Impact of Longitudinal Training Programs on the HIV Workforce: The Clinician Scholars Program

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Disclosures



The speakers have nothing to disclose.

Learning Objectives



At the conclusion of the presentation, participants will be able to:

- Identify elements of a longitudinal training program for HIV clinicians.
- 2. Describe the long-term impact of longitudinal HIV training programs on HIV clinicians participating in these programs.
- 3. Describe how longitudinal HIV training programs can affect change in multiple areas at the practice, systems, and community-level.



Introduction to the Midwest AIDS Training + Education Center (MATEC)

About MATEC

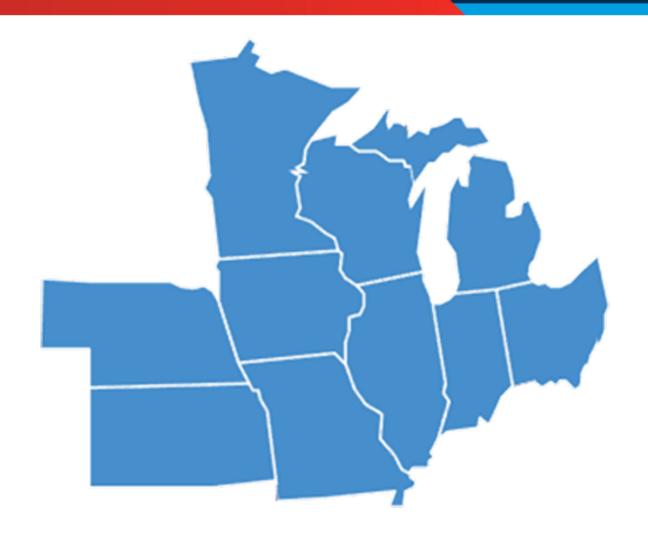


- Founded in 1988
- Housed at the University of Illinois-Chicago College of Medicine,
 Department of Family and Community Medicine
- Publicly-funded training center that is part of the national network of AIDS Education and Training Centers
 - Funded primarily through the HRSA Ryan White HIV/AIDS Bureau Part F
 - Additional HRSA Ryan White HIV/AIDS Bureau funding for the Midwest Integration of the National HIV Curriculum and HRSA Bureau of Primary Health Care for the Midwest Fellowship for Primary Care Champions
- Mission Statement: To develop and transform the health care system and its workforce to advance equitable and patient-centered care.
- Vision Statement: Health equity and maximum health for all.

10-State Region



- Illinois
- Indiana
- lowa
- Kansas
- Michigan
- Minnesota
- Missouri
- Nebraska
- Ohio
- Wisconsin





Introduction to and Evaluation of the Clinician Scholars Program

Background



- Designed for front-line clinicians interested in expanding their capacity to provide HIV/AIDS care
- Aim to increase the number of clinicians providing HIV care to underserved or disproportionately-affected populations
- Includes mentorship, clinical consultation, networking, and clinical interaction
- 12-month commitment with a minimum of 12 hours of clinical preceptorship and 40 hours of multimodal training
- Coordinated between both Local Partner and Regional staff
- Funded primarily as an MAI program
- About 200 clinicians have participated in the program since 2011
 - 18-25 Scholars accepted into the program per year

Qualifications



- Actively licensed physician, physician assistant, nurse practitioner, advanced practice nurse, or pharmacist practicing in the Midwest region
- Self-declared minority or predominantly minority-serving (>50% of patient population is racial and/or ethnic minority) on Participant Information Form
- Has some baseline knowledge about HIV prevention, transmission, and treatment
- Attest to continuing employment with current employer, are not participating solely to provide care outside the United States, and can complete all program requirements (52 hours of training and preceptorship; participation in the Immersion Institute and Collaborative Learning Series; present one case during a regional program; complete all evaluation activities)

Evaluation Approach



- Multimethod Evaluation Approach:
 - Entrance & Exit Interviews (discontinued; switched to survey format)
 - Follow-up interviews with select scholars from 2011-2015 cohorts
 - Scholars' knowledge baseline and endpoint self-assessments on 11
 Core Capabilities
 - Mentor midpoint and endpoint assessment of scholars' knowledge and performance on the 11 Core Capabilities
 - Midpoint satisfaction survey to assess Scholars' satisfaction with their learning experience in the program

Core Capabilities



The program focuses on the following 11 Core Capabilities and 33 related learning objectives:

- Capability 1: Use local, national, and international epidemiology data to identify
 emerging trends in the epidemic and potential impact on practice and HIV testing.
- Capability 2: Use current DHHS treatment guidelines, including those related to special populations, to manage HIV infection.
- Capability 3: Incorporate current standards of care, including those related to special populations, into management of HIV infection. Use results of CD4 T cell count, HIV viral load, and HIV resistance testing in combination with ART history to choose optimum treatment regimens.
- Capability 4: Use results of CD4 T cell count, HIV viral load, and HIV resistance testing in combination with ART history to choose optimum treatment regimens.
- Capability 5: Manage treatment failure.

