Southern California Dissemination, Implementation & Improvement Science Symposium

POPULATION AND SYSTEM NEEDS IN DISSEMINATION AND IMPLEMENTATION SCIENCE

MAY 3, 2017 | 8:00 A.M. – 4:30 P.M | THE CALIFORNIA ENDOWMENT | #SoCalDII17

The mission of the UCLA CTSI is to create a borderless clinical and translational research institute that brings UCLA resources and innovations to bear on the greatest health needs of Los Angeles. The Dissemination, Implementation and Improvement Science Initiative is a component of the UCLA CTSI Community Engagement and Research Program.

Steven M. Dubinett, MD
Director

SC CTSI helps accelerate scientific discoveries and their application in real-life settings to address the specific health needs of urban and diverse populations and improve human health, by helping researchers obtain the education, resources and collaborations necessary to translate discoveries into practice.
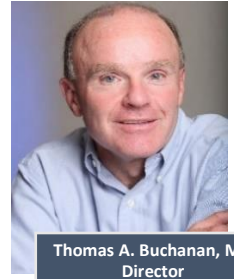
Thomas A. Buchanan, MD
Director

UC San Diego Altman Clinical and Translational Research Institute (ACTRI) helps researchers obtain education, resources, and collaborations necessary to translate scientific discoveries into improved human health and provides research resources, training, and collaboration opportunities for ACTRI scientists, health care providers, and the community. The Dissemination, Implementation and Improvement Science Initiative is part of the Community Engagement Unit at UC San Diego ACTRI.

Gary S. Firestein, MD
Director

At the Gehr Family Center for Implementation Science, our vision is to accelerate the adoption of high-value healthcare in Los Angeles and nationwide. We strive to improve healthcare delivery through delivery science, evidence based advocacy and education.
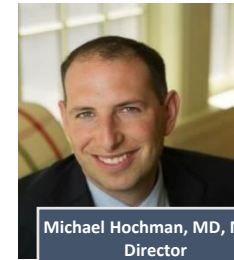
**Michael Hochman, MD, MPH**
Director

The mission of the Department of Research & Evaluation is to initiate and conduct high-quality public-sector health services, epidemiologic, behavioral, and clinical research that has a demonstrable positive impact on the health and well-being of Kaiser Permanente Southern California members and the general population.

Michael K. Gould, MD, MS
Director

The UCR School of Medicine's Center for Healthy Communities will lead and facilitate innovative research aimed at improving the health of culturally, linguistically, and economically diverse communities in the region, especially those who are medically under-resourced. Our goal is to build collaborations and partnerships between researchers and communities through education and research that address our communities' needs and promotes health equity.
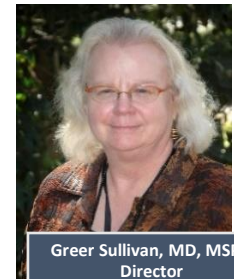
Greer Sullivan, MD, MSPH
Director

WELCOME

On behalf of the UCLA Clinical Translational Science Institute, the Southern California Clinical and Translational Science Institute, UC San Diego Altman Clinical and Translational Research Institute, USC Gehr Family Center for Implementation Science, UC Riverside, Kaiser Permanente Southern California, and the Veterans Administration Greater Los Angeles Healthcare System, we are pleased to welcome you to the Third Southern California Dissemination, Implementation and Improvement Science Symposium.

This meeting reflects continued growth in the importance of Dissemination, Implementation and Improvement (DII) Science in our nation's health policy, education and research agendas — and the significant leadership and capability in DII Science shown by each of our institutions and regional partners. The sessions included in the Symposium illustrate the breadth, depth and diversity of DII Science expertise and activity throughout Southern California, and the value of this activity in improving health and quality of life throughout the region.

Today's Symposium is an important component of our shared commitment to focusing investigators and practitioners on what delivery systems are looking for, increasing familiarity with methods for developing and introducing improvements in real-world delivery systems, sparking future collaborations, identify ways that we can work together to strengthen our local capabilities in learning methods that support delivery systems.

The intended results for today's Symposium are to foster more and better partnered research that improves health systems performance and outcomes; build our professional network; and build a shared vision of success and strategies that we can act on.

As with previous symposia, we hope to see continued growth and new collaborations and initiatives emerge from the day's activities. We look forward to the results of this Symposium and to the new energy, creativity and commitments that follow from our work together.

SPEAKERS

Hal Yee, MD, PhD
LAC DHS

Dr. Yee is Chief Medical Officer for the Los Angeles County Department of Health Services. He is responsible for healthcare delivered by the County's 20,000 staff at 4 academic medical centers and 19 outpatient care centers, and affiliations with UCLA, USC, and Charles Drew University. He graduated from Punahou School and Brown University, received his MD and PhD from UCLA, and completed internal medicine and gastroenterology training at UCSF. For over a decade, his academic and operational focus has been the development and implementation of novel interventions that healthcare in a positive way.

Tony Kuo, MD, MSHS
LAC DPH

Dr. Kuo directs the Division of Chronic Disease and Injury Prevention in the Los Angeles County Department of Public Health. He also serves as the Director of the Office of Senior Health for the County. Dr. Kuo received his Medical Degree from the University of Utah School of Medicine and his Master's in Health Services from the UCLA Fielding School of Public Health. He is boarded in Family Medicine and has joint appointments in the UCLA Departments of Epidemiology and Family Medicine. Dr. Kuo is currently the Co-Lead for the UCLA CTSI's Population Health Program.

Adam Sharp, MD, MS
KAISER

Dr. Sharp is an emergency physician health services researcher with specific interests in implementation science and acute care coordination. Specifically related to implementation research, he is interested in identifying gaps between best and current practices for common acute conditions and evaluating intervention strategies intended to facilitate best practices. Dr. Sharp is also interested in evaluating and optimizing the role of the Emergency Department in facilitating efficient inpatient and outpatient acute medical care.

Artair Rogers, MS
KAISER

Mr. Rogers is a Senior Consultant for Kaiser Permanente's Southern California (SCAL) region where he works with many stakeholders to advance KP's efforts to systematically screen and address social determinants of health for our members. The SCAL region currently uses a call center model for understanding and addressing high utilizers' social needs. The SCAL team is now integrating screening and social need navigation into additional clinical operational settings.

Allen Fremont MD, PHD
BTSD

Dr. Fremont is a physician and sociologist at RAND with a UCLA appointment. He has 2+ decades experience conducting translational research with regional and national healthcare delivery systems. He has played roles in several regional quality improvement efforts in California. He currently serves as Co-Chair of Be There San Diego (BTSD) Data for Quality Project Data Group and a Co-PI on BTSD CMMI-II Heart Attack and Stroke Free Zone Project.

Christine Thorne, MD, MPH
BTSD

Dr. Thorne is a Preventive Medicine physician at UCSD and the Medical Director for Be There San Diego. Her work at Be There San Diego (BTSD) involves clinical oversight of the BTSD data collaborative quality improvement project, overseeing the implementation of a CMMI Healthcare Innovation Award and providing clinical leadership in developing and disseminating best practices for hypertension control and diabetes prevention.

SPEAKERS

Robert Cherry, MD
UCLA

Dr. Robert Cherry is Chief Medical and Quality Officer for UCLA Health. Dr. Cherry is responsible for quality improvement efforts for the UCLA Health System, which includes approaches to quality and value management and improvement for populations, outpatients and inpatients, and coordinating innovative methods for use of analytics to raise clinical quality, improve patient experience and provide value to patients. Dr. Cherry obtained his medical degree from Columbia University and received a master of science in healthcare management from Harvard University.

