

Co-Creation of Electronic Medical Record Templates to Simultaneously Support Patient Care and Implementation



Charlotte Vieira, MPH¹, Cameron Hill, MPH¹, Jihye Kim, PhD¹, R. Christopher Sheldrick, PhD², Stacy Justo, MA¹, Jessica Rosenberg, MPH¹, Anita Morris, MSN, FNP-BC¹, Megan Bair-Merritt, MD, MSCE^{1,3}, Emily Feinberg, ScD, CPNP^{1,3}



¹Boston Medical Center, Department of Pediatrics, Boston, MA; ²Boston University School of Public Health, Boston, MA; ³Boston University School of Medicine, Boston, MA

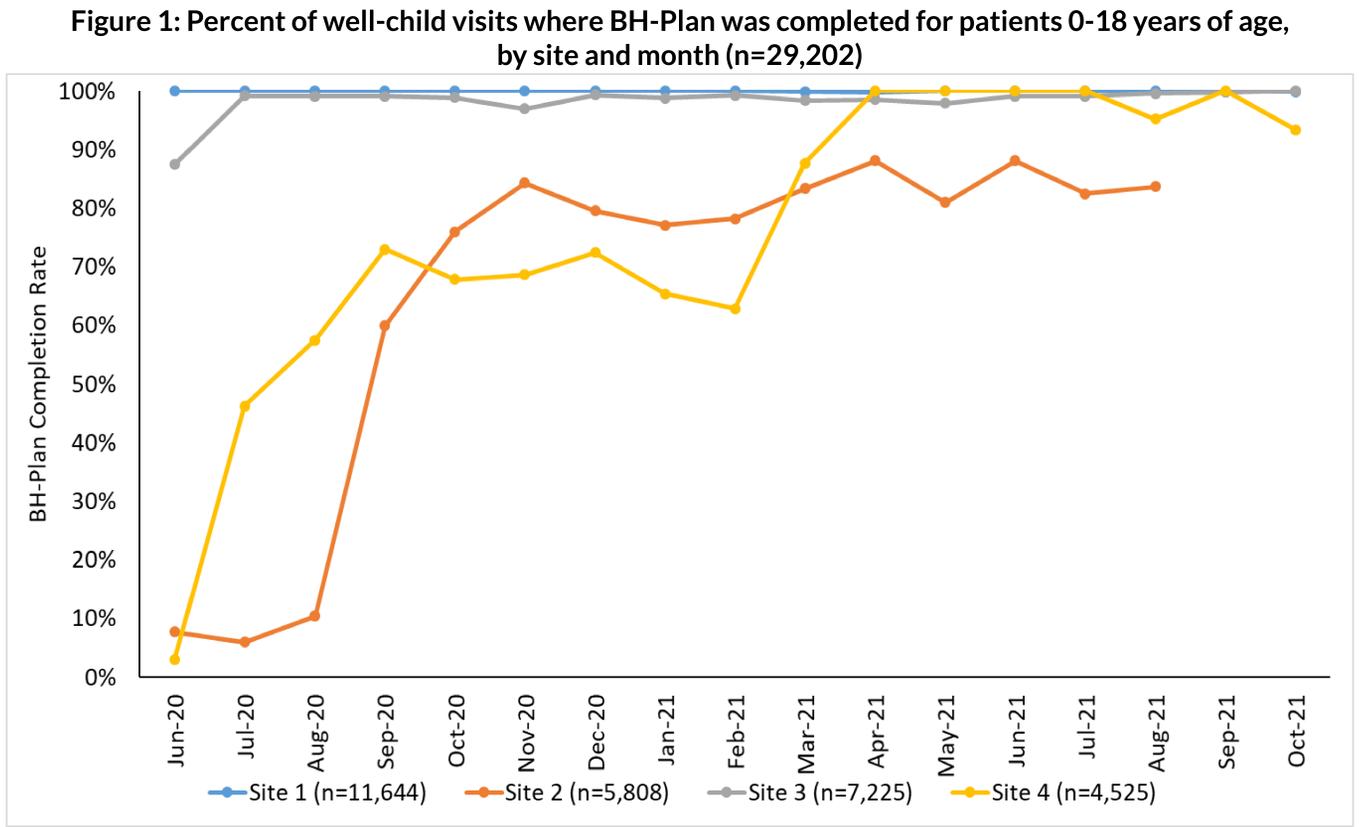
BACKGROUND

- Incorporating data collection into clinical workflows can improve patient care while advancing implementation science
- To maximize utility, metrics must address user-centered perspectives while also reflecting research best-practices to support evaluation and implementation
- We report co-creation of a template to capture primary care providers' (PCP) identification and management of behavioral health (BH) needs in TEAM UP for Children, a pediatric BH integration initiative implemented in several Boston-area health centers (HC)