Core Capabilities, cont.

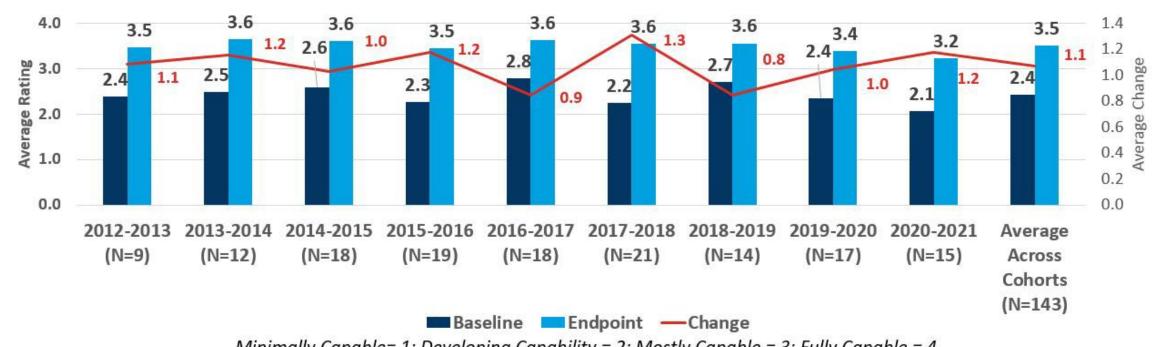


- Capability 6: Address factors that may inhibit a patient's adherence to prescribed ART.
- Capability 7: Institute appropriate OI prophylaxis and diagnose and manage or refer common OIs.
- Capability 8: Recognize and manage common clinical syndromes related to HIV disease. Manage common co-morbid conditions related and unrelated to HIV disease.
- Capability 9: Diagnose and manage common ART side effects and drug interactions with those medications.
- Capability 10: Provide appropriate and professional screening and referral or risk/harm reduction counseling related to sexual behaviors, drug use, and mental health.
- Capability 11: Provide care that incorporates patient's race, ethnicity, gender, age, sexual orientation, and the myriad psychosocial issues impacting patients' lives.

Self-Assessed Knowledge Across Cohorts



Scholars' Self-Assessed Knowledge at Baseline and Endpoint Across Cohorts

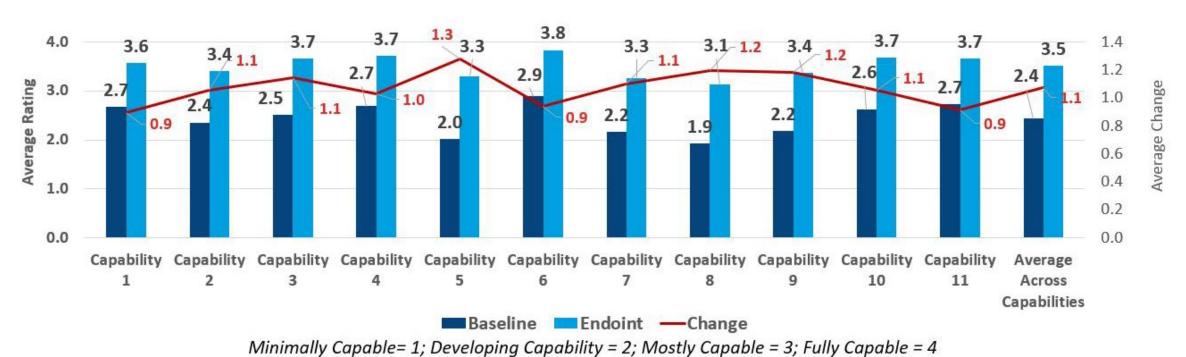


Minimally Capable = 1; Developing Capability = 2; Mostly Capable = 3; Fully Capable = 4