Louis Gomez, PhD
UCLA

Dr. Gomez is Professor of Education and Information Studies at UCLA. Dr. Gomez is also Senior Fellow at the Carnegie Foundation for the Advancement of Teaching, where he leads the development of improvement communities that bring together researchers and practitioners to accelerate learning. Dr. Gomez co-authored Learning to Improve: How America's Schools Can Get Better at Getting Better. His research interests include school improvement, organizational learning, and learning networks. Dr. Gomez received a bachelor's degree in psychology from the State University of New York at Stony Brook and a doctorate in cognitive psychology from UC Berkeley.

Brian Mittman, PhD
KAISER & VA

Dr. Mittman is interested in the organization and delivery of healthcare services and in the development and application of strategies for improving healthcare quality and outcomes, guided by theories and insights from the fields of implementation science and healthcare quality improvement research. He is involved in a variety of efforts to further develop and strengthen the field of implementation science and to facilitate more effective collaborations between researchers and policy and practice leaders interested in improving healthcare delivery. He works with a number of US healthcare delivery systems (VA, KP, UCLA), government and private agencies (NIH, AHRQ, PCORI, AAMC) and other US and international stakeholders in pursuing these goals.

Mark Ghaly, MD, MPH
LAC DHS

Dr. Ghaly is Deputy Director for Community Health for the Los Angeles County Department of Health Services. Dr. Ghaly's role focuses on how community resources and community efforts can build a stronger and richer health services delivery system in the safety net, including health care services provided to youth in the juvenile detention system and for children within the County's child welfare system. Dr. Ghaly attended Brown University and received his MD and his MPH in health policy from Harvard University. He completed his residency in pediatrics at UCSF.

Moira Inkelas, PhD
UCLA

Dr. Inkelas is Associate Professor in the Department of Health Policy and Management, UCLA Fielding School of Public Health, and Assistant Director of the UCLA Center for Healthier Children, Families and Communities. Dr. Inkelas' research practical methods of using measurement and iterative learning processes to help diverse organizations and sectors including school districts, child care, health care, mental health, family resource centers, and others work as a system to improve outcomes for populations of families. Dr. Inkelas is Co-Leader of the Population Health Program of the UCLA CTSI and supports implementation, improvement and dissemination activities within the CTSI.

Lauren Daskivich, MD, MSHS
LAC DHS

Dr. Daskivich is Director, of Ophthalmology and Eye Health Programs at the Los Angeles County Department of Health Services. Dr. Daskivich supports the Ambulatory Care Network and leads the DHS-wide Eye Health Program that seeks to coordinate and expand Ophthalmology services for patients. Her interests include utilizing policy and technological interventions to increase access to ophthalmic care for underserved/safety net populations. Dr. Daskivich has a medical degree from Harvard Medical School and completed her residency training at the LAC+USC/Doheny Eye Institute. Dr. Daskivich was also a Robert Wood Johnson Clinical Scholar at UCLA.

ABSTRACTS

1. Los Angeles County FQCHs Quality Scores compared to those of the national average

Bhatia JK, Saluja S, Hochman ME, & Van Deen W

Goal: Federally Qualified Healthcare Centers (FQHC) are avenues to care for patients in the safety-net and receive a unique source of federal funding. Because Los Angeles County faces many challenges in caring for their extensive safety-net population, we wanted to quantify and compare quality of LA County with national FQHC quality.

Methods: FQHC quality data was obtained from the Health Resources Service Administration. Data includes clinics' patient demographics, services offered, clinic characteristics, Healthcare Effectiveness Data and Information Set (HEDIS) quality metrics, and cost. Means of 31 characteristics or metrics were compared using an independent samples T-test.

Results: We obtained data of 1375 FQHCs, of which 54 are located within LAC (n = 54). LAC FQHCs have significantly more racial/ethnic minorities, more patients ≤65, more patients best served in another language, more patients at below both 200% and 100% of the federal poverty level (FPL), more patients with Medicaid/CHIP, and less patients with Medicare and third party insurance. LAC FQHCs total spending, per patient spending, and grant money received was comparable to the national average. LAC FQHCs significantly outperform the national average on rates of cervical and colorectal cancer screening, adolescent and adult weight screening and follow-up, and on appropriate therapy for heart attack/stroke patients. LAC FQHCs ranked significantly lower on blood pressure control (BP>140/90).

Conclusion: LAC clinics perform significantly better on 5 quality measures despite health disparities that can function as barriers to quality care. Because of LAC's seemingly higher technical quality, more research should be done to 1) figure out how LAC clinics manage to achieve these higher quality scores and 2) whether these scores translate into better health outcomes. It would be useful to compare similar quality metrics across different types of primary care clinics, including County-based systems or private practices, to help figure out where the most cost-effective avenues of care lie.

2. Community Partners in Care: Treating serious mental illness through multi-sector community partnerships.

Castillo EG, Shaner R, Tang, L, Chung B, Jones F, Whittington Y, Miranda J, & Wells KB

Objective: Individuals with depression in under-resourced communities experience disparities in healthcare access and outcomes. This study uses data from a group-level randomized, comparative effectiveness, community-partnered study of two strategies for implementing an expanded model of collaborative depression care for depressed adults in primary care, mental health, substance abuse, and social/community service sectors. The study compares community engagement and planning (CEP), a multi-sector coalition approach, to resources for services (RS), or expert resources and technical assistance to individual programs, with the hypothesis that CEP compared to RS would lead to better outcomes among those with SMI.

Methods: This study conducts secondary data analyses of the Community Partners in Care (CPIC) study. This study focuses on low-income, racial/ethnic minority participants in underresourced Los Angeles communities with depression (PHQ8>=10) who visited healthcare or community services sectors and co-morbid SMI at baseline (n = 504). SMI is defined as severe depression (PHQ-8 score ≥ 20) or lifetime history of mania or a diagnosis of or hospitalization for psychosis. Data were from self-report at baseline and 6-month follow-up. Analyses were conducted using logistic and Poisson regression with multiple imputation and response weights, controlling for covariates, to model intervention effects on outcomes among SMI.

Findings: Among depressed clients with SMI, those in CEP compared to RS at 6-month follow-up had a significantly lower proportion with poor mental health-related quality of life (CEP 47.1% vs. RS 58.7%, p = 0.027), a greater proportion with mental wellness (CEP 40.0% vs. RS 25.7%, p = 0.024), and a lower proportion with multiple risk factors for chronic homelessness (CEP 30.4% vs. RS 46.3%, p = 0.007) and a behavioral health hospitalization (CEP 8.1% vs. RS 16.0%, p = 0.022).

Impact: The findings suggest that a coalition approach to implement collaborative depression care, compared to expert assistance to individual programs, may improve mental health and social outcomes for depressed adults with SMI. This study may provide a model for a community-wide approach across health and community service sectors for depressed clients with SMI, to inform practice and future research.

ABSTRACTS

3. Improving Healthcare Quality While Lowering Costs Through Pharmacist Integration

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Chen S

Background and Aims: Healthcare quality and costs, particularly for the underserved with chronic conditions, are adversely impacted by inappropriate or suboptimal medication use. The aim of this study, funded by the Center for Medicare and Medicaid Innovation, was to improve healthcare quality, enhance medication safety, and reduce overall healthcare costs for high-risk, underserved populations by integrating comprehensive clinical pharmacy services (CPS) in patient-centered medical homes.

