



HCV linkage to care:

Challenges and Opportunities

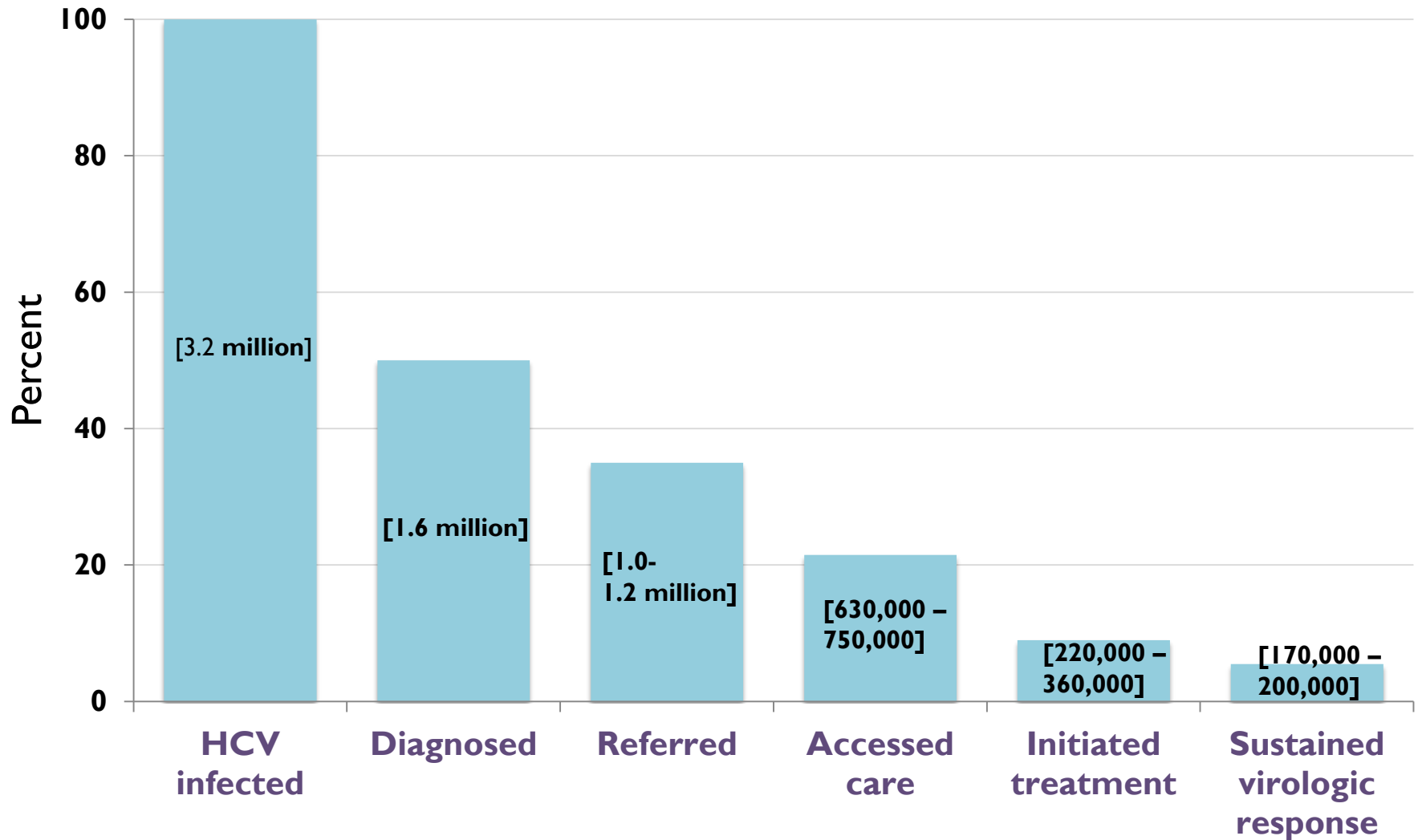
Shruti H. Mehta, PhD MPH

Professor, Johns Hopkins Bloomberg School of Public Health

November 6, 2014



The hepatitis C care continuum (US)



Defining linkage to care [AASLD/IDSA 2014 guidelines]

