

Cost of Pharmacotherapy for Opioid Use Disorders Following Inpatient Detoxification

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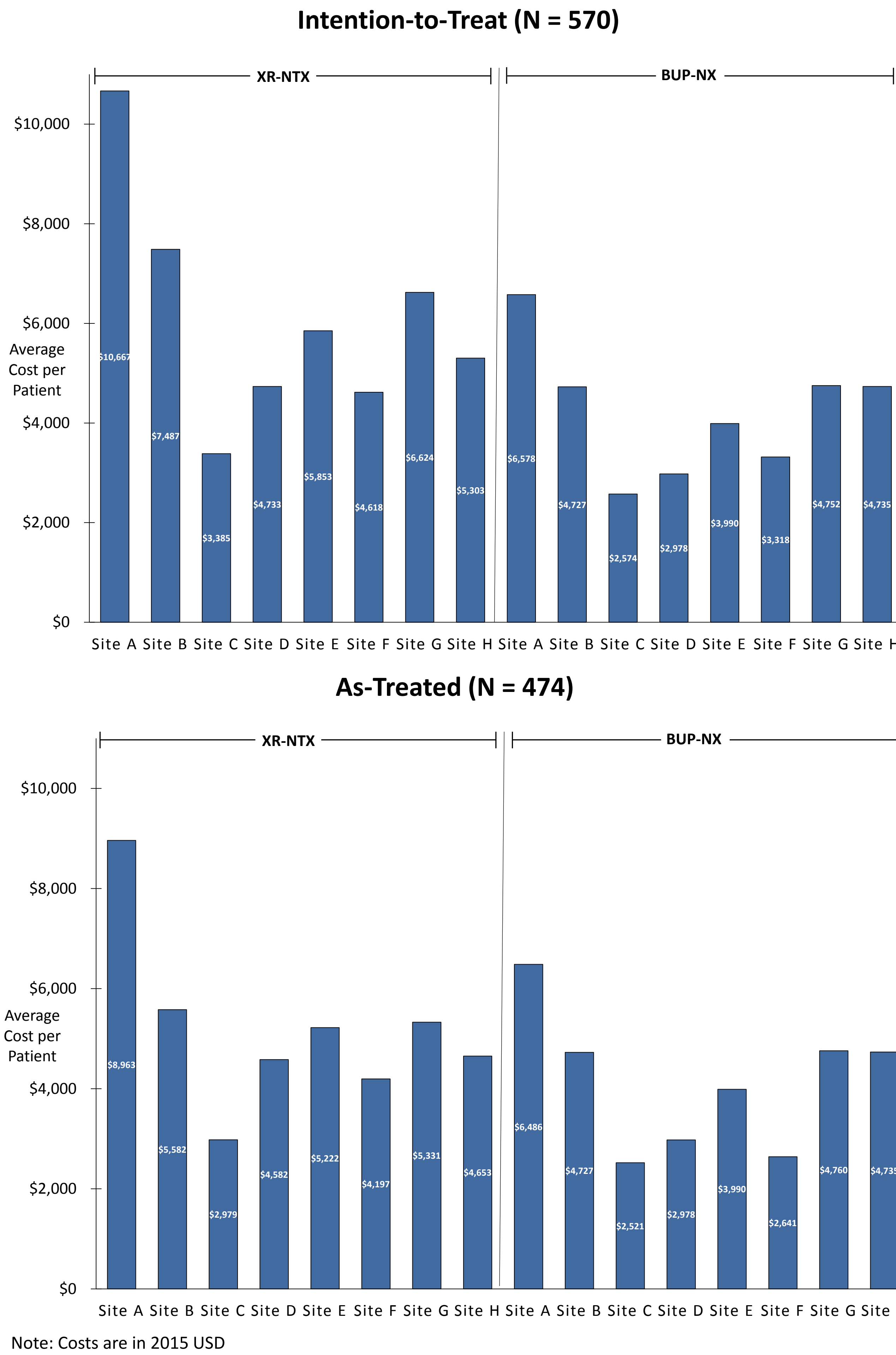
Objective

This study describes the approach and results of a comprehensive cost analysis of NIDA Clinical Trials Network CTN-0051, Extended-Release Naltrexone vs. Buprenorphine for Opioid Treatment (X:BOT), the first head-to-head randomized clinical trial in the U.S. of extended-release injectable naltrexone (XR-NTX) and buprenorphine-naloxone (BUP-NX) for preventing opioid relapse. Our objective was to provide rigorous estimates of the costs of training, inpatient detoxification, and medication management visits, highlighting the variation in these costs across sites and settings.

