# **Buprenorphine:**

Advances in Substance Abuse Treatment & the Impact on the Criminal Justice System

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#### Overview

- Background & scientific evidence of buprenorphine treatment
- The Baltimore Buprenorphine Initiative
- Buprenorphine and the criminal justice system

# Buprenorphine: Background

- Buprenorphine is a partial opioid agonist
  - Low maximal effects of euphoria, respiratory depression
- Advantages of Buprenorphine
  - Reduces cravings, withdrawal symptoms
  - Limited side-effects
  - Less potential for illegal diversion
  - Fewer overdoses (ceiling effect)
  - Proven to be safe and effective
  - Improves retention in treatment



## Buprenorphine: Scientific Evidence

- Significantly superior to placebo in treatment retention and in suppression of use. (Ling 1998 and Johnson 1995)
- No significant difference to methadone in:
  - Treatment retention
  - Suppression of heroin use
  - # of cocaine and benzodiazepine positive urines
  - Level of criminal activity (Mattick et al, 2006; Cochrane Review)

## Buprenorphine: Scientific Evidence

- Overdose deaths fell from 565 to 143 (75%) over 4 years in France (Ling and Smith, 2002)
- Less side effects, milder withdrawal symptoms than methadone (Krantz and Mehler, 2004)
- New patient populations come into treatment (younger, employed, shorter history of use) (Sullivan et al, 2004)

# **Buprenorphine: Treatment Outcomes & Criminal Justice**

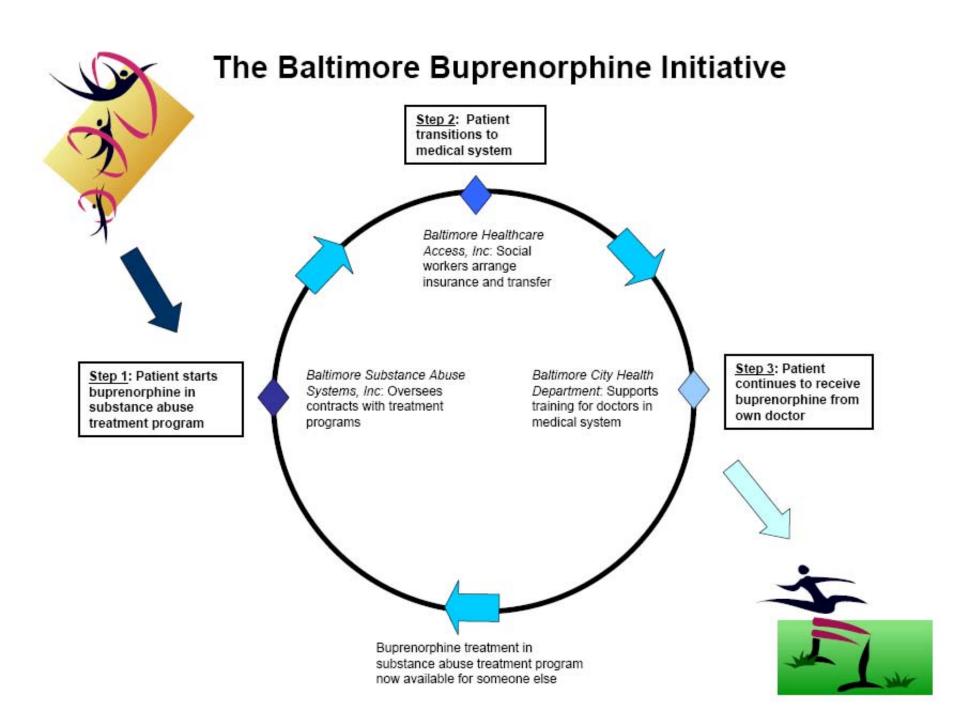
- Reduction in:
  - Risk-taking behaviors (Teesson et al, 2006)
  - Criminal behaviors (Teesson et al, 2006)
  - Psychopathology (Teesson et al, 2006)
  - Injection related behaviors (Teesson et al, 2006)
  - > 60% heroin abstinence at 1 year follow up (Teesson et al, 2006)
  - Drug buying/selling & violent crimes at 5 year follow-up (Gossop et al, 2005)

# Baltimore's Challenges

- Heroin addiction remains high:
  - Supply falls short of demand despite expansion in treatment over past 10 years
  - ~4,000 methadone treatment slots
  - > 10,000 admissions for heroin treatment in FY 2006
- High rate of violent crime

# Baltimore's Opportunities

- Large medical system
  - Opportunity to expand treatment to physician offices, clinics, and CHC's
- Support from local leadership
- High crime rate & drugs are major local concerns



### **Baltimore's Results to Date**

- 543 patients total; 308 currently active
  - 63% remained in treatment for 90+ days
- 91 patients transferred to PCPs
  - 13 dropped out in 236 total months of medical care
  - ~50% continue counseling after transfer
- At least 79% qualify for health insurance
- Training 150 physicians and residents
- Cost-effectiveness, new funding sources established

# Remaining Challenges

- Education of local police
- Diversion prevention
  - Market for buprenorphine exists
  - Fake buprenorphine pills sold
- Communication gap among different systems:
  - Substance abuse
  - Medical
  - Mental health
  - Criminal justice

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## **Outstanding Opportunities**

- Treatment coordination with Criminal Justice System
- Buprenorphine Behind Walls:
  - Induction, stabilization, maintenance while in jail
  - Upon release, transfer to substance abuse treatment site and/or medical system as appropriate
  - Continuity of treatment and initiation of medical care ensured post-jail