Advancements in the Field of Behavioral and Social Sciences through the Lens of HIV Research

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Integration of Behavioral and Social Science in HIV/AIDS Research

- Behavioral and Social Science Framework

- Stigma: Components, Pathways and Targets for Intervention

- Social Networks: Strengths and Strategies
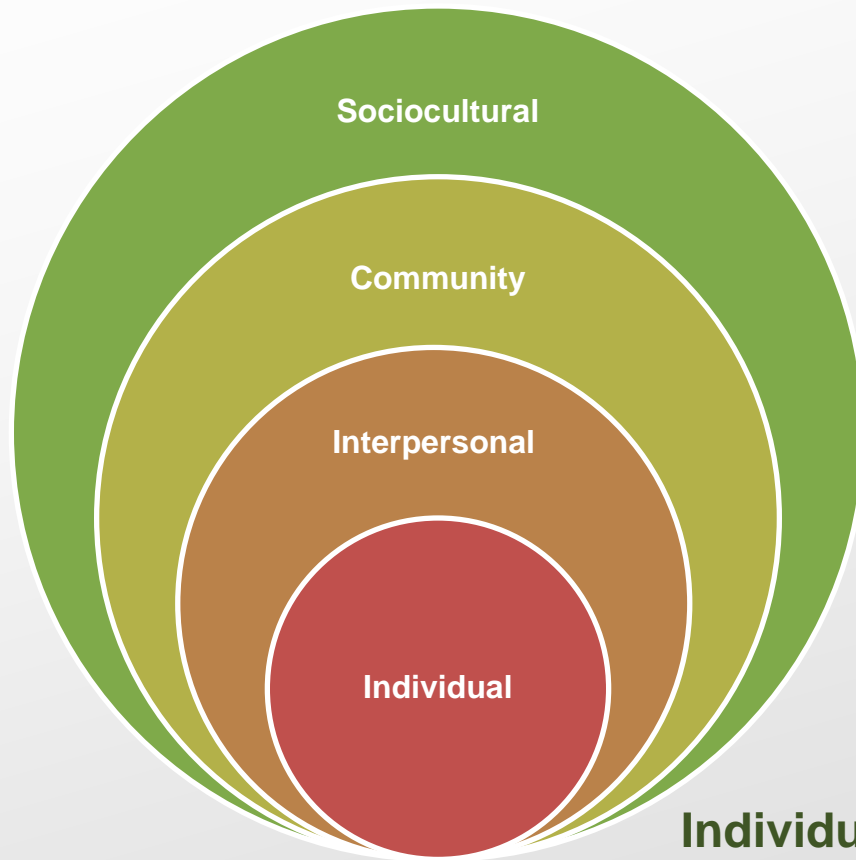
- Implications Beyond HIV/AIDS