- Persons with current (active) HCV infection should receive education and interventions aimed at reducing progression of liver disease and preventing transmission of HCV.
- Evaluation by a practitioner who is prepared to provide comprehensive management, including consideration of antiviral therapy, is recommended for all persons with current (active) HCV infection

REFERRAL

FROM a venue where testing takes place (primary care doctor, HIV clinic, opiate substitution clinic, needle exchange program)

TO a specialist/someone who can treat (gastroenterologist, hepatologist, ID physician)

**HCV
infected**

Diagnosed

[1.0-
1.2 million]

[630,000 –
750,000]

Referred

**Accessed
care**

LINKAGE TO CARE

ATTEND at least one appointment?
RECEIVE counseling?
RECEIVE HCV RNA test?
RECEIVE disease staging?
RECEIVE evaluation for treatment?

[220,000 –
360,000]

**Initiated
treatment**

[170,000 –
200,000]

**Sustained
virologic
response**

Barriers to linkage to care

R
E
F
E
R
R
A
L

A
C
C
E
S
S
I
N
G

C
A
R
E

SYSTEM - LEVEL

Health care system issues

- Limited accessibility of HCV care locations
- Insufficient funds allocated for HCV
- Overburdened health systems
- Cost / insurance
- Segregated service delivery

Workforce issues

- Insufficient number of providers who can treat HCV
- Insufficient resources for case managers, navigators, social workers

PROVIDER - LEVEL

- **Knowledge** (misconceptions about who is at risk for progression and who needs treatment)
- **Perceptions** (may only refer good candidates who they perceive to need treatment; hesitance to refer persons with a history of/active drug use)

PATIENT- LEVEL

General barriers

- General health care access (primary care provider, insurance, health literacy, patient provider-relationship)
- Competing health priorities (mental health, comorbidities)
- Stability factors (substance use, employment, income, housing, drug treatment, social support)

HCV-specific barriers

- Poor knowledge
- Lack of symptoms
- Fears about treatment
- HCV stigma

Overcoming barriers at multiple levels

SYSTEM - LEVEL

Health care system issues

- Mechanism to pay for treatment
- Integrated services (co-location)
 - with HIV care, STD services, community health centers, primary care, methadone programs, needle exchange

Workforce issues

- Multidisciplinary team care
- Telemedicine

PROVIDER - LEVEL

- Education at all levels (Primary care physicians, ID physicians, Service providers)
- Sensitization to substance use and related comorbidities
- Consistent and frequently updated guidelines
- Expansion of non-invasive disease staging

PATIENT- LEVEL

General barriers

- Patient navigation / Case management
- Peer support
- Brief interventions (e.g., for alcohol use)
- Incentives

HCV-specific barriers

- Education / counseling
- Messaging around cure

Service integration +... + referral for HCV tx

HCV testing & counseling

Referral to specialty care

	<u>Additional services</u>	<u>Case mgmt / navigation</u>
Methadone clinics ¹	Education, counseling, motivational interviewing	Coordinate primary care & hepatology appts; psychiatric care, alcohol counseling, legal, social services
Needle exchange ²	Wound mgmt, HBV vaccination, other general and specialty care (e.g. mental)	Welfare services, counseling, referral to other health services, support through HCV treatment
Prisons ³	ID and prevention screening	Referrals to health care (including HCV care) upon release
Public health clinics ⁴	HCV RNA test, education, counseling, HBV vaccine, HCV treatment discussion	Insurance evaluation/assistance; referral for specialty care; appt reminders; outreach
Primary health care ⁵	Acute/primary care, prevention services, substance use tx, HIV/other testing	Case management, mental health services, post-prison release services
HIV clinics ⁶	Other specialty medical services, wound care, on-site pharmacy	Case management services available

