

Factors that Predict Early Treatment Failure Among Patients in Outpatient Treatment for Opioid Dependence



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Background

- Opioid dependence results when people abuse legal or illegal opiates in increasing quantity and frequency, thereby developing a tolerance
- In the United States, there has been a steady increase in both the number of people who abuse and become dependent upon opioids (SAMHSA, 2007)
- Opioid dependence, as a drug problem, is second only to alcohol abuse (Harvard Mental Health Letter, 2004)
- Opioid dependence can place a tremendous burden on individuals and their families, employers, and the national health care system (McLellan et al., 1992)
- Hundreds of millions of health care dollars are disbursed every year on untreated and under-treated opioid dependence (White et al., 2005; and Kaur et al. 2008)
- Existing treatment options for opioid dependence have mixed effectiveness
 - Abstinence-based approaches are characterized by cycles of detoxification and periods of abstinence and relapse (Bell et al., 2006; Matthews et al., 2006)
 - Relapse and mortality rates of replacement-based approaches are less than half of that of abstinence therapy patients (Amato et al., 2005)

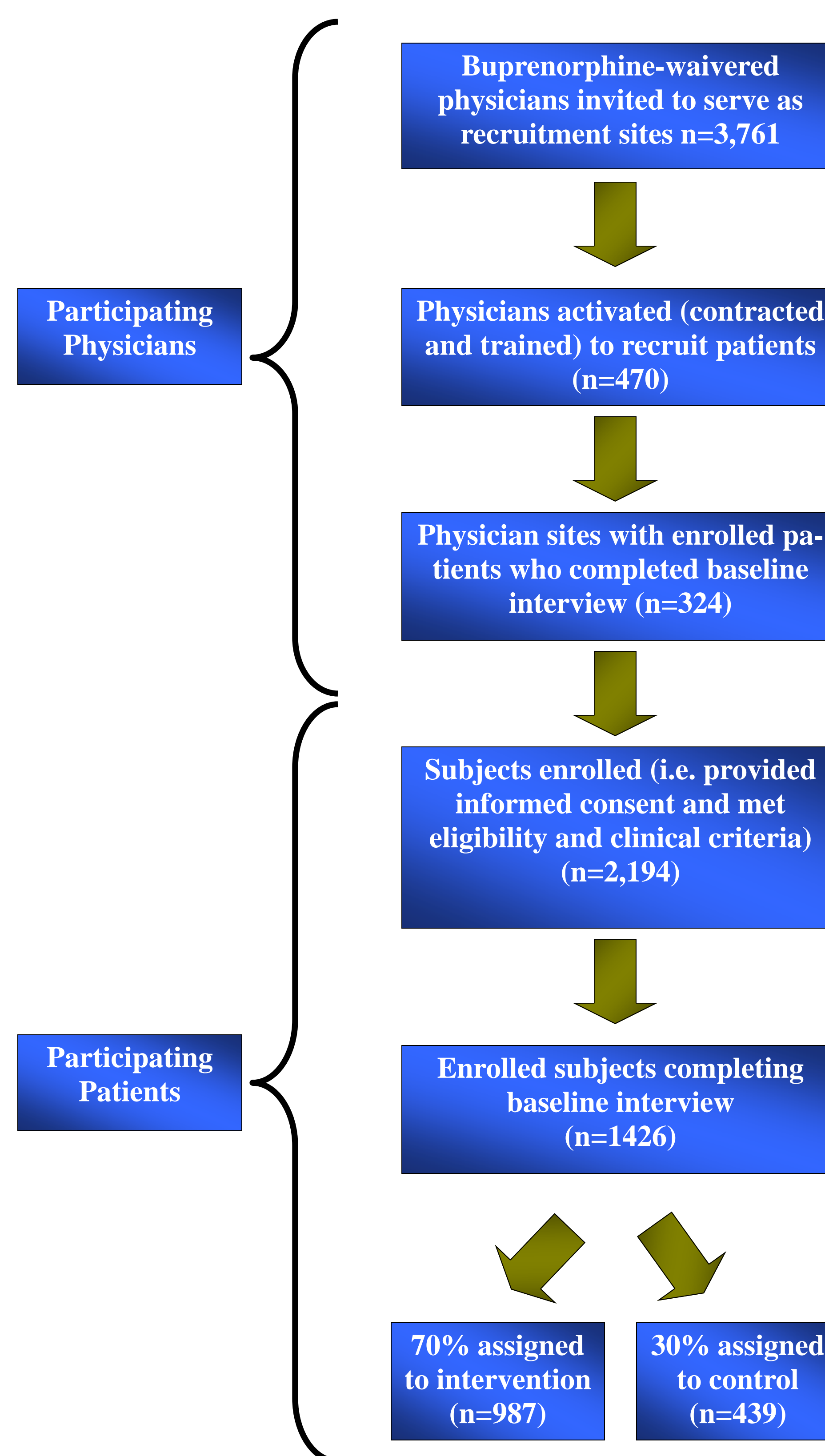
- Support systems and counseling are important ancillaries within the addiction treatment paradigm, but little formal research on their effectiveness has been done
- The focus of this study is to better understand the influence of a telephonic patient support program, when applied early in treatment, on compliance with Buprenorphine medication assisted treatment (B-MAT) for opioid dependence
- It is hypothesized that subjects receiving the support program will be less likely to experience early treatment discontinuation
- The relationship between treatment discontinuation other outcomes will be explored

