



Integrated Behavioral Health Care in the Pediatric Primary Care Setting

Michael Yogman MD, Susan Betjemann LICSW, Anna Sagaser BS, Liza Brecher MS

Abstract

Background

The top five reasons for pediatric office visits in the US today are behavioral health concerns, a departure from the physical concerns that were once the most prominent chronic illnesses of our nation's youth. Yet children and families face multiple barriers to accessing behavioral healthcare. This paper describes a Quality Improvement project that utilizes a co-located behavioral health and care coordination integration model in a private pediatric primary care office that is a Patient Centered Medical Home. The project was designed to align with the IHI goals of the Triple Aim, targeting improved patient and provider experience, population health quality, and healthcare costs.

Methods

A Licensed Clinical Social Worker (LICSW) was co-located into the practice along with a parent partner/care coordinator. Children with behavioral health disorders were provided interventions involving consultation with the primary care physician, short-term treatment or referral for treatment of more complex cases, and care coordination by the parent partner/care coordinator. Outcomes measuring improvement in patient and provider experience, population health quality, and cost savings were examined.

Results

The LICSW had 1573 encounters with over 366 patients in the practice over a 2 year period. Improvements were observed in all aspects of the triple aim. Cost savings averaged \$336 pmpm for the total patient population and \$716pmpm for patients with behavioral health disorders.

Conclusion

Behavioral Health Integration improved patient and provider experience, population health quality, and lowered overall cost.

Affiliation

Michael Yogman MD, Dept of Pediatrics, Harvard Medical School. Mt. Auburn Hospital
Susan Betjemann, LICSW, Yogman Pediatrics Associates
Anna Sagaser, BS, Tufts University School of Medicine
Liza Brecher, MS, Tufts University School of Medicine
Contact: Dr. Michael Yogman, myogman@massmed.org

Funding

Funding was provided by the Harvard Pilgrim Quality Grant Program.

Behavioral Health Concerns

- Among the top 5 reasons for pediatric office visits
- 20% of children have a mental health diagnosis
- QI project in pediatric practice to demonstrate effect of co-located, integrated, behavioral health on triple aim`

Intervention

- LICSW/Care Coordinator: consultation, assessment, short-term treatment, care coordination, and referral
- Encounters Tracked in EMR:

Behavioral Health / Care Coordination Measurement Tool

Patient Level	Care Coordination Needs	Outcome(s)
Level Description (1-2 encounters) 1. Low: Information/Referral (1-2 encounters) 2. Intermediate (2-5 encounters) 3. Intensive (5+ encounters)	Care Coordination Needs (choose all that apply) 1. Behavioral Health Coordination 2. Make Appointments 3. Follow-Up / Referral Services Provided 4. Order Supplies, Services 5. Coordination Services (schools, agencies, payers) 6. Specialty Provider Coordination	Outcome(s) (choose all that apply) As a result of this care coordination activity, the following was PREVENTED (choose all that apply) 1. ER Visit 2. Subspecialist visit 3. Hospitalization 4. Visit to Pediatric Office/Clinic 5. Specialized Therapies (PT, OT, etc) As a result of this care coordination activity, the following OCCURRED (choose all that apply) A. Advised family/patient on behavioral health management B. Behavioral health therapy/treatment C. Met family's immediate needs, questions, concerns D. General patient follow-up E. Advocacy for family/patient F. Reviewed labs, specialist reports, IEP's etc. G. Referral for assessment H. Referral to specialized therapies (OT/PT/SLP) I. Referral to community agency J. Referral to behavioral health subspecialist K. Referral to ER L. Unmet needs (please specify) M. Identification of resources
Focus of Encounter (choose all that apply) 1. Mental Health / Treatment 2. Developmental / Behavioral 3. Educational / Care / EI / IEP 4. Assessing / Dr / Intake 5. Referral Management 6. Clinical / Medical Management 7. Social Services / Community Agencies 8. Legal / Judicial	Activities to Fulfill Needs (choose all that apply) Center With 1a. Patient 1b. Parent/family 1c. School 1d. Agency 2. Form Processing 3. Confer with Primary Care Physician 4. Develop / Modify Written Care Plan 5. Meeting / Case Conference 6. Intake Assessment / Therapy Visit 7. Group Meeting / Therapy 8. Family Meeting	

