

Integration of the National HIV Curriculum at Accredited Doctor of Pharmacy Programs

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Background

- The HIV workforce is diminishing across all sectors of healthcare.
- In 2018, the Health Resources and Services Administration (HRSA) provided a funding opportunity to integrate the National HIV Curriculum (NHC) e-learning platform into health professions programs in medicine, nursing, and pharmacy to improve student knowledge of HIV healthcare.
- The NHC is a free website (www.hiv.uw.edu) that provides ongoing, up-to-date information for health care professionals to meet the core competency knowledge for HIV prevention, screening, diagnosis, and ongoing treatment and care of people with HIV.

The National HIV Curriculum

| | | |
|--|---|---|
| Module 1 Screening and Diagnosis | Module 2 Basic HIV Primary Care | Module 3 Antiretroviral Therapy |
| Module 4 Co-Occurring Conditions | Module 5 Prevention of HIV | Module 6 Key Populations |

- Between 2019-2022, ten accredited Doctor of Pharmacy programs participated in the Midwest Integration of the National HIV Curriculum (MINHC) project.

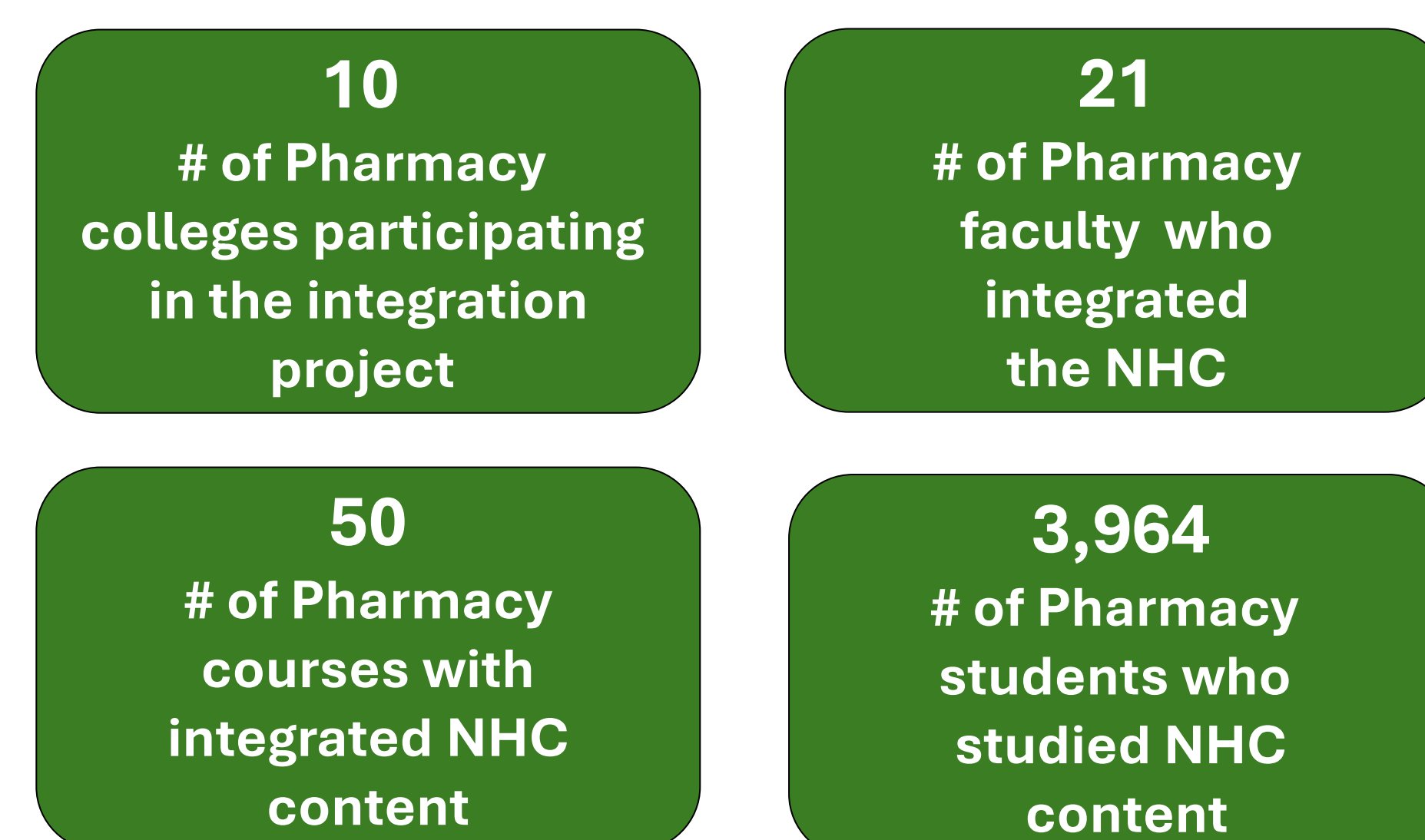
Purpose

- Enhance the quality of HIV education at accredited Doctor of Pharmacy programs by integrating the NHC into their curricula and stimulate student interest in HIV healthcare when entering the workforce.
- Evaluate data collected from both student and faculty perspectives of the NHC.
- Report back to the funding agency (HRSA) our findings.

Methods

- Evaluation of pre and post surveys from faculty who integrated the NHC into their curriculum.
- Evaluation of endpoint assessments of NHC from students.
- Minimum requirements established by HRSA included:
 - Faculty had to integrate at least 8 lessons from NHC modules
 - At least 50% of students had to generate an account with the NHC
 - At least 10% of students will complete a quiz at the end of one NHC lesson and pass with a grade of 80%
- The program also offered a MINHC certificate for students who finished 8 selected lessons and took the quiz at the end of each lesson, passing with at least 80% correct.

Results



Mean Ratings of Self-Reported Knowledge Before and After Studying Material from the NHC by Module (N=2072)

