



VIRTUAL
**2020 NATIONAL
RYAN WHITE
CONFERENCE ON**
HIV CARE & TREATMENT

Lessons Learned from Integrating the National HIV Curriculum (NHC) at 24 Midwestern Health Profession Programs

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Overview



- Background
- Project description
- Evaluation plan
- Results
- Success stories
- Lessons learned

- Why the need to integrate HIV into the curricula of Health Profession Programs?
 - PLWH 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
 - Screening & diagnosis
 - Basic HIV primary care
 - ART
 - Co-occurring conditions
 - Prevention of HIV
 - Key populations
- Up-to-date information on HIV care and treatment
- Suitable for novice to expert health care professionals

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
- 2 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 institutions 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 accredited HPPs in HHS Regions V and VII
 - 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

- 4 Medicine
- 10 Nursing
- 10 Pharmacy

- Number of HPPs by State



Evaluation Plan



- Process Evaluation:
 - # of courses with integrated NHC
 - # of students and faculty trained
- Outcome Evaluation:
 - HPP level:
 - ↑ Capacity how to integrate the NHC into HPPs' curricula
 - ↑ Understanding of best practices
 - Faculty level:
 - ↑ KSBs on how to teach students about HIV care using the integrated NHC
 - Student level:
 - ↑ KSBs on how to diagnose manage, and treat HIV
 - ↑ Intent to provide care to PLWH

Evaluation Tools



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

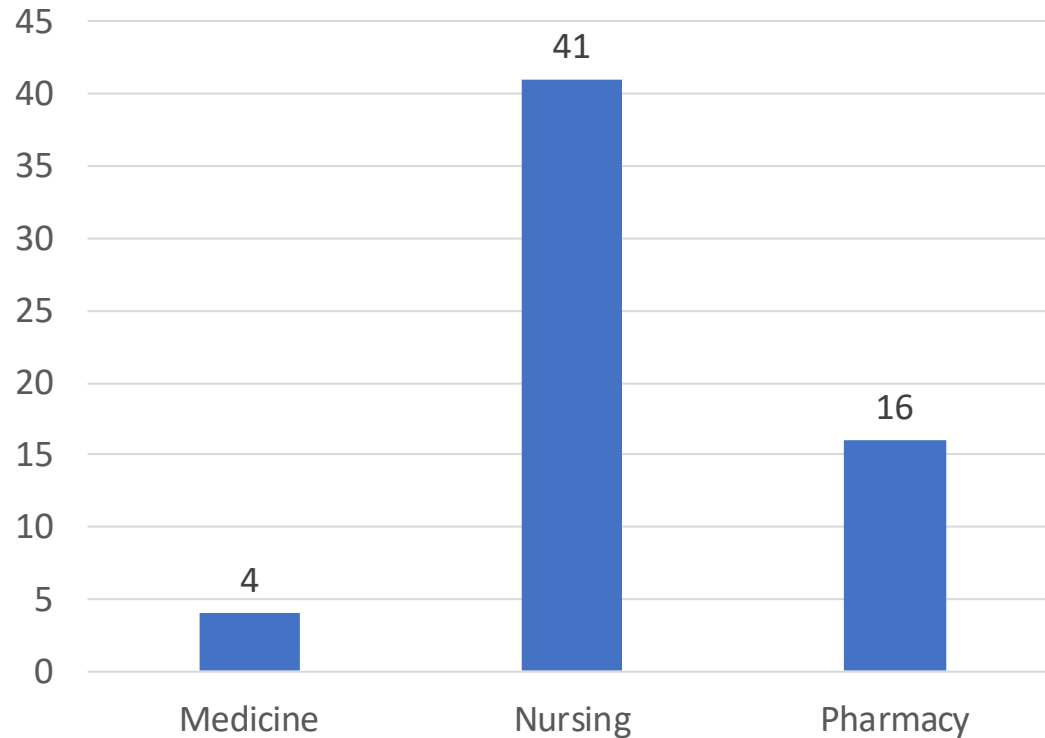
- Documentation of the Integration Process Survey
 - Collected prior to the start of each course
 - Documents steps taken to integrate the NHC into each course
 - Which modules?
 - Which topics?
 - What materials?
 - How were materials used?
 - Use of learning group functionality

- Post Integration Survey
 - Completed after teaching the integrated NHC content
 - Documents experience of teaching NHC
 - Successes
 - Challenges
 - Changes made during the teaching of the integrated NHC content
 - Planned changes before teaching the integrated NHC next time
 - Feedback on e-learning platform

- 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
 - Measures students' intent to work with PLWH before and after NHC
 - Students rate aspects of e-learning platform

The Numbers

of Courses Integrating the NHC by Health Profession Program in AY '19-'20 (N=61)



of Students enrolled in courses with integrated NHC in AY '19-'20:

