Experience and outcomes of a high volume homeless health center-based HCV treatment program in Boston

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9/21/18

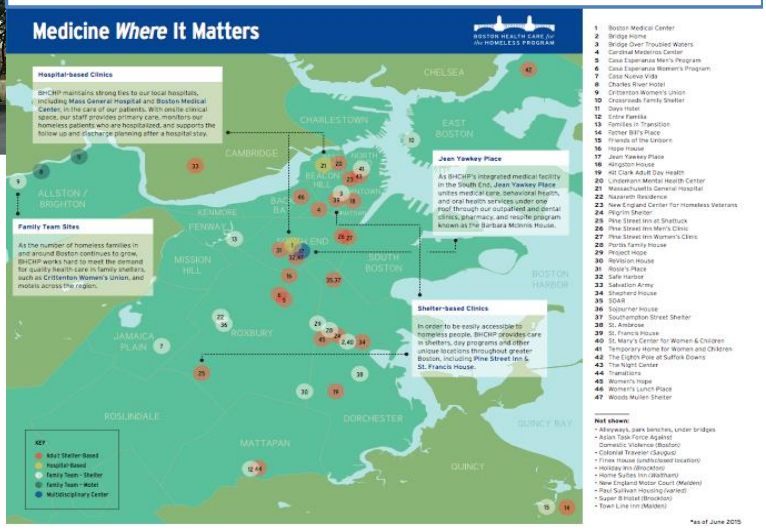
BOSTON HEALTH CARE *for the* HOMELESS PROGRAM

Disclosures and Acknowledgements

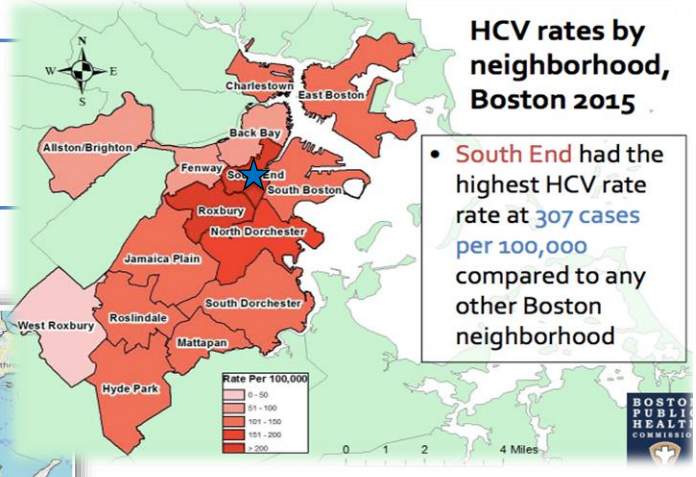
- I have nothing to disclose
- I'd like to acknowledge the research team: Travis Baggett, MD, MPH; Kamala Smith, MPH; Molly Ingemi, Emma Mulligan and Emily Gold
- Thank you to the patients and staff at Boston Health Care for the Homeless Program!

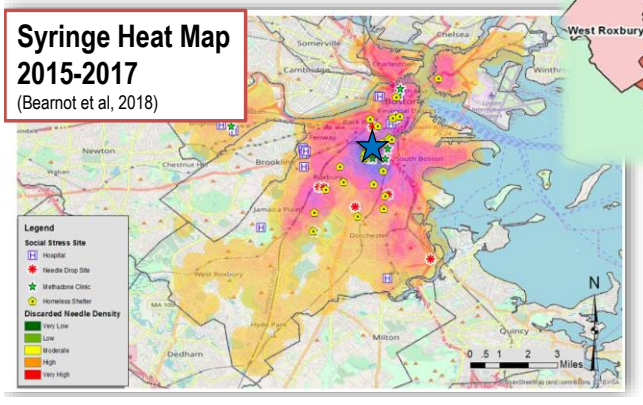
Boston Health Care for the Homeless Program