Multi-level Factors Influencing HIV Risk and Care Across the Lifespan

Sociocultural
HIV-related stigma
Gendered sexual scripts
Policies/Laws

Community
Access to friendly HIV services
Condom and PrEP Availability
Community Awareness
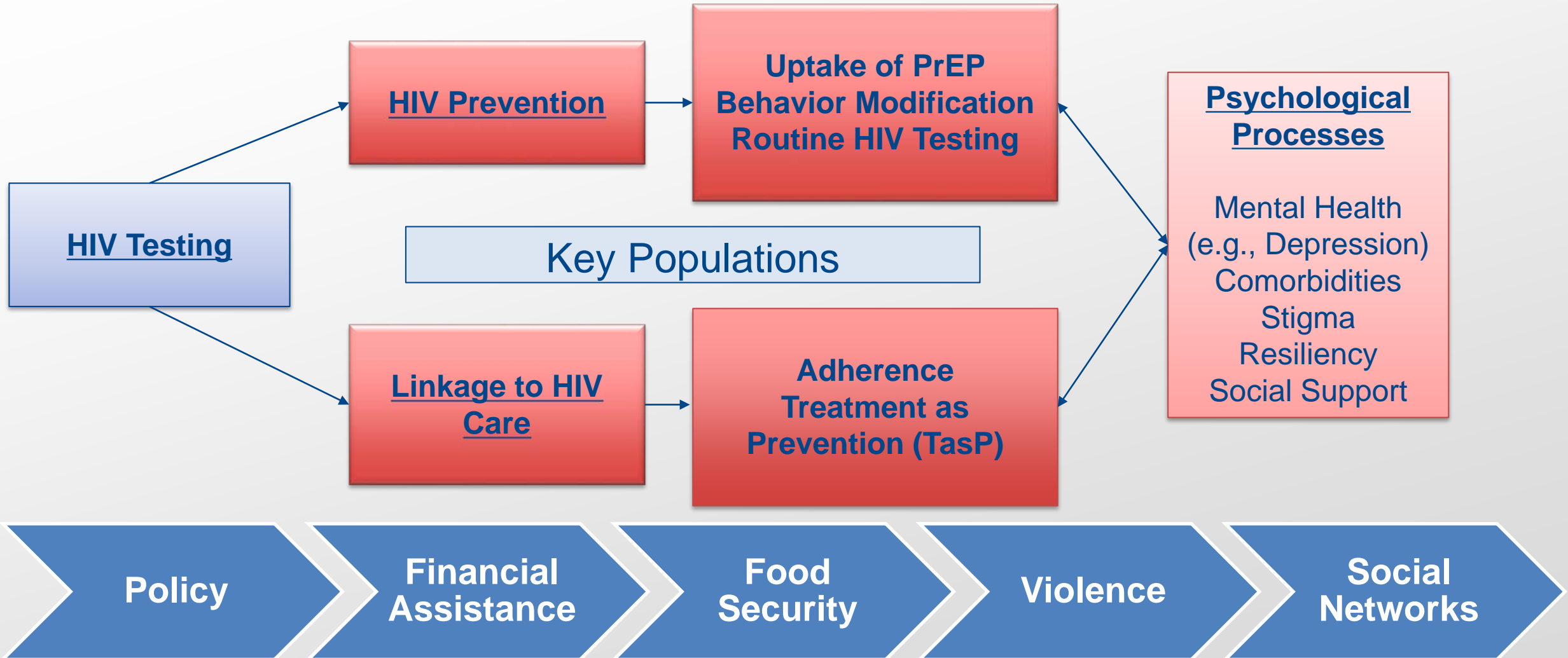Social/sexual networks

Interpersonal (family, peers, partners)
Power dynamics
Intimate partner violence
Parental monitoring

Individual
Physiological factors
Substance use
Mental health
Knowledge

What is stigma?

➢ **Stigma is a perceived negative attribute that causes someone to devalue or think less of the whole person***