- Medicine: 771 students
- Nursing: 1873 students
- Pharmacy: 1283 students

Total: 3927

Planning and Evaluating the Integration

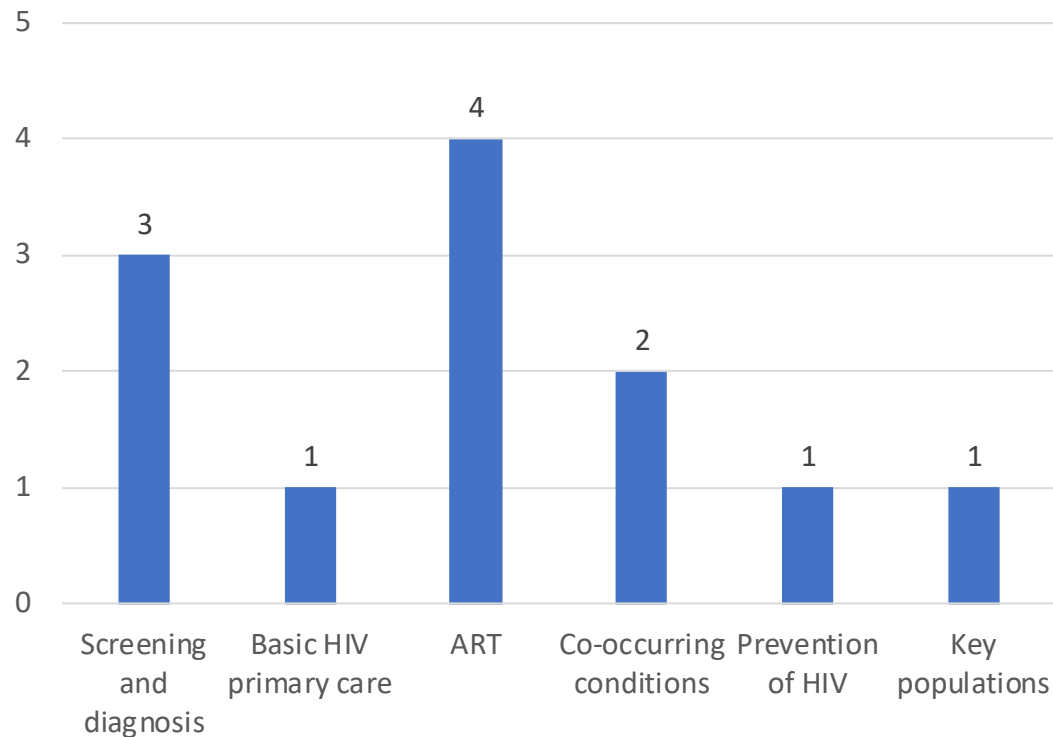
Fall 2019 & Spring 2020



- Results of pre-integration survey by discipline for Fall 2019 and Spring 2020
 - What topics did they plan to integrate?
 - What materials did they plan to use from each topic?
 - How did they plan to use the material from each topic?
- Results of the post integration survey by discipline for Fall 2019 and Spring 2020
 - What went well?
 - What challenges were encountered?
 - Future changes

Medicine Pre-Integration

Number of Medicine Courses with Integrated Content by NHC Module (N=4)



- Topics:

- Epidemiology of HIV (3)
- HIV screening (2)
- Diagnostic testing (3)
- Acute and recent HIV infection (3)
- ART initial therapy (4)
- Adverse side effects (3)
- Switching ART (2)
- Opportunistic infections (2)

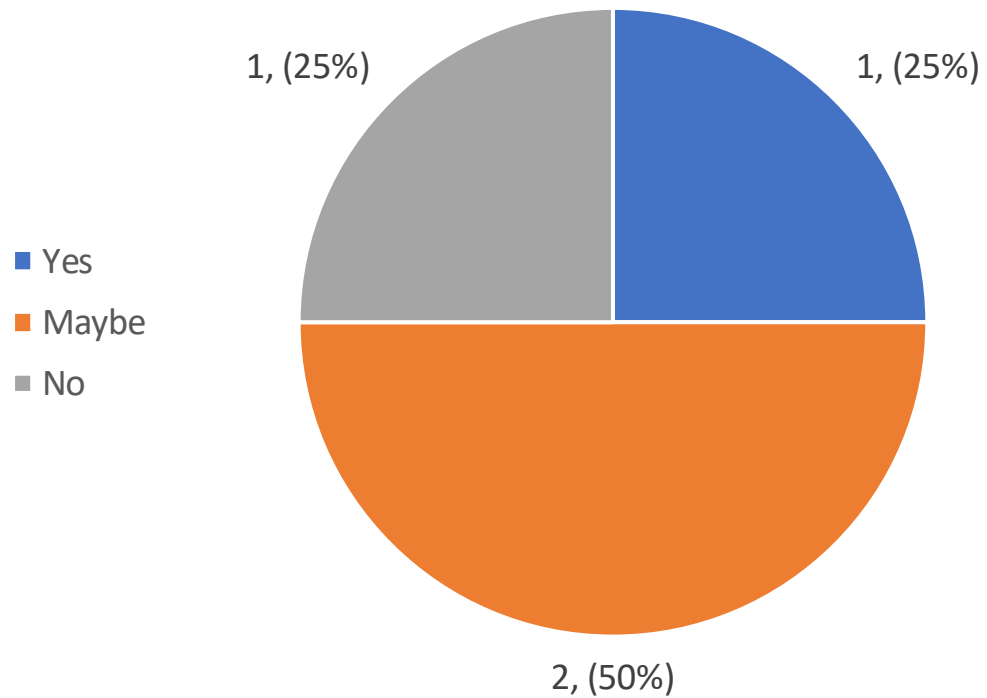
Medicine Pre-Integration



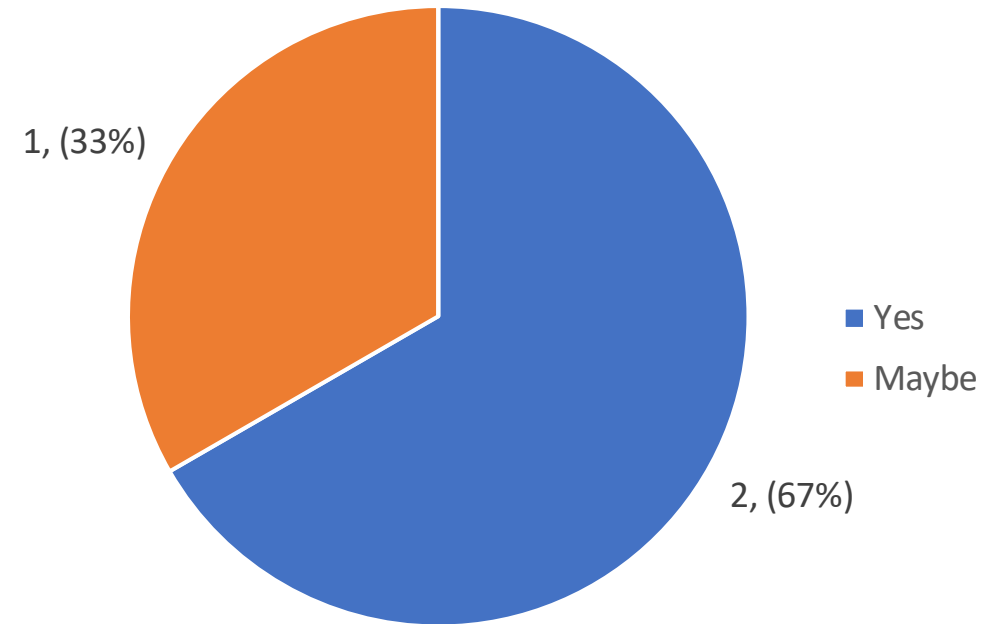
- Combination of classroom and asynchronous online learning
- Online self-study, downloadable readings, HIV question bank
- How was the integration done?
 - Images included in Powerpoint slides for lecture
 - Topics assigned as pre-reading prior to class time
 - Pictures from ART modules were very helpful to include in slides on classes of medication
 - Question bank used to direct learning