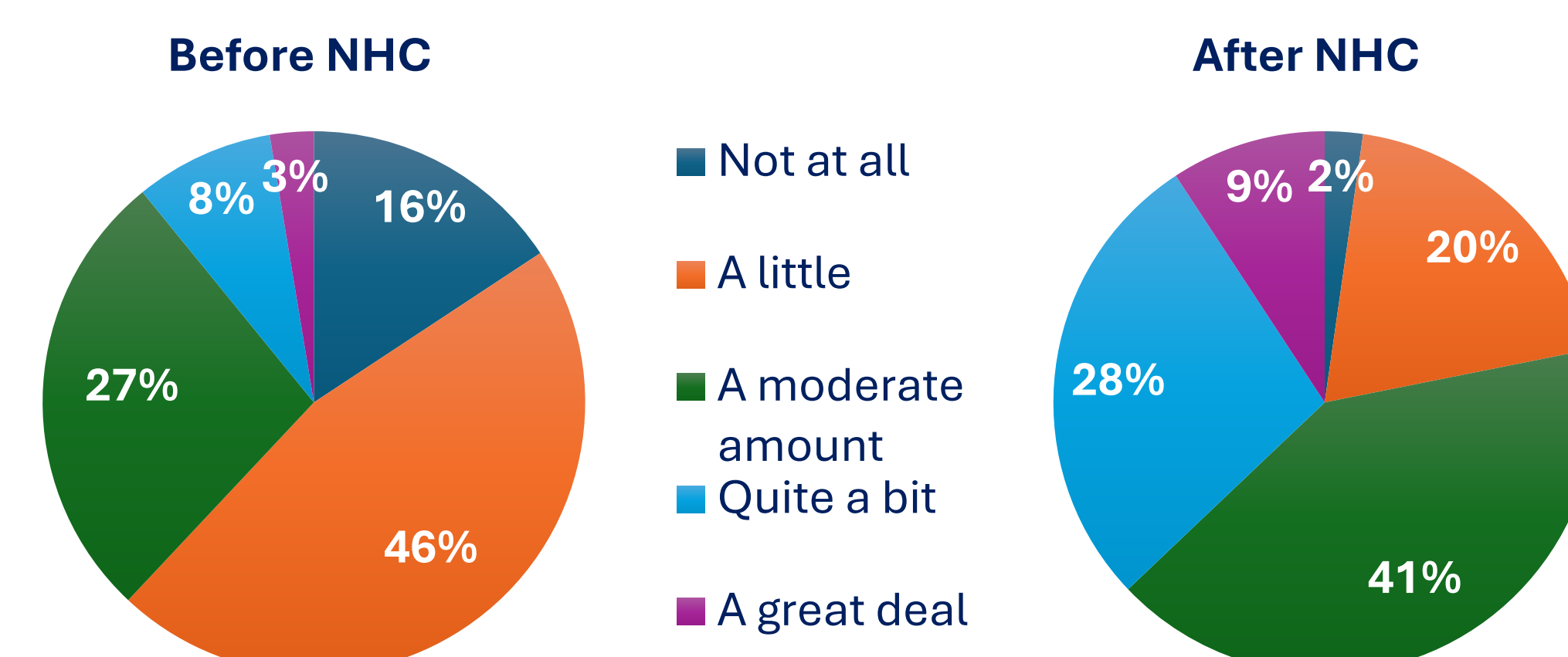
| NHC Module | Before NHC | After NHC |
|-------------------------|------------|-----------|
| Screening and Diagnosis | 1.59 | 3.17 |
| Basic HIV Primary Care | 1.54 | 3.13 |
| Antiretroviral Therapy | 1.52 | 3.16 |
| Co-Occurring Conditions | 1.52 | 3.12 |
| Prevention of HIV | 1.67 | 3.27 |
| Key Populations | 1.59 | 3.18 |

Rating scale: 1 = poor, 2 = fair, 3 = good, 4 = excellent

Pharmacy students who intent to apply knowledge from the NHC in their future work either "quite a bit" or "a great deal" **59.2%**

"I think the NHC is very well organized and helpful in learning!"
~ Pharmacy student

Pharmacy Students' Intent to Provide HIV Care and Prevention Services in Future Career Before and After NHC Exposure (N=5445)



