**Qualitative & Mixed Methods Implementation Science Readings, as of 2/29/2016**

**Aarons GA**, Fettes DL, Sommerfeld DH, Palinkas LA. Mixed methods for implementation research: application to evidence-based practice implementation and staff turnover in community-based organizations providing child welfare services. Child Maltreat. 2012 Feb;17(1):67-79.

**Albright K**, Gechter K, Kempe A. Importance of mixed methods in pragmatic trials and dissemination and implementation research. Acad Pediatr. 2013 Sep-Oct;13(5):400-7.

**Benoot, C**., et al. (2014). "Living Alone During Cancer Treatment: An Exploration of Patients' Experiences." Qual Health Res **24**(8): 1057-1067.

The social environment is an important determinant in the overall experience of having cancer. The purpose of this article is to identify how patients experience living alone during their cancer treatment. Using qualitative methods based on grounded theory techniques, we interviewed a sample of 32 cancer patients. Living alone was an ambiguous experience during cancer treatment: patients experienced both a lack of support as well a gain in privacy, freedom, and know-how. Living alone was also seen as a constitutive element of the patients' identity. Consequently, patients saw living alone as either a threat or as a resource for their adjustment to cancer treatment. These divergent meanings of living alone did share one common attribute, which was that staying independent was their key goal during cancer treatment. Health care providers should be attentive to the heterogeneous aspects of the experience of living alone when critically appraising the independence of patients.

**Benzer JK**, Beehler S, Cramer IE, Mohr DC, Charns MP, Burgess JF Jr. Between and within-site variation in qualitative implementation research. Implement Sci. 2013 Jan 3;8:4.

***BACKGROUND:*** *Multisite qualitative studies are challenging in part because decisions regarding within-site and between-site sampling must be made to reduce the complexity of data collection, but these decisions may have serious implications for analyses. There is not yet consensus on how to account for within-site and between-site variations in qualitative perceptions of the organizational context of interventions. The purpose of this study was to analyze variation in perceptions among key informants in order to demonstrate the importance of broad sampling for identifying both within-site and between-site implementation themes.*

***METHODS:*** *Case studies of four sites were compared to identify differences in how Department of Veterans Affairs (VA) medical centers implemented a Primary Care/Mental Health Integration (PC/MHI) intervention. Qualitative analyses focused on between-profession variation in reported referral and implementation processes within and between sites.*

***RESULTS:*** *Key informants identified co-location, the consultation-liaison service, space, access, and referral processes as important topics. Within-site themes revealed the importance of coordination, communication, and collaboration for implementing PC/MHI. The between-site theme indicated that the preexisting structure of mental healthcare influenced how PC/MHI was implemented at each site and that collaboration among both leaders and providers was critical to overcoming structural barriers.*

***CONCLUSIONS:*** *Within- and between-site variation in perceptions among key informants within different professions revealed barriers and facilitators to the implementation not available from a single source. Examples provide insight into implementation barriers for PC/MHI. Multisite implementation studies may benefit from intentionally eliciting and analyzing variation within and between sites. Suggestions for implementation research design are presented.*

**Buzza CD**, Williams MB, Vander Weg MW, Christensen AJ, Kaboli PJ, **Reisinger HS.** Should Patients be Activated to Request Evidence-Based Medicine? A Qualitative Study of the Providers’ Reponses to the VA Project to Implement Diuretics (VAPID). Implement Sci. 2010;5:24. (doi: 10.1186/1748-5908-5-24)

**Curran GM**, Sullivan G. Mende P. Craske MG, Sherbourne CD, Stein MB,

McDaniel A and Roy-Byrne P. Implementation of the CALM intervention for

anxiety disorders: a qualitative study Implementation Science 2012 March 7:14

**Dixon-Woods M,** Agarwal S, Jones D, Young B, Sutton A. Synthesising qualitative and quantitative evidence: a review of possible methods J. J Health Serv Res Policy. 2005 Jan; 10(1):45-53

**Green, C.,** et al. (2014). "Approaches to Mixed Methods Dissemination and Implementation Research: Methods, Strengths, Caveats, and Opportunities." Administration and Policy in Mental Health and Mental Health Services Research: 1-16.