Methods: More than 6,000 high-risk, low-income patients receiving primary care at one of 10 Federally Qualified Health Centers (FQHC) owned and operated by AltaMed Health Services were enrolled. The study was a pre-post design, with treatment and control sites (difference-in-difference analysis). We compared changes in clinical markers and medical utilization before and after enrollment among patients receiving clinical pharmacy services to propensity score matched controls receiving usual care at AltaMed clinics not offering the program. The main outcomes were medication-related problems identified and resolved, changes in healthcare quality measures, and medical care utilization (hospitalizations, ED use).

Results: Clinical pharmacists identified over 11 medication problems per patient, predominantly related to inadequate dosing and medication use inconsistent with clinical guidelines. The percentage of patients with elevated cholesterol (LDL>=100), blood sugar (HgA1c>9=9.0) or blood pressure (>140/90) at enrollment who were able to attain control were 62%, 66%, and 61%, respectively within six months, while patients receiving usual care (control sites) achieved rates of 48%, 43%, and 52%, respectively. Patients "discharged" from the program after reaching clinical goals were monitored remotely via the telephone and showed only small diminution in clinical gains six to twelve months later. For patients with recent hospital admission at enrollment, the absolute difference in readmissions was -16% when compared to control patients. This represented a cost savings that accounted for approximately half of all program costs.

Conclusions: Integrating clinical pharmacy services into primary care provided at 10 Federally Qualified Health Centers (FQHC) was associated with improved medication use, clinical improvements and reductions in medical utilization relative to usual care. When targeting patients at risk for acute care utilization, the costs of the program appear to be offset by reductions in medical service use.

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4. Fostering a multi-sector collaborative to build a resilient community in the San Gabriel Valley.

Colunga A & Jimenez A

Background: The YWCA of San Gabriel Valley created the Healthy Communities Resource Center (HCRC) to increase health equity and build community resilience. An evidenced-based approach was used to develop a multi-faceted set of interventions to address the most complex community concerns. Using the Spectrum of Prevention as the framework of the HCRC, the YWCA convened a multi-sector collaborative focused on systems level change to guide efforts towards a regional initiative. To assess the needs of the community, the HCRC conducted stakeholder interviews, GIS Assessments and secondary data analysis. The results of the assessments were presented to the community at health forums and focus groups to gather feedback before embarking on the regional initiative.

Methods: The Roadmaps & Intersections Forum was held to kick-off the regional initiative as a convening for the Healthy San Gabriel Valley's (HSGV) efforts. Action planning was conducted to set the priority areas for HSGV. Using the Los Angeles Community Health Improvement Plan as a guide, three groups were convened each with 1 facilitator and note taker. In the action planning groups, community stakeholders identified assets in the community, gaps/opportunities, and efforts that can be better achieved in a collaborative group rather than in silos.

Results: A diverse multi-sector group attended the first convening of HSGV. Participants were asked to identify their sector, 10 were included: business, government, academia, education, non-profit, faith-based, disability, healthcare, law enforcement, and public health. There were two major themes throughout each action planning group, *local action and regional impact*. Regional projects identified included advocacy/policy, mental health, substance use, homelessness, economic stability/workforce development, data sharing, sharing resources and bringing sectors together around a shared vision. Local projects included dissemination of best practices, civic engagement and injury/violence prevention.

Conclusions: The purpose of Roadmaps & Intersections Forum was to provide an opportunity to share and learn about best practices and innovative approaches to multi-sector collaborative efforts in the San Gabriel Valley and beyond while kicking-off the HSGV Initiative. An emphasis was placed on the importance of this work in addressing the most complex social issues in our community. The action planning sessions have resulted in the formation of the HSGV steering committee, dedicated to a foundation of collective impact principles to guide future HSGV efforts.

ABSTRACTS

5. Building a Prototype for an age friendly health system: a multi-system collaborative improvement project

Davis AC, Shah N, & Mate K

Background and Aims: As the elderly population in the US grows, health systems must transform care across the continuum to be 'Age Friendly' or thoughtfully designed to optimize care for older adults. The John A Hartford Foundation (JAHF) and Institute for Healthcare Improvement (IHI), together with four health systems (Kaiser Permanente Southern California (KPSC), Anne Arundel Medical Center, Providence Health & Services, and Trinity Health) have joined together in a collaborative improvement project with the aim of building a 'principle-driven' prototype for an Age Friendly Health System.

Methods: To develop a principle driven prototype, IHI convened a broad panel of content experts, clinicians, academics, and practice leaders from the participating health systems and elsewhere. Using a consensus approach, IHI collected a comprehensive array of intervention ideas, across four domains of focus: Medications, Mentation, Mobility, and (what) Matters: the "4Ms." This method bridges knowledge generated through traditional academic research studies and pragmatic designs, but loosens the strict boundaries of traditional research to accommodate rapid cycle implementation testing and learning.

Results: The prototype has nine broad interventions within the 4Ms: Know what matters; Act on knowledge of what matters; Implement an individualized mobility plan; Create an environment that enables mobility; Implement standard process for age-friendly medication reconciliation; De-prescribe and adjust doses to be age-friendly; Ensure adequate nutrition, hydration, sleep, and comfort; Engage and orient to maximize independence and dignity; Identify, treat, and manage dementia, delirium, and depression. Within each broad intervention, there are 15-20 specific ideas for how a system might implement each high-level intervention.

Conclusions: The result of this consensus prototype development project is a set of principles that can be achieved through various means of implementation for each specific context and setting, rather than a model that must be precisely followed (as in traditional research designs). In upcoming project phases, the prototype will be tested and refined using improvement science approaches, and ultimately disseminated widely.

6. Improving integration of substance use disorder and mental health treatment: Service provider perspectives

Fenwick K

Background: Integration of substance use disorder and mental health (SUD/MH) services is necessary in order to improve the health and well-being of individuals with co-occurring disorders. Although many healthcare systems (including L.A. County) are moving towards integrated models, the longstanding division between the SUD and MH systems in terms of administrative, financial, and regulatory structures inhibits integration efforts. As part of a larger, mixed-methods dissertation project, the proposed study will use qualitative data from service providers in SUD and MH systems to examine how organizational and systems-level characteristics impact provision of integrated SUD/MH services.

Methods: Hour-long, semi-structured interviews will be collected from leaders and direct service providers in SUD and MH service delivery organizations in Los Angeles County. Eight service delivery organizations (four from the SUD system and four from the MH system) will be recruited. Four participants (one director, one supervisor, and two direct service providers) will be sampled from each organization (n = 24 - 32). Participants will be asked to describe their experiences with delivering integrated SUD/MH services, offer examples of how organizational and systems-level characteristics (such as funding sources, program ownership, regulation, leadership) impact service integration, and offer specific strategies for increasing integration. Qualitative data will be coded by two researchers using thematic analysis.

Implications for practice/policy: As the Affordable Care Act expands access to behavioral health services, the SUD and MH service delivery systems must offer integrated services to meet the needs of a large population of clients with co-occurring disorders. Results from the proposed study will be used to expand and add depth to quantitative findings from the larger dissertation project on integration of the SUD and MH systems. Knowledge gained will inform frameworks and policies designed to increase provision of integrated SUD/MH services and improve outcomes for clients in behavioral health care.