Medicine Pre-Integration

Number of Courses Using the Learning Group
Functionality of the E-Learning Platform (N=4)



Number of Courses Encouraging Students to
Create an Account on the E-Learning Platform and
Go Through the Modules on Their Own (N=3)



Medicine Post Integration



- Integration went well for all 4 courses
 - Pre-reading
 - ART, side effects, PrEP
 - Well received by students
- No barriers encountered
- Planned changes for the future:
 - More interactive teaching format
 - Learning tool throughout med school
 - Sign up live during lecture

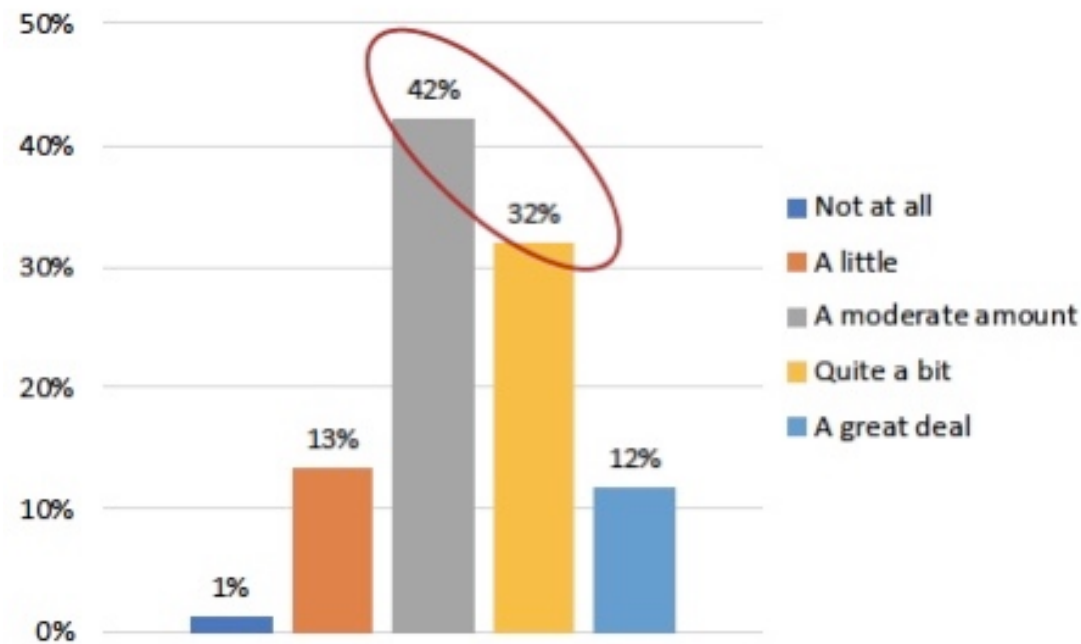
Medical Students Survey Results



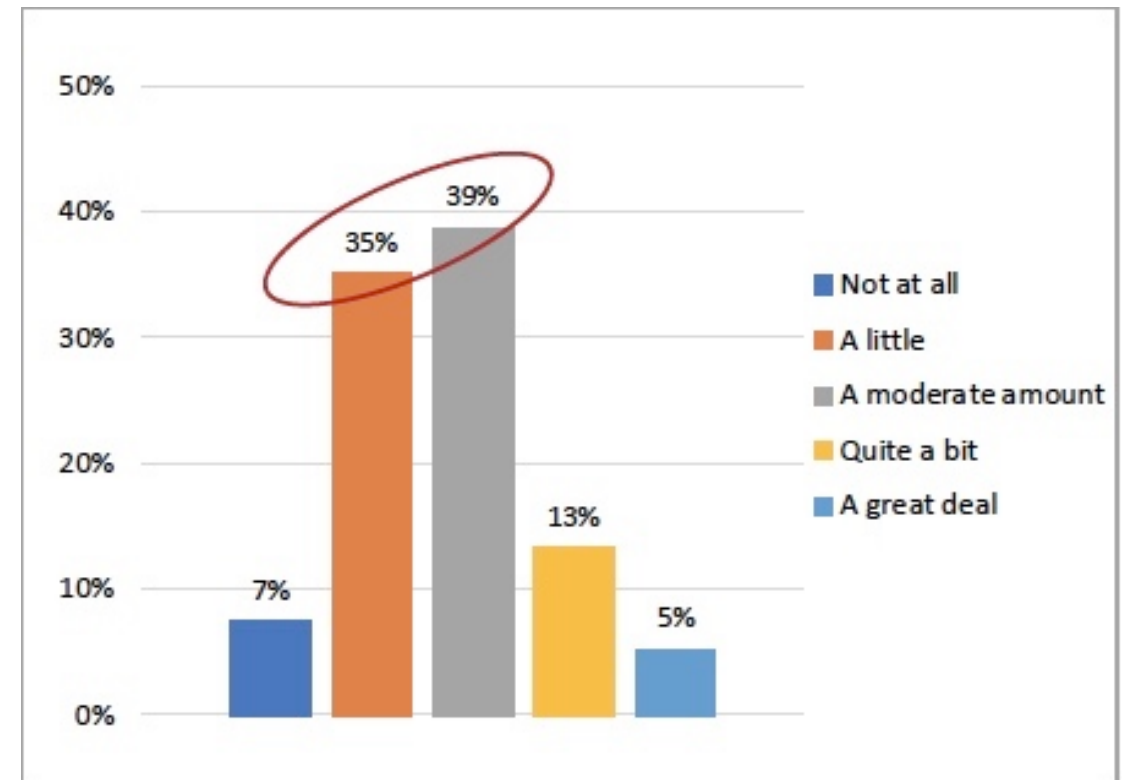
- 188 students completed survey – 24% response rate
- Significant increase in self-reported knowledge across all six modules of the NHC
 - “poor” most selected answer before studying NHC
 - “excellent” most selected answer after studying NHC
- Intent to apply knowledge from NHC to future work setting:
 - Mean rating of 3.61 on a 5-point scale
 - “Quite a bit” most selected answer
- 75% of students used e-learning platform

