

# CHERISH

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

## Fact Sheet: Quality of Life Outcomes in Prescription and Injection Opioid Misuse

### Purpose of the Study

Quality of life is an increasingly important measure of chronic disease outcomes. Despite growing recognition that substance use disorder is a chronic disease, quality of life is rarely measured in substance use disorder treatment studies. Investigators should improve measurement of quality of life in substance use disorder to provide policy makers with evidence of the impact of the disorder on patients' lives and to quantify the value of investing in opioid use disorder treatments.

### Methods

With funding from the National Institute on Drug Abuse (NIDA) R01DA033424 we measured quality of life in prescription and injection opioid misuse using primary data from a survey of the U.S. population and secondary data from opioid use disorder patients enrolled in three national treatment studies. We measured quality of life utility weights using standard survey measures. We also conducted a systematic review.

### Summary of Findings

- Quality of life for opioid users is rated by the U.S. population as poor, similar to colorectal cancer.<sup>1</sup>
- Quality of life for family members of opioid users is also rated as poor, for example similar for spouses of opioid users to spouses of patients with Alzheimer's disease.<sup>1</sup>
- Medication-assisted substance use disorder treatment has a modest positive impact on quality of life that may not persist over time.<sup>2,3</sup>
- Co-morbidities (HIV, HCV, other substance use, depression) negatively affect quality of life of opioid users; the "minimum level" may be appropriate for health utility assessment of opioid misuse.<sup>4</sup>
- Quality of life is rarely used as a measure in assessing opioid use treatment programs.<sup>5</sup>

1. Wittenberg E, Bray JW, Aden B, Gebremariam A, Nosyk B, Schackman BR. Measuring benefits of opioid misuse treatment for economic evaluation: health-related quality of life of opioid-dependent individuals and their spouses as assessed by a sample of the US population. *Addiction*. 2016; 111:675-84.

2. Nosyk B, Bray JW, Wittenberg E, Aden B, Eggman AA, Weiss RD, Potter J, Ang A, Hser YI, Ling W et al. Short term health-related quality of life improvement during opioid agonist treatment. *Drug Alcohol Depend*. 2015; 157:121-8.

3. Aden B, Dunning A, Nosyk B, Wittenberg E, Bray JW, Schackman BR. Impact of Illicit Drug Use on Health-Related Quality of Life in Opioid-Dependent Patients Undergoing HIV Treatment. *J Acquir Immune Defic Syndr*. 2015; 70:304-10.

4. Wittenberg E, Bray JW, Gebremariam A, Aden B, Nosyk B, Schackman BR. A Comparison of Joint State Utility Estimators Using Standard Gambles for Substance Use Disorder States. 6th Biennial Conference of the American Society of Health Economists, Philadelphia, PA. 2016.

5. Wittenberg E, Bray JW, Gebremariam A, Aden B, Nosyk B, Schackman BR. Joint Utility Estimators in Substance Use Disorders. *Value in Health*. 2017.

### Recommendations

**Policy Makers:** quality of life measures are common and should be used as substance use disorder treatment outcomes.

**Program Administrators:** quality of life measures should be included in substance use program evaluation.

**Researchers:** quality of life should be included when collecting patient-related outcomes and should be analyzed using state-of-the-art utility assessment methods.

### Quality of Life Utility Weights

**What:** Quality of life utilities are a measurement from 0 to 1, 0 being the worst quality of life, similar to death and 1 being perfect quality of life.

**Why:** Quality of life utilities provide standard measurements to compare across chronic diseases.

**How:** Quality of life utilities are measured from a societal perspective. Using different methods and survey tools, investigators describe the symptoms of a disease to members of society who do not have the disease of interest and ask them to rate the quality of life for that disease.