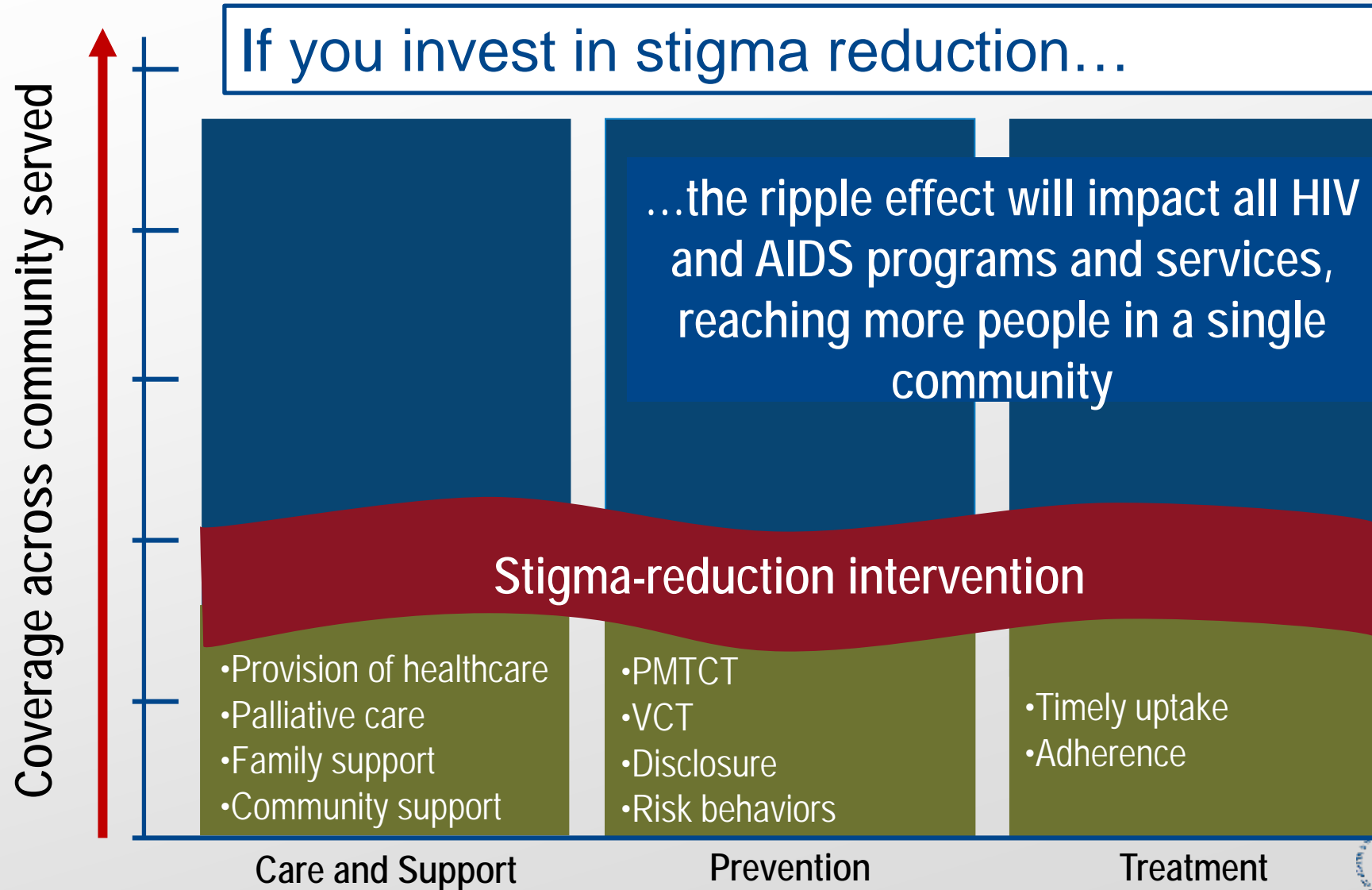## What are the types of stigma?