BOSTON HEALTH CARE *for the* HOMELESS PROGRAM

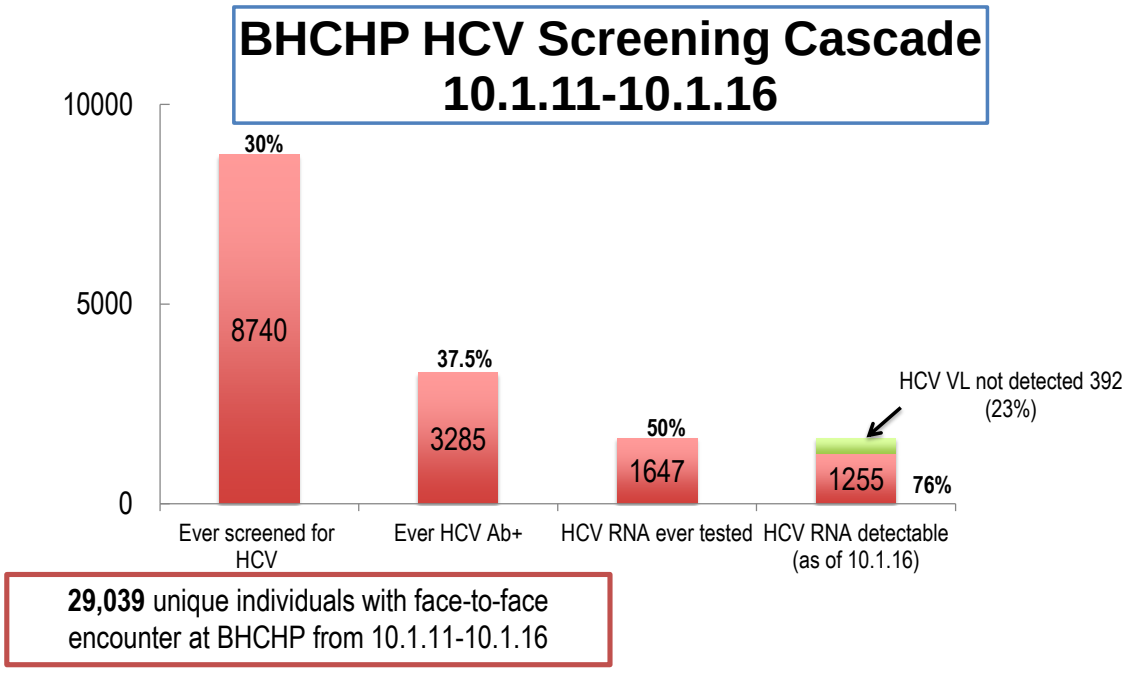


Geographical Context





★BHCHP is at the **epicenter** of opioid use and HCV prevalence in Boston.



Urgency for Solutions on HCV at BHCHP

- High prevalence of HCV[1]
- HCV associated with health care utilization and cost[1]
- Excess mortality from liver cause[2]
- Needs assessment of BHCHP patients with HCV[3]
  - 74% indicated interest and confidence in ability to complete HCV treatment
  - Majority identified primary care as preferred location for treatment

1 Bharel et al, 2013; 2 Baggett et al., 2015; 3 Beiser et al, 2017

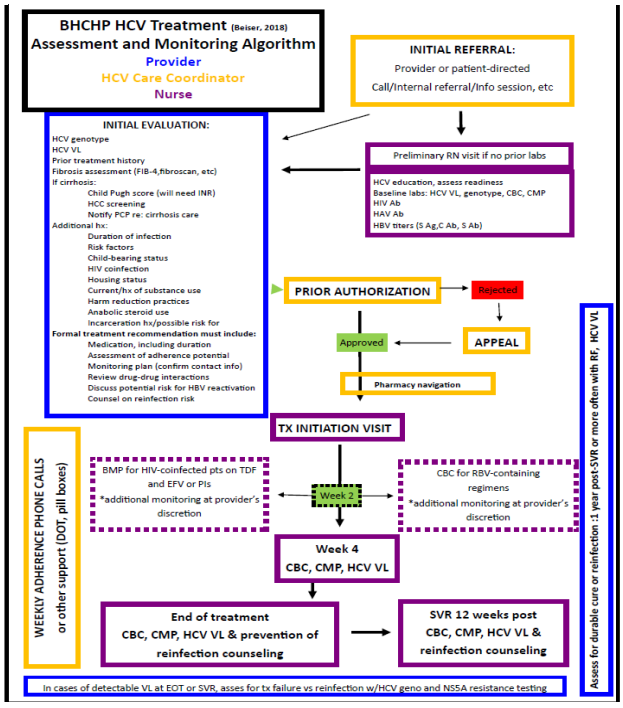
HCV Treatment Team

HCV Team: Founded in 2014
- Full time HCV care coordinator/case manager
- ½ time RN
- 3 sessions/wk clinicians: 2 MDs, 1 NP (HCV Program Director)

