# Effective Strategies for Integrating the National HIV Curriculum into the Curricula of Health Professions Programs

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#### Overview





## Background



- Why the need to integrate HIV into the curricula of Health Profession Programs?
  - PWH are living longer
  - Shortages in the HIV clinical workforce
  - Health disparities and shortage of HIV care services in the region
  - Inadequate training in health professions programs (HPPs)

#### The National HIV Curriculum



- Developed by the University of Washington with support from HRSA
- Six modules that are completed online
- Up-to-date information on HIV care and treatment
- Suitable for novice to expert health care professionals

1.Screening& diagnosis

Basic HIV primary care

Antiretroviral therapy

Co-occurring conditions

Prevention of HIV

Key populations

#### HRSA Funding Opportunity



- NOFO "Integrating the National HIV Curriculum e-Learning Platform into Health Care Provider Professional Education"
- Focus: integrate the NHC into the education and training curricula of health professions programs with an emphasis on medical, nursing, and pharmacy programs
- MATEC received one of two awards issued
- Grant period: September 1, 2018 August 31, 2022

#### Description of MINHC



#### Goal

Enhance the quality of HIV education and training at multiple health professions programs (HPPs) in HHS Regions V and VII by integrating the National HIV Curriculum E- Learning Platform (NHC) into the education and training curricula of accredited programs of medicine, nursing and pharmacy

#### **Objectives**

- Promote NHC among all HPPs
- Integrate the NHC into at least 20 accredited HPPs
- Train 444 faculty members on the use of integrated NHC
- Deliver NHC integrated curriculum to 7,445 students
- Document and disseminate best practices for the integration of the NHC into the curricula of HPPs

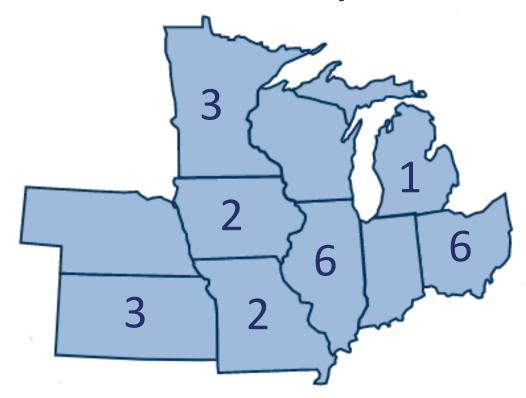
### Participating HPPs



#### **Number of HPPs by Discipline**

- 3 Medicine
- 10 Nursing
- 10 Pharmacy

#### **Number of HPPs by State**



#### **Evaluation Tools**



- Tools to be completed by faculty:
  - Documentation of the Integration Process Survey
  - Faculty Post Integration Survey
- Tools to be completed by students:
  - Student Retrospective Endpoint Assessment

#### Faculty Assessment



## Documentation of the Integration Process Survey

- Documents steps taken to integrate the NHC into each course
  - Which NHC content was integrated and how was it used?
  - Use of learning group functionality

#### **Post Integration Survey**

- Documents experience of teaching NHC
  - Successes and challenges
  - Changes made during the semester
  - Planned changes before teaching next time
  - Feedback on e-learning platform

#### Student Assessment

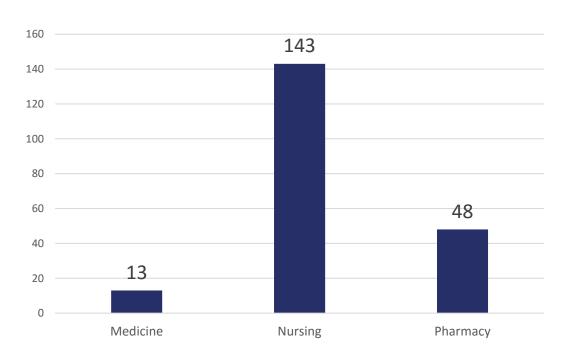


- Student Retrospective Endpoint Assessment
  - Completed online during the last class session in which the integrated NHC is taught
  - Measures students' self-reported knowledge of 6 Core Competencies before and after NHC on a four-point scale ranging from 'poor' to excellent'.
  - Measures students' intent to work with PWH before and after NHC on a five-point scale ranging from 'not at all' to 'a great deal'
  - Students rate functionality aspects of e-learning platform