ABSTRACTS

7. Opioid ordering patterns in the emergency department before and after implementation of treatment guidelines

Ghobadi A, Van Winkle P, Sharp A, Menchine M, Chen Q, & Huang BZ

Background and Aims: On January 1st 2014, Kaiser Permanente Southern California adopted treatment guidelines for judicious ordering of opioids in the Emergency Department (ED), with a primary focus on reducing parenteral opioids. Our aim was to compare ordering patterns before and after this intervention.

Methods: A retrospective study of adult encounters (≥18 years) seen in 14 EDs in 2013 pre and 2014 post intervention. Primary outcome was percent of encounters with opioids ordered. Segmented logistic regression models of an interrupted time series assessed the odds of receiving opioids before and after the intervention. Models accounted for the correlation among encounters from the same patient and were adjusted for age, gender, race, comorbidity, medical center, Kaiser member status, and discharge disposition.

Results: There were 687,273 pre and 654,852 post guideline encounters. Primary analysis showed the intervention was associated with a significant reduction of all opioids during ED visit; showing an immediate post-intervention reduction (OR=0.92, 95% CI 0.90-0.94), and an additional decrease in the monthly trend following the intervention (OR=0.99, 95% CI 0.98-0.99). Similarly, there was a significant reduction of parenteral opioids ordered at ED visit; showing a decrease immediately post-intervention (OR=0.90, 95% CI 0.88-0.92), and again decrease in the monthly trend following the intervention (OR=0.99, 95% CI 0.98-0.99). Conversely, oral opioids at ED visit demonstrated a transient increase associated with intervention (OR=1.04, 95% CI 1.01-1.08) but then a decrease in the monthly trend following the intervention (OR=0.99, 95% CI 0.98-0.99). A similar trend was present for prescriptions at discharge; with an immediate post-intervention increase (OR=1.08, 95% CI 1.05-1.10) then a decrease in the monthly trend following the intervention (OR=0.98, 95% CI 0.98-0.98).

Conclusion: Opioid use in the ED decreased after implementation of prescribing guidelines. This was primarily due to a significant reduction in parenteral opioid prescribing and was also associated with continued gradual decrease in the monthly trend for the 12 months after the intervention. Our findings suggest the intervention was effective in reducing parenteral and overall opioid use, with some substitution of oral for parenteral opioids during the initial transition.

8. Understanding the impact of external context on community-based implementation of an evidence-based HIV risk reduction intervention

Hamilton A, Campbell DM, Hutchinson C, Mittman B, Liu H, & Wyatt GE

Background: Organizational context plays a critical role in the implementation of evidence-based interventions. Implementation research to date has focused largely on internal, rather than external, context. This paper presents key features of external context and their impact on implementation of Eban II, an evidence-based HIV/AIDS prevention intervention currently being tested in community-based organizations (CBOs). We examine external context factors that have influenced implementation, highlighting the ways in which client needs, agency resources, and changing policies permeate the theorized boundary between internal and external context, affecting both organizational capacity for implementation research and implementation processes themselves.

Methods: Staff (n=91) across participating CBOs completed a baseline survey of organizational functioning; a subset of key stakeholders (n=15) completed semi-structured interviews. Client participants (n=84) completed a baseline survey. Process notes and organizational documents were also analyzed.

Results: Organizational readiness for implementation was high across the organizations. However, despite apparent readiness, external contextual barriers to implementation were substantial. Three categories of barriers were identified: (1) client needs as a manifestation of social determinants of poverty, (2) community agency resources, and (3) local and national policy changes. Clients' psychosocial vulnerability affected their everyday lives and priorities, which thereby affected the regularity and intensity of their interface with CBOs, and hence their participation in our intervention. CBOs typically lacked staffing and space. Furthermore, changing federal and state policy priorities destabilized the CBOs, which had a ripple effect on our study. Drawing on community-engaged research principles, we made numerous adjustments to the intervention format and structure according to the preferences and contexts of the CBOs. Had we not adjusted to external contextual factors, the organizations would not have been able to maintain their involvement and provide the intervention to their clients, despite expressed, genuine commitment to shared goals.

Conclusions: Community-based implementation studies need to address complex organizational and client needs, using community-engaged research principles. If these studies are community-based among vulnerable populations, they need to more thoroughly evaluate, monitor, and address the ways in which external contextual factors impinge upon implementation processes and outcomes, with a parallel need for more comprehensive measures of fiscal, political, and social determinants of implementation success.

ABSTRACTS

9. Adapting a team-based secondary stroke prevention intervention in a safety-net setting

Hill V, Vickrey B, Mittman B, Sivers-Texeira T, & Towfighi A

Background: Although recurrent strokes are preventable through vascular risk factor control, these factors are poorly controlled in minority populations. The SUCCEED randomized controlled trial tests the efficacy of a team-based intervention for improving risk factor control after recent stroke in a safety-net setting. SUCCEED utilizes a hybrid-effectiveness implementation study design. The care team – an Advanced Care Practitioner (APC) and Community Health Worker (CHW), guided by a physician – provides care through clinic and home visits, and chronic disease self-management workshops over 12 months. Providers follow evidence-based protocols on medications, healthy lifestyle, self-management, and health literacy; and tailors the intervention to patients' needs. The team meets regularly and uses a mobile application with assessment tools, protocols, educational materials, and decision support. The primary clinical outcome is blood pressure control at one year. Secondary clinical outcomes include control of other risk factors (e.g. diabetes, cholesterol), lifestyle (diet and physical activity), and medication adherence. Process outcomes include number of patient interactions (in clinic, home, and workshops) and mobile application use. A comprehensive formative evaluation was nested within the SUCCEED RCT, to evaluate implementation processes, adaptations, and contextual influences.

Methods: We conducted interviews with the principal investigators, APCs and CHWs. We observed initial clinic and home visits and care team huddles. Interviews focused on providers' roles, care processes, implementation challenges, and adaptations. Observations identified process and care adaptations.

Findings: First, providers varied with respect to: style and approach for patient/support network engagement and empowerment; visit duration and frequency per patient, and strategies to triage patients. We adopted the adaptations that enriched the intervention across all sites. Second, the mobile application was slow; therefore, providers did not document in the application as intended. We modified the application to meet the team's needs. Lastly, providers could not assess their protocol fidelity (e.g. timing of visits). We developed patient tracking forms and reviewed them weekly, thus improving accountability and fidelity.

Implications for D & I Research: We uncovered adaptations that enhanced the intervention and deficiencies that hindered efficiency. As with other trials, adaptations were essential to pragmatically implement new services and processes into the healthcare system. We will continue to assess the impact of the implementation adaptations.

10. The integrative preventive model: A continuous improvement process

Jimenez E, Shushan K, Mena S, & Lopez C

The goal of California Mental Health Connection has been working on complex trauma; conducting research that finds correlations within continuous and categorical variables in the underserved population to understand the repercussion on functioning and quality of life in the study subjects.

In the last (8) eight years the outpatient clinic has compiled a large set of data with the minority population in mental Health.

The clinical team utilizes assessment tools including the complex trauma inventory to determine the level and sequence of the trauma. This allows longitudinal interventions to prevent violence and decrease the impact on victimization in early childhood supporting the development of preventive/integrative programs.

Mixed methods were utilized to analyze categorical data through chi-square statistical analysis using the data of the clinical assessment and trauma checklist. The clinical team has collected and processes the data and then observed the epidemiological patterns of Mental Health in the San Gabriel Valley Community.

Our statistical analysis has demonstrated that early trauma within the children population will evolve into developmental trauma over critical periods in different stages throughout a person's life spam if not treated. Therefore, early assessment of trauma is key to prevent mental illness but also a tool to outline preventive evidence base strategies that support decision making regarding policies, funding, technical procedures, training needs and interventions.

