

Studying and facilitating the development, installation and initial implementation of an interdisciplinary buprenorphine treatment/practice (IBT/P) within HIV primary care in NYC

A Practice Focused - Action Research Implementation Study

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Buprenorphine

- Buprenorphine is a partial opioid agonist used in the treatment of opioid dependence/addiction.
- Opioids: Opioids are a class of drugs such as pain pills and heroin.
- Buprenorphine as effective as methadone in treating opioid dependence/addiction.
- Because it is a partial agonist (methadone is a full agonist), buprenorphine is a safer treatment because of lower risk of respiratory depression and overdose.
- The hallmark of opioid dependence/addiction are both the physical dependence (tolerance, cravings and withdrawal) in combination with other features, most significantly the compulsive use or loss of control over opioid use despite ongoing harm (physical, legal, social, etc.).

Diagnostic and Statistical Manual of Mental Disorders IV , 2000, Washington, DC: American Psychiatric Association

Historical & Regulatory Background

- Unlike in Europe and other countries - where treatment for OD/A has been taking place in primary care, office-based settings for decades , this has not been the case in the US.
- Up until 2000, it was against the law in the US to treat OD/A outside of highly regulated Methadone Maintenance Treatment Programs.
- In 2000 these regulations were changed by the passage of the Drug Addiction Treatment Act (DATA 2000).
- Then the FDA approval of buprenorphine in 2002 allowed for the use of buprenorphine for the treatment of OD/A in office-based settings.
- Despite these changes, buprenorphine treatment has been slow to be adopted and implemented.
- Advanced Practices Nurses are not permitted to prescribe buprenorphine.
- The International Nurses Society on Addictions has taken the lead in advocating amending the DATA 2000 and legislation has been introduced in the House to remove this restriction.

Study Goals

1. Improve the delivery of services, increase access to treatment and improve health outcomes for individuals with opioid dependence/addiction.
2. Addressing the threat of a two-tiered opioid treatment system by focusing on bringing treatment to a publicly funded clinic as current treatment of bupe has disproportionately expanded to white patients of higher socio-economic status.
3. Contribute to knowledge development about implementing evidence-based interventions within clinical practice to address science-to-service gap.

Research Questions

1. What factors promote or inhibit the development, installation and initial implementation of an interdisciplinary buprenorphine treatment/ practice (IBT/P) within a primarily publicly funded hospital-based HIV Primary Care Center/Designated AIDS Center?
2. How can Action Research, Implementation Science, and Institutional Ethnography inform the development, installation and initial implementation of an IBT/P within a primarily publicly funded hospital-based HIV Primary Care Center/Designated AIDS Center?

Action Research (AR)

- AR provided guidance regarding how to manage the research process which is founded upon collaborative, iterative, reflective action and the creation of knowledge about that action.
- AR focuses on power sharing and capacity building allows for cultivating new patterns and practices that are expected to positively impact on the implementation process.

Coughlan D., & Brannick, T. (2010). *Doing action research in your own organization*, (Third, ed.). Los Angeles, SAGE.
Stringer, E. T. (2007). *Action research* (Third ed.). Los Angeles: SAGE Publications.
Reason, P., & Bradbury, H. (2008). *Action Research: Participative inquiry and practice*. Los Angeles: SAGE Publications

Advisement

- **Constructivist Grounded Theory Method Advisement: 10 sessions**
An experienced qualitative researcher trained in symbolic interactionism, grounded theory and dimensional analysis was obtained to provide advisement on GTM, managing researcher bias, data collection, coding, analysis and interpretation.
- **Clinical/Milieu Management Advisement: 4 Sessions**
A psychiatric nurse practitioner who specializes in addiction, is a licensed psychoanalyst and has experience supervising other mental health clinicians provided guidance on clinical and interdisciplinary buprenorphine practice and milieu management.
- **Inter (ra) personal Advisement: 6 Sessions**
A certified social worker and licensed psychoanalyst provided an opportunity for the researcher to have ongoing exploration of her perspective, purpose, and the research processes, with a focus on how power was operating in the study.

Normalization Process Theory (NPT)

- NPT is a recently published mid-range implementation theory whose unit of analysis is the collective work, (both mental and material) related to implementing new practices into health care settings.
- NPT advances the conceptualization of implementation from general processes and effects to focusing on specific generative mechanisms by which implementation is produced.
- Prior to the start of the study the researcher translated the multiple dimensions of the generative mechanisms into a working model with real world correlates related to this research. These operationalized constructs provided direction of how to proceed with various research processes.

