# CHERISH

Center for Health Economics of Treatment Interventions for











Newsletter - September 2017

Substance Use Disorder, HCV, and HIV

## **Stakeholder Conference**

Experts from Across Country Gather at LDI on June 9, 2017 to Address Gaps in Evidence-Based Practice and Policy



In the opening plenary panel of the CHERISH conference on evidence-based policy and practice are (I to r) Daniel Polsky, PhD, Tom McLellan, PhD, Richard Frank, PhD, and Joshua Sharfstein, MD.



Former Congressman Patrick Kennedy (D-RI) keynoted the event.

On June 9, 2017 110 invited health researchers, clinicians, policymakers, health system leaders, and other stakeholders met at the University of Pennsylvania to discuss approaches to address the gaps in evidence-based substance use disorder policy and practice, with an emphasis on the current opioid epidemic. The CHERISH-sponsored conference was hosted by the Leonard Davis Institute of Health Economics (LDI).

#### In This Newsletter

- A recap of our first stakeholder conference
- Studies by CHERISH investigators Kathryn McCollister, PhD and Jake Morgan, PhD
- Information on our consultation services and resources for researchers
- Center/Core video profiles and presentations available on the CHERISH YouTube channel
- Where you can find us at upcoming conferences and talks

The goal of the conference was to bring together policymakers, who make decisions about, and researchers, who study, the treatment of substance use disorder (SUD) in the United States within the context of the current opioid epidemic. Specifically, this conference was designed to improve the translation of current research for policy stakeholders and to inform future research so that it can be responsive to policymakers' needs. The conference began with a plenary that included a dynamic discussion about the history and scope of SUD. Conference breakout sessions covered the most pressing issues concerning opioid prescribing, evidence-based treatment of opioid use disorder, and the need to integrate treatment into the health system. The first set of breakout sessions were led by policymakers and the second by researchers. The conference participants then came together as one group for the keynote speaker, former Congressman Patrick Kennedy, who passionately shared his pursuit of insurance coverage parity for mental health and substance use treatment. The day concluded with an interactive session focused on exchanging policy ideas and solutions to curb the opioid epidemic.





The conference was kicked off with remarks from Zachary Meisel, MD, MPH and Bruce Schackman, PhD, MBA.



Yuhua Bao, PhD addresses a breakout session with other panelists (I to r) Deborah Dowell, MD, MPH, Dan Hartung, PharmD, MPH, and Stefan Kertesz, MD, MSc.



Addressing breakout sessions are Rachel Levine, MD and Jennifer McNeely, MD.





In lunch discussions are (I to r) Kai Yeung, PharmD, PhD, M. Kit Delgado, MD, Sean Murphy, PhD, and Janet Weiner, PhD, MDH



Leaders of the collaborative CHERISH effort flank keynote speaker Patrick Kennedy (I to r): Daniel Polsky, PhD, Brandon Aden, MD, MPH, Zachary Meisel, MD, MPH, Gary Mendell, MBA, former Congressman Kennedy (D-RI), Bruce Schackman, PhD, MBA, Kathryn McCollister, PhD, Jeffrey Samet, MD, MPH, and Ben Linas, MD, MPH.





## Monetary Conversion Factors for Evaluating Substance Use Disorder Interventions: New Resource for Researchers



The National Institute on Drug Abuse estimates that substance use disorders, comprising illicit drugs and alcohol use as well as smoking, cost the United States more than \$740 billion per year. This includes the cost of crime, incarceration, lost productivity, and medical care. A recent study considered the economic consequences of heroin use specifically, finding that the annual societal cost of heroin use disorder in the United States is more than \$51 billion per year. These costs are staggering placing substance use disorders among the top ten causes of death in the U.S. and translate to more than 7% of the global burden of disease. Cost-effectiveness analyses of substance use disorder treatment interventions, as well as related HIV and HCV linkage to care or care coordination interventions, typically focus on capturing costs to the healthcare system. Recent guidance from the Second Panel on Cost-Effectiveness in Health and Medicine encourages researchers to broaden their analytic perspective to include multidimensional costs to society, including many indirect costs previously considered in cost-benefit analyses. This guidance includes using an impact inventory that organizes which costs align with the narrower health care system perspective vs. the broader societal perspective.

In order to quantify and value the measures in the impact inventory, CHERISH Methodology Core Co-Director Kathryn McCollister, PhD recently published an article providing an up-to-date summary of relevant monetary conversion factors. Guided by common assessment tools used in substance use disorder research such as the GAIN, ASI, and NMS to select domains and measures, Dr. McCollister used several data sources to create a list of unit costs to monetize societal impacts. She focused on the domains that are relevant for substance use disorders such as medical and behavioral health services, substance use disorder treatment, infectious disease consequences, productivity, criminal activity and criminal justice system contacts, social services, and disability. Coupled with an extensive literature review, this list of monetary conversion factors will serve as a valuable resource for health services and health economics researchers. Considering the article is an update to a study published almost 20 years ago, the authors suggest this exercise be repeated on a regular interval to promote consistency and reproducibility of cost analyses.

The article is available open access in the *Journal of Substance Abuse Treatment*. Co-authors include Xuan Yang, MPH, MHS, Bisma Sayed, PhD, and Michael French, PhD from the University of Miami, and Jared Leff, MS and Bruce Schackman, PhD, MBA from CHERISH and Weill Cornell Medicine. These results were presented by Kathryn McCollister on July 15, 2016 at the **European Association of Health Economics Conference** in Hamburg, Germany, on October 15, 2016 at the **Addiction Health Services Research Conference** in Seattle, WA, and at the **2017 iHEA Biennial World Congress** held July 7 - 11, 2017 in Boston, MA.