The clinicians witness the miracle of symptom transformation into better quality of life and functioning through models that utilize less Violence and are inclusive of multisystem integration. These methods are early intervention strategies models such as, the love challenge a model created to decrease Violence since early childhood in elementary schools.

ABSTRACTS

11. Magnolia Community Initiative (MCI) Reading Group case study: using quality improvement to inform a community approach to improving parent-child reading

Joachim C, Bowie P, Wilkerson L, Brown R, Reimer K, & Garcia JA

Background and Aims: The MCI has established long-term goals for the improvement of a host of outcomes for children and families living within a 500 square block area in Los Angeles. One of those outcomes is a push for improvement in parent reading rates to their children. Despite knowledge of effective programs around this outcome, the improvements were not being realized in the MCI area. Consequently, the MCI partners established an innovation group with the aim of identifying a sustainable and scalable system of disseminating strategies to enhance the rates of parents reading to their children daily.

Methods: Using the Model of Improvement as a framework to structure and inform its efforts, the group identified key drivers to support daily parent-child reading routines and to test strategies that would support families in their efforts. The methods included developing a shared aim across several stakeholders and agencies, leveraging existing MCI network data to spark interest in the improvement of parent-child reading, building a data system that targeted this specific outcome so that all interested parties could track change and improvement, and applying improvement principles such as Plan-Do-Study-Act cycles to establish a culture of learning and change.

Results: By the end of the 2016 school year, 350 families with children aged 0-5 reported Reading Routines, with 72% of those families readying daily. This was a 30% increase over a 12 month period. In addition, data from community surveys in the broader catchment area showed a positive increase of 18%, from 45% of families to 63% of families reporting daily reading.

Conclusions: The MCI innovations group provided an example of how knowledge of effective practices can be coupled with improvement methods to promote a sustainable practice of early literacy within dynamic family and community contexts with a goal of widespread dissemination.

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12. If we can, then what's stopping us? Caries prevention through a complex systems lens

MacBride RF

Background and Aims: Caries is a transmissible, chronic and progressive disease that affects 23% of children before they start kindergarten and 60% of adolescents. Though dental health has significantly improved in the U.S. over the last 50 years for two thirds of the population, the other third continues to bear the burden of disease resulting from lack of access to preventive or treatment services. Dental expenditures continue to rise. Yet for young children rates of decay are on the rise. Evidence-based practices exist and are used elsewhere, but few U.S. dentists have adopted the risk and disease management strategies which could prevent the effects of caries disease in childhood, and later in life. California is currently rolling out a Medicaid 1115 demonstration program that will incentivize some of these changes. This project comes at this problem from a systems perspective to 1) understand the dynamics of the dental care system as a whole that might detract dentists from pursuing approaches likely to result in less disease, and 2) present the framework for a simulation model to study the implications of implementing risk assessment and disease management of caries in dental practices.

Methods: I will develop causal loop diagrams around caries disease development and the concept for a hybrid discrete event simulation (DES)- agent-based model (ABM). The model will simulate disease development in a child population (ABM) who experiences a dental care process at a dental practice (DES) that uses either a traditional "one size fits all" or a "patient-centered risk-based" approach.

Results: I will present a causal framework of dental care system dynamics identifying possible leverage points to improve oral health at lower costs and by way of a better care experience. I will also present the simulation model design along with a plan for sensitivity analysis scenarios to uncover the impacts of each care approach on both inputs and outputs of the care process: efficiency, productivity, and effectiveness.

Conclusions: Complex systems approaches offer innovative ways of thinking about system challenges. They explore the implications of changes that are difficult to test in isolation of competing system dynamics and changes with politically challenging longer time horizons.

ABSTRACTS

13. Evaluation of a Choosing Wisely™ Intervention to reduce low value preoperative care for patients undergoing cataract surgery at a safety net health system

Mafi JN, Godoy-Travieso P, Carrillo CA, Wei E, Anders M, Berry J, Amaya R, Wong B, Sarff L, Daskivich LP, Vangala S, Keeler E, Damberg C, & Sarkisian C

Background: Pre-operative testing for cataract surgery provides no discernible benefit to patients, increases risk of harm, and substantially raises healthcare costs. Supported by the American Board of Internal Medicine's Choosing Wisely™ campaign to reduce low value care, we evaluated a quality improvement (QI) initiative to reduce pre-operative visits and testing for cataract surgery at LAC+USC Medical Center.

Methods: Using Institute for Healthcare Improvement PDSA cycle techniques, our QI team implemented the following steps (1) reviewed cataract surgery patients' charts, (2) presented data on overuse to anesthesia/ophthalmology chairs—gaining their support for initiative, (3) obtained buy-in from the chairs of anesthesia and ophthalmology, (4) recruited an ophthalmology resident champion, and (5) empowered nurses to stop scheduling pre-operative visits for cataract surgery. On 9/30/15, the team emailed pre-op guidelines to physicians/trainees/staff, calling to eliminate routine pre-op testing for cataract surgery by 10/13/15. We conducted a quasi-experimental comparing pre-op cataract surgery care at LAC+USC Medical Center (intervention site) vs. Harbor-UCLA (control site). Administrative data was obtained to identify patients undergoing cataract surgery between 10/15/14-4/15/16. Primary outcomes included pre-op visits, labs, EKGs, and wait-time between cataract diagnosis and surgery. Analysis of data consisted of difference-indifferences (DinD) comparing utilization between sites using logistic regression adjusting for patient characteristics.

Results: We identified 1,009 intervention and 959 control patients undergoing cataract surgery during the study period. Baseline mean age/sex (61 yrs/53% female) was similar between both groups. The proportion of pre-op visits, labs, and EKGs declined more for intervention than control patients; intervention pts: 77%, 91%, and 74% before the intervention vs. 20%, 39% and 27% after the intervention respectively; control pts: 62%, 40%, and 66% before vs. 86%, 72%, and 86% after the intervention respectively (DinD -81%, $p<0.001$, -83%, $p<0.001$, -67%, $p<0.001$ respectively). Median surgical wait-time declined more for intervention pts (245 days before vs. 64 days after the intervention) than for control pts (27 days before vs. 22 days after the intervention), DinD -176, $p<0.001$.

Conclusion: This intervention substantially reduced low value pre-op care and surgical wait-times among pts undergoing cataract surgery.

14. Strengthening collaborations between research and healthcare stakeholders through meaningful engagement

Martinez J, Wong C, Covarrubias B, & Leland NE

Background and Aims: Stakeholder engagement (SE) has been suggested as an effective approach for ensuring the development of patient-centered, relevant, usable, and transferrable interventions and strategies for real-life scenarios, thereby accelerating the knowledge-to-practice translation and improving patient outcomes. To this end, engaging healthcare stakeholders (i.e., patients, caregivers, clinicians, payers, policy makers) throughout the research process has emerged as a focus for national initiatives and a federal funding priority. However, there is limited discussion regarding strategies for SE within post-acute care rehabilitation. This poster will present a conceptual model for meaningful stakeholder engagement in healthcare research with a focus on rehabilitation.

Methods: A literature review of current evidence was conducted to inform the development of a conceptual model for SE for rehabilitation research.

Results: The following four domains were identified: partnering with key stakeholders early in the project development process, maintaining two-way communication throughout implementation, collaborative problem solving, and incorporation of reciprocal co-learning opportunities. Through application of this framework, we identified six key stakeholder groups for post-acute care: patients and caregivers, providers, purchasers, payers, policy makers, and the research investigators. Further, we identified strategies for meaningfully engaging each stakeholder groups within each domain.

