

CHERISH

Center for Health Economics of Treatment Interventions for Substance Use Disorder, HCV, and HIV



Newsletter - January 2019

Keeping Up With CHERISH



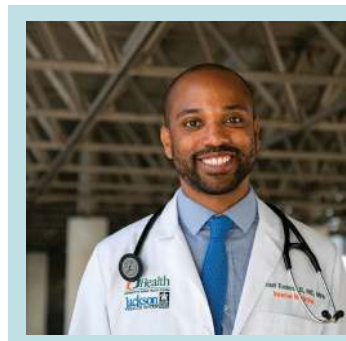
Joshua Sharfstein, MD, CHERISH Dissemination & Policy Core Advisory Board Member, spoke with CHERISH Investigator **Benjamin Linas, MD** on strategic engagements of investigators and local stakeholders on September 7, 2018 at Boston Medical Center. He discussed his experience and stakeholder engagement models in Rhode Island and drew on the local expertise of Traci Green, PhD. Dr. Sharfstein outlined the roles of different types of data for investigators: surveillance data, intervention effectiveness data, missing data and data to inform policy.



CHERISH Director **Bruce Schackman, PhD** co-led an opioid modeling consortium with CHERISH Research Affiliates **Bohdan Nosyk, PhD** and **Ahmed Bayoumi, MD** at the Society for Medical Decision Making conference on October 14, 2018 in Montreal, Canada. Opioid modelers gathered to share information on modeling methods and challenges to modeling substance use disorder.



Hansel Tookes, MD spoke with CHERISH pilot grant recipient **Czarina Behrends, PhD** about the Infectious Diseases Elimination Act (IDEA) syringe exchange program he leads in Miami, FL at the University of Miami Miller School of Medicine on December 14, 2018. He spoke about the medical services, HCV and HIV testing provided on-site, and associated linkage to care and medication adherence outcomes. Dr. Tookes outlined the political challenges the program faced in implementation and described the role of health economics data in convincing stakeholder of the benefits of syringe exchange. Investigators shared and discussed ideas for funding and sustainability of the program. Dr. Tookes serves as a mentor to CHERISH pilot grant recipient **Tyler Bartholemew** at University of Miami.



In This Newsletter

- ▶ Announcement of our Research Enhancement pilot grant recipients
- ▶ Roundup of select recent publications and presentations by CHERISH leadership, staff, pilot grant recipients, and Research Affiliates
- ▶ Information on our consultation services and resources for researchers
- ▶ Where you can find us at upcoming conferences

Congratulations Corner

- ▶ Welcome **Caroline Savitzky, MSW** to the CHERISH staff at Boston Medical Center
- ▶ Congratulations to CHERISH Research Affiliate **Alexander Walley, MD** whose work with colleagues was chosen as one of the top papers of 2018 at *Annals of Internal Medicine*

Pilot Grant Recipients: Recent Presentations

Challenges and Successes in Providing On-site HIV and HCV Testing in Substance Use Disorder Treatment Programs

Czarina N. Behrends, PhD, Jemima A. Frimpong, PhD, Bruce R. Schackman, PhD

Cycle 3 pilot grant recipient, Czarina Behrends, PhD presented at the Addiction Health Services Research (AHSR) conference held October 17-19, 2018 in Savannah, Georgia. Dr. Behrends and colleagues found the need for payment policies that support billing for testing services at SUD treatment programs, enhanced efforts to facilitate partnerships with healthcare organizations, and policies that improve care coordination with medical providers.



Implementation of Routine HIV/HCV Screening and Linkage to Care in the IDEA Exchange; Miami, FL

Tyler S. Bartholomew, Hansel E. Tookes, MD, MPH

Cycle 4 pilot grant recipient Tyler Bartholomew (pictured on the right), presented at the International Symposium on Hepatitis Care in Substance Users (INSHU) 2018 held September 19 - 21, 2018 in Lisbon, Portugal. Mr. Bartholomew and colleagues found universal screening and routine testing among people who inject drugs (PWID) through needle exchange can increase identification of new HIV and HCV infections.