Self-Assessed Knowledge Across Capabilities



Scholars' Self-Assessed Knowledge at Baseline and Endpoint Across Capabilities (N = 143)



Results of Knowledge Assessments



- Scholars' self-assessment from 9 cohorts (2012-2021; N=143) revealed:
 - Fairly consistent ratings across cohorts
 - Endpoint averages across capabilities and cohorts between "mostly capable" and "fully capable"
 - Significant positive change (p<.05) in all 11 capabilities across cohorts
 - Most improvement in treatment failure (Cap 5), complications of HIV (Cap 8), and ART side effects and interactions (Cap 9)
 - Least improvement in epidemiology (Cap 1), ART adherence (Cap 6), and cultural competence (Cap 11)
- Faculty Mentor analysis from two cohorts revealed:
 - Significant positive change (p<.05) in most capabilities (Boehler et al., 2015)



Long-Term Outcomes of the Clinician Scholars Program

Background 2



- After the program had been in existence for 5 years, interest arose in evaluating its long-term impact
- Up until then, Scholars completed an endpoint assessment and exit interview immediately after graduating from the program; however, these did not measure long-term, sustained change
- Decided to conduct follow-up interviews with graduated Scholars to learn about:
 - Long-term practice changes
 - Professional identify formation
 - Continued commitment to continuing education
 - Long-term involvement in the HIV care network

Method



- MATEC conducted phone interviews in 2016 and 2017 with a group of 46 Scholars who participated in the program between 2011 and 2015
- Scholars had graduated from the program between 2-4 years prior at the time of their interview
- Interviews were recorded and transcribed for thematic analysis
- Four coders coded interviews IRR established using Fleiss' kappa and Krippendorff's alpha
- Thematic analysis of codes resulted in code summaries that formed the basis of our findings

Descriptive Data



Demographic Characteristics of Clinician Scholars from 2011-2015 Cohorts Who Participated in Follow-Up Interviews (N=46)

Gender	n (%)
Female	34 (74%)
Male	12 (26%)

Race	n (%)
White	31 (67%)
Black or African American	8 (17%)
Asian	6 (13%)
Mixed Race	1 (2%)

Discipline	n (%)
Advanced Practice Nurse	20 (46%)
Physician	11 (24%)
Pharmacist	12 (26%)
Physician's Assistant	2 (4%)
Registered Nurse	1 (2%)

Patients Served



Percent of <u>overall</u> client/patient population in the past year who were racial/ ethnic minorities	n	%
None	2	5%
1 to 24%	3	7%
25-49%	9	21%
50-74%	14	33%
≥75%	14	33%

Percent of people with HIV served in the past year who received Antiretroviral		%
Therapy	n	
None	1	3%
1 to 24%	2	5%
25-49%	1	3%
50-74%	13	33%
≥75%	22	56%

Percent of people with HIV served in past year who were racial/ethnic minorities	n	%
None	1	3%
1 to 24%	6	15%
25-49%	8	20%
50-74%	11	28%
≥75%	14	35%

Patients Served 2



- Racial/ethnic minorities
- MSM
- Transgender
- Undocumented, immigrant, or foreign-born
- Social Determinants of Health:
 - Homelessness
 - Lack of insurance
 - Economic hardship
- Substance use disorder and mental illness

Long-Term Practice Changes



- Sustained changes in knowledge has led to Scholars providing more complex HIV care:
 - Prescribing PrEP
 - Managing comorbidities
- Greater knowledge has increased Scholars' confidence in providing HIV care
- Positive changes in clinician-patient interactions
- Improved patient education

HIV Care Continuum



- Scholars are moving patients across the HIV Care Continuum through a variety of activities:
 - Make HIV screening part of baseline screening
 - Encourage patients to get tested
 - Enhance linkage-to-care activities to link patients with HIV quickly to care through inner reach and outreach
 - Intensify retention in care activities (case manager outreach, addressing social determinants of health, etc.)
 - Assist patients with ART adherence
 - Help patients achieve viral suppression

Long-Term System Changes



- Expanding services for HIV care and prevention
 - New patient groups, e.g., transgender patients
 - Offering new services, e.g., PrEP
 - Bringing in more HIV providers
- Educating other providers in the clinic to increase capacity for HIV care
- Implementing new HIV policies and procedures
 - Improve quality of care
 - Improve access to care