May, C. & Finch, T. (2009). Implementing, embedding, and integrating practices: An outline of normalization process theory. *Sociology*, 43(3), 535-554.

Implementation Research

- **Implementation is defined as**, “the process of putting to use or integrating evidence-based interventions within a setting.”
Rabin, B.A., Brownson, R.C., Haire-Joshu, D., Kreuter, M.W., & Weaver, N.L. (2008). A Glossary for Dissemination and Implementation Research in Health. *Journal of Public Health Management Practice*, 14, 117-123.
- **Implementation research is defined as**, “the scientific study of methods to promote the systematic uptake of clinical research findings and other evidence-based practices into routine practice, and hence to improve the quality and effectiveness of health care”
Implementation Science
<http://www.implementationscience.com/about>
- **Implementation research addresses**, “the level to which health interventions can fit within real-world public health and clinical service systems”
National Institutes of Health, 2009
<http://grants.nih.gov/grants/guide/pa-files/PAR-06-520.html>

Institutional Ethnography (IE)

- IE focuses on developing knowledge of the extended bureaucratic, professional, legislative, economic and other social/governing relations, sharing that knowledge and using it as a resource for enacting change.
- With its roots in ethnography, IE directs reflective and process journaling that provides for thick descriptions and audit trails.
- Explore the organizational conditions of people's lives.
- IE also provided direction as to why and how certain data is collected, including the processes of choosing research informants and conducting interviews and documentary analysis.

Smith, D. E. (1987) *The everyday world as problematic: A feminist sociology*. Boston: Northeastern University Press.
Smith, D. E. (2005). *Institutional ethnography: A sociology for people*. Lanham: MD: AltaMira Press.
Smith, D. E. (2006) *Institutional ethnography as practice*. Lanham, MA: Rowman & Littlefield Publishers, Inc.
Griffith, A., I. (2008, July). *Whose ethnography is it anyway?* Paper presented at the 58th Annual Meeting of the Society for the Study of Social Problems, Boston, MA.

