3</u> (581 Clients)	26.9% vs. 32.0%
Assessment <u>1 vs. 5</u> (257 Clients)	28.0% vs. 33.5%

Attend school?	
Baseline (All Clients N=1125)	18.1%
Assessment <u>1 vs. 3</u> (581 Clients)	15.5% vs. 19.1%

The Evaluation Rubric: An Approach to Data-Informed Decision Making

The Innovation rubric is a decision-making tool created by and for LACDMH to:

- Systematically determine future funding recommendations and decisions, based on the weighing of outcomes
- Help answer Innovation program learning questions
- Ensure a transparent process for evaluation and decision-making based on evaluation

Process for Developing the Rubric

- May – July 2014: Internal staff discussed the purpose and use of the rubric. Informed by each model's service agreement and solicitation requirements.
- July 2014: Innovation providers discussed draft rubric at quarterly learning session. Providers shared their feedback on the domains, sub-domains, data sources, and potential weighing.
- June – September 2014: Data sources were reviewed for each model to determine scoring parameters for each sub-domain. Minimum criteria for inclusion and scoring category names identified.
- September 2014: Domains, sub-domains, and scoring approach were finalized. Weighting of domains and sub-domains was discussed.
- October – November 2014: Weighting finalized. Present rubric to DMH executive management and other decision-makers (System Leadership Team).

Level	Domain	Sub-domain	Data source
Client Level			
	Quality of Care	Mental Health Outcomes	iHOMS - IMR, CHOIS, PROMIS Mental Health, MORS
		Physical Health Outcomes	iHOMS – Physical Health Indicators, PROMIS Physical Health
		Substance Abuse Outcomes	iHOMS - Reported alcohol/substance use, PROMIS Substance Use scale
		Physical Health Labs (screening)	iHOMS - Physical Health Indicators
		Cultural Competency	iHOMS - satisfaction item
	Quality of Life	Incarcerations	iHOMS - client report
		Emergency Services	iHOMS - client report, IMR
		Employment/Volunteer/School	iHOMS - client report
		Housing	iHOMS
		Housing Retention	iHOMS – one year
		Income/Benefits¹	IS
		Stigma	iHOMS - ISMI
		Social Support	iHOMS – IMR
	Client Satisfaction	Client Satisfaction	iHOMS - MHSIP
Program Level			
	Data Compliance	Data Compliance	iHOMS
	Access to Care	Clients served relative to targets	IS – demographics, diagnoses, location
		Client Flow	iHOMS - discharge data
		Clients receive desired care	iHOMS - client satisfaction
	Staffing	Service Location	IS
		Staff Satisfaction	iHOMS - staff satisfaction
		Staff Development	IT Tool
		Peer involvement	IT Tool, staff satisfaction survey
	Cost	Cost	IS
	Integration	Integration Efforts	IT Tool Report, SNA, iHOMS - client satisfaction and staff satisfaction
	Outreach & Engagement	Client Engagement	iHOMS - MORS score, client satisfaction
		Success in reaching target population	iHOMS demographics, Outreach survey

ICM & IMHT only, ICM and ISM only,
 ICM only, IMHT only, ISM only

ICM Combined Rubric

Raw scores are made up for purposes of illustration					
Level	Domain	Weight	Raw Score	Weight	Weighted Score
Client Level			46.7	60%	28.0
	Quality of Care	59%	45.8		
	Quality of Life	34%	47.8		
	Client Satisfaction	7%	50.0		
Program Level			53.8	40%	21.5
	Data Compliance	10%	66.7		
	Access to Care	25%	62.8		
	Staffing	12%	53.8		
	Cost	24%	37.5		
	Integration	17%	54.2		
	Outreach and Engagement	12%	56.3		
Total Score				100%	49.6

Summary and Recommendations

- The IMHT, ICM and ISM models are all scheduled to end on June 30, 2015
- All 3 models have demonstrated effectiveness in reducing mental health, physical health and substance use symptoms
- Recommendation:
 - Approve ongoing funding for these 3 models through MHSA Community Services & Support funding
 - Specific funding to be determined by DMH Executive Management Team, based on review of funding priorities, with a requested range between \$10-19 million per year (MHSA INN only)
 - Specific agency funding level to be determined by DMH based on results of evaluation rubric