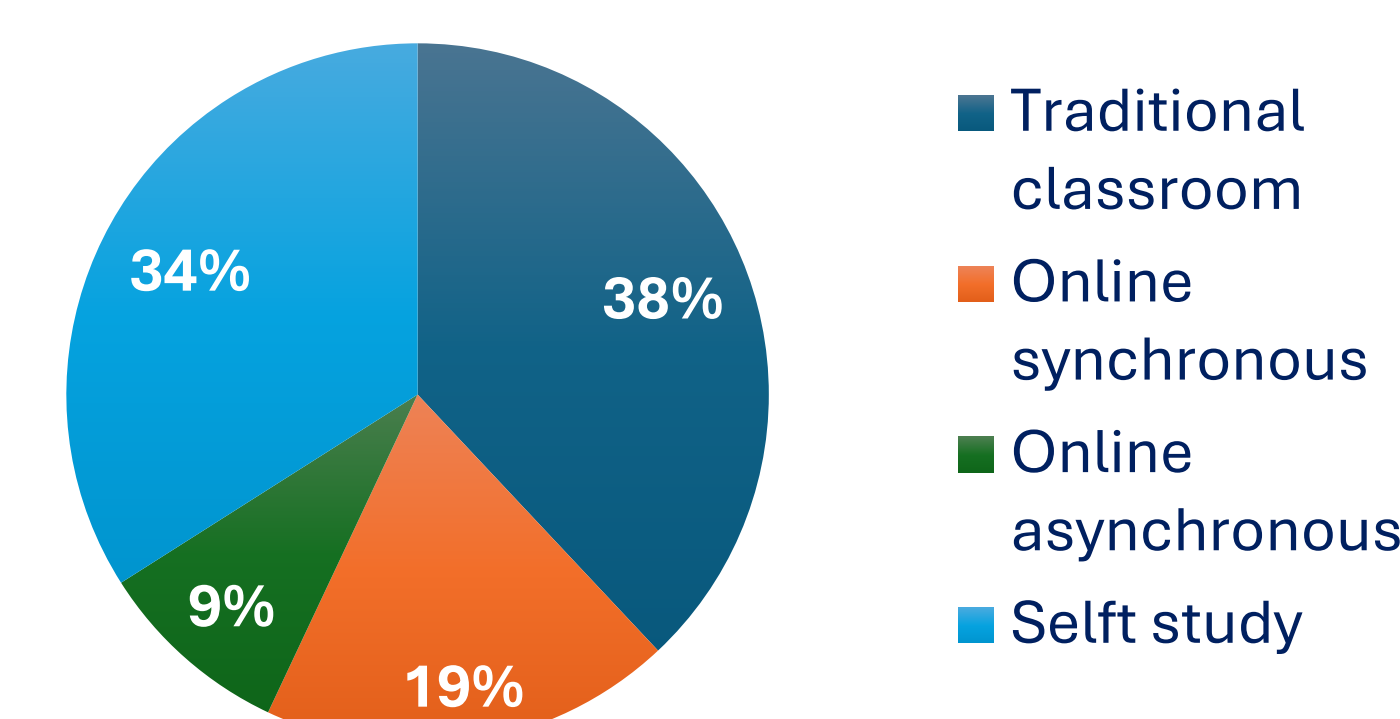
Percentage of Pharmacy Courses Using Different NHC Integration Strategies (N=50)

| Integration Strategy | % of Courses |
|---|--------------|
| Use images and information from the NHC to incorporate in lecture | 30% |
| Assign reading material from the NHC in preparation for class sessions | 44% |
| Use a flipped classroom approach of self-study before class followed by discussion or case studies in class | 20% |
| Use questions from the NHC's HIV question bank for in-class discussion, assessment, or exams | 20% |
| Create a learning group on e-learning platform and track students' progress | 68% |
| Assigning on-line self study with or without credit for completion | 38% |

Most integrated NHC lessons:

- ❖ Antiretroviral medications and initial therapy
 - ❖ Adverse side effects
- ❖ Management of virologic failure
 - ❖ Drug interactions
- ❖ Opportunistic infections
- ❖ Pre-exposure prophylaxis
- ❖ Post-exposure prophylaxis

Selected Modalities for Teaching NHC Content Among 50 Pharmacy Courses



Courses in which the NHC was integrated:
Pharmacotherapy
Infectious Disease
Pharmacy Residency
Advanced Pathophysiology
Management of the HIV patient