**Green CA,** Duan N, Gibbons RD, Hoagwood KE, Palinkas LA, Wisdom JP. Approaches to Mixed Methods Dissemination and Implementation Research: Methods, Strengths, Caveats, and Opportunities. Adm Policy Ment Health. 2014 Apr 11. [Epub ahead of print] Palinkas LA. Qualitative and Mixed Methods in Mental Health Services and Implementation

Research, J of Clin Child & Adolescent Psych. 2014 43(6): 851-861

**Hamilton AB,** Chinman M, Cohen AN, Oberman RS, Young AS. Implementation of

consumer providers into mental health intensive case management teams. J Behav Health Serv Res. 2015 Jan;42(1):100-8.

**Hamilton AB**, Cohen AN, Glover DL, Whelan F, Chemerinski E, McNagny KP, Mullins D, Reist C, Schubert M, Young AS. Implementation of evidence-based employment services in specialty mental health. Health Serv Res. 2013 Dec;48(6 Pt 2):2224-44.

**Hamilton AB**, Mittman BS, Williams JK, Liu HH, Eccles AM, Hutchinson CS, Wyatt GE. Community-based implementation and effectiveness in a randomized trial of a risk reduction intervention for HIV-serodiscordant couples: study protocol. Implement Sci. 2014 Jun 20;9:79.

BACKGROUND:

*The HIV/AIDS epidemic continues to disproportionately affect African American communities in the US, particularly those located in urban areas. Despite the fact that HIV is often transmitted from one sexual partner to another, most HIV prevention interventions have focused only on individuals, rather than couples. This five-year study investigates community-based implementation, effectiveness, and sustainability of 'Eban II,' an evidence-based risk reduction intervention for African-American heterosexual, serodiscordant couples.*

METHODS/DESIGN:

*This hybrid implementation/effectiveness implementation study is guided by organizational change theory as conceptualized in the Texas Christian University Program Change Model (PCM), a model of phased organizational change from exposure to adoption, implementation, and sustainability. The primary implementation aims are to assist 10 community-based organizations (CBOs) to implement and sustain Eban II; specifically, to partner with CBOs to expose providers to the intervention; facilitate its adoption, implementation and sustainment; and to evaluate processes and determinants of implementation, effectiveness, fidelity, and sustainment. The primary effectiveness aim is to evaluate the effect of Eban II on participant (n = 200 couples) outcomes, specifically incidents of protected sex and proportion of condom use. We will also determine the cost-effectiveness of implementation, as measured by implementation costs and potential cost savings. A mixed methods evaluation will examine implementation at the agency level; staff members from the CBOs will complete baseline measures of organizational context and climate, while key stakeholders will be interviewed periodically throughout implementation. Effectiveness of Eban II will be assessed using a randomized delayed enrollment (waitlist) control design to evaluate the impact of treatment on outcomes at posttest and three-month follow-up. Multi-level hierarchical modeling with a multi-level nested structure will be used to evaluate the effects of agency- and couples-level characteristics on couples-level outcomes (e.g., condom use).*

DISCUSSION:

*This study will produce important information regarding the value of the Eban II program and a theory-guided implementation process and tools designed for use in implementing Eban II and other evidence-based programs in demographically diverse, resource-constrained treatment settings.*

**Hamilton AB**, Oishi S, Yano EM, Gammage CE, Marshall NJ, Scheuner MT. Factors influencing organizational adoption and implementation of clinical genetic services. Genet Med. 2014 Mar;16(3):238-45.

PURPOSE:

*We sought to identify characteristics of genetic services that facilitate or hinder adoption.*

METHODS:

*We conducted semi-structured key informant interviews in five clinical specialties (primary care, medical oncology, neurology, cardiology, pathology/laboratory medicine) within 13 Veterans Administration facilities.*

RESULTS:

*Genetic services (defined as genetic testing and consultation) were not typically characterized by informants (n = 64) as advantageous for their facilities or their patients; compatible with organizational norms of low cost and high clinical impact; or applicable to patient populations or norms of clinical care. Furthermore, genetic services had not been systematically adopted in most facilities because of their complexity: knowledge of and expertise on genetic testing was limited, and organizational barriers to utilization of genetic services were formidable. The few facilities that had some success with implementation of genetic services had knowledgeable clinicians interested in developing services and organizational-level facilitators such as accessible genetic test-ordering processes.*

CONCLUSION:

*Adoption and implementation of genetic services will require a multilevel effort that includes education of providers and administrators, opportunities for observing the benefits of genetic medicine, strategies for reducing the complexity of genomic medicine, expanded strategies for accessing genetics expertise and streamlining utilization, and resources dedicated to assessing the value of genetic information for the outcomes that matter to health-care organizations.*

**Johnson, M.,** et al. "Barriers and facilitators to implementing screening and brief intervention for alcohol misuse: a systematic review of qualitative evidence." Journal of Public Health **33**(3): 412-421.

