

CHERISH

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

Newsletter - May 2019



Strengthening Partnerships Between Substance Use Researchers & Policy Makers



Comprehensive evidence-based policy is crucial in combatting the substance use crisis. CHERISH Investigators from the University of Pennsylvania Leonard Davis Institute **Zachary Meisel, Julia Mitchell, Daniel Polsky and Janet Weiner** published a new study in *Substance Abuse Treatment Prevention and Policy* that describes how eighteen policy makers involved in the delivery of health services engage with substance use disorder (SUD) research to inform policy.

In This Newsletter

- ▶ Announcement of our Cycle 5 Pilot Grant Recipients
- ▶ Roundup of select publications by CHERISH Investigators, Pilot Grant Recipients, and Research Affiliates
- ▶ Information on our consultation services and resources for researchers
- ▶ Where you can find us at upcoming conferences

Recommendations for Researchers:

- ▶ Partner with policy makers early in the research process
- ▶ Systematically test alternative phrasing of scientific terminology
- ▶ Incorporate qualitative research methods to uncover the narratives that explain the context and relevance of evidence
- ▶ Incorporate study designs that prioritize timeliness of results
- ▶ Promote and reward researcher involvement in policy discussions
- ▶ Formulate and use research designs to meet the strategic goals of end-users

Congratulations Corner

- ▶ **Dan Polsky** named Bloomberg Distinguished Professor at Johns Hopkins Bloomberg School of Public Health and Carey Business School
- ▶ **Jake Morgan** appointed Research Assistant Professor at Boston University School of Public Health
- ▶ **Bruce Schackman** appointed to the NIH Office of AIDS Research Advisory Council

NIH Funds HEALing Communities Study in Four States

On April 18, 2019, the National Institute on Drug Abuse (NIDA) together with the Substance Abuse and Mental Health Services Administration (SAMHSA) announced research sites in four states will receive more than \$350 million in funding as part of the Helping to End Addiction Long-term (HEAL) Initiative's HEALing Communities Study.

As part of the HEALing Communities Study call for proposals, NIDA emphasized the importance of integrating health economics research to address affordability, scalability and sustainability of evidence-based treatment interventions for opioid use disorder. CHERISH is proud to participate in the economic component of the study. CHERISH Investigators will provide economic expertise to the Kentucky (**Kathryn McCollister**), Massachusetts (**Benjamin Linas** and **Sean Murphy**), and New York (**Bruce Schackman**) sites. Additionally Drs. McCollister and Schackman are collaborating with Research Triangle Institute on the cross-site economic evaluation.



Using the 340B Drug Pricing Program to Support Primary Care-Based Hepatitis C Treatment in a Safety-Net Hospital Patient-Centered Medical Home

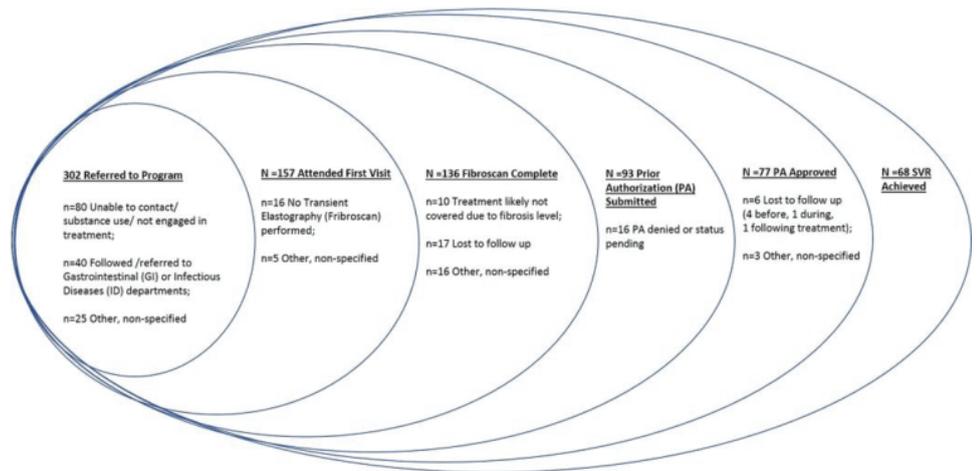
Jones EA, **Linas BP**, Troung V, Burgess JF, **Lasser KF**. Budgetary impact analysis of a primary care-based hepatitis C treatment program: Effects of 340B drug pricing program. *PLoS One* 2019; 14(3): e0213745.

Over 2 million people in the US had chronic hepatitis C (HCV) infection during 2013-2016, and HCV remains a leading cause of morbidity and mortality in the United States. Expanding HCV treatment in primary care would improve treatment access and follow-up but is resource intensive, requiring significant staff support. Using a budget impact analysis, a new study by **Karen Lasser**, CHERISH Pilot Grant Recipient, in *PLoS One* shows how the 340B Drug Pricing Program generated enough revenue to fund primary care-based HCV treatment at a safety-net hospital.

The 340B Drug Pricing Program provides medications to participating organizations at significant discounts and allows them to bill insurers for the full market price (e.g., wholesale acquisition cost) in order to re-invest the revenue. Recently, there has been intense policy debate about the role and suitable application of 340B regulations, and the outlook for the 340B program is uncertain.