Conclusion

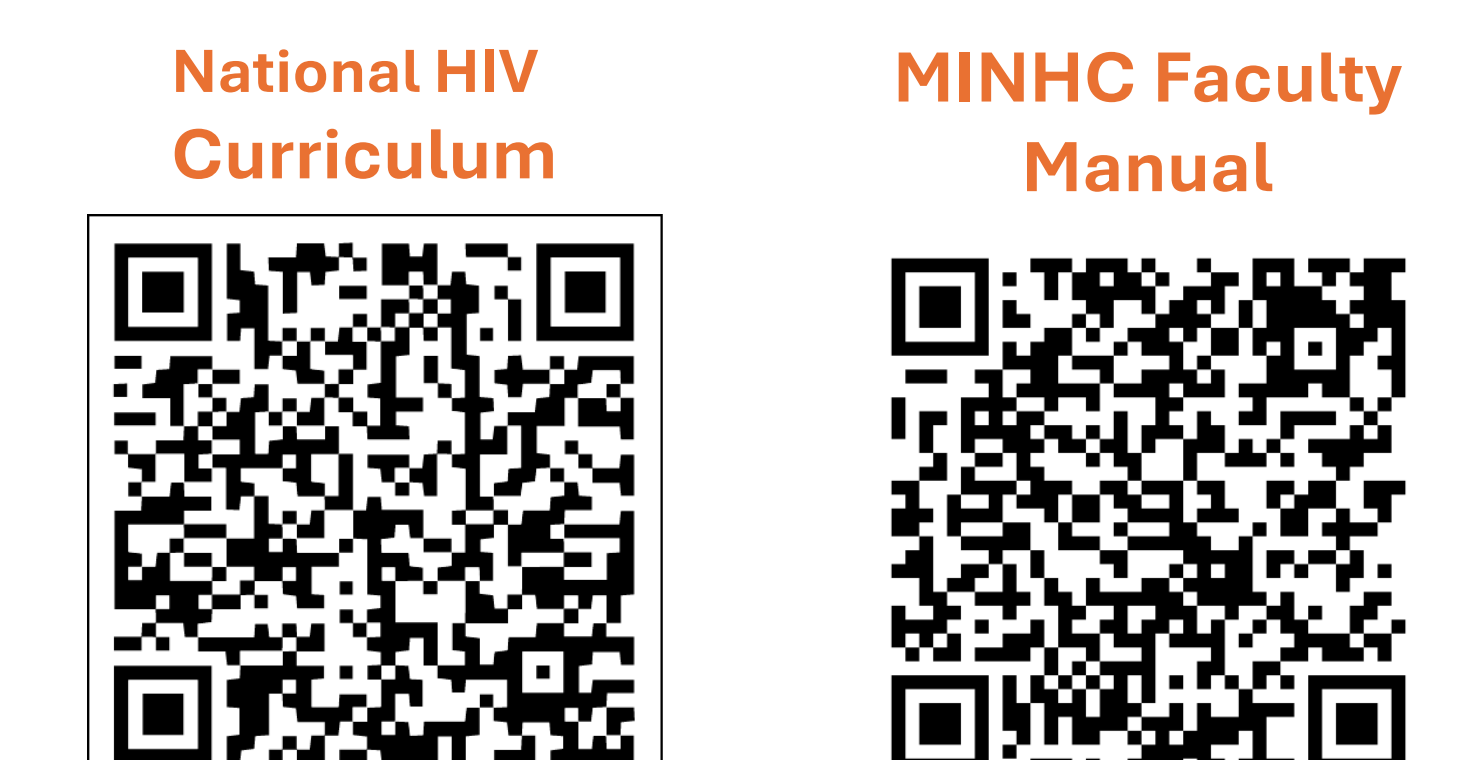
- Close to 4,000 students from 10 accredited Doctor of Pharmacy programs studied content from the NHC between 2019 and 2022.
- Students increased their knowledge of HIV care and prevention on average from "poor/fair" to "good" after studying material from the NHC.
- Intent to provide HIV prevention and care services "quite a bit" or "a great deal" increased from 11% before to 37% after studying NHC content.
- Faculty used a combination of multiple modalities to teach the integrated NHC content to students, with traditional classroom and self-study being the most popular.
- The NHC lends itself to integration into a variety of pharmacy courses.
- Creating learning groups on the NHC's e-learning platform to monitor students progress through the curriculum and assigning the NHC as reading material in preparation for class session were the most used integration strategies.

Implications for Practice

- Due to the success of MINHC between 2019 - 2022, MATEC has been awarded funding to integrate the NHC into 24 health profession programs between 2022 - 2027. Four new accredited Doctor of Pharmacy programs have been added for this new cycle.
- Follow-up with students who enter in the workforce caring for persons living with HIV is needed to document long-term outcomes.

100% of pharmacy programs plan to keep using the NHC in the future!

Scan the QR code to access



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