#### **Consultation Service**

The consultation service provides guidance to researchers on the design and implementation of observational and interventional studies related to treatment interventions for substance use disorder, HCV, and HIV, to ensure that planned economic analyses are methodologically sound and feasible.

#### We have health economic evaluation expertise in:

- Budget impact and costing
- Cost-effectiveness
- Cost-benefit
- Quality of life

- Qualitative data collection
- Statistical analysis / econometrics

#### We have health economic modeling expertise in:

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

To learn more about CHERISH consultation services for researchers:

#### www.cherishresearch.org/consultation



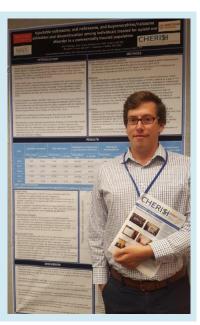


### **Medications for Opioid Use Disorder: Who is Receiving** Which Treatment?

In response to the growing opioid epidemic in the United States there is an increased focus on expanding evidence-based treatment using medications prescribed for substance use disorder, especially medications that can be prescribed in outpatient settings including buprenorphine and naltrexone. The Surgeon General's report on facing addiction in America describes substance use disorders as chronic illnesses requiring long term treatment similar to other less stigmatized illnesses, but until now there were no studies that compared several medications for opioid use disorder head-to-head in real-world outpatient settings. Using the MarketScan database of commercially insured beneficiaries, CHERISH investigator Jake Morgan, PhD along with CHERISH colleagues Bruce Schackman, PhD, MBA, Benjamin Linas, MD, MPH, and Jared Leff, MS and Boston Medical Center colleague Alexander Walley, MD, MSc analyzed prescribing patterns and subsequent treatment discontinuation for injectable naltrexone, oral naltrexone, sublingual buprenorphine/naloxone, sublingual buprenorphine and transdermal buprenorphine medications for opioid use disorder (MOUDs).

From 2010 to 2014, Dr. Morgan found that the proportion of commercially insured individuals in the database diagnosed with opiate use disorder (OUD) increased 4 fold but the proportion of individuals with OUD receiving these medications decreased, indicating that the proportion of individuals diagnosed with OUD outpaced the utilization of MOUDs. Individuals who received MOUDs were more likely to be male, younger and have a co-occurring substance use disorder than those with OUD who were not receiving the medications. While the proportion of all individuals receiving MOUDs who received naltrexone (injectable or oral) and transdermal buprenorphine grew, it remains small at approximately 5% of all MOUDs analyzed. Discontinuation rates after 30 days were high among all treatment groups, ranging from 31% for sublingual buprenorphine/ naloxone to 70% for oral naltrexone. After the first 30 days, the discontinuation rate was higher among those receiving naltrexone (injectable or oral) and transdermal buprenorphine.

The MarketScan database is a nationally representative database of commercially insured individuals that allows investigators to track the pattern of filled OUD therapy medications. However, stigma is one of the largest barriers to treatment and thus these data underestimate the prevalence of OUD since they only include individuals with an OUD diagnosis. The results may not be generalizable to publicly insured individuals who may face additional barriers to MOUD treatment. The high discontinuation rates reported in this study suggest that more efforts are needed at the provider, health system and policy level in order to increase access to MOUD and reduce treatment discontinuation.



Dr. Jake R. Morgan presented the results of his MarketScan analysis at the College on Problems of Drug Dependence (CPDD) held June 17 - 22, 2017 in Montréal, Canada. An article detailing these findings was recently published in the Journal of Substance Abuse Treatment.

#### Resources

The CHERISH network has expertise and insight in a range of topics related to health economic research that is informative of substance use disorder treatment policy and HCV and HIV care of substance users. Made available on the CHERISH website are a number of informative links and resources identified to serve the research community.

#### We have instruments to measure:

- Health-related quality of life
  Resource utilization
  Productivity
- Resource utilization
- Productivity

#### We have other helpful resources:

- Issue briefs / fact sheets NIH health economics priorities Recommended health economics references
- Costing tools
- Economic evaluation guidelines Language of addiction glossary

To learn more about CHERISH resources for researchers:

#### www.cherishresearch.org/resources



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# **CHERISH Video Library**

The CHERISH video library and YouTube channel host presentations given by CHERISH investigators as well as video profiles which serve as introductions to Center and Core goals, accomplishments, and leadership.

#### **Presentations**



"Understanding Access to HCV Therapy in 2015" HepCure Tele-Education Webinar Series Benjamin P. Linas, MD, MPH; November 10, 2015



"The Health Economics of Substance Abuse Treatment" Annual Penn Health Policy Retreat Zachary Meisel, MD, MPH, MSPH; February 2016



"Hepatitis C and HIV in Substance Users: Economics of Screening and Linkage to Care" BC Centre for Excellence in HIV/AIDS Forefront Lecture Bruce Schackman, PhD, MBA; October 26, 2016

#### **Profiles**



CHERISH profile by AASLD TV 2016



2016 Year in Review



Methodology Core



HCV & HIV Core



Dissemination & Policy Core



Pilot Grant & Training Core

CHE RIS

http://www.cherishresearch.org/videos/

## Find Us

CHERISH investigators and staff are looking forward to presenting at the following conferences:







SUDDA Society for Medical Decision Making Better Health through Better Decisions. 39th ANNUAL MEETING October 22-25, 2017 Pittsburgh, PA www.smdm.org

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