Medical Students Survey Results

Intent to Work with PLWH in Future Career Before NHC Exposure (N=188)

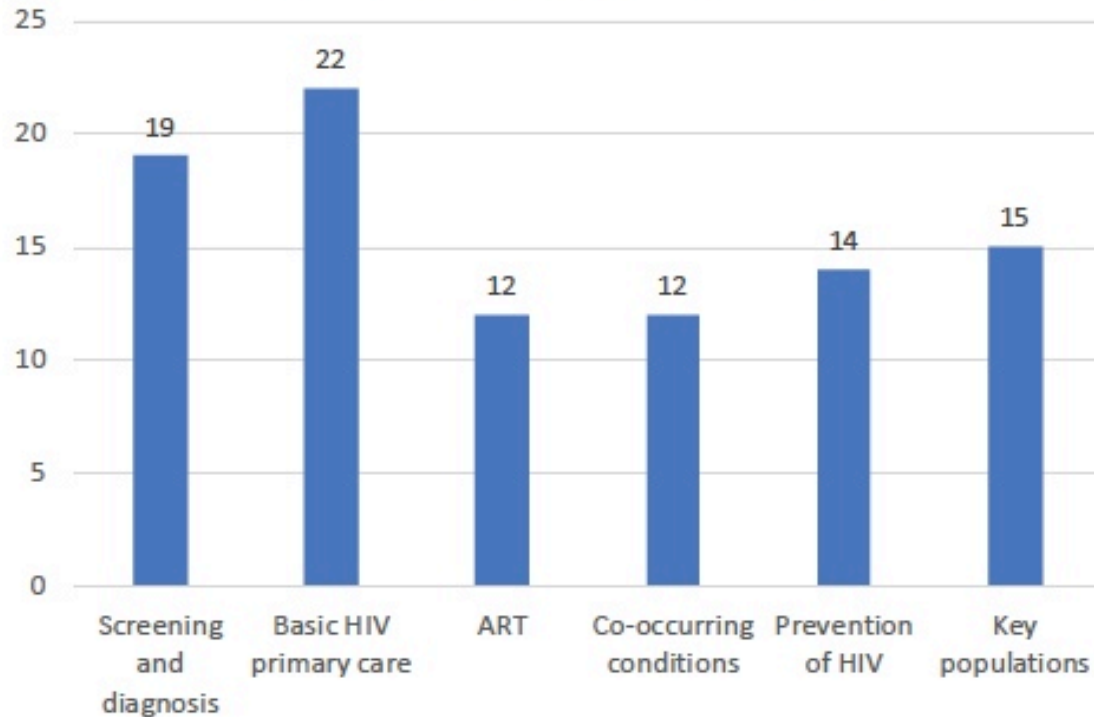


Intent to Work with PLWH in Future Career After NHC Exposure (N=188)



Nursing Pre-Integration

Number of Nursing Courses with Integrated Content by NHC Module (N=41)



- Topics:
 - Epidemiology of HIV (17)
 - HIV screening (18)
 - Diagnostic testing (18)
 - Acute and recent HIV infection (18)
 - Linkage to HIV care (18)
 - Initial evaluation (20)
 - Primary care management (17)
 - Retention in HIV care (13)
 - PrEP (12)

