Research in Progress: Measuring Behavioral Health Integration in Primary Care Settings

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Introduction

If patient centered medical homes are to succeed, mental health, substance abuse, and health behavior services must be integrated into the delivery of primary and specialty medical care (Baird et al., 2014). It has been established that such services are the most difficult medical subspecialty services for primary care physicians to obtain (Cunningham, 2009). Primary care practices have responded to this need by increasing collaboration with mental health professionals in the community or co-locating behavioral health providers to facilitate access. A less frequent strategy is integrating clinicians trained in primary care behavioral health into those practices.

While each model of collaboration may enhance some elements of care, we know very little about how different implementation models and degree of integration impact the Triple Aim outcomes of improved patient experience, improved outcomes, and lower costs of care (Berwick et al., 2008). A difficulty in assessing such outcomes has been a lack of an agreed upon taxonomy or descriptive language that identifies the content and processes of these efforts. To date, measurement of care processes used in collaborative care implementation has been infrequent and non-systematic. In response to the limitations of existing terminologies, Peek (2013) has introduced the Lexicon for Behavioral Health and Primary Care Integration, which proposes a set of clauses and terms to define the "paradigm case" of collaborative and integrated care (for more information, seehttp://integrationacademy.ahrq.gov/sites/default/files/Lexicon.pdf)

Using methodology adapted from descriptive psychology as a starting point, Peek proposes a set of defining core concepts, and their acceptable variations, that define the practice of "collaborative care." Most of the defined parameters are structural (e.g., team composition, financial model), but some refer to procedural aspects (e.g., method of targeting patients for behavioral health services).

We now describe our ongoing efforts to translate the Lexicon into a set of standardized measures of integrated care processes to use in both practice implementation and improvement efforts and in research.

The VIP

Our team recently developed the Vermont Integration Profile (VIP) (Kessler et al., 2014), a 30-item, electronically administered measure of integrated care processes. We operationalized Peek's key clauses into s six measurable dimensions: practice workflow, clinical services and providers, workspace arrangement, shared care and integration method, case identification, patient engagement and retention, and a total score. We developed item clusters operationalizing these dimensions. Further feedback and pilot testing resulted in adjusted language for comprehension and readability. The same process was used to develop a scoring system, which can be used to generate a score for each individual dimension and a practice total score. We have currently tested the measure in over 140 practices. The current version of the instrument (VIP v5.0) recently was refined to automatically self-score and can be completed in 10 minutes.

Method

We administered version the VIP to a convenience sample recruited from email broadcasts to relevant list-serves (including Division 38, Division 38 Primary Care, and Society of Behavioral Medicine), national webinars, and presentations at national meetings. We requested that the measure be filled out by the practice's most senior behavioral health clinician and senior physician in the practice. We generated clinic scores on the 6 dimensions plus a total score, and total sample means and medians on each domain, to compare overall practice response. We identified two practice organizations around the country (10 total practices) as "exemplar practices" representing the most advanced in behavioral health integration according to reports from the Agency for Healthcare Research and Quality and others. We performed a one-way ANOVA to compare mean scores with behavioral health clinicians, physician practices, and community mental health centers. We computed test-retest reliability on a subset of responders. The protocol was reviewed by the University of Vermont IRB and assessed as exempt from human subjects research regulations.

Results

We analyzed data from 139 respondents in 113 practices (16 practices had multiple respondents). Behavioral health clinicians (n = 53) and physicians (n = 23) were most frequent respondent types. There was an overrepresentation of urban (n = 54) and rural (n = 36) practices compared with other geographical categories. Practices were broadly represented, with federally qualified health centers (n = 35) and family medicine clinics

(n = 48) most frequently represented. Respondents were primarily from large practices (defined as having 10 or more employees, n = 101).

Across all respondents, the median total integration score was 58.29 (range 8.71-100). Median domain scores are shown in Table 1. Total mean integration scores varied significantly by practice type (F=20.21, p<0.0001; also see Table 2), suggesting that the VIP discriminates levels of integration. On a limited sample (n=8), test retest reliability was high, with an average total score variation of 4.0 points between first and second administrations (average of 45 days between responses). The average difference in total scores between multiple raters within the same practice was 7.3 points.

Table 1. Median VIP Domain Scores (n = 139)

VIP 5.0 Domain	Median Score (Range 0-100)
Workflow	58.33
Clinical Services	66.67
Workspace	75.00
Shared Care & Integration	50.00
Case Identification	50.00
Patient Engagement	50.00
VIP 5.0 Total Score	58.29

Table 2. Median Scores by Practice Type

VIP 5.0 Median Score	Exemplar Sites (10)	Community Mental Health Center (N = 24)	Community Health Center and Medical Practices with BHC (N = 20)	Community Health Center and Medical Practices without BHC (N = 14)	Community Health Center and Medical Practices not identified with or without BHC (N = 71)
Workflow	75.00	58.33	54.17	37.50	58.33
Clinical Services	95.83	59.72	70.83	20.83	69.44
Workspace	100.00	37.50	87.50	37.50	87.50
Shared Care & Integration	87.50	31.25	62.50	18.75	56.25
Case Identification	87.50	37.50	47.50	52.50	55.00
Patient Engagement	68.75	50.00	50.00	31.25	50.00
VIP 5.0 Total Score	84.21	44.28	59.55	35.76	62.04

Conclusion

There is a need to measure differences in approaches to behavioral health services in primary care settings. We have translated Peek's theoretical construct of behavioral health integration into a brief self-report measure with encouraging early evidence of reliability and validity. Our hope is to further develop this instrument to

evaluate and measure the processes associated with the growing presence of behavioral health in primary care. Results of such measurement can support practice level quality improvement and allow us to evaluate whether the degree of practice process is related to differences in outcomes. Several organizations are now using the VIP to inform their quality improvement efforts. We have identified opportunities to refine the measure further to establish clarity and language for multiple sub-populations and are currently seeking broader venues to apply the VIP. Although the VIP is undergoing continued testing and refinement, we believe we have established a usable, theoretically driven set of measures relevant to the field and a product that can assist in the evaluation of behavioral health integration models.

For questions regarding the VIP and copies of the instrument to review and complete, please contact Rodger Kessler, Ph.D., ABPP (Rodger.Kessler@med.uvm.edu).

References

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