#### The Numbers



#### # of Courses Integrating the NHC by Health Profession Program between Fall 2019 - Spring 2022 (N=204)



## # of Students enrolled in courses with integrated NHC in between Fall 2019 to Spring 2022

- Medicine: 1988 students
- Nursing: 6128 students
- Pharmacy: 5700 students

Total: 13,816



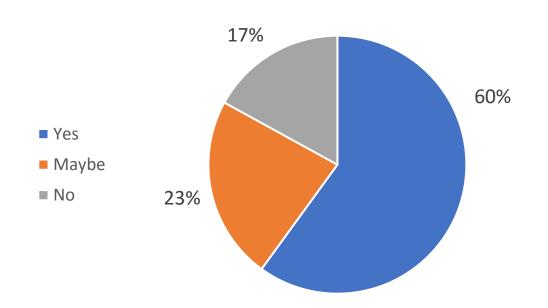
- Faculty used a combination of classroom and asynchronous online learning in first year, but this changed in years 2 and 3 due to the pandemic.
- Asynchronous online learning and self-study were the most used teaching modalities in years 2 and 3
- Many faculty used a combination of two or more teaching modalities
- Online self-study material was the most used material from the NHC, either by itself or in combination with downloadable readings and/or the HIV question bank



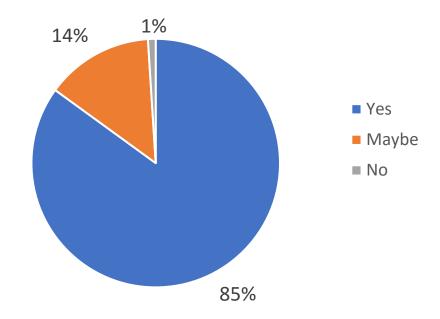
- How do faculty integrate the NHC into their courses?
  - Used images and information from downloadable readings in Powerpoint slides for lectures
  - Flipped classroom approach
  - Assigned materials for self-study, used the learning group function to track students' progress
  - Integrated different portions of the NHC in sequential courses in the program
  - Used questions from the HIV question bank on exams
  - Some issue extra credit for completing assigned topics for self-study



Number of Courses Using the Learning Group Functionality of the E-Learning Platform (N=204)



Number of Courses Encouraging
Students to Create an Account on the
E-Learning Platform and Go Through
the Modules on Their Own (N=86)



#### Post Integration



- Students can access the NHC and go through material on their own
- The NHC is regularly updated and always up-to-date
- NHC provides substantial supplementation on course topics
- Faculty like to be able to track their students' progress

#### Student Survey Results

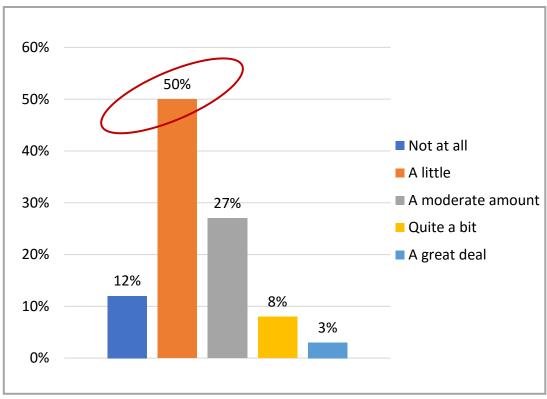


- 5418 students completed survey 39% response rate
- Significant increase in self-reported knowledge across all six modules of the NHC
  - o "poor" most selected answer before studying NHC
  - o "good" most selected answer after studying NHC
- Intent to apply knowledge from NHC to future work setting:
  - Mean rating of 3.35 on a 5-point scale
  - o "A moderate amount" most selected answer
- 86% of students used the e-learning platform

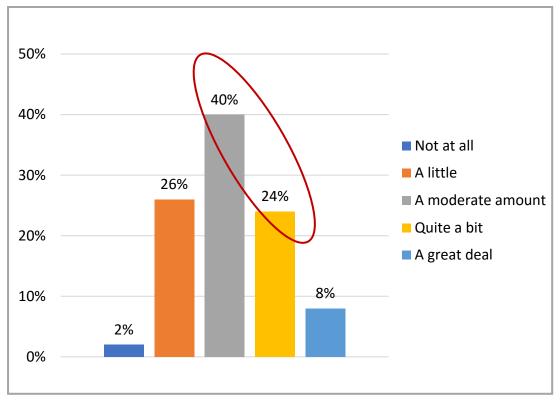
#### Student Survey Results 2



## Intent to Work with PWH in Future Career <u>Before</u> NHC Exposure (N=5410)



## Intent to Work with PWH in Future Career After NHC Exposure (N=5405)



#### Lessons Learned: Feasibility



Content from at least 8 lessons can be integrated in an academic year

All students can access the NHC e-learning platform and participate in online or inperson faculty-led discussion(s)