Hepatitis C Treatment Wanted Yet Not Received: Barriers to Receiving HCV Treatment Among People Who Inject Drugs

Shashi Kapadia, MD, Yesenia Aponte-Melendez, MA, Chunki Fong, MS, Benjamin J. Eckhardt, MD, Laz Davis, Bruce R. Schackman, PhD, Kristen M. Marks, MD, Pedro Ma-teu-Gelabert, PhD

Cycle 4 pilot grant recipient Shashi Kapadia, MD (pictured on the left) also presented at the INSHU 2018 Conference. Dr. Kapadia and colleagues found among PWID enrolled at a syringe services program, despite high rates of insurance coverage and desire to be treated, most participants have neither been referred to HCV care nor offered treatment. Providing HCV care and education in a low-threshold model, such as walk-in visits at community sites, may help alleviate these barriers.

Pilot Grant Recipients: Research Enhancement Funding

Katherine Wen

Katherine Wen is a doctoral student in the Department of Policy Analysis at Cornell University. Ms. Wen is working with CHERISH Research Affiliate and Cycle 1 pilot grant recipient, **Yuhua Bao, PhD** to assess the effects of state policies and practices aimed at improving prescriber use of Prescription Drug Monitoring Programs (PDMPs) on opioid prescriptions that put patients at high risk of opioid misuse and overdose (i.e., "high-risk opioid prescriptions"). With CHERISH enhancement funding, Ms. Wen will use Health Care Cost Institute (HCCI) data to assess the effects of PDMP policies on opioid overdose and other opioid-related inpatient admissions and emergency department (ED) visits with a focus on the privately insured and Medicare Advantage populations.



Melissa Zielinski, PhD

Dr. Melissa Zielinski is an Assistant Professor of Psychiatry at the University of Arkansas. Dr. Zielinski serves as the evaluator for the Pulaski County Regional Crisis Stabilization Unit (PCRCSU), one of Arkansas' four state-mandated crisis stabilization units, intended to aid in diverting people who come into contact with police due to acute mental health crises from jails and into a medically-appropriate level of care. Dr. Zielinski, CHERISH Research Affiliate **Joshua Barocas, MD** and colleagues will use CHERISH enhancement funding to conduct a preliminary economic evaluation of the PCRCSU to provide timely information on the budget impact to the state of Arkansas as it considers expanding the number of units throughout the state. Dr. Zielinski was previously awarded a travel scholarship attended the CHERISH Introduction to Health Economics training at the CTN Annual Steering Committee Meeting in March 2018.

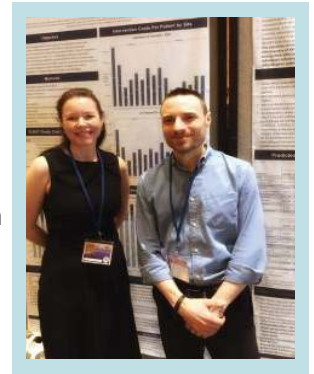


Cost and Cost-Effectiveness of Buprenorphine Naloxone (BUP-NX) versus Injectable Naltrexone (XR-NTX)

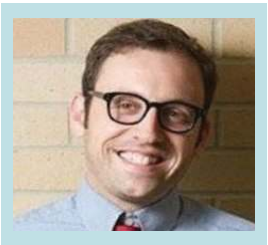
One key strategy in reducing deaths from the opioid epidemic is to improve access to existing evidence-based treatments. Two new economic studies by CHERISH Investigators **Sean Murphy, PhD, Kathryn McCollister, PhD,** and **Bruce Schackman, PhD** can help providers, patients, and payers sort through alternative pharmacotherapies to prevent opioid relapse.

In a new cost-effectiveness analysis published in the *Annals of Internal Medicine* on December 18, 2018, Dr. Murphy and colleagues found BUP-NX was preferred to XR-NTX as the first line of treatment from the healthcare sector and societal perspectives, due to the similarity in effectiveness between the therapies and the higher cost of the XR-NTX treatment strategy. The higher cost of the XR-NTX treatment strategy was driven largely by higher medication costs and longer detoxification period required before starting treatment. This higher cost was not associated with significantly better outcomes measured in QALYs or abstinent years gained; thus, a reduction in the cost of the XR-NTX injection and less costly modes of treatment initiation would likely improve its relative economic value.