+

Example: Public health STD clinic in Baltimore

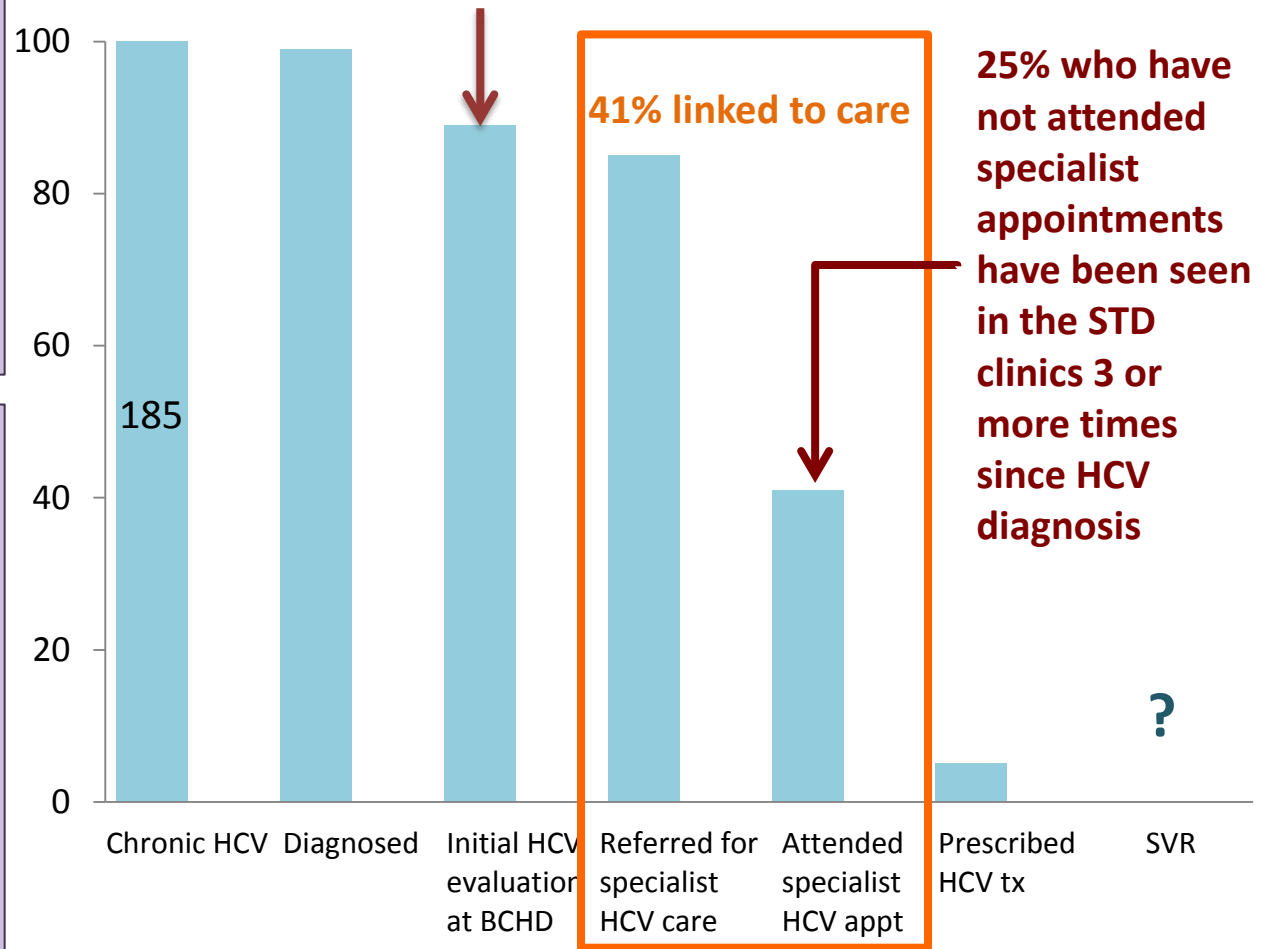
-Onsite SERVICES

- Immediate HCV RNA test
- Medical education, risk reduction, alcohol counseling (+brief intervention)
- Hepatitis B immunization
- HCV treatment discussion

Patient NAVIGATION

- Insurance evaluation & assistance with insurance application
- Appointment scheduling with HCV treatment specialist
- Reminder calls for appointments
- Community outreach

But, 89% attended their initial follow-up visit at the clinic where they were diagnosed!