At least 75% of the students who take courses in which the NHC is integrated create an account on the NHC e-learning platform

At least 10% of the students will complete at least one CE quiz at the end of each lesson

## Lessons Learned: Integration

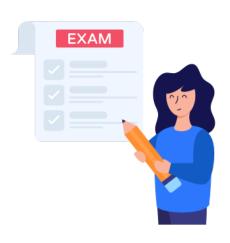








Flipped classroom is an effective teaching strategy



Versatile use of HIV question bank



High satisfaction from faculty and students

## Lessons Learned: Getting Started





Integrating into Medicine programs is more challenging than other disciplines



Tailor topic selection to each discipline



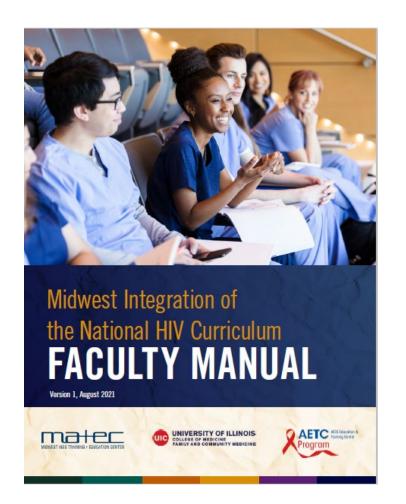
AETC Local Partners are key to connect with and support HPPs

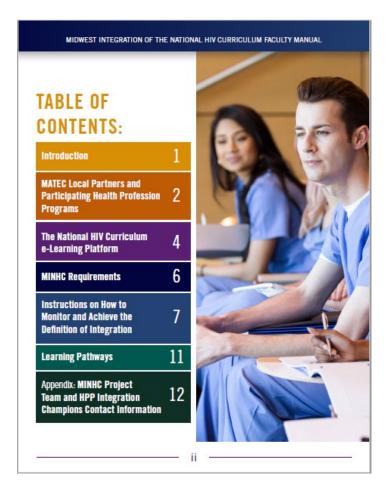


Integration champions are key to successful integration and sustainability

#### MINHC Faculty Manual







MIDWEST INTEGRATION OF THE NATIONAL HIV CURRICULUM FACULTY MANUAL INSTRUCTIONS ON HOW TO MONITOR AND ACHIEVE THE DEFINITION OF INTEGRATION The following instructions and best practices are based on the experience and lessons learned from the faculty who participated in MINHC during the first two years of the project. They are intended to assist the faculty in meeting the MINHC requirements. SIGN IN OR CREATE YOUR OWN ACCOUNT AT THE NHC WEBSITE www.hiv.uw.edu A National HIV Curriculum account allows you to track your individual or group progress towards meeting the core competency knowledge for prevention, screening, diagnosis, and ongoing treatment and care of HIV. BECOME FAMILIAR WITH THE NHC E-LEARNING PLATFORM · Faculty from participating HPPs were required to review all six modules of the NHC and become familiar with the content and all the tools offered by this e-learning platform. For an overview of the NHC and to gain a OVERVIEW better understanding on how to optimally use the platform and its features, you can watch the following video. CHOOSE NHC CONTENT: MODULES AND LESSONS · Map the learning objectives of the course with specific content Consider the competencies identified by your accrediting agency to determine which content is essential for your students. · Assess gaps in teaching HIV care and prevention in existing curricula. · Assess areas that can be enhanced when teaching HIV care and prevention in existing curricula. . Below are the modules HPPs used most when integrating NHC content in - Medicine: Screening and Diagnosis, ART, and Co-Occurring Conditions Nursing: Basic HIV Primary Care, Prevention of HIV, and Key Pharmacy: Screening and Diagnosis and ART



## MATEC Local Partner

Nicole Benson – Principal Program Manager MATEC Minnesota/Iowa

#### MATEC-MN/IA and MINHC



- MATEC-MN/IA: The role of the Local Partner (LP) in MINHC
  - Meet with HPPs quarterly during the three academic years of implementation between 2019-2022.
  - Provide support to the faculty throughout the project, as needed
- It's really all about people and relationships

#### Quarterly Meetings with Faculty



#### Objectives:

- Assessing faculty development and technical assistance needs as they relate to HIV care and prevention as well as the NHC
- Soliciting observations or suggestions for enhancing the NHC e-learning platform
- Answering questions and providing resources
- Assistance with data collection for the project
- Opportunities to learn more about faculty's HIV-related professional development goals and interests, and identified opportunities for collaboration