In the cost analysis in the *American Journal of Managed Care*, CHERISH Investigators Drs. Kathryn McCollister, Sean Murphy, and Bruce Schackman compared the cost of administering BUP-NX and XR-NTX during program start-up, inpatient detoxification and 24 weeks of follow up post-detoxification. From a healthcare sector perspective, the mean 24-week cost per participant was higher for XR-NTX than for BUP-NX due to longer outpatient medication management visits and higher medication costs. The analysis concluded that providing BUP-NX and XR-NTX to patients receiving inpatient detoxification generates modest additional costs to providers, although the costs associated with attending medication management visits may be a barrier for some patients considering these treatments. Dr. Murphy said,



“These are both very effective medications for the treatment of opioid use disorder. Narrowing the cost gap by lowering the cost of XR-NTX and shortening the induction period would allow more people to access both alternatives according to their clinical needs and preferences. Another way to reduce healthcare sector costs would be to identify the subset of people who are most likely to achieve superior outcomes on XR-NTX.”



In an accompanying editorial in the *Annals of Internal Medicine*, CHERISH Research Affiliate **Josh Barocas, MD** and his colleague, Richard Saitz, MD from Boston Medical Center highlighted the barriers and beliefs around medication for opioid use disorder (OUD). He explains that access to medication for OUD and choice of medication are frequently based on regulatory policy and unsubstantiated beliefs related to the meaning of abstinence. Instead co-authors suggest that the choice of medication for OUD should be guided by efficacy and safety and informed by cost-effectiveness. In the article, they noted,

“Basing medical decisions on beliefs about medications does nothing to help the growing pool of those with OUD, who if untreated are likely to fall victim to an overdose.”

Consultation Service

We have health economic evaluation expertise in:

- Budget impact and costing
- Cost-benefit
- Qualitative data collection
- Cost-effectiveness
- Quality of life
- Statistical analysis / econometrics

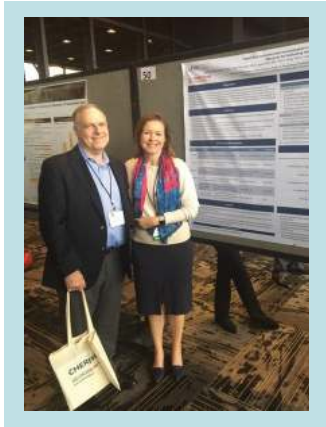
We have health economic modeling expertise in:

- Markov modeling
- Discrete event simulation
- Agent-based modeling
- Monte Carlo simulation
- Compartmental modeling
- Longitudinal data

To learn more about CHERISH consultation services for researchers:

www.cherishresearch.org/consultation

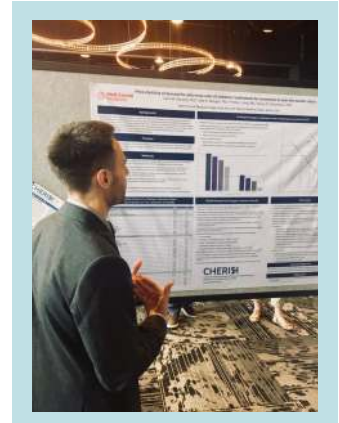
2018 Addiction Health Services Research Conference



Bruce Schackman, PhD and **Kathryn McCollister, PhD** at poster session



Kathryn McCollister, PhD and **Sean Murphy, PhD** at pre-conference workshop



Sean Murphy, PhD at poster session

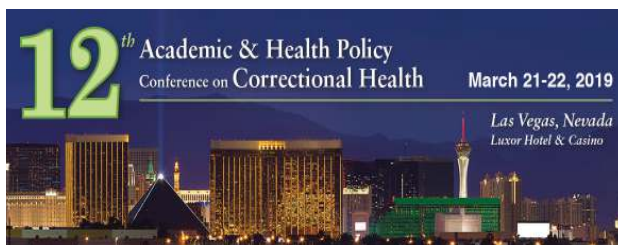
Expanding the Impact of Substance Use Disorder Research: Economic Analysis for Program and Policy Evaluation

This workshop introduced participants to cost-effectiveness analysis (CEA) methods and applications, and demonstrated the use of the Second Panel on Cost-Effectiveness in Health and Medicine impact inventory to organize cost domains by perspective, and measures within those domains. Drs. Murphy and McCollister reviewed the process of selecting the most appropriate monetary conversion factors for different perspectives, and addressed analytic challenges associated with heterogeneity of data sources, double counting when combining and monetizing multiple outcomes, and analyzing non-normally distributed data. The workshop was highly interactive where participants worked in groups to make key decisions in conducting a CEA, using real-world examples. Participants gained an understanding of how CEA complements effectiveness trials and can expand the impact of this research by addressing concerns of multiple stakeholders.



Find Us

Center investigators and staff are looking forward to promoting CHERISH at upcoming conferences:



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