Methods

- Cost data collected prospectively in RCT:
 - Eight treatment sites with inpatient detoxification programs participated in the trial
 - 570 patients enrolled and randomized to XR-NTX (n=283) or BUP-NX (n=287)
- Cost data and analysis:
 - Collected resource utilization data using study assessment forms and during site visits
 - Costs reported as phases: start-up, inpatient detoxification, and post-randomization medication induction and medication management follow-up visits
 - Calculated costs for intent-to-treat and as-treated groups

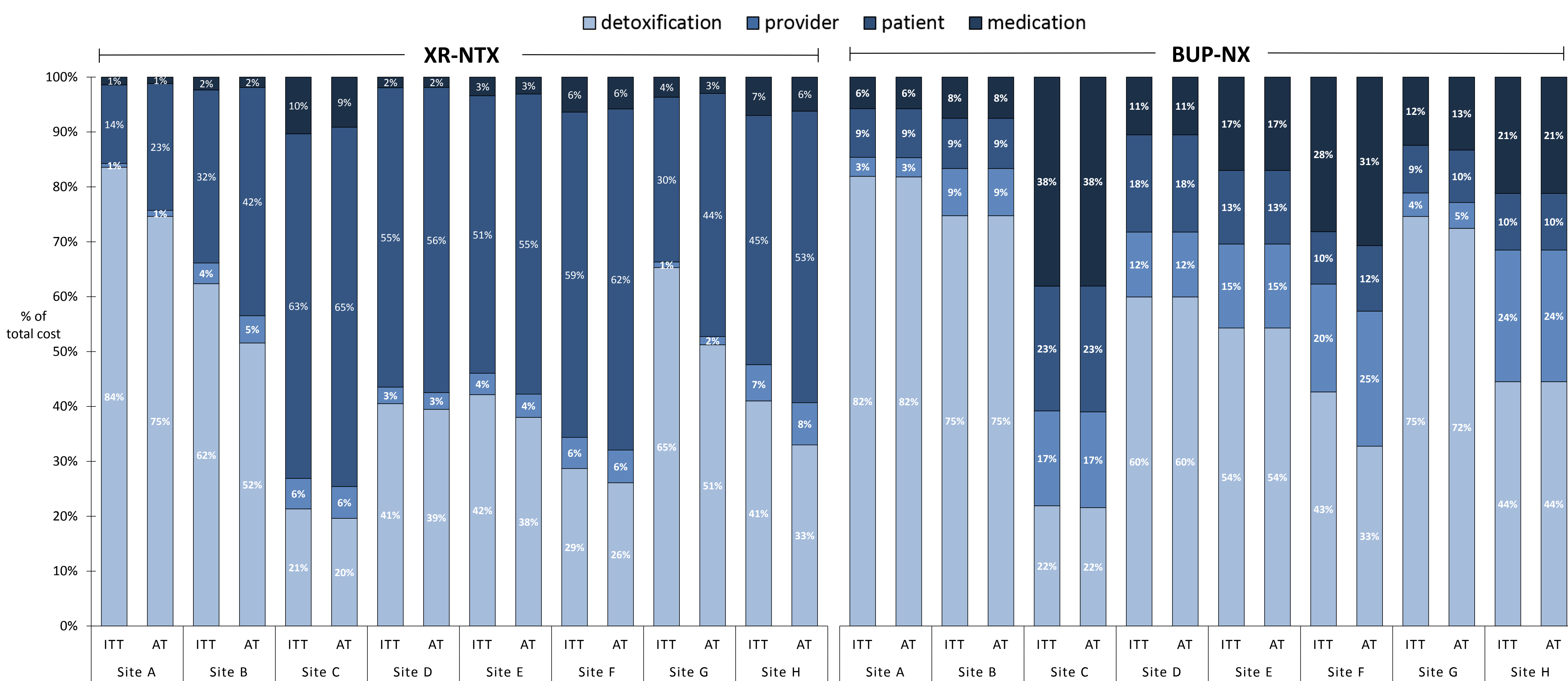
Intervention Costs Per Patient by Site



X:BOT Study Cost Components

Component	Description
Start-up costs	Sites received training and purchased equipment. Training costs were based on the number of hours of staff time to receive training on clinical aspects of using XR-NTX or BUP-NX, and a % of the costs to produce the training webinars attributable to the clinical aspects.
Inpatient detoxification costs	Personnel, buildings/facilities, equipment, supplies, medications, laboratory services, administrative costs, miscellaneous.
Intervention costs	Study medications, patient and provider time to complete induction and follow-up medication management visits. Patient transportation costs to return for follow-up visits.

Intervention Costs per Patient by Cost Component and Site



Results

- The average site start-up costs were \$1,071 for XR-NTX and \$828 for BUP-NX.
- The average costs per patient were \$5,416 for XR-NTX and \$4,148 for BUP-NX.
- XR-NTX costs were mostly related to detoxification (57%) and medication (37%); provider costs (3%) and patient costs (3%) were a small proportion of the total.
- For BUP-NX, detoxification was similarly high (64%), but medication costs made up a lower proportion (12%), on par with provider costs (10%) and patient costs (14%).
- As-treated patients had higher post-detoxification costs.

Discussion

- Providing XR-NTX and BUP-NX to patients receiving inpatient detoxification generates relatively modest costs to the healthcare provider.
- Access to these medications remains limited, further widening the gap between treatment need and actual utilization of medications.
- Individuals with OUDs out of treatment are at high risk of overdose and death.
- The treatment and financing landscape for OUDs continues to change as new medications are introduced and the role of primary care expands through more integrated behavioral health/physical health services delivery models.
- Results of the X:BOT cost analysis provides current practical information on the types of costs incurred by providers, payers, and patients for XR-NTX and BUP-NX, but continued research is needed to understand the costs of MAT as the system continues to evolve.

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Declaration of Interests

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