Methods

- A total of n = 1426 opioid dependent patients new to B-MAT were: 1) recruited, 2) randomized to receive Buprenorphine plus the patient support program or Buprenorphine alone, and 3) completed a valid baseline survey (Figure 1)
- All subjects completed the Addiction Severity Index (McLellan et al., 2006) at the time of enrollment, and at 1, 2, 3, and 6 months post-enrollment
- The Addiction Severity Index (ASI) is a semi-structured interview designed to detect and measure potential treatment problems in seven areas commonly affected by drug and alcohol abuse:
 - Drug
 - Legal
 - Medical
 - Employment
 - Family
 - Alcohol
 - Psychiatric

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Figure 1. Recruitment Protocol



- The intervention was the HereToHelp™ program, a confidential, outbound, telephonic support program for patients receiving Buprenorphine treatment for opioid dependence
- As part of the intervention, a “Care Coach” contacted their patients up to 8 times during the first 3 months of treatment and provided encouragement, helped locate appropriate providers, and facilitated treatment problem resolution

Results

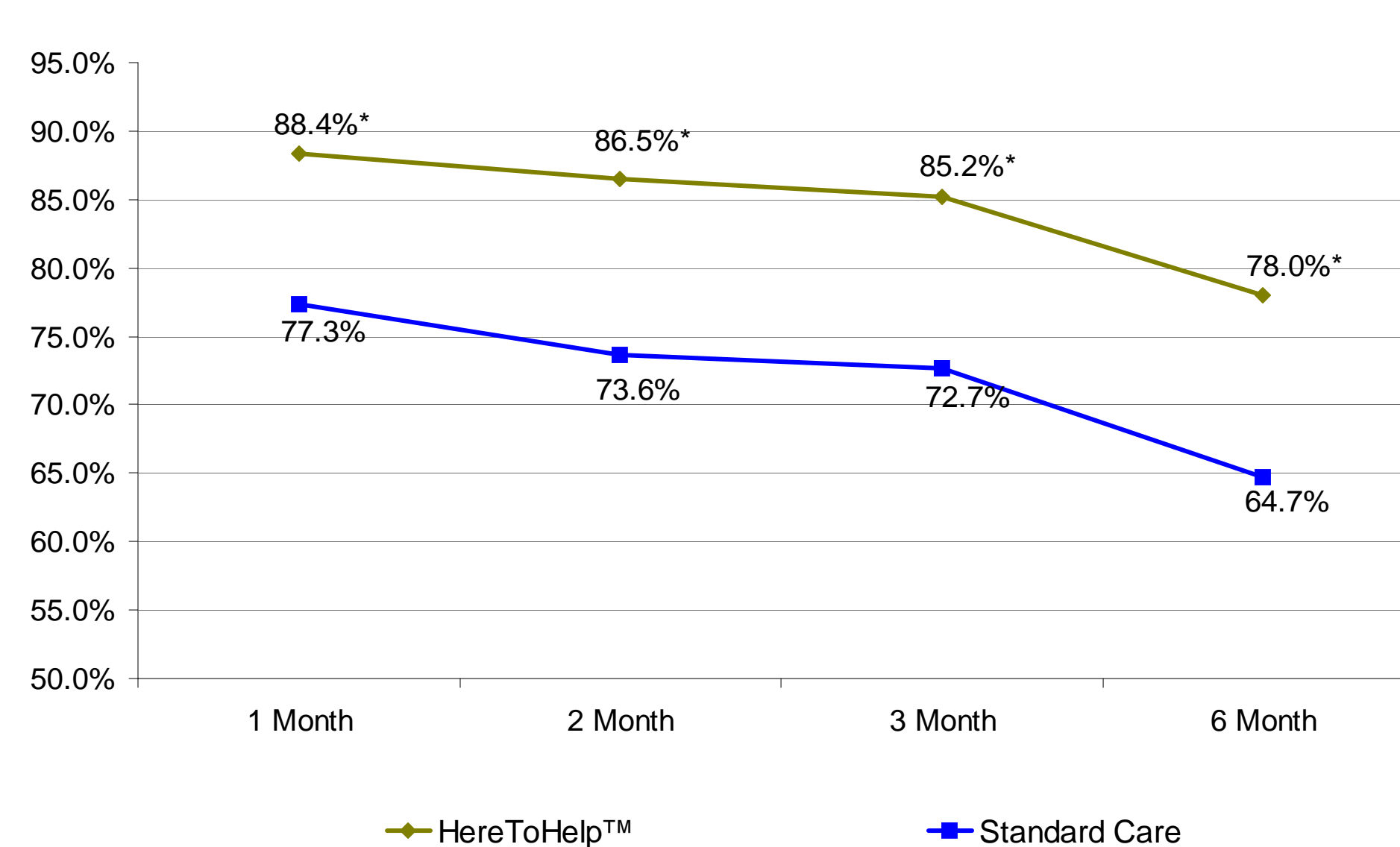
Data Analysis

Three levels of comparisons were performed:

1. Experimental condition was tested using χ^2 for relationship to adherence with B-MAT
2. Bivariate comparisons (χ^2) of substance abuse and psychiatric problems at 3 and 6 months were performed to identify the influence of B-MAT adherence
3. To predict treatment retention at month 6, baseline characteristics, outcomes, and experimental condition were entered into a stepwise logistic regression