In order to assess revenues and costs to the hospital system, Dr. Lasser and colleagues conducted a retrospective chart review of 302 patients with chronic HCV referred to a primary care-based multidisciplinary team. The team included a case manager who performed care facilitation activities, seven general internists who treated HCV, a pharmacy technician and a pharmacist. The investigators estimated the proportion of time the team spent on HCV care. They then determined the cost and revenue associated with clinical visits, HCV medications dispensed through the hospital pharmacy benefiting from the 340B Drug Pricing Program, laboratory and diagnostic tests.

The primary care-based HCV treatment program cost \$942,770 annually and generated annual revenue of \$1.2 million, resulting in a net revenue of \$930 per patient referred. Without the 340B program, however, the hospital would have experienced a net loss of \$370 per patient referred. The authors conclude that efforts to sustain the 340B program could enable dissemination of similar HCV treatment models elsewhere. Conversely, if the 340B program were removed, patient adherence to treatment could decline, as the hospital might be unable to support the ancillary services provided by the case manager and pharmacist that facilitate adherence to treatment.



*Visit #2 with HCV treater added mid-way through the program and thus does not appear in this figure

Consultation Service

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

Naloxone Sales Likely to Increase after Switch to Over-the-Counter Status

Murphy SM, Morgan JR, Jeng PJ, Schackman BR. Will converting naloxone to over-the-counter status increase pharmacy sales? *Health Serv Res* 2019; epub ahead of print.

Naloxone is an opioid antagonist rescue medication that reverses the effects of an opioid overdose, and thus a critical tool to prevent fatal opioid overdoses. CHERISH Investigators Drs. **Sean Murphy, Jake Morgan, and Bruce Schackman**, and CHERISH staff member **Philip Jeng, MS** predicted pharmacy sales following conversion of naloxone to over-the-counter (OTC) in a new study published in *Health Services Research*.

The Centers for Disease Control and Prevention reported 47,600 opioid-related overdose deaths in 2017. In an effort to increase access to life saving naloxone many states and jurisdictions have passed naloxone standing order laws that allow pharmacists to dispense naloxone without a prescription. Increased availability of naloxone has been bolstered by public figures such as the US Surgeon General. To further increase access to naloxone, the Food and Drug Administration announced unprecedented new efforts to support development of OTC naloxone products. According to Dr. Murphy “although we would expect a conversion of naloxone to over-the-counter to reduce access barriers and increase demand, the conversion could also result in an increase in out-of-pocket price for consumers, which would moderate the demand-side effects.”

Using a nationwide longitudinal prescription claims database the CHERISH investigators estimated the demand and supply functions for naloxone purchased at US retail pharmacies, which allowed them to estimate the own-price elasticity of naloxone demand in these settings, and ultimately predict retail pharmacy sales following conversion of naloxone to OTC. The investigators found that for every 1% increase in the out-of-pocket price paid for naloxone, there would be a 0.27% decrease in pharmacy sales. The authors predict an increase in naloxone sales of 15%- 179% following its conversion to OTC. Dr. Murphy states,



“ One hopes that the increase in naloxone sold at retail pharmacies would decrease the number of fatal opioid overdoses; however, this will depend on whether the changes in the marketplace result in an increase in the amount of naloxone among persons most likely to encounter an opioid overdose. ”

Cycle 5 Pilot Grant Recipients



Rachel Epstein, MD, MA

Rachel Epstein, MD, MA is a Post-Doctoral Research Fellow at Boston Medical Center. Dr. Epstein's project is, “Medicaid State Hepatitis C Treatment Restrictions: Spillover Effects on the Care Cascade.” Dr. Epstein's CHERISH sponsor is **Ben Linas, MD, MPH** at Boston Medical Center, Director of the CHERISH HCV and HIV Core.



Margaret Lowenstein, MD, MPhil

Margaret Lowenstein MD, MPhil, is a Fellow in the National Clinicians Scholars Program at the University of Pennsylvania and an Associate Fellow at the Leonard Davis Institute of Health Economics. Dr. Lowenstein's project is, “Cost-effectiveness of naloxone distribution to public libraries.” Dr. Lowenstein's CHERISH sponsor is **Zack Meisel, MD, MPH, MSHP**.



Angélica Meinhofer, PhD

Angélica Meinhofer, PhD, is an Instructor in the Department of Healthcare Policy & Research at Weill Cornell Medical College. Dr. Meinhofer's project is, “The impact of state policies for reducing prenatal drug use on pregnancy outcomes.” Dr. Meinhofer's CHERISH sponsor is **Yuhua Bao, PhD** at Weill Cornell.

2019 CPDD Conference Workshop

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



June 18, 2019 | 5:15 PM to 7:15 PM CT

Discussion Leaders: *Kathryn McCollister, PhD & Sean M. Murphy, PhD*



At the College on Problems of Drug Dependence (CPDD) 81st annual scientific meeting, the workshop will present economic analysis methods and help participants understand how to leverage existing clinical trials to examine cost-effectiveness and budget impact of new SUD interventions. The workshop will be interactive and employ group-based learning exercises to illustrate recommended procedures and key decisions in conducting a cost-effectiveness analysis (CEA), using real-world examples. Participants will gain an understanding of how CEA complements clinical effectiveness trials and can expand the impact of this research by calculating budget impact and long-term fiscal viability of new interventions. They will also consider the net economic benefits attributable to the intervention such as healthcare sector savings, reduced criminal justice system costs, and improved productivity.

Find Us

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

ASHEcon



8th Conference of the American Society of Health Economists
The Crossroads of Public Policy and Health Economics
Washington, DC



IAS 2019
10TH IAS CONFERENCE ON HIV SCIENCE
Mexico City, Mexico 21-24 July 2019

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