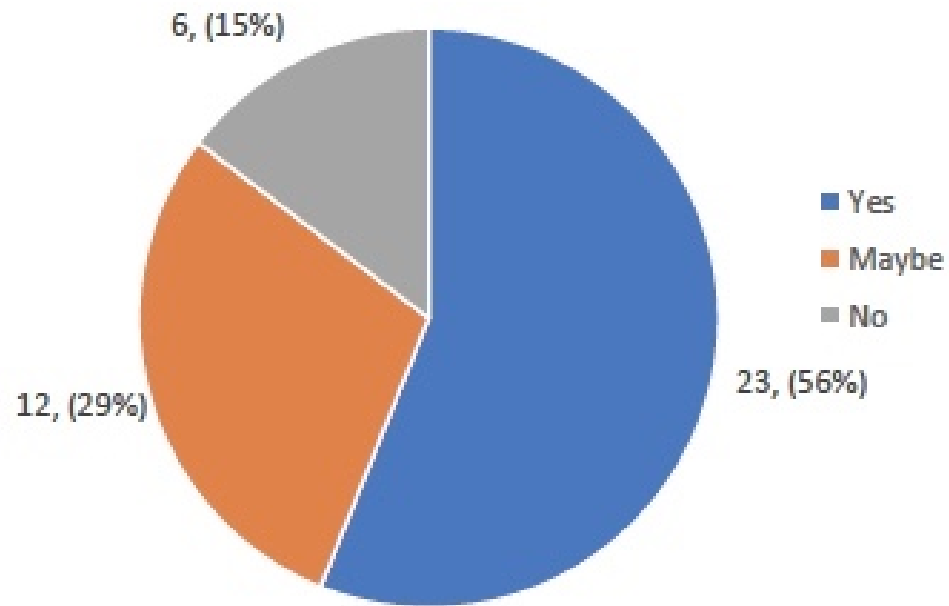
Nursing Pre-Integration



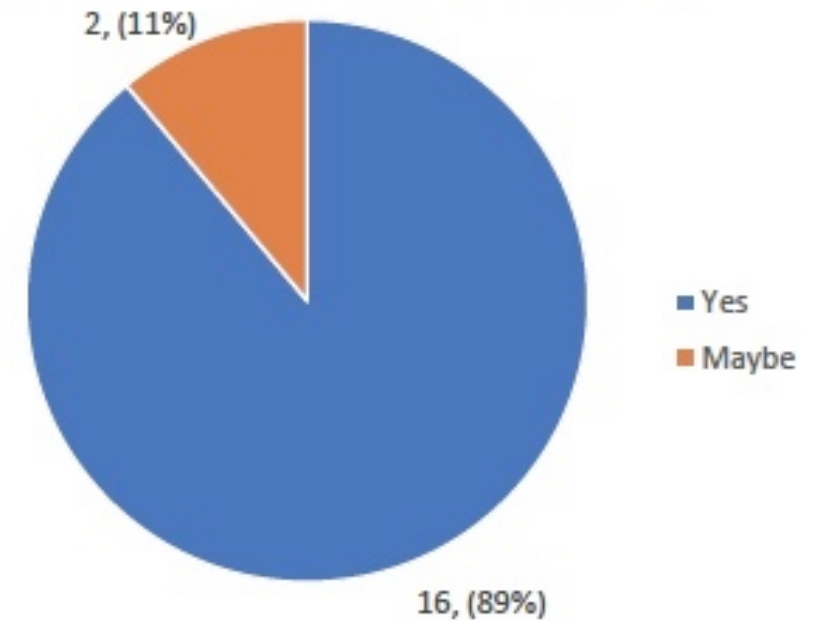
- Online asynchronous learning most used learning modality
- Online self-study most used material from NHC
- How was the integration done?
 - Flipped classroom
 - HIV question bank used for exam questions
 - NHC material integrated in lecture content
 - Online progress tracked
 - Course credit / CNE credit

Nursing Pre-Integration

Number of Courses Using the Learning Group Functionality of the E-Learning Platform (N=41)



Number of Courses Encouraging Students to Create an Account on the E-Learning Platform and Go Through the Modules on Their Own (N=8)



Nursing Post Integration



- What worked well:
 - Ability for students to go through the modules at their own pace
 - Flipped classroom format
 - Tracking students' progress through the learning group
 - Excellent content
- What did not work well
 - Switching from in-person to online due to COVID-19
 - Navigation of website required tutorial for students
 - Manually enrolling students in learner group
 - Students found topics long, and in some cases overwhelming

Nursing Post Integration



- Barriers:
 - Many HPPs added an extra week of spring break due to COVID-19
 - Lack of control over whether students would complete the assigned modules
 - Some students registered for the e-learning platform with their personal email
- Planned changes for the future
 - Space content out over longer time period
 - Use more NHC content and less from the course textbook
 - Add more interactive content such as class discussions and case studies
 - Assign points for completion of assigned material