Adapted by M. Yogman, MD, FAAP and S. Betjemann, LICSW, 2013 (Copyright pending) from the Medical Home Care Coordination Measurement Tool - R. Antonelli, MD,FAAP

Measures

- Patient Experience
- Provider Experience
- Population Health Quality
- Cost

Results

Patient and Provider Experience Measures Pre and Post Intervention

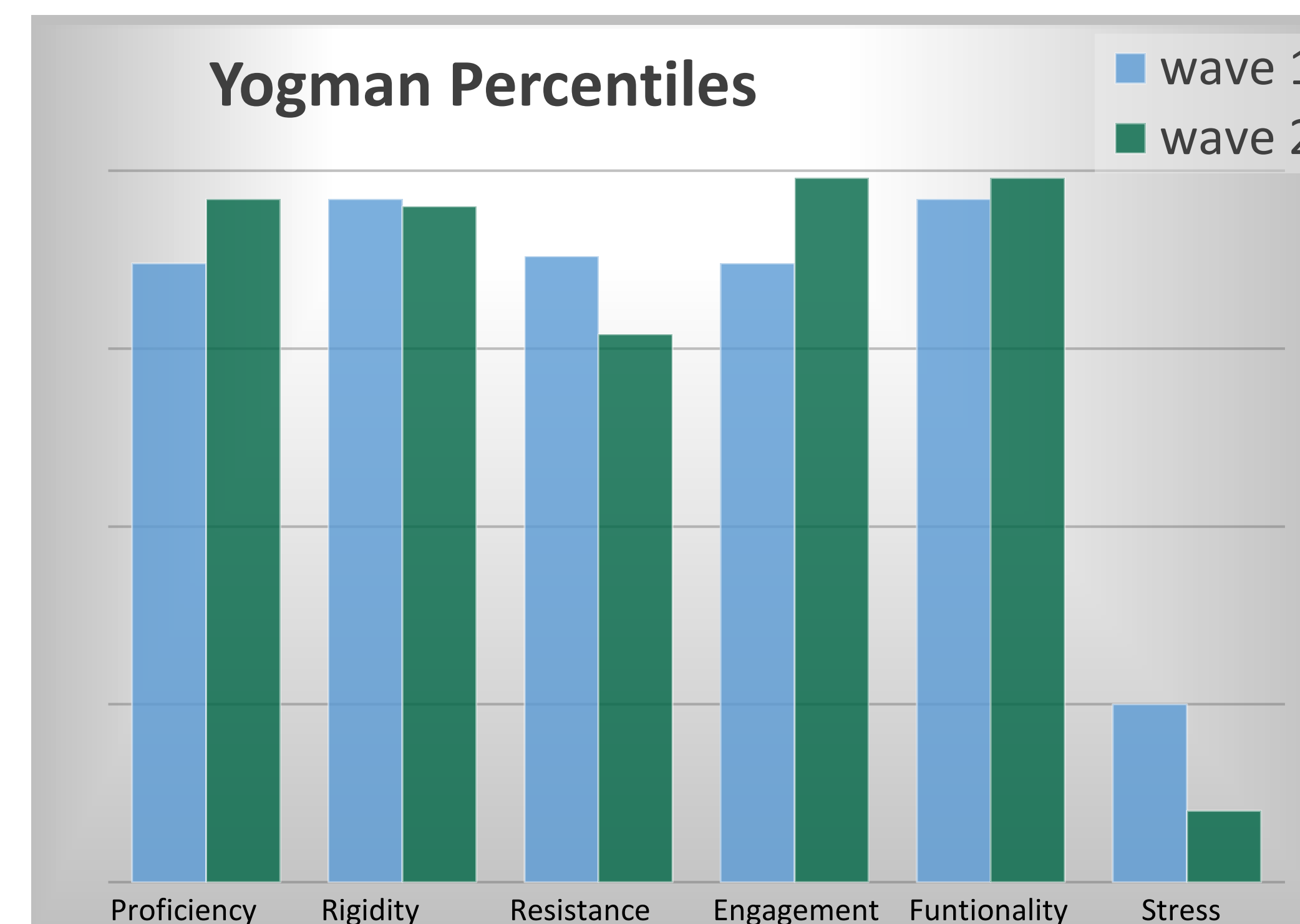
Patient Experience

- Parenting Stress Index: Improved
- Family Centered Care Assessment for Families: Improved
- Client Satisfaction Questionnaire: Improved

Provider Experience

- Family Centered Care Assessment Self Assessment: Improved
- Physician Belief Scale: Improved
- Organizational Social Context Scale: Improved

Provider Experience: Organizational Social Context Scale: Percentile Comparison of OSC Pre and Post Intervention



Bar graphs show pre and post results: positive gains in proficiency, engagement and functionality; decreases in rigidity, resistance and stress (wave 1=pre,wave2=post).

