Linkage

Characteristics of the jurisdiction matters – all "best practices" have to be triaged especially by size

- Defining Linkage is still problematic
 - One vs two (or three) visits
 - What indicates secure vs insecure "attachment" to care
- Whose definition of linkage
 - Patients consider them linked/engaged
 - Providers consider themselves linked or not
 - Surveillance definitions of linkage
- Measures for surveillance data CD4 thresholds
 - CD4/viral load test often same day, part of dx workup—count as linkage?
 - Hard evidence of linkage
- We don't use the same metrics across DOHs, studies
- Cascade data presentations varied in how calculated

Notification-Linkage-Engagement-Retention is a process

- Cascade important for research and surveillance, but a public health tool
 - Provider/public health, cross-sectional/static
 - Need patient/dynamic perspective
- Segmenting the process of linkage-engagement-retention on the ground may work against ultimate goal, reduction of viral load
- Need to give up the separate reimbursement and see it as a process

- Health Care Best Practices
 - Medical home for primary HIV care may be a best practice
 - Private providers often neglected in research and intervention
- Who is the advocate for the patient
 - After linkage, usually the medical care site
 - Before the linkage, not clear
- Support providers who are uncomfortable in notification challenges

Confirmatory test is a barrier to linkage

- National policy issue
- HRSA: Use Ryan White Part A funds if confirmatory test negative (Houston)
- Accept parallel rapid tests?
- International models for point of test confirmation
- Delay in initiating ARV until confirmatory test
- What national policies need changing?

Shared Information Systems

Public Health Information Exchange

LAPHI

- Rationale: many without recent CD4/viral load test are in health care system
- Match positives to surveillance data base in real time
 - Alerts provider to verify HIV status, check on engagement in care
 - Try to re-engage in care
 - Evidence of considerable success
- Depends on surveillance system, IT and confidentiality

Health Information Systems

- Ability to communicate and track in real time whether people are coming to appointment
- Can access these data to ID positives not in care
- Can see number of tests overall to provide real denominator
- Different hospital EMRs don't talk to each other regional systems overcome this
- Tension in confidentiality re: large data bases
- Resource intensive

Confidentiality and Privacy

- Surveillance data for tracking only can we use for individual patient tracking?
- Information exchanges have a lot of individual data who should have access?
- Community consultation needed
- HIPAA limitations when care providers and care providers try to work together
- Can shared information systems still be helpful without very detailed information
- National advocacy for structural and policy change in use/access of data systems

- Explore use of Regional Health Information System and electronic health records in conjunction with surveillance to better understand cascade, linkage and engagement
- Define a minimum set of variables that are needed to need specific goals for cascade
- Study impact of policy and legal changes in what data can be shared, who can gain access

Lesson (Research?)

Social Marketing and Education Campaigns

- Perhaps it is time to move \$ from PR campaigns on testing
- Emphasize importance of linkage and being in care
- Explain benefits of care
- Address misinformation

Navigation Models

- Describe and compare variety of models
 - Roots in STD/STI experience
 - Case management and social work models
 - Peer Models
 - Surveillance vs shoe leather

Notification Process

- First step linkage
- Emotional reaction to test result
 - Need protocols for counseling?
 - Depends on whether results a surprise
 - Depends on whether patient seeks test or is offered test
- Are providers reluctant to test and link because they are uncomfortable with notification

Stigma is one of the large barriers to linkage

- Community stigma still there
 - Fear of casual contagion
 - Taking meds, seeing a doctor
 - Seek care outside their neighborhood
- Emerging stigma reduction practices on the ground may be practical, feasible, not resource intensive but are they effective
- Stigma hard to change
- Public and social marketing campaigns against stigma needed – but how evaluate?

Affordable Care Act

- What evidence is needed for policy makers?
- Capture units for improving outcomes
- Need for wrap-around services and how to defend it (shift from Ryan White to Medicaid/Medicare)
- Primary care/pharmacy models vs medical home model
- What aspects of medical home are needed?

Linkage Practices

- Cost effectiveness and incremental effectiveness of linkage practices,
 - need to model linkage
 - who pays for what and for who
- Role of community engagement and using community advice
- Compare different models re: linkage, comprehensive case management, navigator
- Implementation science: Role of procedures and checklists in intervention implementation and monitor fidelity
- Preparation for care intervention

Incentives

- For different things -- testing, link for one/two visits, to start ARV, for reduced viral load
- Need to parse benefits of incentives for each behavior
 - Incentivize repeat testing may be wasteful
 - Incentivize linkage/engage/adhere
- Is it sustainable?
- Should we use incentives for linkage

Research

Cascade as a process

- Outcome: viral suppression
 - Not just linkage but engagement
 - Is this the same set of predictors?
 - Cascade models show retention the biggest problem but reflects larger social predictors
 - Mental illness
 - Homeless
 - Substance use