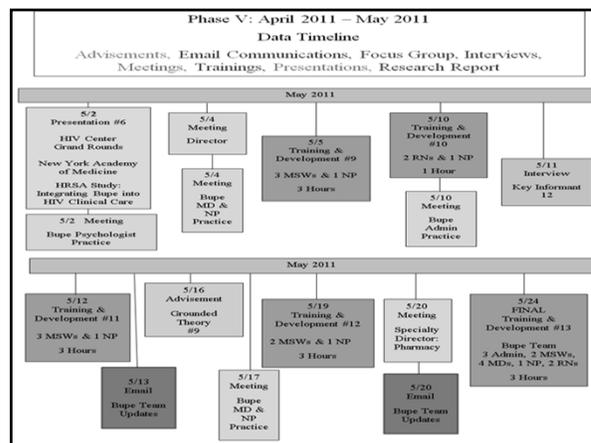
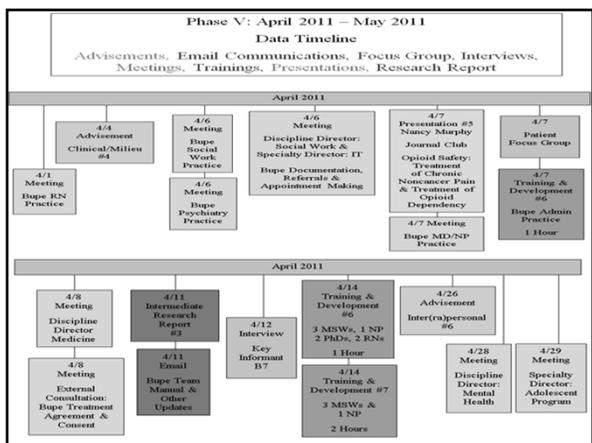
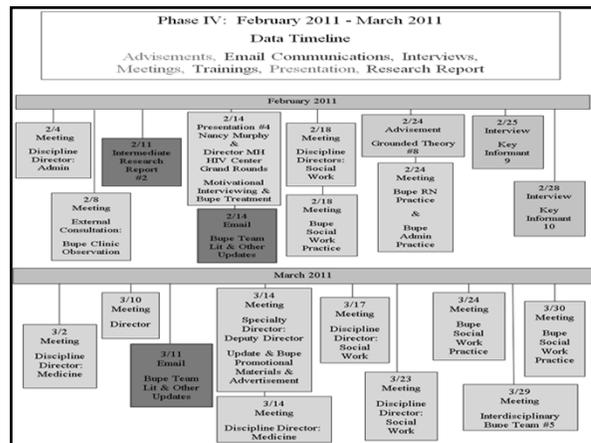
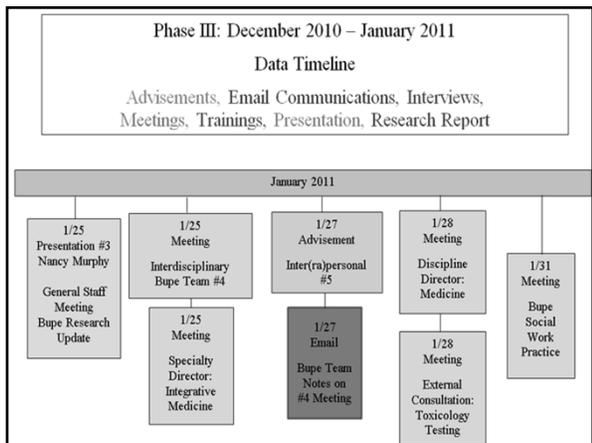
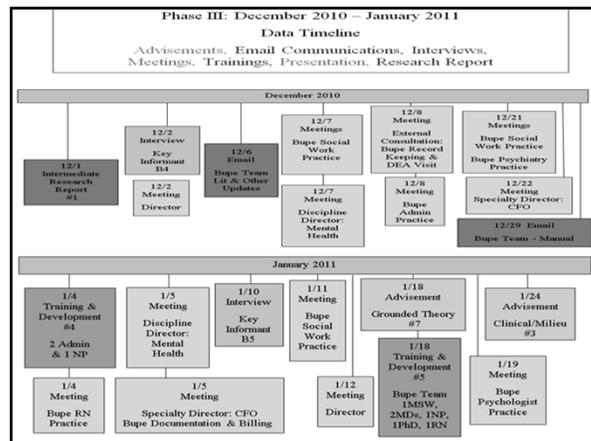
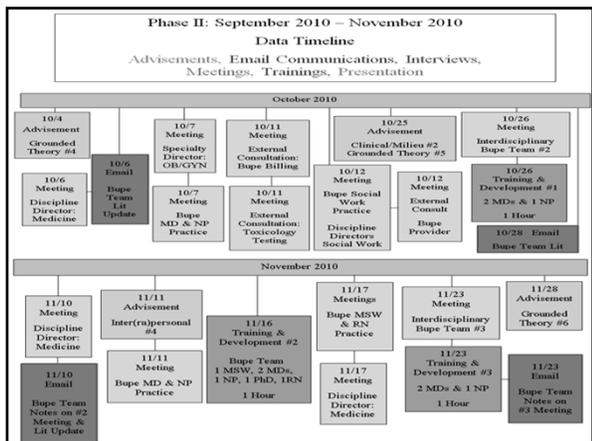
Study Design:

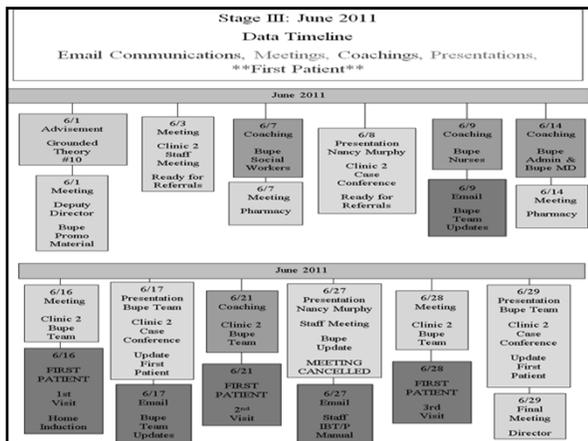
Stages, Phases & Study Participants

- Stage I: Exploration and Adoption
 - Stage II: Development and Installation – 5 Phases
Phase I: June 2010-August 2010, Phase II: September 2010-November, 2010,
Phase III: December 2010-January 2011, Phase IV: February 2011-March 2011,
Phase V: April 2011-May 2011.
 - Stage III: Initial Implementation : June 2011
- Study Participants**
- Interdisciplinary Buprenorphine Team
 - Leadership Research Organization (Director, Discipline Directors & Specialty Directors)
 - External Consultants
 - Key Informants : 12 Interviews Conducted throughout study year
 - Focus Group Participants : Patients from Research Organization (1 Focus Group)