Funding:
- Internal support
- National Viral Hepatitis Roundtable (NVHR) mini-grant
- Department of Public Health as of 11/17

Program Fundamentals

- Low-barrier to entry
  - Outreach to shelters and treatment programs
  - No period of abstention from substances required
- High touch, driven by care coordinator and RN
  - Flexible adherence support tailored to patient needs- weekly calls/pillboxes/DOT
  - Collaboration w/other BHCHP teams (OBAT, Street Team, Family Team)
- Meticulous tracking/hands on all logistics
  - Routinization of insurance and pharmacy process- usually supporting 40-50 pts on tx at a time
- Emphasis on harm reduction/prevention of reinfection counseling throughout



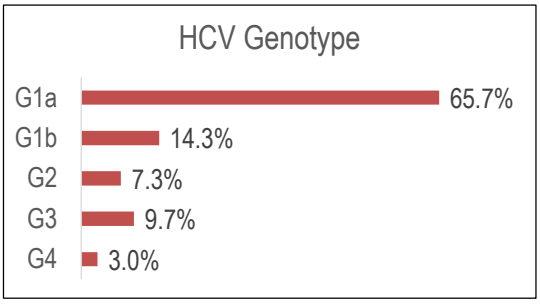
Demographic Breakdown of Initial 300 Patients Treated at BHCHP

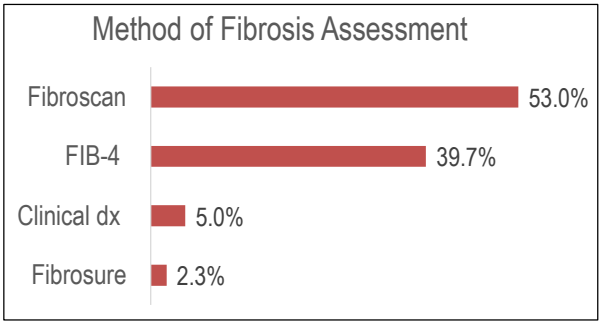
Demographics	N=300
Mean age in years (SD)	49.8 (10.5)
Gender, no (%)	
Male	240 (80)
Female	58 (19.3)
Transfemale	2 (0.7)
Race, no (%)	
White/Caucasian	137 (45.7)
Black/African-American	86 (28.7)
Unknown	71 (23.7)
Ethnicity, no (%)	
Hispanic	75 (25)
Non-Hispanic	206 (68.7)
Unknown	19 (6.3)
Housing, no (%)	
Residential or transitional tx program (unstably housed)	92 (30.7)
Shelter	61 (20.3)
Street	3 (1)
Housing	114 (38)

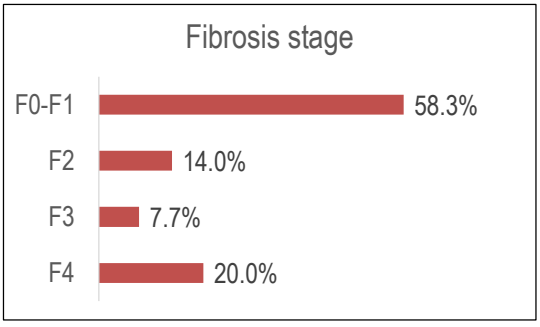
Health Characteristics of Initial 300 Patients Treated at BHCHP