➢ **Experienced**

➢ **Perceived**
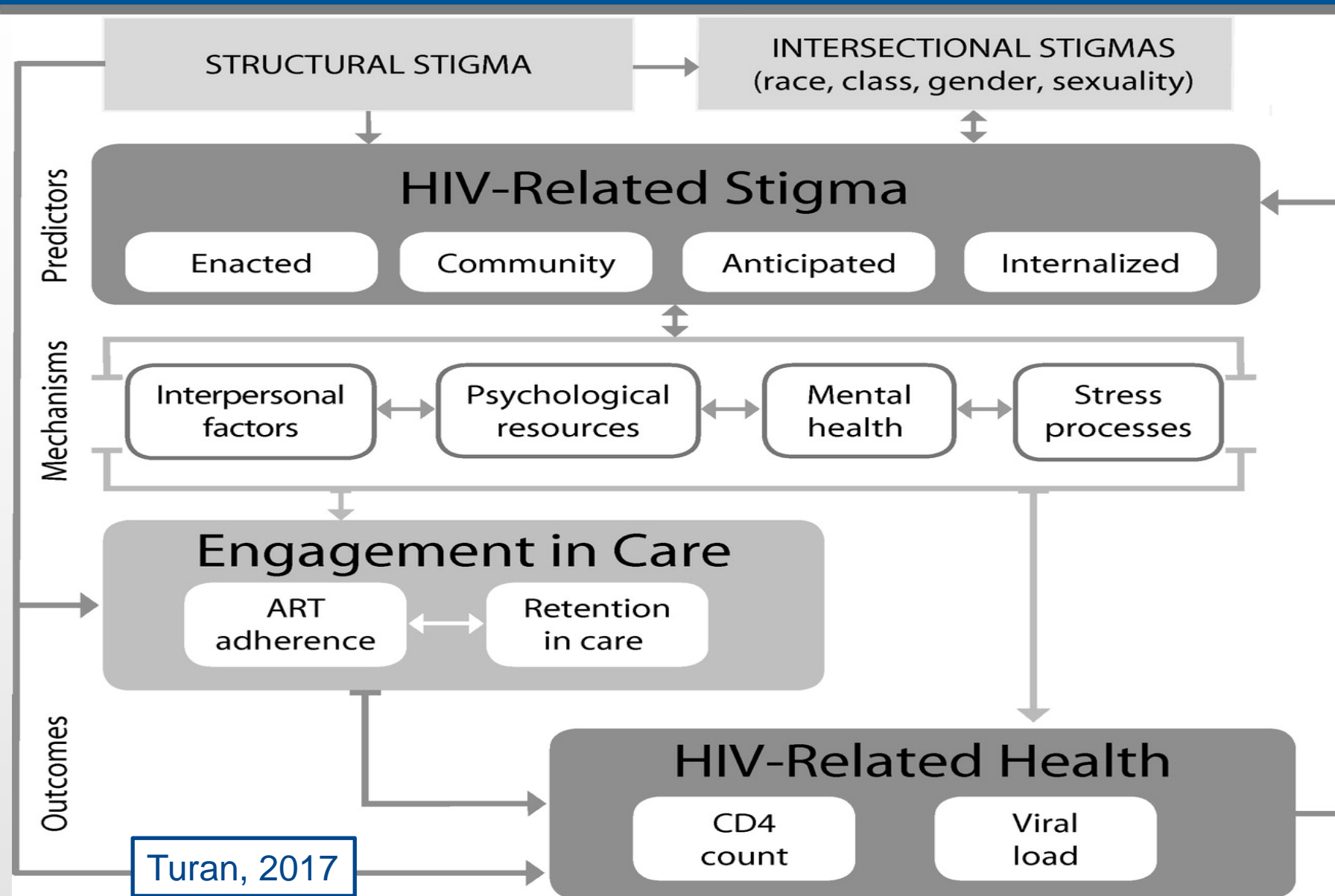
➢ **Internalized**

How does stigma affect health outcomes?

➢ **Barrier to testing**

➢ **Challenge to treatment initiation**

➢ **Interferes with adherence and retention and care**

➢ **Can lead to increased morbidity and mortality**

*Healthy Place (https://www.healthyplace.com/stigma/)

National Institute of Mental Health

Understanding the Role of Stigma

Coverage across community served

If you invest in stigma reduction…

…the ripple effect will impact all HIV and AIDS programs and services, reaching more people in a single community

Stigma-reduction intervention

- Provision of healthcare
- Palliative care
- Family support
- Community support

- PMTCT
- VCT
- Disclosure
- Risk behaviors

- Timely uptake
- Adherence

Care and Support

Prevention

Treatment

Components of Stigma

Turan, 2017

Factors that can be intervened on with a goal of reducing stigma as a barrier to care and overall health outcomes

Mechanisms for the Negative Effects of Internalized HIV-Related Stigma on ART Adherence in Women:
The Mediating roles of Social Isolation and Depression

