

Building Mental Wellness: Outcomes of a Statewide Intervention to Implement Mental Health Services in Pediatric Primary Care

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Background

- Mental health concerns are among the most frequent issues faced by pediatric primary care, yet providers report low comfort levels for managing common mental health conditions.
- Efforts to train primary care providers are underway, but research on interventions that address both organizational and individual determinants of mental health care are lacking.

Objective

- To determine the effectiveness of the Building Mental Wellness (BMW) Learning Collaborative (wave 3) in improving implementation outcomes in pediatric primary care.

Methods

- Staff from 29 pediatric primary care practices completed 4 on-site trainings over 10 months.
- Training content included communication and management skills for common mental health problems and addressed organizational (inner organizational context) and individual (staff attitudes, provider confidence) factors.
- Practices measured change in 5 areas (resources, referral tracking, mental health promotion and screening, mental health integration, and practice-based interventions), earning a star for each category.
- Change in outcome variables was measured over time.

Results

- Most practices earned ≥ 3 stars in the 5 star recognition system, and all earned at least 1.
- All aspects of inner organizational context improved, with most being significantly affected by practice. Improvements in staff attitudes, measured using the Physician Belief Scale, were noted but did not reach statistical significance (Table 1).

Table 1. Improvements in aspects of inner organizational context and staff attitudes pre and post intervention.

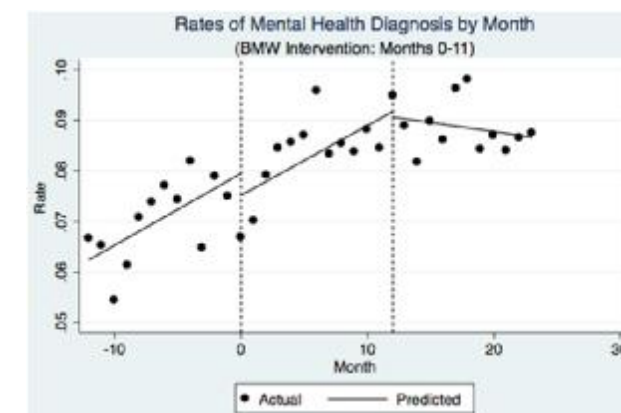
Inner Organizational Context	Fixed Effects Coefficients (95% CI)		Random Effects Coefficients			
	Baseline n=223	Post n=165	Practice Variance		Residual Variance	
Culture (%)	67.7 (63.1-72.3)	79.0 (75.7-82.4)	7.69**	4.28	19.4	17.1
Structures/Processes (%)	63.1 (58.9-67.3)	79.5 (75.6-82.4)	6.62**	3.06	20.3	16.5
Climate (%)	64.5 (62.0-67.1)	70.9 (67.5-75.2)	2.72	4.61	15.4	15.2
Technologies (%)	63.2 (55.0-71.5)	84.1 (79.6-88.6)	11.6*	~0	32.1	22.0

Staff Attitudes						
	Baseline n=96	Post n=74				
Belief/feelings	15.6 (14.4-16.9)	14.2 (13.0-15.5)	0.743	~0	5.82	5.29
Burden	15.4 (14.0-16.7)	13.4 (12.1-14.5)	1.65	1.00	5.30	5.08
PBS total	30.9 (29.0-32.9)	27.7 (25.6-29.8)	~0	~0	9.62	9.36

**p<0.01; *p<0.05

- Provider confidence increased 20% (95% CI: 15 to 25%) from 2.92 to 3.55 points from baseline to post-intervention.
- Using Medicaid claims data, monthly rates of office visits for mental health concerns increased by 0.14 percentage points (95% CI: 0.05, 0.23; p=0.003) per month, from 6% one year prior to 9% at the end of BMW (Figure 1).

Figure 1. Rates of mental health diagnosis by month (splines for pre/during/post).



Conclusions

- This study provides initial evidence that an intervention addressing organizational and individual factors may be effective in improving mental health service delivery in primary care. These factors may be important in driving and sustaining changes in care.
- Using a "train the trainer model," BMW has been adapted for use in residency continuity clinics to address gaps in residency training.

Acknowledgments

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And now we probably take a little bit of a different approach that, here are some things that we may be able to suggest [or] do [other] than just strictly the referral. – BMW provider