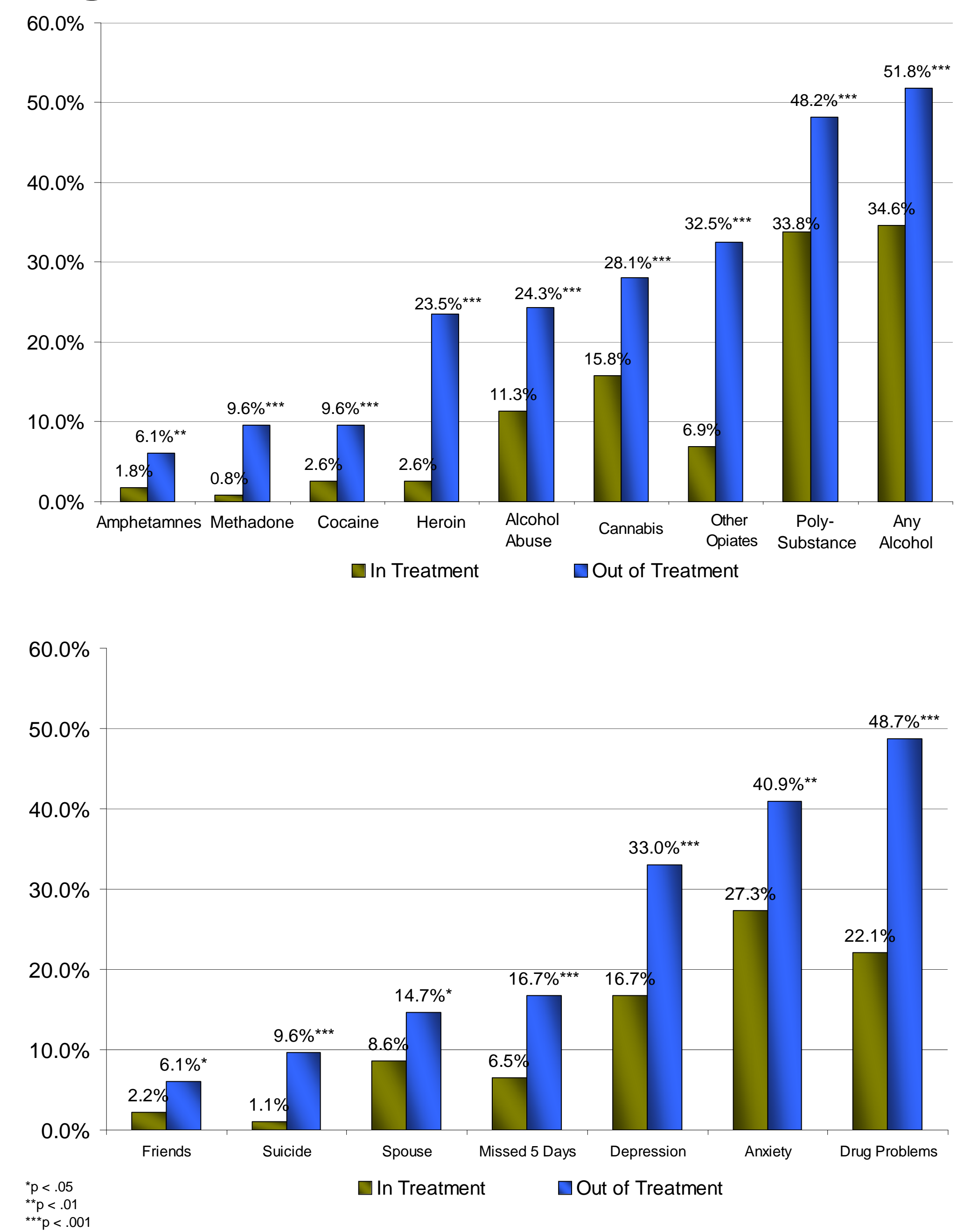
- The HereToHelp™ group was significantly more likely to remain in treatment at all 4 measurement periods, (p 's < .001; Figure 2)