Conclusion: This conceptual model for SE in rehabilitation can be used to develop collaborative research and quality improvement programs that are responsive to stakeholder priorities, thereby resulting in timely policies, a diminished research-to-practice gap, and improved patient outcomes. Future research is needed to further examine SE in action and strategies to overcome barriers to meaningful engagement.

ABSTRACTS

15. Implementing substance use disorder treatment in community-based primary care: Findings from the SUMMIT Study

Ober AJ, Watkins KE, Hunter SB, Lamp K, Lind M, Ewing B, McCullough C, & Setodji C

Background and Aims: Integrating substance use disorder (SUD) treatment and health care results in less utilization of inpatient care and fewer emergency room visits, but uptake of evidence-based practices (EBP) for SUDs into primary care has been slow, and patients are unlikely to be screened or receive SUD treatment in primary care settings.

Methods: To increase the delivery of EBP for SUD in primary care, we conducted a dual intervention study that first prepared, using an organizational readiness intervention, a federally qualified health center to deliver SUD services and then tested, in a randomized controlled trial (RCT), the effectiveness of an integrated collaborative care (ICC) service delivery intervention on implementation, service system and patient outcomes compared with usual care. The EBP were extended-release injectable naltrexone (XR-NTX) for alcohol use disorders (AUD), buprenorphine/naloxone (BUP/NX) for opioid use disorders (OUD), and a brief therapy intervention.

Results: Medical providers' perceptions of ease of use of XR-NTX changed significantly after the organizational readiness intervention (p<.05), as did perceptions of its compatibility with current practices (p<.05). Non-provider staff agreed more after the intervention that SUDs could be treated in primary care settings in general (p <.0001) and at their clinic (p <.0001), and that providing SUD medications fit the mission of the clinic (p <.0001). Of 28 full-time medical providers who had never previously prescribed SUD medication, 23 participated in training, 11 prescribed BUP/NX, and 16 prescribed XR-NTX. After the RCT, patients randomized to ICC were more likely to receive SUD medication or therapy (39% vs. 17%; p<.0001), to initiate treatment (32% vs.14%; p<.0001), and to remain abstinent from drugs and alcohol 6 months post-RCT (p<0.01) than patients receiving usual care.

Conclusions: We found that an organizational readiness intervention increased primary care provider and non-provider perceptions about providing SUD treatment and resulted in 62% of providers prescribing. We also found that an ICC service delivery intervention improved patient initiation of EBP for SUD and increased abstinence. Findings suggest that a dual intervention study that addresses organizational and patient needs can improve uptake of evidence-based treatment by providers and patients and improve patient outcomes.

16. Reducing inappropriate antibiotic prescribing at outpatient settings: implementation and effectiveness

OYong K, McKinnell J, Terashita D, & Schwartz B

Background and aims: Inappropriate antibiotic use is a primary contributor to the spread of antibiotic resistance. A recent study estimates that more than 30 percent of antibiotics prescribed in outpatient settings are unnecessary. Antimicrobial stewardship has been demonstrated to reduce unnecessary antimicrobial prescribing, while reducing microbial resistance and costs. The recently released CDC Core Elements of Outpatient Antibiotic Stewardship note four key areas of stewardship: commitment, action for policy and practice, tracking and reporting, and education and expertise.
The LAC Department of Public Health (DPH) plans to assist practices in implementing a multi-faceted stewardship program that meets all four Core Elements and to assess changes in prescribing practices and factors associated with successful implementation of the intervention.

Methods: The study will be a multilevel trial to determine the effect of the intervention on appropriate prescribing. Primary care practices will be enrolled and randomized to intervention or control arms. DPH staff will support intervention practices in to implement four core interventions: posting of public commitment letters, provider education, communication skills training, and provider feedback. Antimicrobial prescribing data by practice and clinician (overall, for upper respiratory infection, and for bronchitis) will be compared between intervention and control practices, and for the intervention group, to a baseline period before intervention. Fidelity of intervention also will be assessed and factors associated with implementation effectiveness will be determined.

Results: The project is currently in the planning stage. Data collected will include prescribing and diagnosis data by practice and clinician, and pre- and post-surveys of clinicians, and qualitative methods to assess implementation. Measures will include overall antibiotic prescribing, appropriate prescribing for upper respiratory tract infections and bronchitis, and implementation measures (e.g. organizational readiness, barriers, fidelity, clinician engagement, and clinician knowledge, attitudes and beliefs).

Implications for practice/policy: This study will be the first to analyze an intervention implementing the four CDC Core Elements of Outpatient Antibiotic Stewardship to determine impact on prescribing behavior. It will also add to the scant literature regarding the implementation of antibiotic stewardship programs in outpatient settings.

ABSTRACTS

17. Mixed-method analysis on program manager (PM) perspectives on the sustainment of multiple evidence based practices in a system-driven implementation

Rodriguez, A, Regan J, Wright B, Lau AS, & Brookman-Frazee L

Background and aims: Understanding program manager (PM) roles in evidence-based practice (EBP) sustainment is essential to leverage implementation outcomes (Proctor et al., 2011). To date, however, much of the literature has focused on direct service provider perspectives on EBPs (e.g., Nelson & Steele, 2007). PMs provide rich insight into sustainment of EBPs given their distinctive roles in facilitating adoption and institutionalizing EBPs (e.g., Aarons et al., 2016). Organizational factors are also important to consider as they are shown to relate to PM perspectives on EBPs (e.g., culture; Aarons et al., 2012). Accordingly, the aim of this mixed-method study was to explore the association between PM perspective factors across specific practices, organizational factors, and the sustainment of EBPs.

Methods: Data were gathered from 186 cross-sectional surveys and 47 semi-structured interviews administered as part of a larger study examining the Los Angeles County Department of Mental Health Prevention and Early Intervention (PEI) Transformation, which fiscally-mandated the use of selective EBPs. A three-level multilevel logistic model (practice nested within PM nested within agency) was employed to examine predictors of a dichotomous practice sustainment variable. Predictors included PM attitudes of six PEI practices, number of PEI practices adopted, organizational functioning (staffing, cohesion, stress), organizational social context, and agency infrastructure (size, number of sites). Qualitative interviews were analyzed using a coding, consensus, and comparison methodology.

Results: Quantitative analysis revealed a greater probability of EBP sustainment for PMs (a) with more negative attitudes about PEI practices (β=-1.73, p<0.001) and (b) from small-sized agencies (β=1.81, p=0.05). Qualitative data were consistent, revealing that PMs from smaller agencies reported less on de-adoption of practices as compared to larger agencies. Qualitative analysis further showed that challenges to EBP sustainment range across client/family, practice, therapist, and agency factors.

Conclusions: Findings suggest that both PM attitudes on EBPs and agency size are key to sustainment. The smaller agency size finding perhaps suggests that characteristics distinctive to smaller agencies (e.g., smaller workforce) facilitate sustainment of EBPs. Future research warrants exploring agency size further to identify specific indices of smaller agencies that contribute to sustainment. These findings inform EBP implementation efforts particularly with decisions about organization infrastructure and EBP sustainment.