#### Participating HPPs 2



- How it started:
  - Began with 6 HPPs from 4 academic institutions
    - University of Minnesota Medical School left the project
  - Some existing and new relationships









#### Participating HPPs 3



- How it's going:
  - Department of Nursing at Briar Cliff University
  - College of Pharmacy at University of Iowa
  - College of Nursing and Health Sciences at Metropolitan University
  - School of Nursing at University of Minnesota
  - College of Pharmacy at University of Minnesota



- Heather Stehr, ARNP, FNP-BC, AAHIVS
  - Assistant professor at Briar Cliff University in the graduate nursing department, and an Advanced Registered Nurse Practitioner at the Siouxland Community Health Center.
  - Expressed interest in professional development both to support her role in MINHC and as a clinician
  - Prior to MINHC, was no in the "MATEC tent"



- Heather Stehr, ARNP, FNP-BC, AAHIVS
  - Became a MATEC "Lifelong Learner"
  - Accepted into and completed MATEC's Clinician Scholars Program
  - Coordinated 12 hours of shadowing at HIV care settings in the Twin Cities
  - Attended MATEC's HIV Intensive Nursing Review and other MATEC training programs
  - MATEC supported her in seeking AAHIVM Specialist Certification and AANP membership.



- Melanie Nicol, PharmD, PhD
  - A clinical pharmacologist and associate professor in the College of Pharmacy at the University of Minnesota
  - MATEC Faculty/HIV subject matter expert for MATEC
  - A champion for the HIV Interprofessional Education Project



- Melanie Nicol, PharmD, PhD
  - Interested in learning more about how clinics can implement long-acting injectable ART, which led to a collaboration with a clinical pharmacy specialist from Iowa.
    - Together they facilitated a webinar in April 2022, Cabotegravir and Rilpivirine: An Update on Long-Acting Injectable Antiretroviral Treatment
  - This is not necessarily "traditional" faculty development but wouldn't have been possible without the MINHC project

#### Other examples of support



- Post-doctoral teaching associate at the UMN College of Pharmacy
  - Worked on the MINHC project in her pursuit of American Academy of HIV Medicine (AAHIVM) HIV Pharmacist certification
  - Provided a one-year membership with the AAHIVM to give access to Continuing Education (CME/CE) opportunities
  - Introduced her to multiple clinicians and shadowing opportunities

#### Lessons Learned



- Technical assistance needs were minimal
- Faculty development needs varied greatly
- Invited all HPP faculty into the "MATEC tent" by inviting them to programming
- Provided an individualized approach for the faculty who needed more.
- While customized and small, our interventions were powerful and encouraged faculty



## Health Professions Program

Pamposh Kaul, MD – Clinical Director and Clinical Professor University of Cincinnati, College of Medicine

#### Integration in Ohio



- University of Cincinnati
  - College of Nursing
    - Lead faculty: Dr. Joe Perazzo
  - College of Pharmacy
    - Lead Faculty: Dr. Siyun Liao
  - College of Medicine
    - Lead Faculty: Dr. Pamposh Kaul and Dr. Keith Luckett
- University of Toledo
  - College of Pharmacy
    - Lead Faculty: Dr. Eric Sahloff
  - College of Medicine
    - Lead Faculty: Dr. Joan Duggan
- Cedarville University
  - School of Pharmacy
    - Lead Faculty: Dr. Zachary Jenkins







## Integration Timeline – University of Cincinnati (UC)



- Year 1 (2018 2019): Planning and discussing implementation process
  - Meetings with faculty and MATEC staff
  - After becoming familiarized with the NHC, began to go through the modules to select which topics to focus on
  - Topics were chosen based on student knowledge
    - Chose topics that may be new concepts to students
- Year 2 (2019 2020): Integration begins
- Year 3 (2020 2021): Integration continues virtually due to COVID-19
- Year 4 (2021 2022): Integration continues both virtually and in person

## Integration at UC College of Medicine



- College of Medicine has 2 different tracks available for medical students participating in MINHC
  - HIV and AIDS parts I and II
    - Instructor: Dr. Keith Luckett
    - 2-hour lecture
      - Occurs once during the spring semester
      - 2<sup>nd</sup> year med students (185 pre-clinical students during 2022)
      - Lecture is offered in person and virtually
    - Dr. Luckett incorporates all the modules from the NHC during the lecture
  - Super Tuesday Lectures
    - Instructor: Dr. Pamposh Kaul