Turan, B. (2016). JAIDS, 72(2), 198.
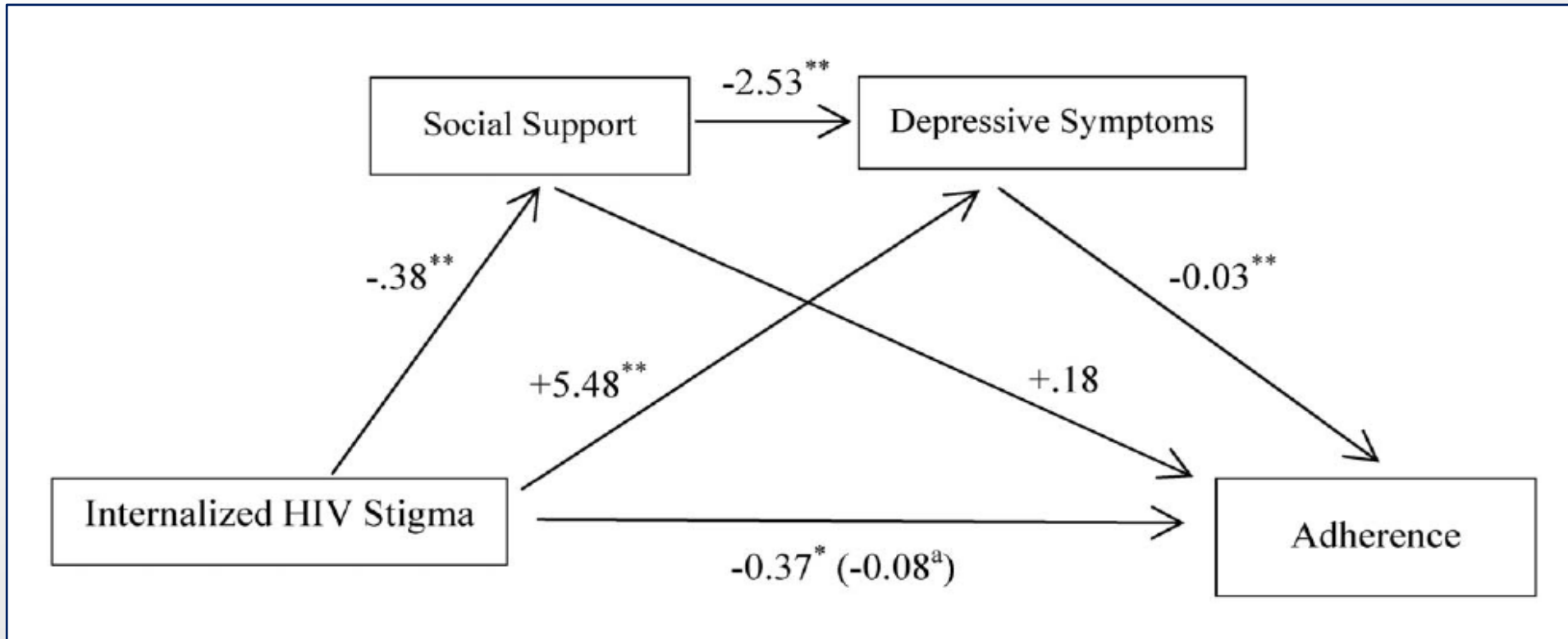
Stigma Beyond HIV

- Common stigma dimensions allow for advancements in **measurement and monitoring**

- Estimating the **prevalence** and **burden** of stigma will enable examination of relative contribution of multiple social influences

- Understanding the **mechanisms and pathways** of how stigma differently affects behavior and health outcomes will advance intervention development and programming

- Identifying **barriers** (e.g., intersectional stigma) in the uptake of efficacious interventions allows for development of strategies to reach disadvantaged populations

What is a social network?

➤ A network of social interactions and personal relationships*

What is social networking?

➤ The use of dedicated websites and applications to interact with other users, or to find people with similar interests to oneself*.

Why are social networks important?

➤ How an individual lives depends in large part on how he or she is tied into the larger web of social connections**.

➤ A focus on networks helps us understand people's behavior, motivation, etc.

*Dictionary.com; **Cornell Univ. (www.soc.cornell.edu/about/social-networks/)

Social Networks: HIV Risk and Runaway and Homeless Youth (RHY)

- **Innovation:**
  - Used the event-based approach (EBA) to collect sociometric network data over time on an unbounded population of youth at risk for HIV/AIDS.