Professional Identity Formation



- Scholars shaped their professional identity as an HIV care provider as a result of the CSP:
 - Increased comfort with providing HIV care
 - Increased standing with other providers as an HIV expert
- Scholars achieved career benchmarks such as AAHIVM certification
- Scholars were able to take on leadership roles within their clinic
- Some obtained faculty positions with local AETCs

HIV Care Network



Scholars were able to expand their HIV care network via:

- Connections with their local AETC
- Connections with other HIV providers
- Participation in additional HIV training opportunities
- Becoming a resource in their community by:
 - Teaching/speaking at continuing education events
 - Providing clinical consultations to other providers outside their clinic
 - Serving as faculty, trainers, or preceptors for external organizations, incl. the AETCs
 - Sharing their expertise with community groups and schools

Professional Development



- Scholars sought educational opportunities from their local AETC
 - Training events
 - Preceptorships
- Local and national conferences
- Teaching
- Self-study
- Podcasts
- Journal clubs



Practice Outcomes of the Clinician Scholars Program

FY22 Outcomes



Between August 2021 – April 2022:

- Four current and former Scholars took the AAHIVS/P exam or became AAHIVS/P credentialed
- Seven current and former Scholars served as faculty or subject matter experts on topics related to HIV
- Six current and former Scholars began providing HIV prevention services and/or care to their own panel of patients
- Two current and former Scholars have taken on leadership roles in local HIV committees and organizations
- Two current and former Scholars built referral networks with external partners to provide their services

Scholar Highlights





Jorge Ramallo, MD, MPH, FACP, FAAP, AAHIVS

2019-2020 Graduated Scholar

Opened the Inova PRIDE Clinic, the first LGBTQ+ primary care clinic in Northern Virginia, where he is a physician lead.

Scholar Highlights, cont.



Nikki Regan, MSN, APRN, NP-C

2015-2016 Graduated Scholar

Took over the roll of the MATEC Kansas/Nebraska Omaha HIV Program Coordinator and provides mentorship to Nebraska Scholars participating in the Clinician Scholars Program.

Amanda Allmacher, DNP, RN, NP-BC, AAHIVS

2017-2018 Graduated Scholar

Became the Site Director of the MATEC Michigan local partner site in late 2021.

Scholar Highlights, cont. 2



Alex Dworak, MD 2016-2017 Graduated Scholar

Partners with a local HIV specialty clinic two afternoons a month where he provides care to patients with HIV who have uncontrolled diabetes. He also has been a community champion for developing COVID-19 testing and vaccination programs, as well as integrating hormone management as part of his primary care practice.

Phil Winternheimer, FNP

2017-2018 Graduated Scholar

Currently working to integrate PrEP services throughout primary care by providing training and clinical preceptorships to primary care providers at Eskenazi Health, the county hospital system for Indianapolis.

Scholar Highlights, cont. 3



Dana Vallangeon, MD

2020-2021 Graduated Scholar

Started providing rapid start ART and treating newly-diagnosed patients with HIV in her substance use treatment clinic.

Leah Siegfried, PA

2020-2021 Graduated Scholar

Implemented same-day rapid start ART and incorporated PrEP discussions with every patient seen for STI testing or treatment.



The Future of the Clinician Scholars Program

Challenges to Changes



- Challenge: Increased participation by primary care providers with low HIV patient volume
 - Allowing the use of Core and HIV Practice Transformation Project funding
 - Updating 11 Core Capabilities to better align with the HIV Care Continuum and incorporating more primary care-related topics
 - Capability 1: Clinical Guidelines
 - Capability 2: Cultural Humility
 - Capability 3: Special Populations
 - Capability 4: HIV Prevention
 - Capability 5: Screening and Diagnosis
 - Capability 6: HIV Primary Care

- Capability 7: Antiretroviral Therapy
- Capability 8: Treatment Adherence
- Capability 9: Treatment Switch and Failure
- Capability 10: Complications with HIV
- Capability 11: Aging with HIV

Challenges to Changes, cont.



- Challenge: COVID-19 has made it more challenging for Scholars to network and secure clinical preceptorships
 - Adaptations to the Immersion Institute and creation of the Collaborative Learning Series
 - Incorporating telehealth opportunities into preceptorships, utilizing reverse preceptorships when available, and exploring the use of simulated patient experiences
 - Increasing expected interactions between Mentors and Scholars



Questions

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