Service integration including on-site HCV treatment

HCV testing + on-site treatment

On-site treatment provided by

Additional services

Methadone clinics¹

Internal medicine physician, physician assistant, part-time psychiatrist, nurse

Substance abuse counseling, peer support groups, hepatitis A and B vaccination

Needle exchange

Prisons

Public health clinics

Primary health care²

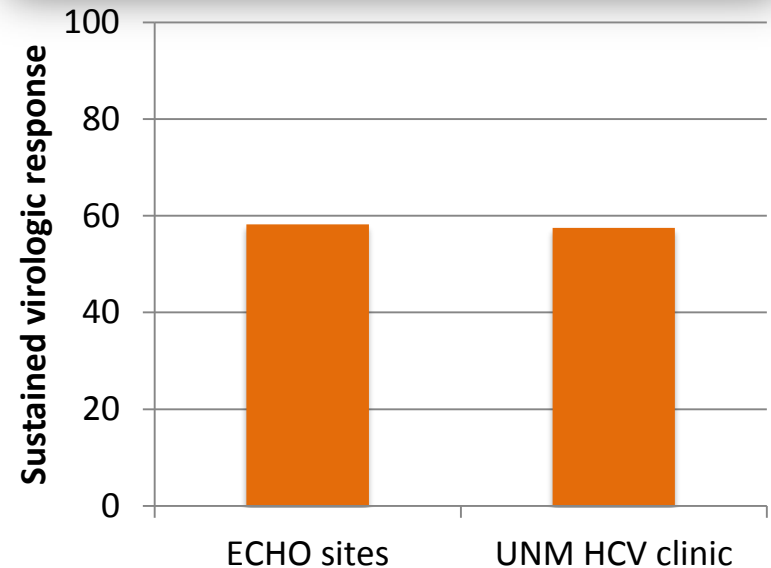
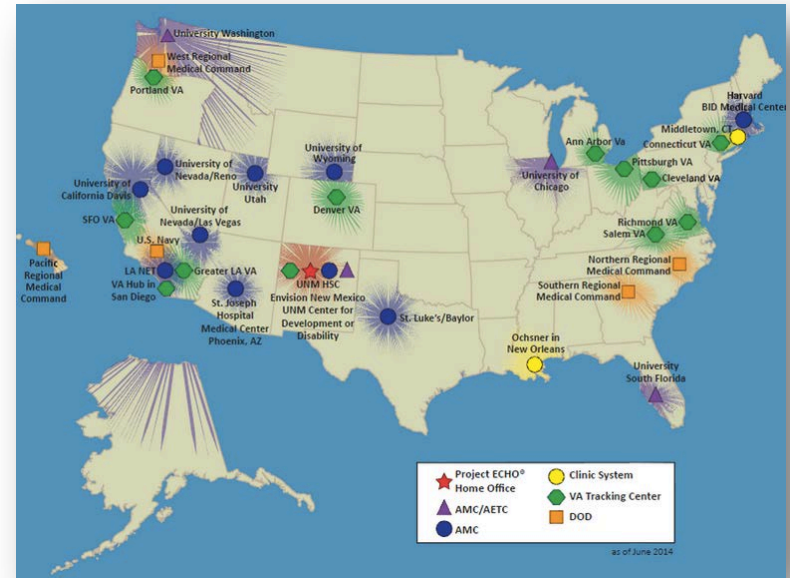
Lead clinician (physician, nurse or PA), nurse or medical assistant with specialist support (telemedicine)

HIV clinics³

3 HIV clinicians, psychiatrist, 2 clinical pharmacists, health educator, substance counselor

Example: Project ECHO

- Goal is delivery of specialty medical care to underserved populations
- Uses:
 - Telehealth technology
 - Best practice protocols
 - Case-based learning to train and support primary care providers to manage HCV
- Allows for consultation with multidisciplinary experts (e.g., mental health, substance abuse, medical specialties)