- **Findings:**
  - Position in a network affects HIV risk-taking: peripheral youth less engaged in HIV risk behaviors.
  - Young women were more likely to be at the core of the street-based network where HIV risk was elevated.
  - Highest-risk youth were also the most frequently nominated which has implications for social network interventions.
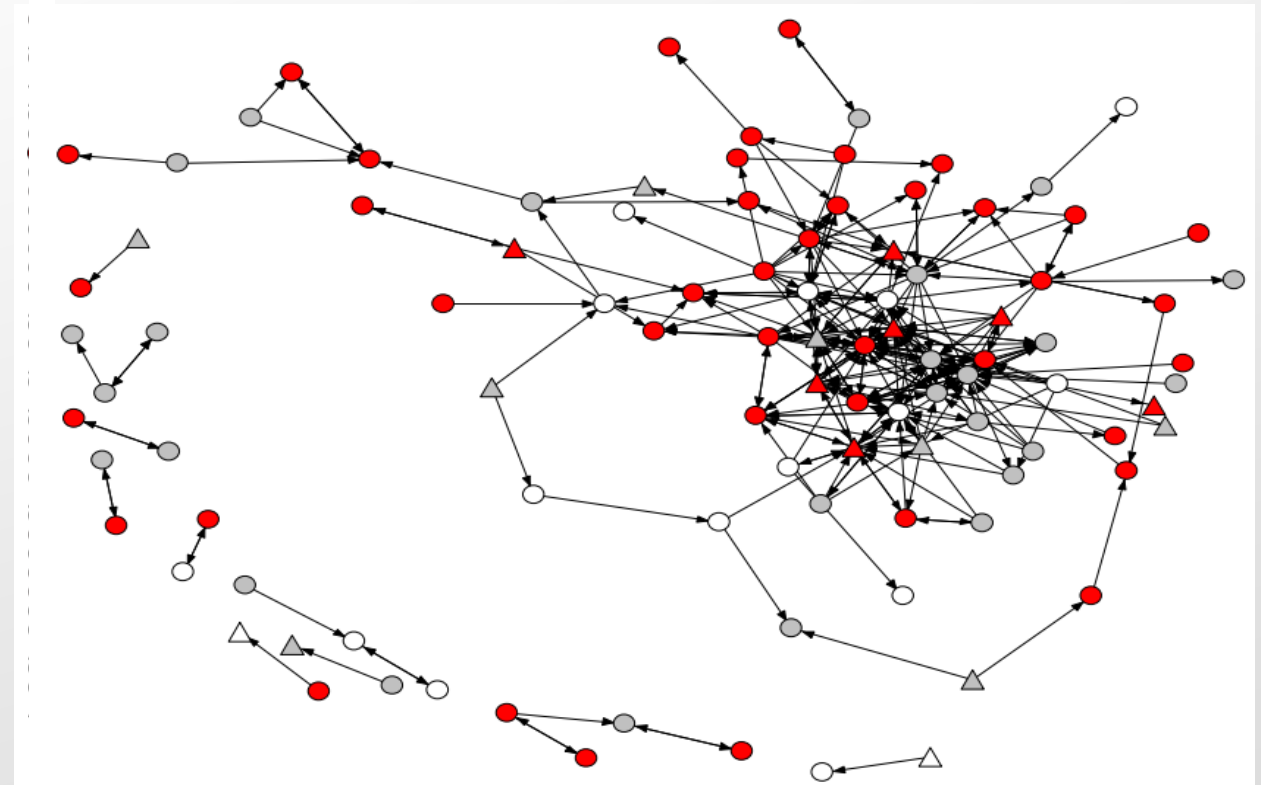
Unprotected sex and network position among RHY, n=136