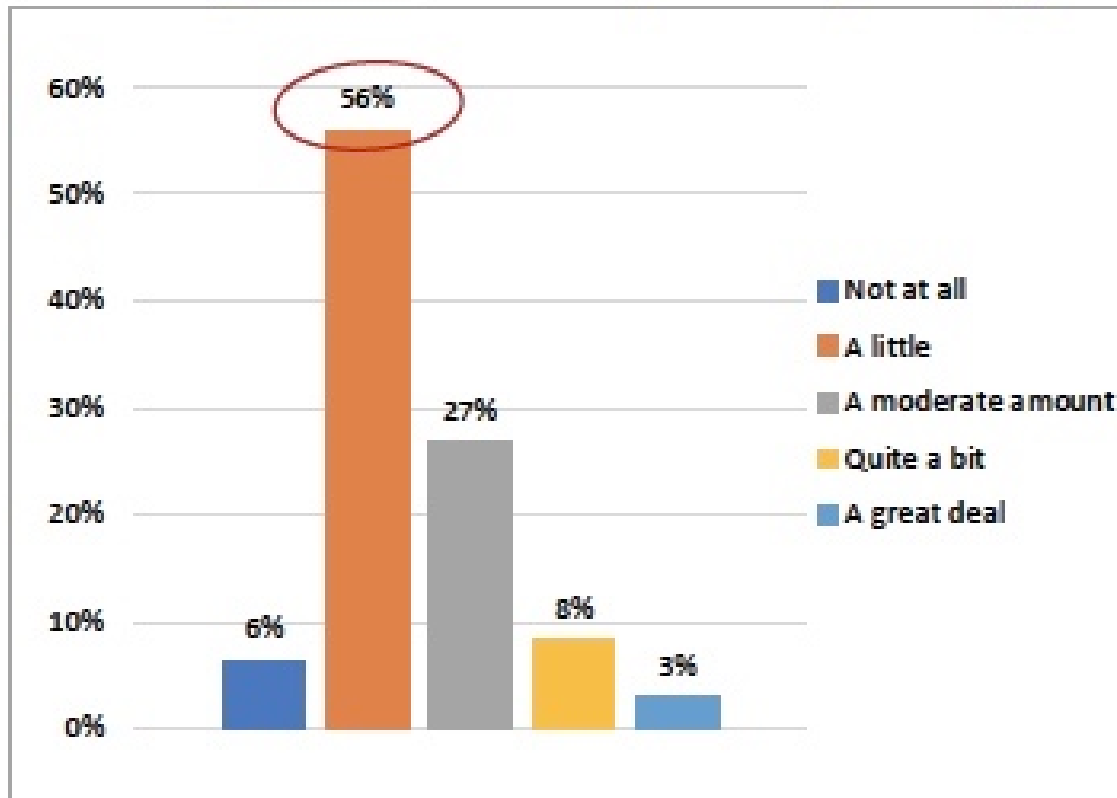
Nursing Students Results



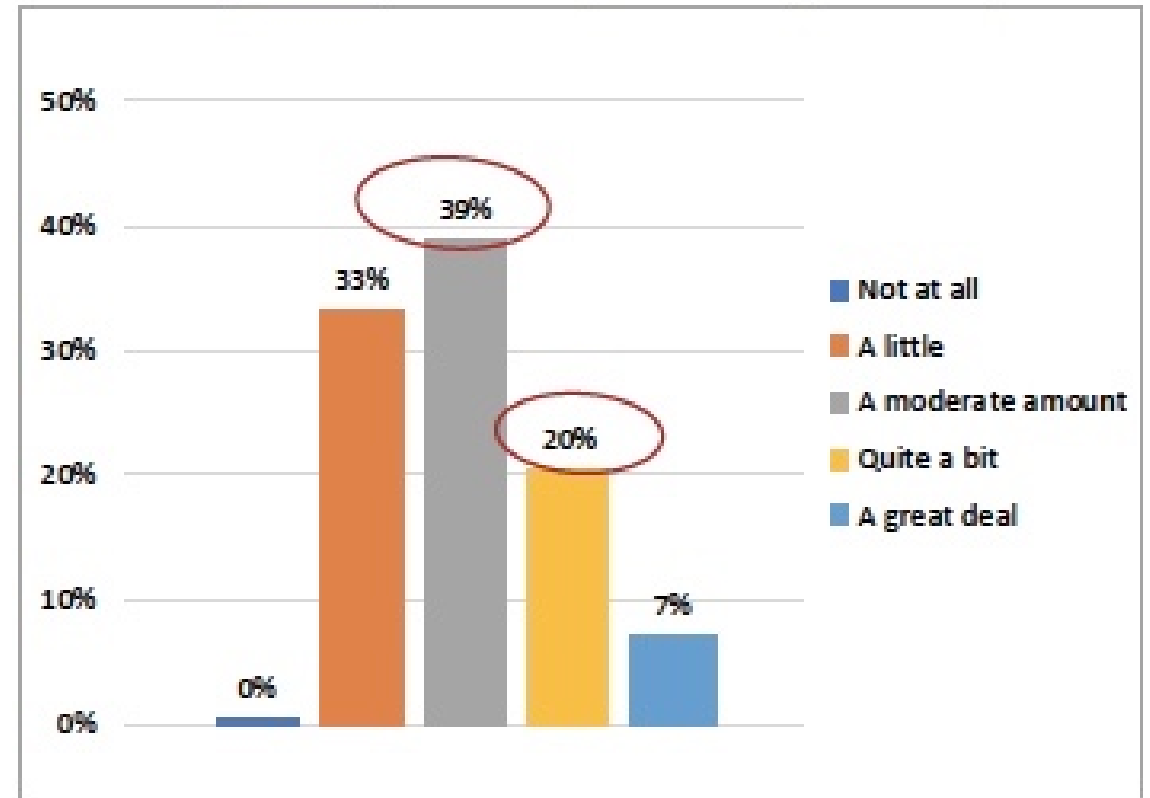
- 522 students completed survey – 28% response rate
- Significant increase in self-reported knowledge across all six modules of the NHC
 - “Poor” and “fair” most selected answer before studying NHC
 - “Good” most selected answer after studying NHC
- Intent to apply knowledge from NHC to future work setting:
 - Mean rating of 3.38 on a 5-point scale
 - “A moderate amount” most selected answer
- 92% of students used e-learning platform

Nursing Students Survey Results

Intent to Work with PLWH in Future Career Before NHC Exposure (N=522)

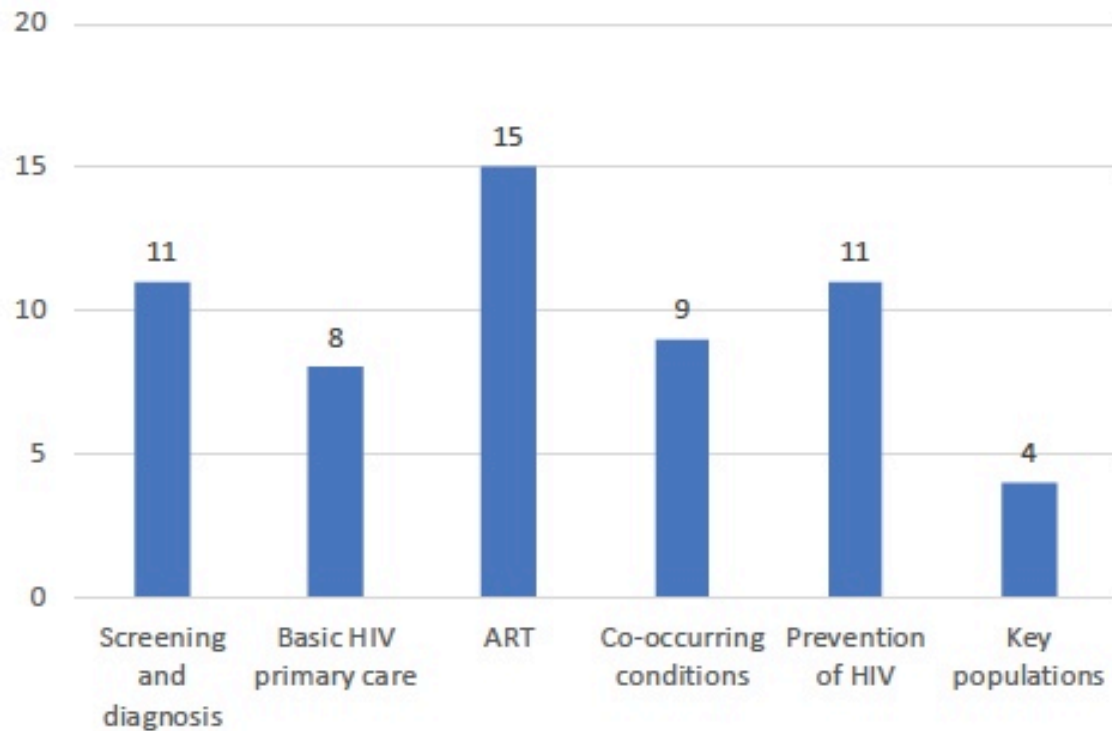


Intent to Work with PLWH in Future Career After NHC Exposure (N=522)



Pharmacy Pre-Integration

Number of Pharmacy Courses with Integrated Content by NHC Module (N=16)



- Topics:
 - Epidemiology of HIV (11)
 - Diagnostic testing (10)
 - ART initial therapy (14)
 - Adverse side effects (13)
 - Drug interactions (13)
 - PrEP (10)
 - PEP (10)