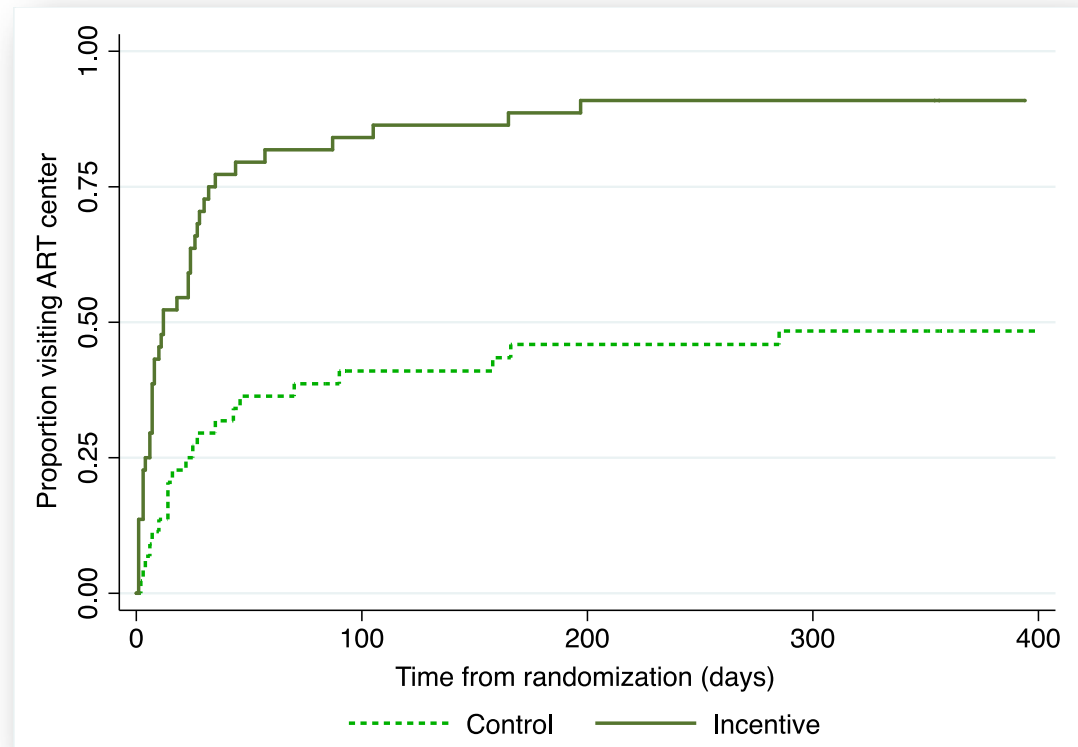


The way forward..

- Consistent definition of **linkage to care**
- **Integrating HCV testing, counseling** with other services is a great first step
 - Incorporate HCV RNA testing into locations where screening is done
- To **improve linkage to care** rates, will need more....
 - Patient navigation, case management
 - Integrating HCV treatment in settings where HCV-infected individuals come into contact with the health care system
- Interventions demonstrated to be most successful often include **multiple interventions delivered in combination**
 - Identifying which groups will require more intervention than others
 - Alternatives – incentives?

