

## ABSTRACT SUBMISSION AIC 2016: #128

### 1. Title

Comprehensive Review of Feedback Systems to Support Implementation of Measurement-Based Care in Mental and Behavioral Health

### 2. Author

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### 3. Abstract Text:

Measurement-based care (MBC) – the systematic, repeated collection of outcome data to evaluate patient progress, provide feedback, and inform intervention decisions – is shown to improve patient outcomes in mental and behavioral health (e.g., Bickman et al., 2011; Lambert & Shimkova, 2011; SAMSHA, 2012). Digital measurement feedback systems (MFS; Bickman, 2008), which collect outcome data and display results to clinicians and patients, represent a rapidly growing implementation strategy with the potential to address workflow issues and streamline MBC integration. A diverse array of MFS have been developed across the academic and commercial sectors yielding a diffuse and siloed knowledge base. System variability and lack of alignment with relevant theories and frameworks may limit the extent to which they can effectively support MBC implementation.

This presentation will report findings from a comprehensive review of MFS designed to (a) document their characteristics and capabilities and (b) detail strategies through which they support MBC. Using a competitive analysis framework (Bergen & Peteraf, 2002), we identified extant MFS and their associated processes for supporting MBC. Data collection involved (1) coding publically available MFS information (websites, scientific literature) and (2) semi-structured interviews with system developers to assess congruence with leading frameworks for feedback (e.g., Feedback Intervention Theory; Kluger & DeNisi, 1996), user centered design (e.g., International Standards Organization, 2010), and implementation science (e.g., Diffusion of Innovations; Rogers, 2003).

MFS capabilities varied widely across 49 identified systems. For example, although most tracked standardized outcomes (94%), far fewer facilitated the use of more individualized outcomes (29%). The majority displayed outcomes visually (e.g., graphs) (69%), but were less likely to provide feedback about outcomes relative to a standard (e.g., assessment tool norms; 42%) or facilitate data collection via a patient portal (37%). Although bibliometric data indicated that only 31 systems (63%) were represented in the literature, 84% of systems were self-described as “evidence-based.” Additional results from developer interviews will describe implementation supports, costs, and spread.

Federal agencies have underscored the importance of technology and outcome evaluation for the modernization and enhancement of healthcare. Identification of MFS components that best support MBC has considerable potential to strengthen client engagement and improve outcomes.