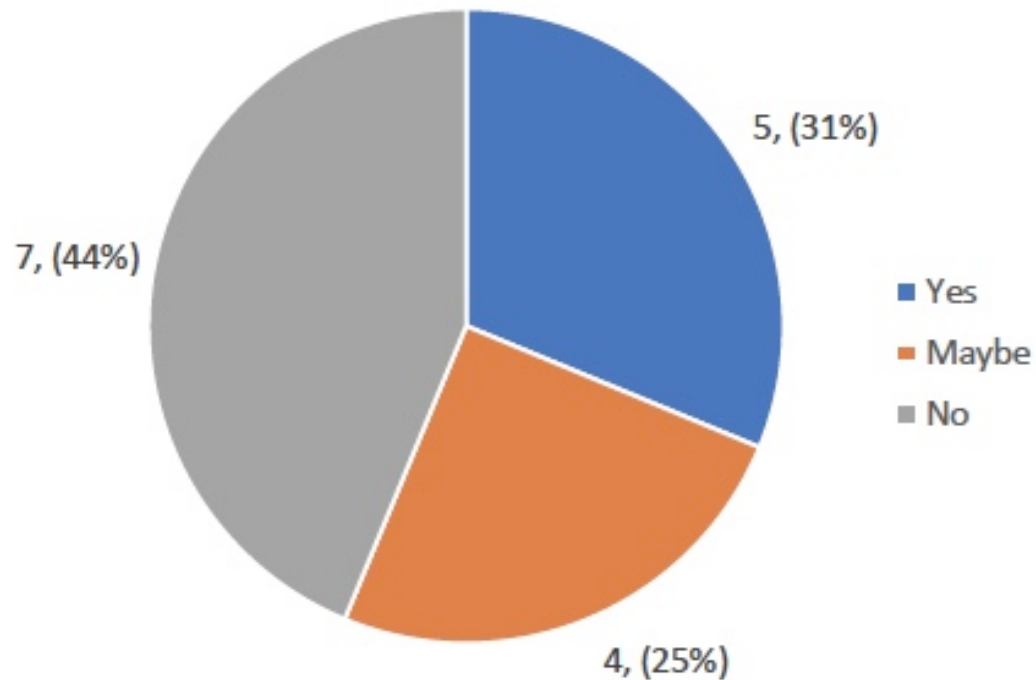
Pharmacy Pre-Integration



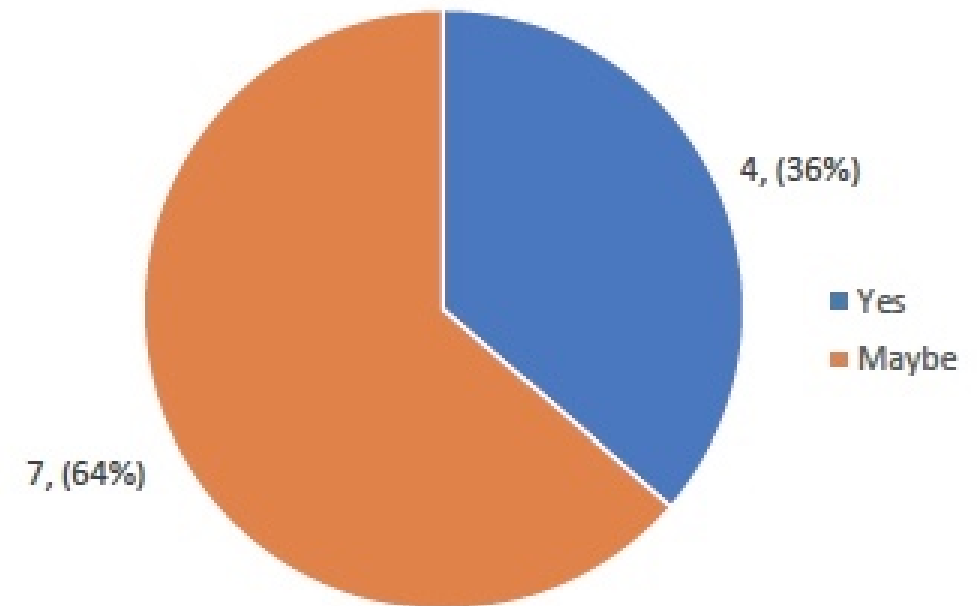
- In-person classroom instruction most used learning modality
- Online self-study material most used material from NHC
- How was the integration done?
 - Pre-reading ahead of classroom discussion
 - HIV question bank used for exam questions
 - Self study with credit for completion
 - NHC material integrated in lecture content

Pharmacy Pre-Integration

Number of Courses Using the Learning Group Functionality of the E-Learning Platform (N=16)



Number of Courses Encouraging Students to Create an Account on the E-Learning Platform and Go Through the Modules on Their Own (N=11)



Pharmacy Post Integration



- What worked well:
 - NHC provided supplementation that deepened students' learning
 - Using tables and images as aids
 - Pre-reading followed by in-class discussions
 - HIV question bank used for exams and for prompting discussions
 - Learning group functionality to monitor students
- What did not work well
 - Making the NHC material optional
 - Some content not relevant for pharmacy students
 - Interchangeable use of topic, lesson, and section
 - Changing to online teaching due to COVID-19

Pharmacy Post Integration



- Barriers:
 - Forced remote learning due to COVID-19
 - Students feeling overwhelmed by NHC
 - Lack of time for classroom discussion
- Planned changes for the future
 - Content relevant for PharmD students
 - Incentives
 - More in-class activities
 - Increase use of learning group function