**Katz DA,** Paez MW, **Reisinger HS**, Gillette MT, Weg MW, Titler MG, Nugent AS,

Baker LJ, Holman JE, Ono SS. Implementation of smoking cessation guidelines in

the emergency department: a qualitative study of staff perceptions. Addict Sci

Clin Pract. 2014 Jan 24;9:1.

**Morse JM** Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry. Qual Health Res. 2015 [Qual Health Res.](http://www.ncbi.nlm.nih.gov/pubmed?otool=nihlib&term=Critical%20Analysis%20of%20Strategies%20for%20Determining%20Rigor%20in%20Qua) Sep;25(9):1212-22

**Palinkas LA,** Aarons GA, Horwitz S, Chamberlain P, Hurlburt M, Landsverk J. Mixed method designs in implementation research. Adm Policy Ment Health. 2011 Jan;38(1):44-53.

**Palinkas LA,** Horwitz SM, Green CA, Wisdom JP, Duan N, Hoagwood K. Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. Adm Policy Ment Health. 2013 Nov 6. [Epub ahead of print]

**Palinkas, L. A.** (2014). "Qualitative and mixed methods in mental health services and implementation research." J Clin Child Adolesc Psychol **43**(6): 851-861.

Qualitative and mixed methods play a prominent role in mental health services research. However, the standards for their use are not always evident, especially for those not trained in such methods. This article reviews the rationale and common approaches to using qualitative and mixed methods in mental health services and implementation research based on a review of the articles included in this special series along with representative examples from the literature. Qualitative methods are used to provide a "thick description" or depth of understanding to complement breadth of understanding afforded by quantitative methods, elicit the perspective of those being studied, explore issues that have not been well studied, develop conceptual theories or test hypotheses, or evaluate the process of a phenomenon or intervention. Qualitative methods adhere to many of the same principles of scientific rigor as quantitative methods but often differ with respect to study design, data collection, and data analysis strategies. For instance, participants for qualitative studies are usually sampled purposefully rather than at random and the design usually reflects an iterative process alternating between data collection and analysis. The most common techniques for data collection are individual semistructured interviews, focus groups, document reviews, and participant observation. Strategies for analysis are usually inductive, based on principles of grounded theory or phenomenology. Qualitative methods are also used in combination with quantitative methods in mixed-method designs for convergence, complementarity, expansion, development, and sampling. Rigorously applied qualitative methods offer great potential in contributing to the scientific foundation of mental health services research.

**Pilling SA,** Williams MB, Brackett RH, Gourley R, Vander Weg MW, Christensen AJ, Kaboli PJ, **Reisinger HS.** Activating Patients to Engage Their Providers in the Use of Evidence-Based Medicine: A Qualitative Evaluation of the Patients’ Perspective among Participants of the VA Project to Implement Diuretics (VAPID). Implement Sci. 2010;5:23.

**Proctor EK,** Powell BJ, McMillen JC. Implementation strategies: recommendations for specifying and reporting. Implement Sci. 2013 Dec 1;8:139.

**Scott, S. D.,** et al. "Understanding implementation processes of clinical pathways and clinical practice guidelines in pediatric contexts: a study protocol." Implementation Science **6**.

BACKGROUND:

*Canada is among the most prosperous nations in the world, yet the health and wellness outcomes of Canadian children are surprisingly poor. There is some evidence to suggest that these poor health outcomes are partly due to clinical practice variation, which can stem from failure to apply the best available research evidence in clinical practice, otherwise known as knowledge translation (KT). Surprisingly, clinical practice variation, even for common acute paediatric conditions, is pervasive. Clinical practice variation results in unnecessary medical treatments, increased suffering, and increased healthcare costs. This study focuses on improving health outcomes for common paediatric acute health concerns by evaluating strategies that improve KT and reduce clinical practice variation.*

DESIGN/METHODS:

*Using a multiple case study design, qualitative and quantitative data will be collected from four emergency departments in western Canada. Data sources will include: pre- and post-implementation focus group data from multidisciplinary healthcare professionals; individual interviews with the local champions, KT intervention providers, and unit/site leaders/managers; Alberta Context Tool (ACT) survey data; and aggregated patient outcome data. Qualitative and quantitative data will be systematically triangulated, and matrices will be built to do cross-case comparison. Explanations will be built about the success or lack of success of the clinical practice guidelines (CPG) and clinical pathways (CPs) uptake based upon the cross-case comparisons.*

SIGNIFICANCE:

*This study will generate new knowledge about the potential causal mechanisms and factors which shape implementation. Future studies will track the impact of the CPG/CPs implementation on children's health outcome, and healthcare costs*

*Implementation of a patient centered medical home challenges primary care providers to change their scheduling practices to enhance patient access to care as well as to learn how to use performance metrics as part of a self-reflective practice redesign culture. As medical homes become more commonplace, health care administrators and primary care providers alike are eager to identify barriers to implementation. The objective of this study was to identify non-technological barriers to medical home implementation from the perspective of primary care providers. We conducted qualitative interviews with providers implementing the medical home model in Department of Veterans Affairs clinics-the most comprehensive rollout to date. Primary care providers reported favorable attitudes towards the model but discussed the importance of data infrastructure for practice redesign and panel management. Respondents emphasized the need for administrative leadership to support practice redesign by facilitating time for panel management and recognizing providers who utilize non-face-to-face ways of delivering clinical care. Health care systems considering adoption of the medical home model should ensure that they support both technological capacities and vertically aligned expectations for provider performance*

**Weiner, B. J.,** et al. (2011). "Use of qualitative methods in published health services and management research: a 10-year review." Med Care Res Rev **68**(1): 3-33.

Over the past 10 years, the field of health services and management research has seen renewed interest in the use of qualitative research methods. This article examines the volume and characteristics of qualitative research articles published in nine major health services and management journals between 1998 and 2008. Qualitative research articles comprise 9% of research articles published in these journals. Although the publication rate of qualitative research articles has not kept pace with that of quantitative research articles, citation analysis suggests that qualitative research articles contribute comparably to the field's knowledge base. A wide range of policy and management topics has been examined using qualitative methods. Case study designs, interviews, and documentary sources were the most frequently used methods. Half of qualitative research articles provided little or no detail about key aspects the study's methods. Implications are discussed and recommendations are offered for promoting the publication of qualitative research.

**Wisdom, J. P., et al.** (2012). "Methodological reporting in qualitative, quantitative, and mixed methods health services research articles." Health Serv Res 47(2): 721-745.

OBJECTIVES: *Methodologically sound mixed methods research can improve our understanding of health services by providing a more comprehensive picture of health services than either method can alone. This study describes the frequency of mixed methods in published health services research and compares the presence of methodological components indicative of rigorous approaches across mixed methods, qualitative, and quantitative articles.*

DATA SOURCES: *All empirical articles (n = 1,651) published between 2003 and 2007 from four top-ranked health services journals.*

STUDY DESIGN: *All mixed methods articles (n = 47) and random samples of qualitative and quantitative articles were evaluated to identify reporting of key components indicating rigor for each method, based on accepted standards for evaluating the quality of research reports (e.g., use of p-values in quantitative reports, description of context in qualitative reports, and integration in mixed method reports). We used chi-square tests to evaluate differences between article types for each component.*

PRINCIPAL FINDINGS: *Mixed methods articles comprised 2.85 percent (n = 47) of empirical articles, quantitative articles 90.98 percent (n = 1,502), and qualitative articles 6.18 percent (n = 102). There was a statistically significant difference (chi(2) (1) = 12.20, p = .0005, Cramer's V = 0.09, odds ratio = 1.49 [95% confidence interval = 1,27, 1.74]) in the proportion of quantitative methodological components present in mixed methods compared to quantitative papers (21.94 versus 47.07 percent, respectively) but no statistically significant difference (chi(2) (1) = 0.02, p = .89, Cramer's V = 0.01) in the proportion of qualitative methodological components in mixed methods compared to qualitative papers (21.34 versus 25.47 percent, respectively).*

CONCLUSION: *Few published health services research articles use mixed methods. The frequency of key methodological components is variable. Suggestions are provided to increase the transparency of mixed methods studies and the presence of key methodological components in published reports.*