- 🔴 **Unsafe sex last intercourse**
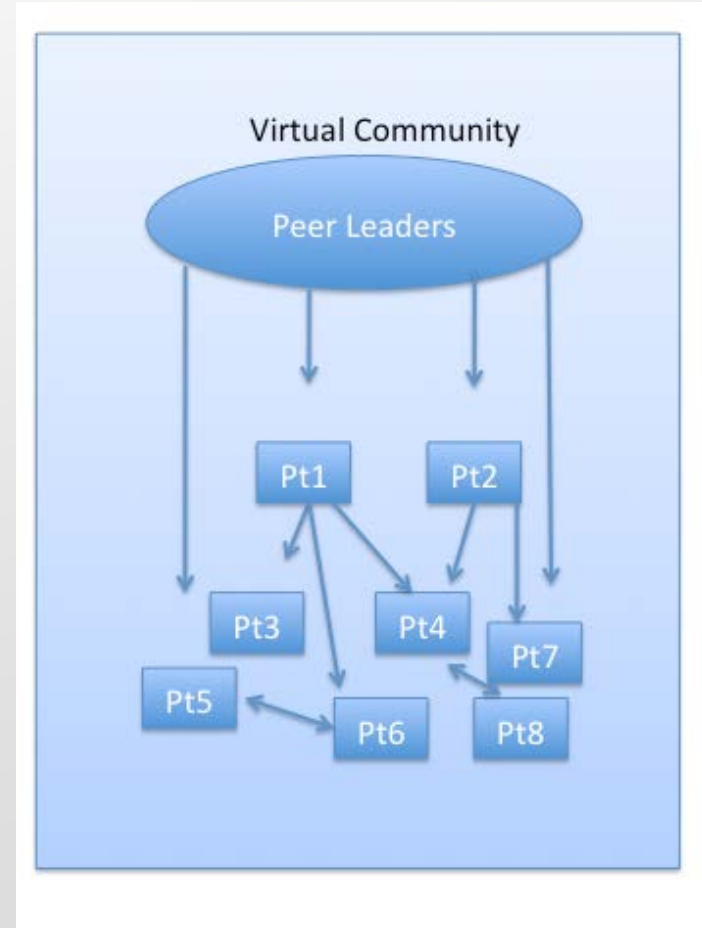- ⬤ **Condom users**
- ◯ **Not Sexually Active 90 days**

Can social media be used to increase HIV prevention, testing, and retention in care?

- Randomized controlled trial with 6-month and 1-year follow-up

- Peer leaders deliver the intervention on social media communities. Goal is for participants to disseminate behavior change within the group and in their own networks

The HOPE Study: Main Outcomes

- Among US-based African American and Latino MSM, 44% of intervention group participants requested an HIV self-test compared to 20% of control participants (Young et al., 2013)

- Among Peruvian MSM, 17% tested for HIV at a local CBO in the intervention group, compared with 7% of control participants (Young et al., 2014)

- The more friends a participant made in the study, the more likely they were to test for HIV, follow-up for test results, and participate in the groups (Young et al., 2014)

- High retention: 94% at 12-week follow-up and more than 82% at 15-month follow-up (Young et al., 2014)

Young, S. D., Cumberland, W. G., Lee, S.J., Jaganath, D., Szekeres, G., & Coates, T. (2013). Social networking technologies as emerging tools for HIV prevention: A Cluster Randomized Trial. *Annals of Internal Medicine, 159*(5)

Young, S. D., Cumberland, W. G., Nianogo, M. D, Menacho, L. A., Galea, J. T., & Coates, T. (2014). The HOPE social media intervention for global HIV prevention in Peru: a cluster randomised controlled trial. *The Lancet, 2*(1), 27-32.

Young, S. D., Holloway, I., Jaganath, D., Rice, E., Westmoreland, D., & Coates, T. (2014). Project HOPE: Online Social Network Changes in an HIV Prevention Randomized Controlled Trial for African American and Latino Men Who Have Sex With Men. *American Journal of Public Health, 104*(9), 1707–1712.