Incentives: *Lessons from HIV?*

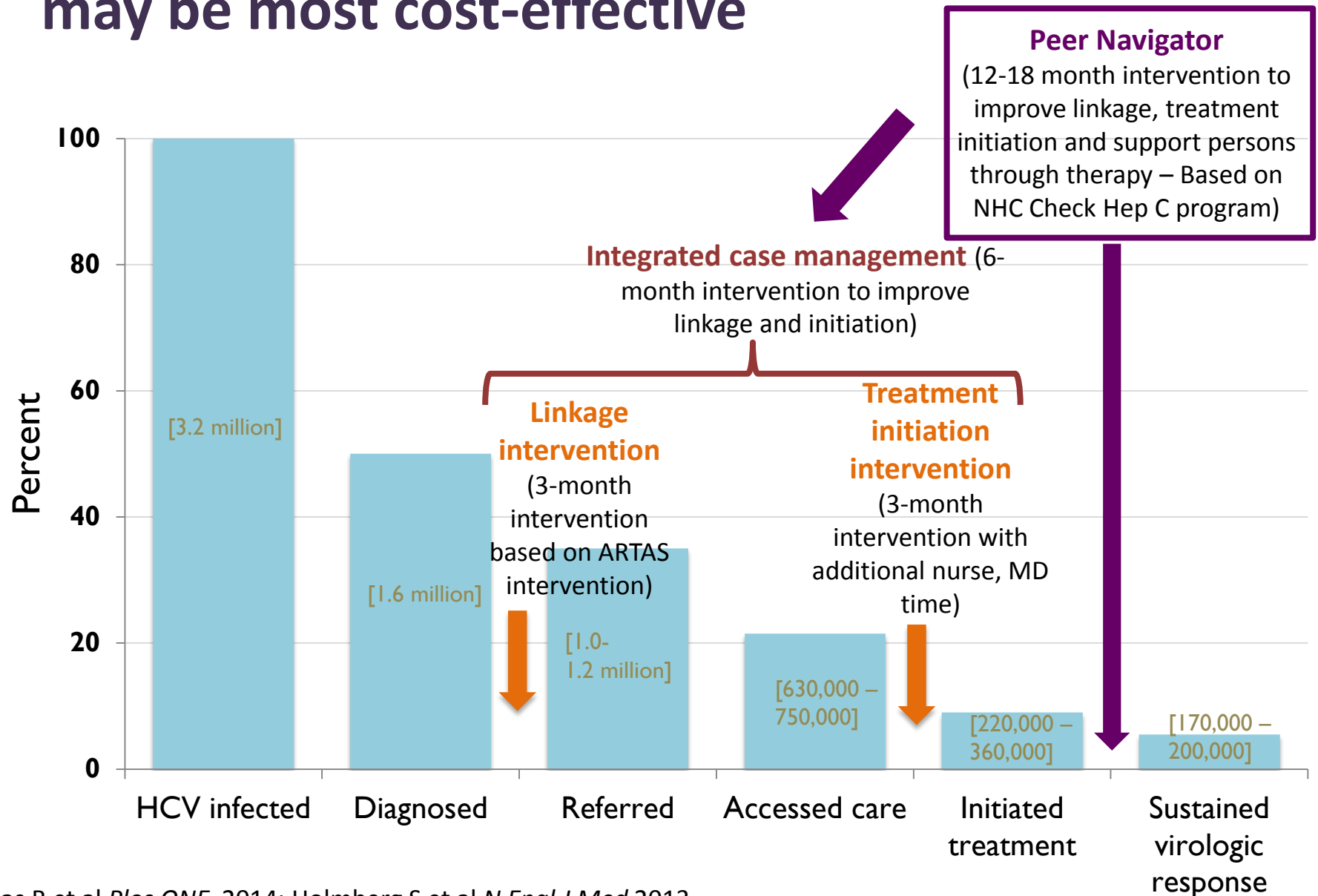
- **Voucher incentives for linkage to care** (visiting government ART center), initiating ART, routine clinical visit and viral suppression
- **Modest incentives** (~4 USD)
- Vouchers could be **traded** for groceries (e.g., rice, lentils) or Household items (e.g., toothpaste, soap)



The way forward..

- Consistent definition of **linkage to care**
- **Integrating HCV testing, counseling** with other services is a great first step
 - Incorporate HCV RNA testing into locations where screening is done
- To **improve linkage to care** rates, will need more....
 - Patient navigation, case management
 - Integrating HCV treatment in settings where HCV-infected individuals come into contact with the health care system
- Interventions demonstrated to be most successful often include **multiple interventions delivered in combination**
 - Identifying which groups will require more intervention than others
 - Alternatives – incentives?
- Integrate with strategies to improve outcomes along the **entire continuum**..

