



# HIV and Diabetes Care

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# What we'll talk about today

- ▶ Challenges to managing diabetes and HIV concurrently
- ▶ Existing treatment standards and protocols for three populations of patients with co-occurring diabetes & HIV
- ▶ HIV and diabetes care demonstration project



# Why is this an issue?

- ▶ PLWH are living longer – meaning they, too, are at risk for age-related chronic conditions like Type 2 diabetes.
- ▶ While the exact prevalence rates for diabetes among PLWH are unknown, national estimates indicate that up to 14% of people who are in care for HIV also have diabetes.
- ▶ PLWH have increased risk for Type 2 diabetes for two reasons:
  - ▶ Chronic inflammation caused by HIV infection
  - ▶ Some antiretroviral (ART) medications, which have a metabolic impact



# Challenges

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# Diagnosis

- ▶ HIV can impact the HbA1c results, underestimating the patient's level of hyperglycemia – which makes it inappropriate to use as a diagnostic tool.
- ▶ For the same reason, the A1c is problematic when used to track blood glucose over time.

# Medication regimen

- ▶ PLWH are already living with a sometimes complex medication regimen.
  - ▶ Beginning ART usually involves three drugs from at least two different drug classes.
  - ▶ Impacted by cost, coverage, patient's health, side effects, drug resistance and convenience.



# Urgency

- ▶ HIV is rightly the priority of infectious disease care providers, and of PLWH – but the presence of an urgent condition tends to push other health issues to the back burner.

# Social Determinants of Health

- ▶ HIV disproportionately impacts people of color, those with lower levels of education, and lower socioeconomic status.
- ▶ Health equity issues create barriers that make it difficult to manage diabetes, such as inconsistent access to:
  - ▶ Medical care
  - ▶ Healthy food
  - ▶ Safe physical activity options
  - ▶ Transportation



# Stigma

- ▶ *Stigma*: negative attitudes or beliefs about a certain group.
- ▶ Both people with Type 2 diabetes (especially those with obesity) and PLWH experience stigma and misunderstandings:
  - ▶ People make moral judgments about those who have it
  - ▶ Think only certain groups get the disease
  - ▶ May think those who have the condition, deserve it

# Criminalization

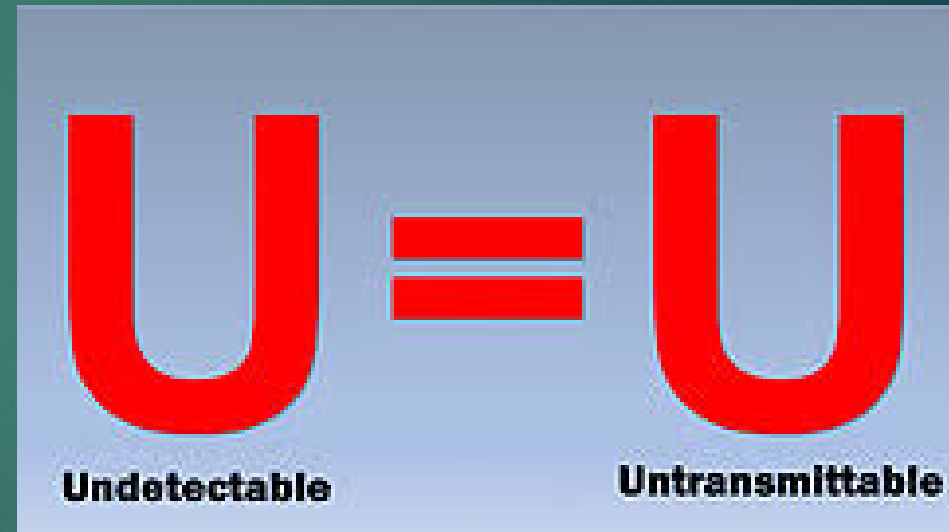
- ▶ Criminalization contributes to the stigma surrounding HIV. Laws in Michigan and throughout the US date from a time when HIV was a fatal and poorly understood disease:
  - ▶ It is a felony for a PLWH to engage in penetrative sex without disclosing their status to the partner.
  - ▶ PLWH can be subject to bioterrorism laws.
  - ▶ HIV status can be considered a factor in criminal sentencing.
  - ▶ PLWN can be subject to examination, treatment or commitment by the Department of Health if they are determined to be a 'health threat' to others.
- ▶ **These laws have not been updated in light of current knowledge.**



# U=U: What is it?

There is now research-based confirmation that people who take ART as prescribed, and have an undetectable viral load, cannot transmit the disease to a sexual partner.

[www.preventionaccess.org/about](http://www.preventionaccess.org/about)



# U=U: Why is it important?

- ▶ Reduces shame and fear of sexual transmission, and opens possibilities for conceiving children without alternative insemination.
- ▶ Dismantles stigma surrounding HIV on a personal, clinical, and community level.
- ▶ Encourages PLWH to start and stay on treatment, to keep both themselves and their partners healthy.
- ▶ Strengthens advocacy efforts for universal access to treatment, care and diagnostics – and brings us closer to ending HIV.
- ▶ <https://www.preventionaccess.org/about>





# Standards and Protocols

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# Three subgroups to consider

- ▶ People with preexisting diabetes who acquire HIV
- ▶ People who are diagnosed with diabetes and HIV concurrently
- ▶ People who develop hyperglycemia after the start of HIV therapy.

*Each has a slightly different treatment protocol.*



# Pre-existing diabetes

- ▶ Test fasting glucose levels prior to starting HIV medications.
- ▶ Reference drug interaction table in [\*Integrated Management of HIV and Type 2 Diabetes\*](#).
- ▶ Prescribe ART drugs with safer metabolic profile.
- ▶ Monitor fasting glucose levels 3 months after start of ART drugs and every 3-6 months thereafter if impaired fasting glucose is present.



# HIV & diabetes concurrent diagnoses

- ▶ Test fasting glucose levels prior to starting concurrent anti-diabetic and HIV medications.
- ▶ Reference drug interaction table in *Integrated Management of HIV and Type 2 Diabetes*.
- ▶ Prescribe HIV drugs with safer metabolic profile.
- ▶ Collaborate with or refer to PCP and/or endocrinologist for prescribing of anti-diabetic agents, and to DSMES.
- ▶ Monitor fasting glucose levels 3 months after start of ART drugs, and every 3-6 months thereafter if impaired fasting glucose is present.



# Develop diabetes after start of ART

- ▶ Test fasting glucose levels prior to switching ART regimen.
- ▶ Reference drug interaction table in *Integrated Management of HIV and Type 2 Diabetes*.
- ▶ If possible, switch to drugs with safer metabolic profile.
- ▶ Monitor fasting glucose 3 months after switching ART, and every 3-6 months thereafter if impaired fasting glucose is present.
- ▶ Collaborate with/refer to PCP and/or endocrinologist, and to DSMES.

# Barriers to using current protocols

- ▶ Testing for diabetes before starting ART sometimes isn't workable.
- ▶ Link between infectious disease and primary care.
- ▶ Access to care.





# HIV and Diabetes Care project

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# Four phases of the project

- ▶ Identify diabetes prevalence and patterns among PLWH.
- ▶ Engage healthcare providers in screening for diabetes & referral to DSMES.
- ▶ Increase LGBTQ+ and HIV cultural competency among DSMES professionals.
- ▶ Create an innovative, culturally competent diabetes wellness program for delivery at outpatient ambulatory care clinics.



# Thank you!

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