Interpreting the Opioid Epidemic via a Blood Borne Pathogen Screening Program

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Disclosures

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Consider:

• a blood borne pathogens screening program in context of injection drug use

• how data – both the presence and absence of – can inform thinking and medical decision making, and

• policies and practices that can result in measureable change.
Norton Healthcare Overview

- **Market Share 52%:** (Approx. 2m patient visits per Year)
- **4 Hospitals**
- **2,000 Providers**
- **13 ICCs**
- **Urban 85%**
- **Rural 15%** (Approx. 1,000 feeder zip codes)
- **Payor Mix:**
  - Commercial 43.8%
  - Government 52.3%
  - Other 4.0%
Testing Models

**HIV**
(Avg. 2,500 per month)
- Universal Pregnancy Testing @ week 12 and 36 (Outpatient)
- Chief Complaint STI Exposure (Outpatient)
- As Requested or Medically Warranted (Inpatient, Outpatient, ED)

**HCV**
(Avg. 3,500 per month)
- Universal Pregnancy Testing @ week 12 and 36 (Outpatient)
- Women Well Women Check (Outpatient)
- Chief Complaint STI (Outpatient, ED)
- Chief Complaint Illicit Drug Use (Inpatient, Outpatient, ED)

**HBV**
(Avg. 2,200 per month)
- Universal Pregnancy Testing @ week 12 and 36 (Outpatient)
- Chief Complaint STI – MSM & Heterosexual (Outpatient, ED)
Definitions

• **Universal screening** – Screened regardless of known or perceived risk-factor(s).

• **Risk-based screening** – Screened based on known or perceived risk factor(s).

• **Prevalence** - the percentage of a population that is affected with a particular disease at a given time
  
  • Population in the denominator (universal or risk-based screened) will change %
HIV Transmission
Norton Rate 23.5% vs. US Rate 9.0%


*MSM (Men that have sex with men).
HIV IDU

24 Men

• HCV and no STI’s – 41.7%
• STIs and no HCV – 20.8%
• No co-infections – 8.3%
• No additional labs – 29.1%

12 Women

• HCV and STI’s – 33.3%
• STI’s and no HCV – 50.0%
• No additional labs – 16.7%

HCV Screening Year 1

*Best Practice Advisory (BPA) Targets Baby Boomers*

NHC Screening 1 May 2016 to 30 June 2017. N=35,622
HCV Screening Year 2

Standing Order Targets Pregnant/Women Childbearing Age

NHC Screening 1 July 2017 to 30 June 2018. N=36,897
Outcome of Expanded HCV Screening

NHC 24 months data. Yr1 HCV RNA+, N=1079. Yr2 HCV RNA+, N=1174.
Prevalence of Active HCV Infections by Cohort

CDC data 30 April 2018. Norton Healthcare (NHC) data 1 July 2017 to 30 June 2018
Effective 1 July 2018, Kentucky became the first State in the US to mandate universal HCV screening of pregnant women (anticipating 60,000 women screened annually). Moreover, all children born to HCV RNA+ mothers will have “exposure to hepatitis C” noted in their medical record to help ensure that children born to HCV positive mothers are also screened for HCV.
Ensuring Infants are Screened per SB250

Infants chart includes diagnosis – exposure to HCV

Timeline of testing between 2 and 24 months established

HCV AB+ auto reflexes to Quantitative PCR

HCV RNA+ auto-generates ambulatory referral to Pediatrics Infectious Disease (ID).

Pediatric ID appointment attended

Primary pediatrician is notified of HCV ID appointment outcome.

Best Practice
Linkage to Care Rates

- Linked Medically (40%)
- Linked Substance Use Program (23%)
- Not Linked (23%)

Not linked

- In Progress (30%)
- Incarcerated (27%)
- Lost to follow-up (12%)
- Deceased (8%)
- Declined (23%)

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Potential Policies and Best Practices

- Modified Kentucky HIV Legislation – KRS. 214.181
- Mandated wrap-around services for Medically Assisted Treatment (MAT) programs
- Required HIV/ HCV screening for all patients in MAT and substance use programs with the goal of treatment (HIV)/ cure (HCV)
- Increased access to Mental and Behavioral Health Programs
- Reflex Quantitative PCR for all HCV AB+ tests
- Earlier/ More Effective interventions for substance users
- Comprehensive Public Health Campaigns on HIV, HCV, and STI