18. Understanding insurance after the Affordable Care Act – Los Angeles safety-net patients' experiences with applying for insurance and using healthcare

Saluja S, McCormick D, Morrison J, Cousineau M, & Hochman, M

Background and Aims: The majority of residents impacted by the ACA are low-income, non-elderly adults who either qualified for Medicaid expansion or subsidies on California's health insurance exchange. Some also gained services under the County-sponsored, My Health LA program - an option for low-income non-citizens. Still nearly 1.5 million LA County residents remain uninsured, many of whom qualify for coverage under the ACA, but for a variety of reasons have yet to enroll. Furthermore, under the new federal administration, there is a considerable threat to healthcare coverage for safety net patients. Given these persistent challenges, there is an urgent need to 1) understand LA County safety net patient's experiences with obtaining, maintaining and using health insurance under the ACA and 2) examine the characteristics of LA County safety net patients who gained insurance through the ACA and determine which services they find essential.

Methods: We will conduct qualitative interviews with patients to illicit key themes around barriers and aids to insurance enrollment and accessing care. The results from these interviews will be used to create a detailed survey of safety net patients in LA County. We will include non-elderly adults with MediCal or without insurance who present to select emergency departments and clinics in LA County. Using data collected from registration, we will be able to verify patients' insurance type, managed care plan and whether they acquired MediCal under pre or post-ACA eligibility standards.

Results: Preliminary interviews with patient financial specialists suggest that there are persistent structural, organizational, knowledge-based and financial barriers to accessing care in LA County. We hope to understand the range and extent of these barriers, the effectiveness of existing interventions and identify new avenues to improve access. Additionally we hope to identify characteristics of patients gaining insurance through the ACA and the healthcare services they find necessary.

Implications: This study will be the first in-depth evaluation of LA County safety net patients' experiences with the ACA and the potential impact its repeal could have on their access to healthcare. Results from this study could inform policy makers and lead to unique strategies to assist patients in accessing care in LA County.

ABSTRACTS

19. Emergency Department-Wellness Center conduit for immigration informed care

Schneberk T, Inkelas M, Hellman J, Hernandez T, Morrison J, Wei E, & Trotzky-Sirr R

Background: Los Angeles County is home to over 1 million undocumented residents. They often lack health insurance, which is the case in 60 percent of Metro LA's undocumented population. Despite extensive enrollment in My Health LA (MHLA), nearly one in ten adults leave LAC+USC ED without insurance. The Wellness Center (TWC) on the LAC+USC Campus contains programs to address un-insurance and immigration legal needs. To enhance patient engagement in these programs, we propose a conduit from the LAC+USC Emergency Department. Uninsured ED patients will be referred for eligibility assessments for public insurance like Medi-Cal. For remaining residually uninsured, TWC will provide engagement (1) enrollment in MHLA's primary care (2) assessment of need for immigration legal services. Leveraging the insurance enrollment workflow addresses frequently coexisting legal needs of uninsured patients

Methods: *Design*-This referral conduit would function best with integration into the Electronic Health Record. Specifically, using a dashboard icon that can be triggered by anyone in the care pathway. We will target multiple referral points starting with the Patient Financial Services employees at the discovery of un-insurance to deploy the referral icon. Then continuing along the patient pathway, emboldening resident physicians to utilize the icon and coordinate referral. From resident discharge, a TWC coordinator stationed in the ED will dispatch volunteers to facilitate warm handoff to TWC. Where upon intake, patients with insurance needs will be informed of immigration legal services, and encouraged to access both as a social bundle. *Measurement*-Data sources will consist of referral source on TWC intake form, which includes originating referral ED check box. This information is stored in a Salesforce database that also provides quantitative data for insurance enrollment and immigration legal aid services. We will be able to provide a natural experiment of operationalizing the warm handoff system certain days, comparing non-operational days as a control. A step wedge approach will allow analysis of different referral interventions along the pathway.

Conclusions: Using the well positioned LAC+USC ED we will target insurance and immigration needs in a highly undocumented population. Nowhere more than Los Angeles, we need to address immigration status is a modifiable social determinant of health.

20. Implementation of an antimicrobial stewardship program for acute respiratory infections in acute care settings

Shigyo K, May L, Stahmer A, & Yadav K

Background and Aims: Inappropriate antibiotic use within emergency department (ED) and urgent care center (UCC) settings is a major public health concern, yet few existing antimicrobial stewardship programs have been designed for application in these settings. As part of a project to adapt existing materials from the CDC's outpatient Get Smart campaign to acute care settings, we report a pre--implementation workflow analysis of five acute care settings at two sites. The aim is to investigate the facilitators and barriers to incorporating an adapted Get Smart antimicrobial stewardship intervention to reduce inappropriate antibiotic prescribing for antibiotic--nonresponsive acute respiratory infections.

Methods: Seventeen semi--structured interviews were conducted at Harbor--UCLA Medical Center and UC Davis Medical Center using purposeful sampling of physicians, registered nurses, and administrators in the adult ED, pediatric ED, and UCC. Interviews were recorded, transcribed, and analyzed independently by two researchers using NVivo 11. Grounded theory content analysis was performed for barriers and facilitators of implementation of antibiotic stewardship interventions in acute care settings, as well as any emergent themes. An anonymized survey assessing attitudes and beliefs of prescribing providers is also currently underway.

Results: Preliminary analysis of the interviews suggests that facilitators to implementation include: incorporation of stewardship education into the triage process, provision of educational materials while patients wait for care, display of bilingual patient education materials within densely populated patient areas, education of residents and nurses, local guidelines for antibiotic use, and provision of viral prescription pads. Some notable barriers to implementation include: lack of coordinated communication amongst providers, maintaining staff and provider awareness of the program, difficulty of timing of the program interventions with the clinical workflow, and concern that lengthy wait times may increase antibiotic prescribing.

Implications for practice/policy: This study can provide a framework for adaptation of existing antibiotic stewardship strategies to match the clinical workflow of acute care settings based on an analysis of the unique challenges inherent within these environments. It also provides a model of pre--implementation analysis for the development of antibiotic stewardship programs at new sites to account for, and adapt to, site--specific variables.

ABSTRACTS

21. Where do peer providers fit in? A mixed qualitative and network analysis

Siantz E

Introduction: The roles of peer providers are expanding, yet mental health agencies have reported challenges implementing peer-support programs. Further, little is known about peer involvement in behavioral health care teams that provide integrated primary care. This mixed method study evaluates where peer providers fit within newly integrated primary and behavioral health care teams using social network analysis and qualitative field work. Integrated teams were part of a policy initiative conducted by the Los Angeles County Department of Mental Health.

Methods: This study followed a convergent parallel design. An online survey collected sociometric data from staff members of 24 integrated pilot programs during 2014. Respondents nominated individuals with whom they regularly coordinate client care from a roster. Indegree centrality was calculated to understand the network positions of peer providers. Qualitative interviews were conducted with peer providers to discuss their role within the team. Interviews were audio recorded, transcribed, and analyzed using constant comparative methods informed by grounded theory. Consistent with the mixed methods design, results from social network and qualitative analyses were triangulated to determine if the findings were convergent, expansive, or discrepant.

Results: Fourteen integrated programs included peer providers on their integrated teams. Network sizes ranged from 8-23. The network positions of peer providers varied based on their responsibilities, professional background, and perceived level of involvement. Qualitative data indicated that network variation was related to the conceptualization of the peer role, namely whether peer providers shared a mental health condition or cultural background with their clientele. Peer providers who were most central to care to teams had lived experience of mental health recovery and reported direct involvement in care management of clients, while those who were least central shared a cultural background with clients and conducted community outreach. Interviews also revealed that network positions of peers did not always align with their experience on the team.