METHODS

- Guided by the Consolidated Framework for Implementation Research (CFIR), a study was conducted to understand implementation of a "BH-Plan" at four participating HCs
- Developed with PCPs and implemented within each HC's EMR, the BH-Plan was designed to be completed at all PCP visits to document BH problems identified and referrals for BH care – core elements of the TEAM UP model
- Extractable data fields facilitated ongoing evaluation of implementation
- We report data collected between June 2020 and October 2021 from BH-Plans and universal BH screening with the Pediatric Symptom Checklist (PSC-17)
- Engagement in practice transformation allowed for the contextualization of data patterns and HC-specific implementation practices

RESULTS & KEY FINDINGS



*Data for Site 2 for Sept-Oct 2021 are currently unavailable

Table 1: BH-Plan Evaluation Data, June 2020 – October 2021

Site (# Patients Screened)	Screening Results		BH Need Identified by PCP		Referred for Care
	Patients Screened Positive (%)	Patients Screened Negative (%)	Subsequent to Positive Screen (%)	Subsequent to Negative Screen (%)	Subsequent to BH Need Identified (%)
Site 1 (n=4,707)	316 (7%)	4,391 (93%)	202 (64%)	707 (16%)	815 (90%)
Site 2 (n=3,002)	213 (7%)	2,789 (93%)	120 (56%)	454 (16%)	493 (86%)
Site 3 (n=2,566)	207 (8%)	2,359 (92%)	107 (52%)	254 (11%)	273 (76%)
Site 4 (n=998)	86 (9%)	912 (91%)	75 (87%)	260 (29%)	315 (94%)
Total (n=11,273)	822 (7%)	10,451 (93%)	504 (61%)	1,675 (16%)	1,896 (87%)

Table 2: Key CFIR Constructs Related to BH-Plan Creation

Adaptability	The BH-Plan was co-created with participating HCs. Over time, several iterations were developed in direct response to feedback from users increasing PCP acceptability.
Trialability	PCPs at each HC piloted the BH-Plan prior to full implementation. This allowed for improvements to EMR functionality, increased capacity for training, and development of buy-in prior to roll-out.
Access to Knowledge and Information	Training materials were developed to engage PCPs on completion of the BH-Plan, though training practices varied by HC. This resulted in inconsistencies in the information shared and expectations for how and when to complete the BH-Plan.
Design Quality and Packaging	HCs used different EMR systems. This resulted in differences in the look and functionality of the BH-Plan across HCs. Specific functions such as a "hard-stop" supported implementation by requiring completion of the BH-Plan prior to closing the visit encounter in the EMR, as did embedding the BH Plan in all documentation templates.
Implementation Leaders/Champions	Clinical Champions and Project Managers at each HC led implementation of the BH-Plan through training and quality improvement efforts. Their buy-in and facilitation strongly influenced implementation outcomes.
Reflecting and Evaluating	Unblinded sharing of data among HCs provided direct feedback on implementation of the BH-Plan. Data were also utilized to support practice transformation across the TEAM UP community and drove HC-specific quality improvement efforts.
External Change Agents	HCs were supported in their implementation of the BH-Plan through practice transformation and funding support. The initiative provided technical assistance and operational support, while funding partners provided salary support for local champions.

CONCLUSIONS

- Co-creation of metrics resulted in a feasible and sustainable data capture system perceived as acceptable to PCPs
- Data revealed frequent disconnect between screening results and PCPs' assessment of BH need – a finding that replicates published studies of BH screening implementation and augments evidence on clinical decision-making
- Initial results suggest that co-created templates for clinical data capture can optimize patient care and improve implementation with minimal impact on PCP burden

ACKNOWLEDGEMENTS

All activities within the TEAM UP for Children initiative are made possible through the contributions of the TEAM UP partners. Funding for the TEAM UP for Children initiative is provided by the Richard and Susan Smith Family Foundation and The Klarman Family Foundation.

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