#### Super Tuesday Lectures



- Super Tuesday Lectures
  - 1-hour long lectures held every other month where professors are invited to speak on a selected topic to med students
  - o 346 3<sup>rd</sup> year med students involved throughout 2020 2022
- Final Integration format
  - Students received an email with instructions on how to set up an account using the NHC
    - Instructions were sent out 1 week in advance to the Super Tuesday lecture date
    - Students received a reminder email a day before the lecture

#### Super Tuesday Lectures 2



- Final Integration Format (Continued):
  - Students received an overview of the NHC and viewed instructions on the day of during the PowerPoint presentation
  - Students participated in the lecture
  - Following the lecture, students were provided with the evaluation link and were encouraged to continue use of the NHC

#### Midwest Integration of National HIV Curriculum (MINHC)

#### National HIV Curriculum (NHC)

- Free online continuing education for novice-to-expert
- Structured around core competencies identified by HIV experts
- Good tool to guide you in your future practice

#### Please create an account with the NHC:

- Go to www.hiv.uw.edu
- Go to "Register" in the upper right corner of the screen.
- Follow prompts to complete registration process. You will not need CE credit, so click "no" when asked.
- Once registered, go to your account in the upper right corner of the screen and click "Join Group"
- Use access code: 9hywkacm9c
- Once you join the group, go to "Question Bank" using the navigation menu then go to "Immunizations in Adults" listed under the "Basic HIV Primary Care" section and open "Question 1"

A link to the Evaluation Survey will be sent by email following this lecture.





Example of instructions slide that students viewed the day of the presentation

### **Topics Covered**



- Basic HIV Primary Care Module
  - Initial Laboratory Evaluation
  - Patient communication
  - Immunizations in Adults
    - Question bank was incorporated into lecture
- Screening and Diagnosis Module
  - Acute Seroconversion
  - Natural History of HIV Infection
- Antiretroviral Therapy Module
  - Antiretroviral Medications and Initial Therapy
- Case studies:
  - HIV Screening Recommendations
  - Basic HIV Primary Care
  - Acute HIV Diagnosis



Snapshot of National HIV Curriculum Website

#### Results of the Integration



- Definition of the Integration of the NHC:
  - Content from at least 8 lessons from any of the six modules of the NHC elearning platform must be selected by HPPs to be integrated into courses in which HIV/AIDS content is taught.
  - At least 75% of the students in courses with integrated NHC content will create an account on the NHC e-learning platform
  - At least 10% of the students who participated in courses with integrated NHC content in a given academic year (i.e., spring, summer, and fall semesters/quarters) will complete at least one CE quiz at the end of a lesson through the NHC e-learning platform

#### Results of the Integration 2



- MINHC Requirements were met during 2021-2022
  - All students completed the assigned lessons
  - 88% of students created an NHC account
  - o 19% of students completed at lest 1 CE quiz and qualified for a certificate of completion

Lecture Date	Number of Students	Accounts Created	Quizzes Started	Quizzes Completed
9/21/2021	25	25	23	6
11/2/2021	25	21	0	0
1/11/2022	25	25	9	1
3/8/2022	25	17	7	2
5/24/2022	25	22	20	15
Total	125	110	59	24

2021—2022 MINHC Summary Table

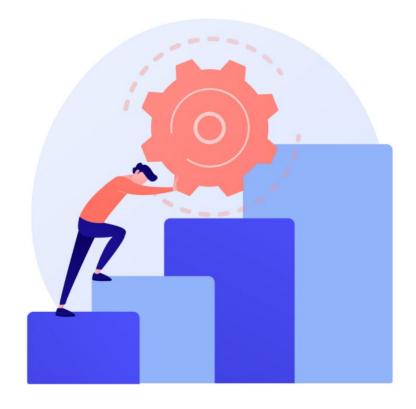


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### Challenges



- Professors interacted as guest speakers for the medicine courses
- New faculty at the COM
- New staff at MATEC Cincinnati
- COVID-19



### Plans for Improvement



- Utilizing emails and introduction slides to encourage students to create an NHC account
  - Having additional faculty and staff present during lectures to help students create accounts
  - Creating onboarding process and videos that shows students how to access, use, and create an NHC account
  - Giving students a brief overview of what MINHC is
- Establishing protocols to educate new faculty and staff on MINHC requirements
  - Encouraging involvement of staff during lectures and meetings to increase knowledge of requirements
  - Meeting with staff and faculty quarterly to discuss MINHC expectations, challenges, and strategies to address those challenges

#### Questions



#### We are here to answer your questions now or after!

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