Comorbidities, no (%)	N= 300
Physical Health	
Hypertension	112 (37.3)
HIV coinfection	61 (20.3)
Diabetes mellitus	44 (14.7)
Extrahepatic manifestations of HCV	9 (3)
Behavioral Health	
Major depressive disorder	158 (52.3)
Generalized anxiety disorder	107 (35.7)
Post-traumatic stress disorder	91 (30.3)
Psychotic disorders	23 (7.7)
Bipolar disorder	39 (13)
Substance Use	
Alcohol use disorder	109 (36.3)
Opioid use disorder	176 (58.6)
on MAT	130 (73.8)
Opioid overdose < 6 mos ago	3 (1.7)
IDU is identified RF for HCV infection	244 (81.3)

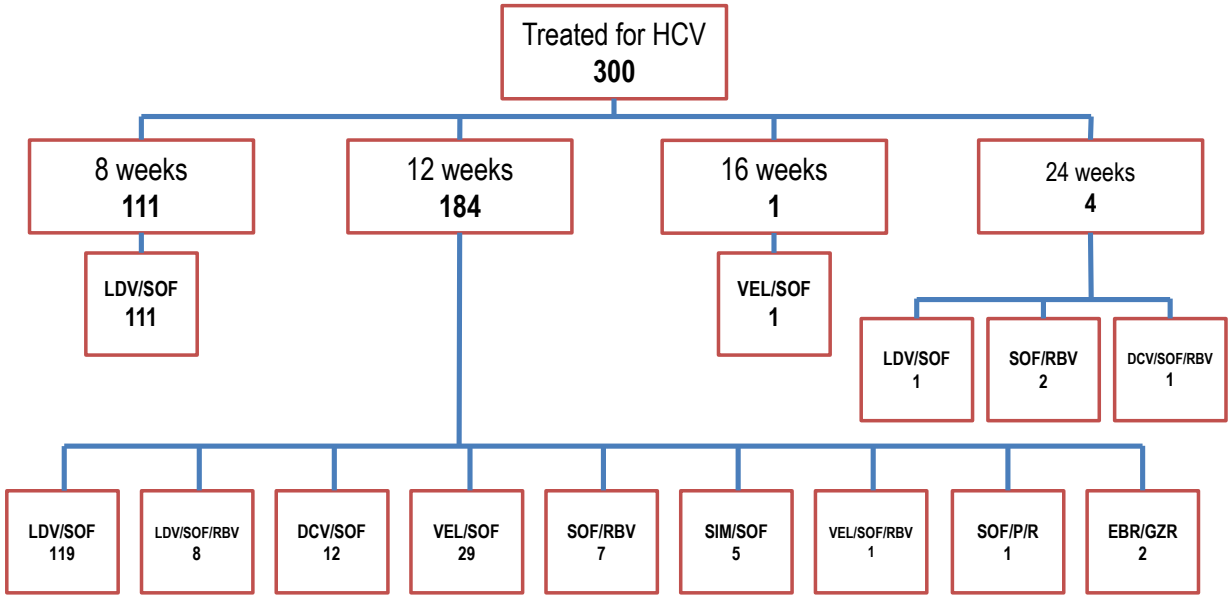
HCV and Hepatic Parameters of Treated Cohort (N=300)