Interventions that target the entire continuum may be most cost-effective



Need HCV Seek, Test, Link and Cure programs

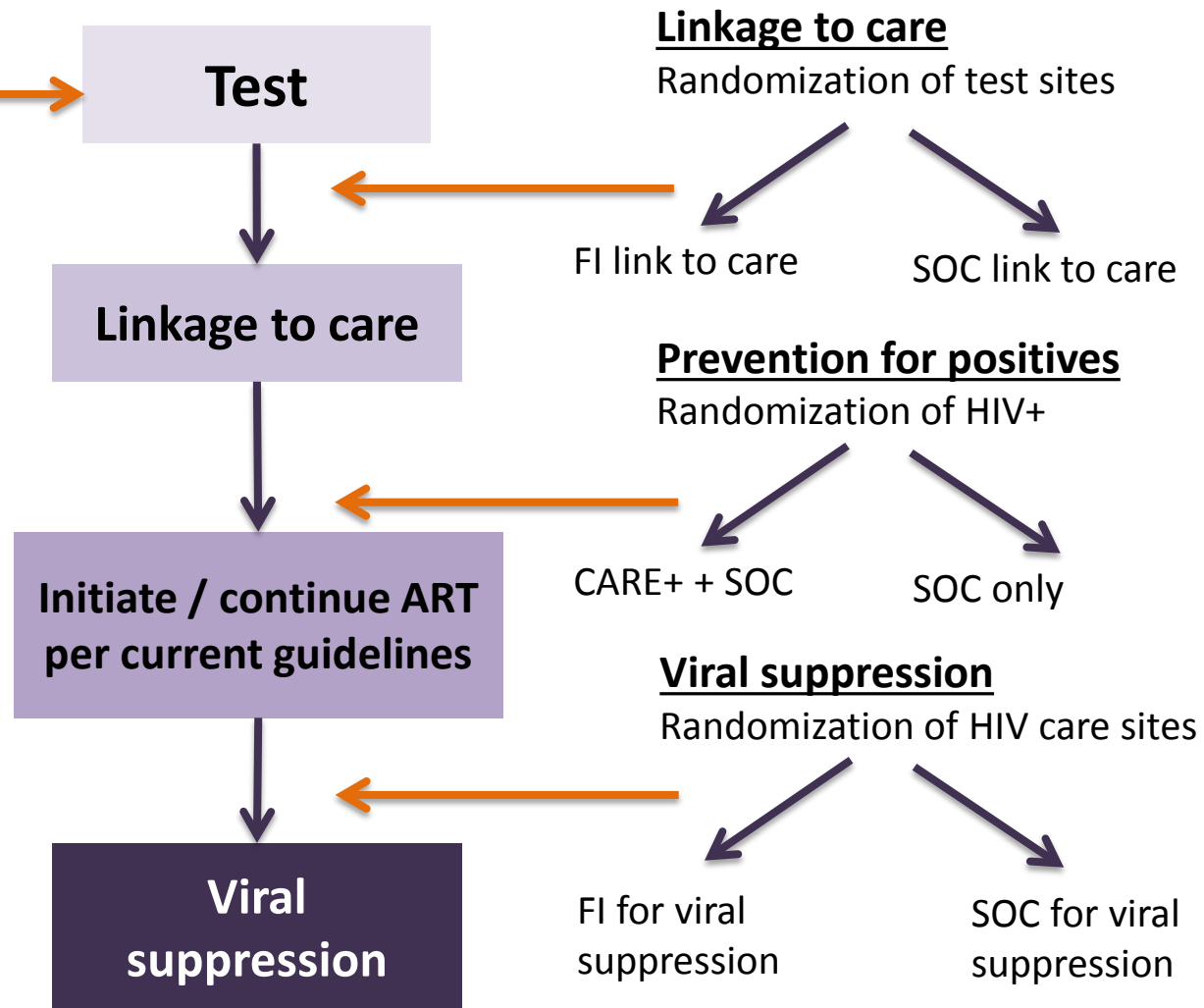
Expanded HIV testing

- Social mobilization
- Universal offer of testing in ED/hospital admissions

FI: Financial incentive

SOC: Standard of care

CARE+: Computer-based intervention

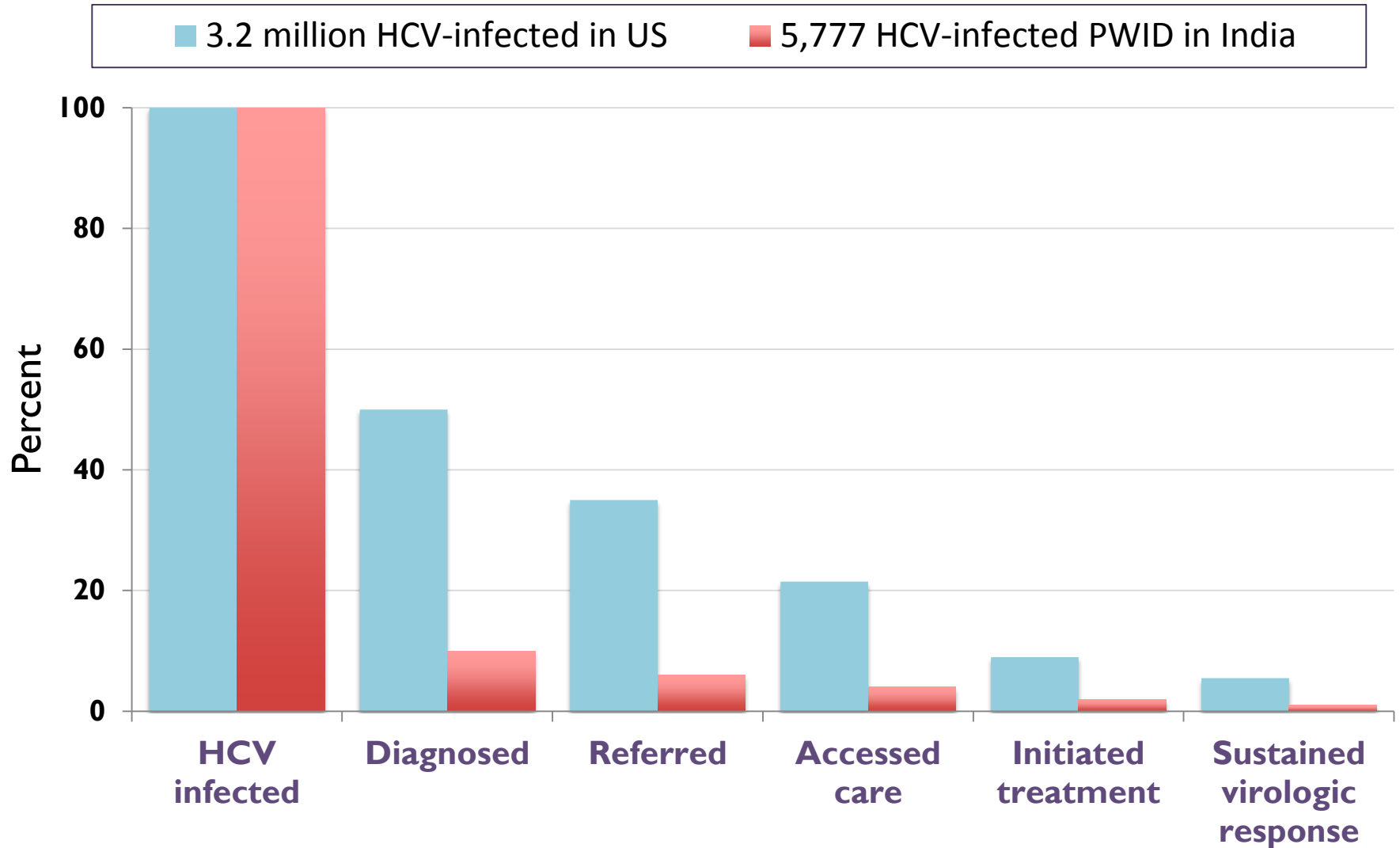


HIV Example (HPTN 065)

The way forward..

- Consistent definition of **linkage to care**
- **Integrating HCV testing, counseling** with other services is a great first step
 - Incorporate HCV RNA testing into locations where screening is done
- To **improve linkage to care** rates, will need more....
 - Patient navigation, case management
 - Integrating HCV treatment in settings where HCV-infected individuals come into contact with the health care system
- Interventions demonstrated to be most successful often include **multiple interventions delivered in combination**
 - Identifying which groups will require more intervention than others
 - Alternatives – incentives?
- Integrate with strategies to improve outcomes along the **entire continuum**..
- Challenges will be greater in **resource-constrained** settings

Challenges greater in resource constrained settings..





Therapeutics - Goal is one size fits all

Access – One size will not fit all populations or countries

Acknowledgements

JHU

- David Thomas
- Mark Sulkowski
- Seun Falade-Nwulia
- Greg Lucas
- David Celentano
- Sunil Solomon
- Allison McFall

India (YRGCARE)

- Suniti Solomon
- M Suresh Kumar
- AK Srikrishnan
- AK Ganesh
- P Balakrishnan

Funding

- OAR/NIDA

Study Staff & participants