Outcomes

Population Health Quality

- Improved outcomes for ADD/ADHD, Complex Special Healthcare Needs (CSHCN), Complex Special Healthcare needs with co-morbid Behavioral Health Concerns (CSHCN/BH), Early Intervention/Individual Education Plan (EI/IEP); but not for Serious Emotional Disturbance (SED: anxiety, depression, substance abuse).

Cost

- Total Medical Expenditures for patients enrolled in 2013 and 2015, regardless of when they enrolled

Registry	Avg/Median	2013	N 2013	2015	N 2015	Change	Change as % of Original
ADHD	Average Pm/Pm	\$329.53	46	\$132.24	45	(-\$197.29)	-59.87%
	Median Pm/Pm	\$137.39		\$89.41		(-\$47.98)	-34.92%
Complex	Average Pm/Pm	\$1,528.81	63	\$1,131.51	55	(-\$397.30)	-25.99%
	Median Pm/Pm	\$674.85		\$201.10		(-\$473.75)	-70.20%
BHCC	Average Pm/Pm	\$2,473.00	27	\$1,757.32	33	(-\$715.68)	-28.94%
	Median Pm/Pm	\$368.38		\$742.42		(\$374.04)	101.54%
SED	Average Pm/Pm	\$386.33	57	\$243.75	68	(-\$142.58)	-36.91%
	Median Pm/Pm	\$151.22		\$114.23		(-\$36.99)	-24.46%
Average Overall	Average Pm/Pm	\$989.95	204	\$653.97	294	(-\$335.98)	-33.94%
	Median Pm/Pm	\$281.72		\$114.23		(-\$167.49)	-59.45%

References

- Ader, J. et al. "The Medical Home and Integrated Behavioral Health: Advancing the Policy Agenda." *PEDIATRICS* 135.5 (2015): 909-917. *CrossRef*. Web. 15 2015.
- Asarnow, Joan Rosenbaum; Michelle Rozenman PhD; Jessica Wiblin BA; Lonnie Zeltzer MD, "Intergrated Medical-Behavioral Care Compared with Usual Primary Care for Child and Adolescent Behavioral Health: A Meta-analysis." *JAMA Pediatrics* 169.10 (2015): 929 -937.
- Campo, John V; Bridge, Jeffrey A; Fontanella, Cynthia A. "Access to Mental Health Services: Implementing an Integrated Solution." *JAMA Pediatrics* 169.4 (April 2015): 299-300.
- Kolko, David J., "The Effectiveness of Integrated Care on Pediatric Behavioral Health: Outcomes and Opportunities." *JAMA Pediatrics Volume 169 Number 10* (October 2015) 894-896.
- Perrin, Ellen C. "The Challenge of Mental Health Care in Pediatrics." *Archives of Pediatrics & Adolescent Medicine* 166.3 (2012): 287. *CrossRef*. Web. 22 Oct. 2014.
- Brenda Reiss-Brennan, PhD, APRN; Kimberly D. Brunisholz, PhD; Carter Dredge, MHA; Pascal Briot, MBA; Kyle Grazier, PhD; Adam Wilcox, PhD; Lucy Savitz, PhD; Brent James, MD, MStat "Association of Integrated Team-Based Care With Health Care Quality, Utilization, and Cost." *JAMA* 316 (8) 826-834, August 2016
- National Research Council and Institute of Medicine. Preventing Mental, Emotional, and Behavioral Disorders Among Young People. Washington, DC: National Academies
- Press; 2009. Available at: <http://www.iom.edu/reports/2009/preventing-mental-emotional-and-behavioral-disorders-among-young-people-progress-and-possibilities.aspx>