Stage I: Exploration & Adoption

- Research Organization: Established Designated AIDS Center NYC, co-located within large hospital based medical center.
- Researcher :
- Practicing as an HIV primary care provider at the research organization for 8 years prior to the study. Long term interest in buprenorphine treatment.
 - Developed proficiency in buprenorphine and implementation research.
 - Investigated the contextual background : history, politics, regulation, economics of opioids and treatment of opioid dependence/addiction.
 - Conducted Environmental and Patient Assessment, Force Field Analysis, Preliminary Research Design.
 - Identified and explicated theories, models, principles, practices, evidence-based treatments & best practices underpinning IBT/P.
 - Proposed the Study and Obtaining the Directors Agreement to the Research.





Audit Trail: Multiple Data Sources

1. Raw Data : audio recordings, advisement notes, fieldnotes from email communications, informal interactions, meetings, presentations, training and development sessions, and interview and focus group notes.
2. Transformed Data: transcripts, write-ups of advisement notes, fieldnotes, interview and focus group notes.
3. Process Data: logistic notes and data-timeline.
4. Directional and Developmental Data: resources for clinical guidance & IBT/P manual.
5. First-Person Inquiry Data : researcher's personal reflective/reflexive journal.
6. Analytic Data: methodological decision notes, coding notes, analytic notes, intermediate research reports.

Highlights of Research Results

- **First Key Inhibitor Category:** Dancing with the Bear: The Never Ending Biases Against Treating Opioid Dependence/Addiction Extended to Buprenorphine
(1) Biases related to association of buprenorphine to methadone, (2) Public bias, (3) Patient bias, (4) Clinician bias, and (5) Institutional bias
- **Countering Promoter:** Be Educated, Be an Advocate, Dispel Myths and Take Action:
(1) Knowing what we are up against: Speaking the truth, (2) Team takes over: A life saving treatment, (3) Credibility and role modeling, and (4) Learning and using Therapeutic Alliance and Motivational Interviewing.
- **Second Key Inhibitor Category:** Plaguing Questions
(1) Issues of lie and death, (2) Emotional distress, (3) Disruptive behavior, and (4) Uncertainty and trade-off thinking
- **Countering Promoter:** Identifying Core Aspects of Buprenorphine Treatment and Developing Uniformity of Care.
(1) Goals of treatment, visit frequency and evaluation of outcomes, (2) Parameters of care & bupe treatment plan agreement, (3) Counseling requirements and treatment intensity, (4) Discontinuation & Transfer of care, and (5) Methadone transfer (6) Inclusion and exclusion criteria, (7) Toxicology testing: What clinicians need to know and what the patients can expect, (8) Education, assessment, care coordination, case management and communication, (9) Opioid safety, and (10) Privacy issues, record keeping and DEA visits.

Highlights of Research Results

- **Third Key Inhibitor Category:** Buprenorphine Exceptionalism: Unique Aspects of Treatment not Otherwise Encountered
(1) More regulated, (2) Fear of government, (3) Inductions, (4) Protecting Primary Care, and (5) Unable to use existing systems
- **Countering Promoter:** Dimensionalizing IBT/P and Identifying and Detailing Discipline Specific Practices, Cross Discipline Practices and Coordination of All.
(1) Dimensions of IBT/P, (2) Bupe Cross Discipline Practices, (3) Bupe Social Work Practices, (4) Bupe MD/NP Practices, (5) Bupe Admin Practice, and (6) Bupe Nursing Practices
- **Promoting Factors:** (1) Home inductions, (2) Pharmacology of buprenorphine, and (3) Staff and patient satisfaction.
- **Action Research:** Power operating in multiple forms (1) power differentials, (2) researcher's responsible use of power, (3) power sharing, (4) collective power of the IBT/P team, (5) speaking truth to power, and (6) consolidating power. **Keep power relations and organizational politics upfront – must manage/negotiate it!**
- **Implementation Science:** theories, frameworks and models exist and must be used to more comprehensively address and study implementation – no longer acceptable to implement EBP without them.
- **Institutional Ethnography:** identify and analyze documents and records that addressed institutional processes and practices related to buprenorphine so as to understand regulatory and mandated practices.