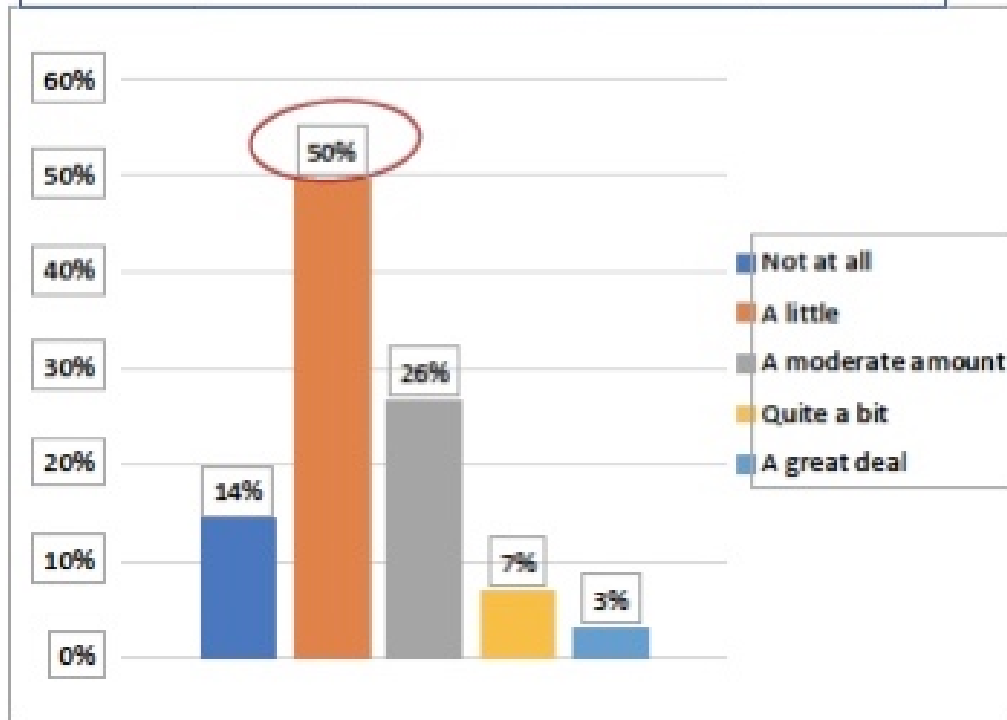
Pharmacy Students Survey Results



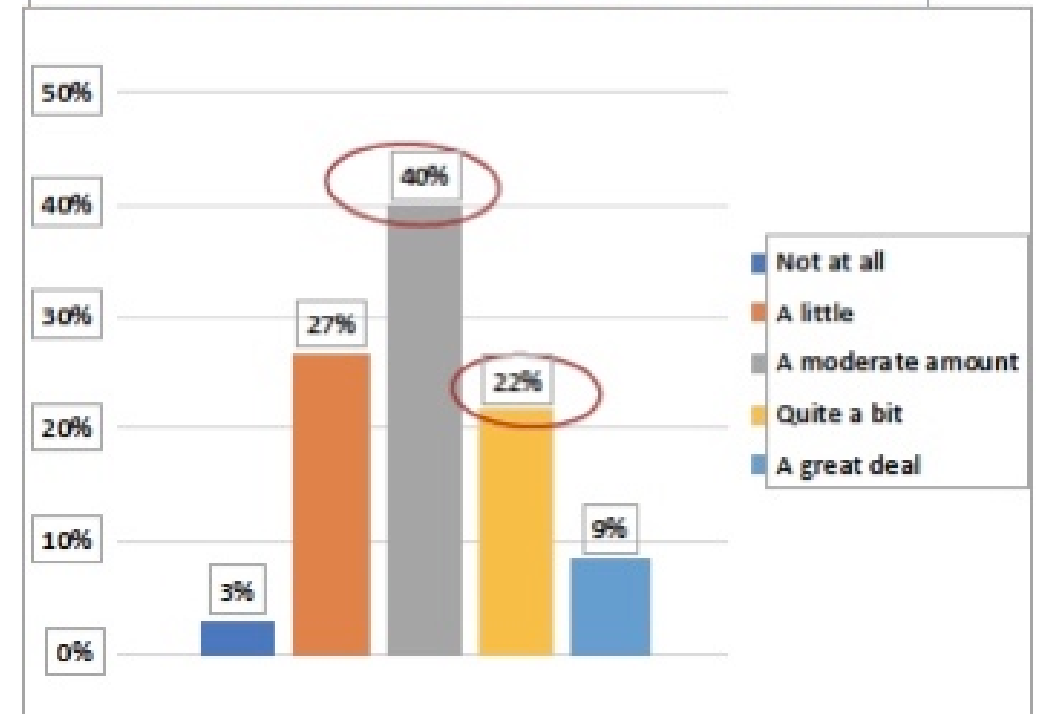
- 705 students completed survey – 55% response rate
- Significant increase in self-reported knowledge across all six modules of the NHC
 - “poor” most selected answer before studying NHC
 - “good” most selected answer after studying NHC
- Intent to apply knowledge from NHC to future work setting:
 - Mean rating of 3.30 on a 5-point scale
 - “A moderate amount” most selected answer
- 82% of students used e-learning platform

Pharmacy Students Survey Results

Intent to Work with PLWH in Future Career Before NHC Exposure (N=703)



Intent to Work with PLWH in Future Career After NHC Exposure (N=703)



Highlight: UIC Medicine



- 190 first year medical students enrolled at UIC COM
- Used topics from Screening & Diagnosis, ART, and Co-Occurring Conditions modules
- Used online self-study material, downloadable readings, and HIV question bank from NHC to integrate into existing course
- Assigned material as pre-reading before active classroom sessions and used HIV question bank to direct student learning
- Had students complete Retrospective Endpoint Survey during class time and had 84% response rate
- 85% of students used the e-learning platform to study the NHC

Highlight: UMN Nursing



- Integrated NHC in 8 different nursing courses
- Had a faculty member who is an “integration champion”
- Used online self-study material, downloadable readings, and HIV question bank from NHC to integrate into existing courses
- Had 100% response rate to Student Retrospective Endpoint Survey
- Made completion of Student Survey mandatory for credit
- Nursing students receive parts of the NHC throughout their degree program

Lessons Learned



- Incentives are important
 - Credit
 - Questions on exam
 - In-class activities
- Taylor topic selection to each discipline
- Flipped classroom effective teaching strategy
- Versatile use of HIV question bank
- Integration Champion

Questions?



We are here to answer your questions!

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