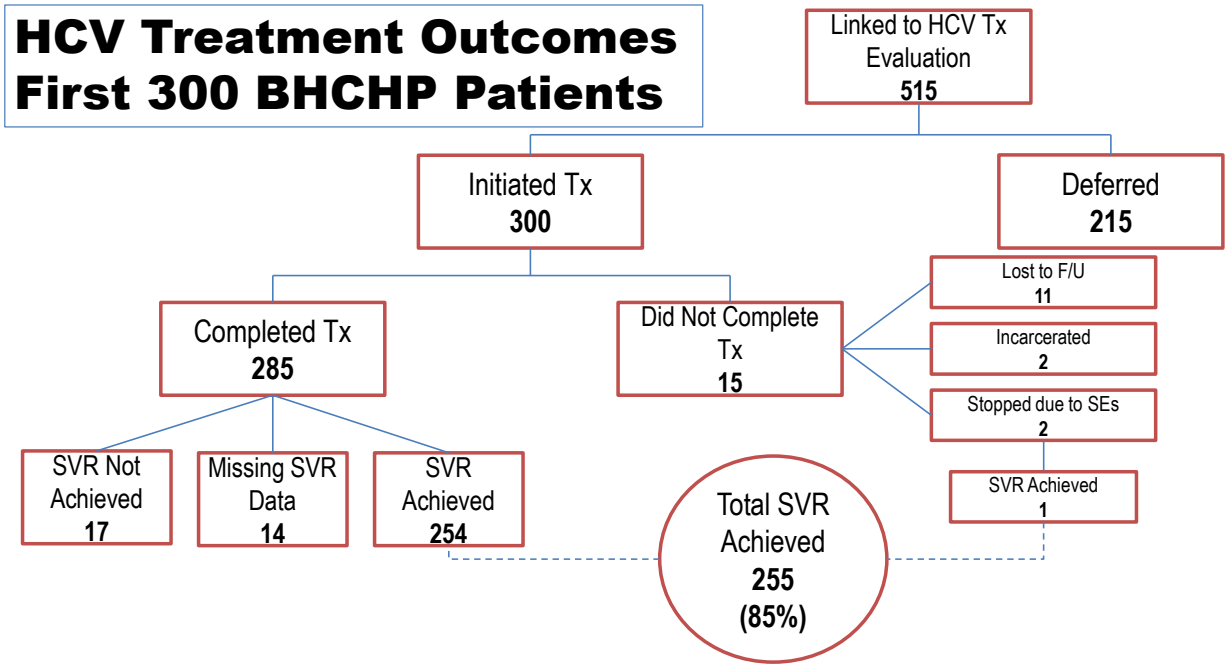




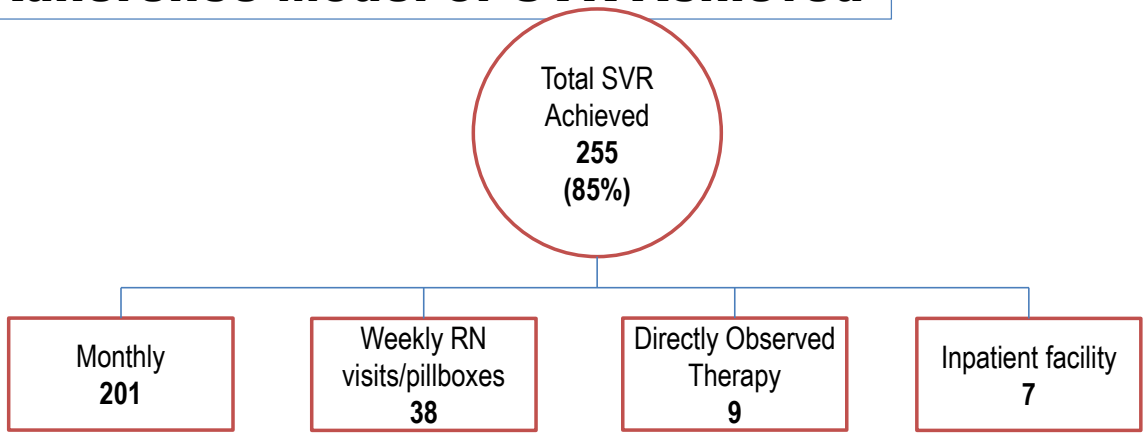
Treatment Regimens Stratified by Duration