Conclusion: Targeted efforts are needed support the implementation of peer providers in integrated care programs. Training is needed at agency level for implementing and working with peer providers, and might be especially critical for integrated behavioral health teams that include professionals with limited experience working with peer support.

22. A process evaluation of the implementation of a peer-led community-based physical activity program for seniors

Takemoto M, Bolling K, Rich P, Aarons G, Johnson E, Full K, Crist K, & Kerr J

Background: Less than 3% of older adults meet physical activity (PA) guidelines. Currently, there is a dearth of research on implementation of PA interventions into real world settings. Few PA interventions in community settings are designed for long-term sustainment. We are employing mixed-methods to evaluate concepts across phases of the exploration, preparation, implementation, sustainment (EPIS) framework including perceived and actual fit of a 2 year Peer Empowerment Program for PA (PEP4PA).

Methods: PEP4PA is a hybrid type 2 effectiveness-implementation randomized control trial designed to promote & assess delivery and sustainment of a peer-led multi-level PA program in seniors centers throughout San Diego County. Sites are randomized at 18 months to one of two implementation strategies, one providing sustainment support or not. Peer health coaches and a center staff member complete a 16-hour training course and certification to lead the program and build a sustainment plan. At baseline, participants, lay peer health coaches, center staff, and directors complete a perceived fit survey and semi-structured interview evaluating implementation outcomes of relevance, compatibility, and acceptability of PEP4PA community-based senior centers. Measures assess levels of the program (e.g. coaching, community advocacy) and levels of support (e.g., peer coach, organization, local policy). PEP4PA intervention fidelity is assessed continually through an online tablet. Assessments are repeated every 6 months, to assess the dynamic, changing fit of the intervention and progress towards sustainment.

Findings: The framework for this implementation strategy in this setting has been developed. Results demonstrate how interviews and surveys have been used to modify the peer & staff training to improve program fit, promote successful implementation, and actively address sustainment.

Implications: Continuously evaluating program fit throughout the course of an intervention and modifying delivery as needed ensures that the program is acceptable and appropriate within the setting thereby increasing the likelihood of sustainment. Given the impending population shift expected in 2030 when the number of older adults is expected to double, it is imperative that PA programs are designed to build capacity within communities to promote long-term sustainment.

ABSTRACTS

23. The effect of audit and feedback design features on physicians' motivation to improve

Van Deen W, Cho E, Wixon D, Spruijt-Metz D, Kim S, Shlamovitz G, & Menchine M

Background and Aims: Audit and feedback, the process of showing providers their own performance, is a strategy successfully used in healthcare to improve quality. However, the underlying mechanisms that lead to successful implementation remain largely unknown due to a lack of involvement of theory in the design and evaluation of these strategies. On the other hand, substantial research in sub-fields of psychology and human cognitive design have led to the development of a variety of theories to understand these underlying mechanisms. The aim of this study is to use the abovementioned theories to understand how the design of a dashboard affects providers' motivation to improve in an emergency department (ED) setting.

Methods: The study will take place in the LAC+USC ED, which employs >100 physicians and experiences above average length of stays. In this study, we will co-develop a prototype dashboard with the ED leadership and ED physicians, using the principles of human-centered design. We will perform two semi-structured interviews with the ED directors to understand the goals of the ED, and six semi-structured interviews with physicians to understand physician-level facilitators and barriers to implementation. Based on these results we will develop a front-end prototype dashboard, which we will improve iteratively using feedback from six additional physician interviews. Additionally, we will perform physician surveys to assess motivation to improve and intention to use a dashboard, before and after showing them the developed prototype. We will randomize physicians to various dashboard prototypes and examine the differential effect of different design element on motivation and intention to use.

Results: A multidisciplinary team including an implementation researcher, a software design expert, a behavioral psychologist, a systems engineer, a medical IT specialist, and an ED physician has been established. Interviews are expected to start in June, 2017 and surveys will be administered in August and September, 2017.

Implications for practice/policy: We expect to get a deeper understanding of the importance of design in audit and feedback interventions. We will specifically address the effect on technology adoption and motivation to improve. Findings of this study will inform future implementation strategies for audit and feedback dashboards for quality improvement.

24. Understanding Patterns and Predictors of Sustained Practice Delivery within a System-Wide EBP Implementation Effort

Zhan C, Lau A, Stadnick N, Terrones L, Aarons G, Sommerfeld D, & Brookman-Frazee L

Background and Aims: The implementation of evidence-based practices (EBPs) requires substantial resources in workforce training (Beidas et al., 2016); yet, failure to achieve long-term sustainment can result in poor return on investment (Hoagwood et al., 2014). There is limited research on the sustainment of EBPs long after their adoption (e.g., Schell et al., 2013). To contribute to the literature, this study examined therapists' delivery trajectories based on administrative claims for reimbursement for six EBPs (i.e., CBITS, CPP, MAP, SS, TF-CBT, and Triple P) adopted in a system-driven implementation effort to identify agency- and therapist-level factors associated with sustained EBP delivery.

Methods: Survival analysis methods were applied to analyze 19 fiscal quarters of claims data from the Prevention and Early Intervention (PEI) Transformation within the LACDMH. These data comprised 2,322,389 claims made by 6873 therapists across 88 agencies.

Results: Survival time was represented by the time elapsed from therapists' first to final claims for each practice and for any of the six practices. Overall, therapists continued to deliver at least one of the six practices for a median survival time of 26 (95% CI: [25.0, 27.0]) months, with CBITS (median: 2.83 months) having the shortest survival times, and MAP and TF-CBT (median: 18.17 and 15.93 months, respectively) having the longest. Multivariate Cox regression models, which compare the hazards (i.e., instantaneous risks) of different groups as ratios, revealed the following therapist-level factors as significant predictors of higher risk of discontinuing EBP delivery: fewer PEI practices ever delivered (HR=.56, p<.001), fewer claims made per active day (HR=.62, p<.001), a greater number of clients seen per active day (HR=3.12, p<.001), a smaller percentage of a therapist's clients that is Hispanic (HR=.996, p<.001), and an older average age of the therapist's clients (HR=1.05, p<.001). In addition, Hispanic therapists (HR=.89, p<.01) and therapists reporting Spanish as their first language (HR=.83, p<.01) had lower risk of discontinuing EBP delivery relative to other therapists. Trainees and psychiatrists were also at higher risk of discontinuing delivery.

Conclusions: These findings indicate that workforce characteristics are associated with increased and decreased returns on investment in large-scale EBP implementations.

AGENDA AT A GLANCE

7:15 AM - 8:00 AM

*Coffee and Registration
Poster Set-up*

8:00 AM - 8:15 AM

Welcome

8:15 AM - 8:55 AM

A Vision for Improving Real World Delivery Systems: Perspectives from Health Care, Population Health, and People

8:55 AM - 9:10 AM

Introduction to the Symposium

9:10 AM - 10:00 AM

Featured Projects

10:00 AM - 11:00 AM

DII Methods in Practice: Workshopping Our Ideas

11:00 AM - 11:10 AM

Break

11:00 AM - 11:50 AM

Poster Session

11:50 AM - 12:45 PM

Lunch

12:15 PM - 12:45 PM

Guided Poster Tours

12:45 PM - 1:30 PM

Becoming the best at getting better: A learning system perspective

1:30 PM - 2:45 PM

Strategy Sessions

2:45 PM -3:30 PM

Report Out

3:30 PM - 4:00 PM

Symposium Reflections and Close

THANK YOU!

Please remember to return your evaluation

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