Young, S. D. (2014). Social Media Technologies for HIV Study Retention Among Minority Men who have Sex with Men (MSM). *AIDS and Behavior*, 18(9), 1625-29.
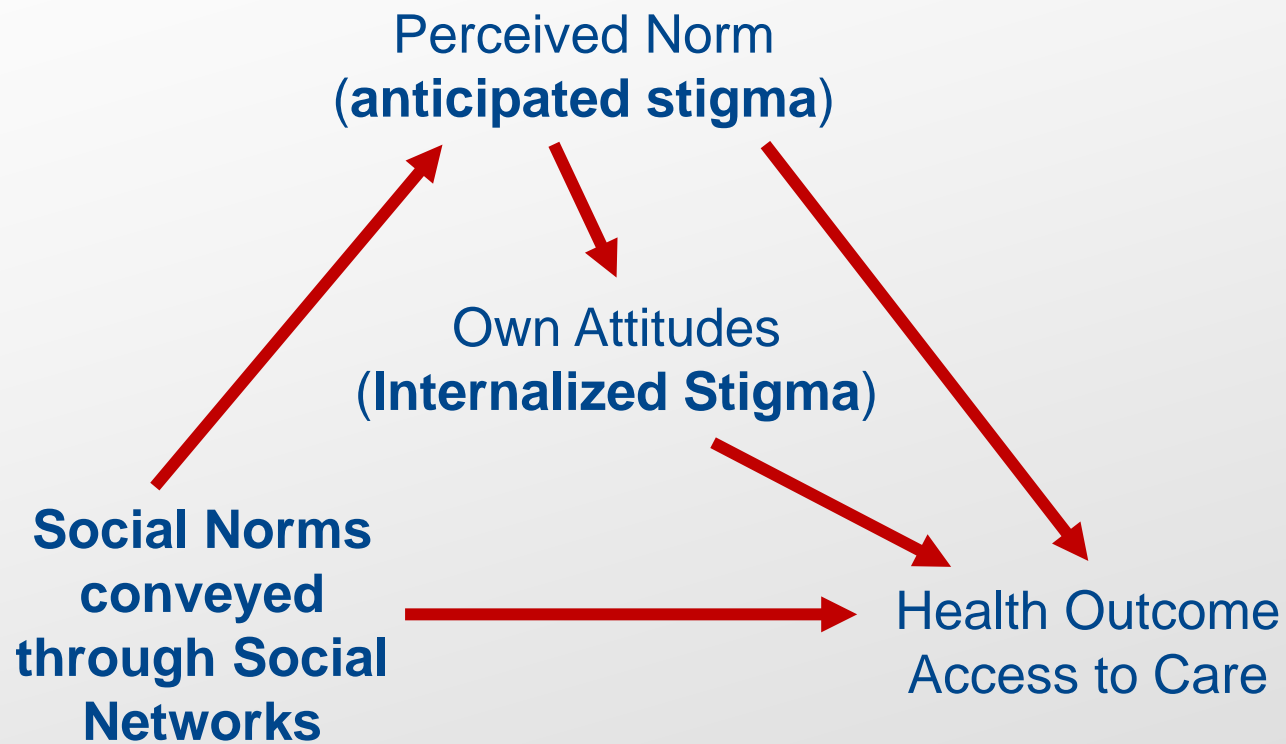
Social Networks Beyond HIV

- Expands our understanding of factors **beyond** the individual that influence health behavior

- Understanding the **influence** of social network **characteristics and functions** on behavior and health outcomes will advance intervention development and programming

- Leveraging new **social network approaches** will identify the role of peers, norms, and community patterns in explaining negative attitudes toward stigmatized communities and related outcomes

Linking Stigma with Social Networks

Model of peer influence linking social networks, HIV stigma, and health outcomes

Perceived Norm
(**anticipated stigma**)

Own Attitudes
(**Internalized Stigma**)

Social Norms conveyed through Social Networks

Health Outcome
Access to Care

Adapted from Perkins (1997)

The influence of **social networks** has a causal effect on one's own beliefs (**internalized stigma**), and the effect is mediated by **anticipated stigma**. Social norms, anticipated stigma, and one's own beliefs exert **independent causal effects** on behavior, prevention and treatment outcomes.

Thank You