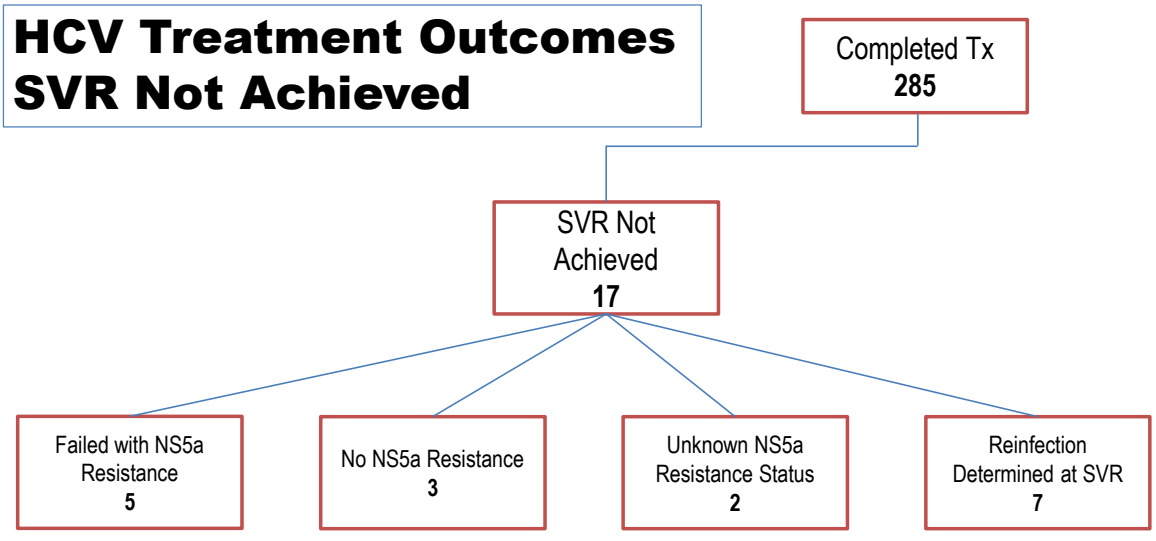
HCV Treatment Outcomes First 300 BHCHP Patients



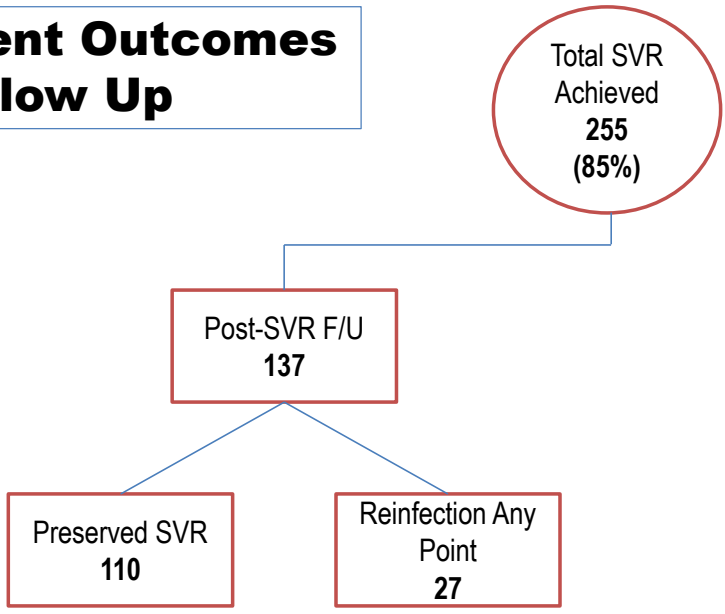
HCV Treatment Outcomes Adherence Model of SVR Achieved



HCV Treatment Outcomes SVR Not Achieved



HCV Treatment Outcomes Post SVR Follow Up



Summary Findings

1) It is possible to successfully treat a high risk population in a homeless health care setting.
2) Majority of cured patients received least resource-intensive adherence model
   - Med boxes and DOT only needed for a subset of this traditionally hard to treat population.
3) Majority of individuals with OUD achieved SVR (81%).
4) Higher than average reinfection rate, but more work is needed to understand time to reinfection in active PWIDs.

Limitations

- This data reflects the first 300 patients treated, not a randomly assigned group.
- Data is retrospective from chart review, challenged by missing data and changes in documentation processes over time.

Next steps

Further data analysis to examine:

- Treatment outcomes across specific populations
- Correlates of achieving SVR or of reinfection

Use the data to:

- Guide the refinement of BHCHP's model
- Optimize strategies to minimize reinfection and lost to follow up
- Advocate for other programs serving PWID and homeless with HCV

Broader Implications

- HCV treatment is possible among homeless individuals with SUDs, but insurance systems have to be intact, not the case broadly in the US.
- The role of the care coordinator is essential to the success of our program, supporting non-reimbursable work by CCs or other key support workers should be prioritized.
- Being able to provide HCV treatment within the patient's health home enables support throughout the continuum of care, including reinfection and retreatment.