Figure 2. Retention in Treatment



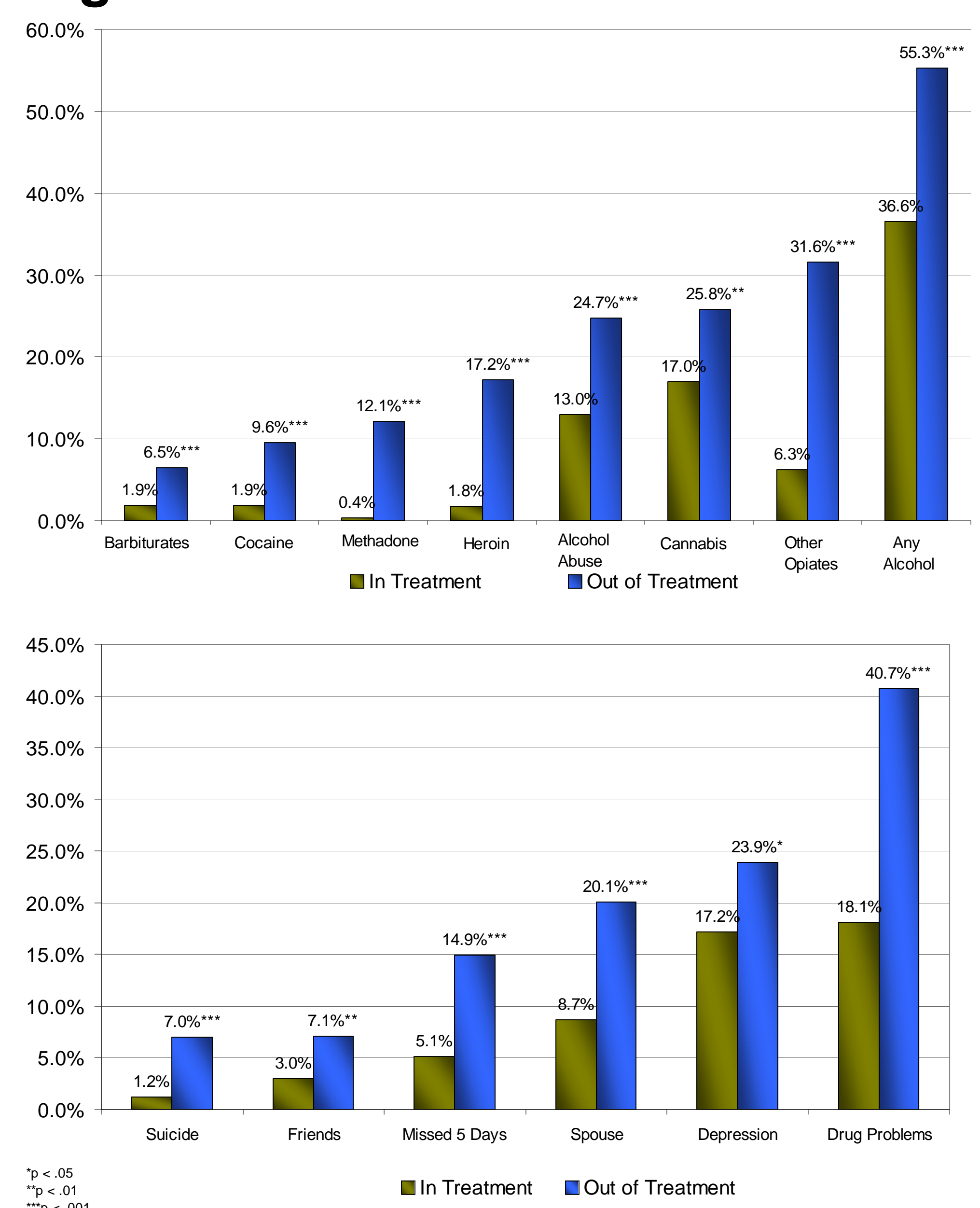
- At Month 3, subjects in treatment were less likely to abuse drugs, (p 's < .01), and also reported less emotional/familial problems (p 's < .05; Figure 3)

Figure 3. Three Month Outcomes



- At month 6, subjects in treatment were less likely to abuse drugs and have less emotional/familial problems (p 's < .05; Figure 4)

Figure 4. Six Month Outcomes



- Psychological problems ($\beta = -.016$), heroin use ($\beta = -.025$), barbiturate use ($\beta = -.039$), days paid for work ($\beta = .021$), medical problems ($\beta = -.021$), job category ($\beta = .33$), and age ($\beta = -.091$, p 's < .03) predicted 6 month retention in treatment

Conclusions

- Subjects assigned to the HereToHelp™ program were more likely than controls to remain in treatment; subjects no longer in treatment were more likely to use licit and illicit drugs, and have psychiatric problems
- The best predictors of treatment retention at month 6 were age, job, baseline drug use, and medical and psychiatric problems
- Results are consistent with other findings on the effects of patient support programs on early treatment outcomes (McLellan et al., 1998; Dolor et al., 2009; Weaver et al., 2009)
- This trial established that a minimalistic telephonic support program combined with usual care, can increase treatment retention for opioid dependent patients

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