## **Welcome and Introduction**



Mary Beth Bigley, DrPH, MSN, APRN Director, Division of Nursing and Public Health, Bureau of Health Workforce Health Resources and Services Administration



Barbara F. Brandt, PhD Director, National Center for Interprofessional Practice and

Education



## **Follow the Conversation**

Join a real-time conversation about this webinar on Twitter.



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## **Featured Speakers**



Jennifer Morton DNP, MPH, APHN University of New England Susan Kimble, DNP, APRN University of Missouri, Kansas City





## Measuring the Impact: Evaluating Interprofessional Education and Care in Community Clinical Settings

Jennifer Morton DNP, MPH, APHN, University of New England Susan Kimble, DNP, APRN, University of Missouri, Kansas City

## **Objectives**

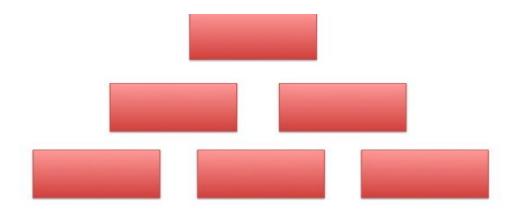
- Illustrate how National Center resources can be used to support IPECP studies
- Share how program plans, including evaluation, translate across various demographics
- Describe attributes that contribute to a high-functioning interprofessional team
- Describe how an interprofessional student interface is beneficial to a clinical partner's organizational culture
- Showcase the linking of isolated IPECP efforts



## **Team Identity Exercise**

What structural(brick) and philosophical(mortar) attributes contribute to your team identity?

Learning with, from, and about...



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# Innovative Models of Education, Training, and Service Delivery

Health, Resources and Services Administration (HRSA)

- Bureau of Health Professions
  - Nurse, Education, Practice, Retention and Quality (NEPQR), IPE grants, 2012
    - University of New England
    - University of Missouri, Kansas City



## A Tale of Two Cities

#### Portland, Maine

- CHANNELS Project-improving the health of immigrant/refugee communities through innovations in team based care
- Population = 66,650
- Community of Interest = Immigrant and Refugee (13,000), resettlement area
- Partnership with local health department and FQHC



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## A Tale of Two Cities

#### Kansas City, Missouri

- Bridging the Disparities Gap: Strengthening Community-based Healthcare Delivery in an Urban Setting
- Community of Interest=urban underserved including immigrant and refugee at the two community-based urban HPSA clinics
- Urban population living at 50% at or below 200% of the federal poverty level
- Patient population, 41% uninsured, 39% receiving Medicaid (RWJF, 2011)
- Partnership with FQHC and urban faith based clinic





## **The University of New England**

- Health Sciences College within a University in Portland, Maine
- Educates the largest number of health professions students in the state
- Relies on partnerships for clinical/practice experiences, no academic health center on site
- Robust IPE infrastructure
- "Private university with a public mission"-President Danielle Ripich





## The University of New England, cont.

- Nursing
- Nurse Anesthesia
- Physician Assistant
- Physical Therapy
- Occupational Therapy
- Dental Hygiene
- Social Work
- Athletic Training
- Applied Exercise Science



Other Colleges:

- Osteopathic Medicine
- Pharmacy
- Dental Medicine





To improve the health of immigrants and refugees through innovations in community-based interprofessional care



## **University of Missouri, Kansas City**

- BSN completion and BSN-prelicense
- First DNP in state (post-MSN)
- MSN tracks
  - CNS, NE, NNP, PMHNP
- BSN to DNP
  - AGNP, FNP, PNP, WHNP
- Nursing PhD

14

- Health Science Campus: Pharmacy, Medicine, Dentistry, City Hospital (no academic medical center)
- Health Science Bachelor of Science

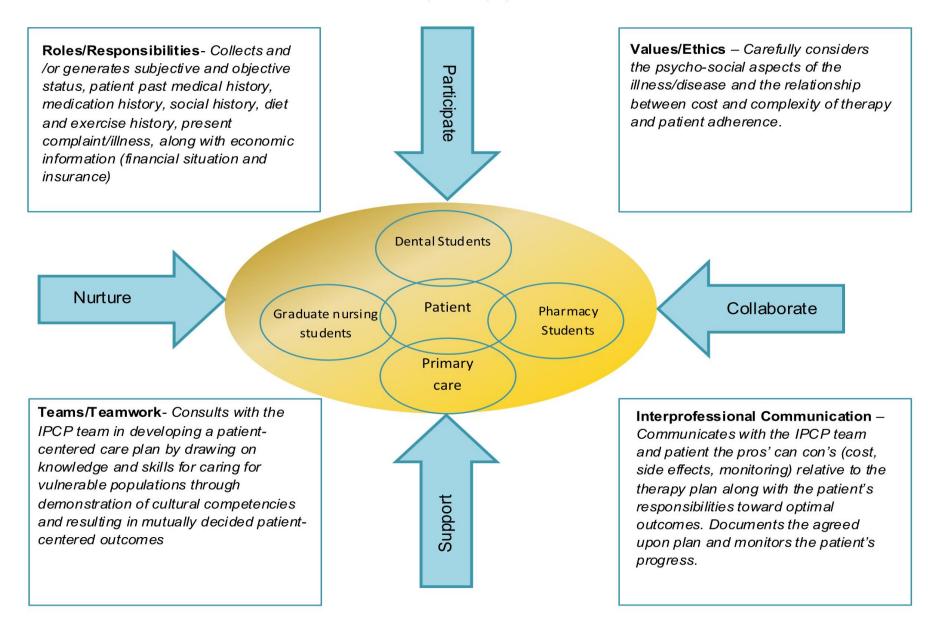






#### **Patient Centered Interprofessional Clinical Practice**

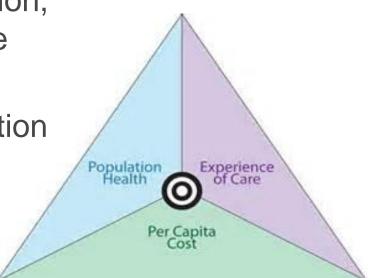
Using a community of practice model at two urban-based primary care clinics in Kansas City, Missouri, interprofessional clinical practice teams of advanced practice nursing, pharmacy, and dental students delivered care to a medically underserved patient population.



## **Evaluation Framework: The Institute for Healthcare Improvement's Triple Aims**

Can innovative models of education, training and service delivery have the ultimate outcome of:

- Improving patient/client/population outcomes?
- Preserving the patient experience?
- Lowering health care costs?





## **Measuring the Difference**

The National Center for Interprofessional Practice and Education

- The Nexus: "A new kind of collaboration and shared responsibility among education and practice partners at local, regional and national levels."
- http://nexusipe.org/measurement-instruments



## The Case for Standardized and Individual Measures

## **Broad Utility**

Student/Trainee Outcomes

- Formative/Summative Evaluations (Reflective Journals)
- Cultural Sensitivity
- Focus Groups

Service Delivery Outcomes

- CAHPS, HCAHPS
- Utilization Reports
- EHR
- Focus Groups (patients, providers)

#### CHANNELS IPEC STUDENT SURVEY BEFORE CLASS

www.surveymonkey.com/s/IPECBeforeClass





# The Case for Standardized and Individual Measures, cont.

## **Unique to Demographic**

UNE

Student/Trainee Outcomes

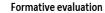
- Attitudes toward health teams
- Attitudes toward IP education
- Cultural Sensitivity
- TeamSTEPPS

UMKC

Student Trainee Outcomes

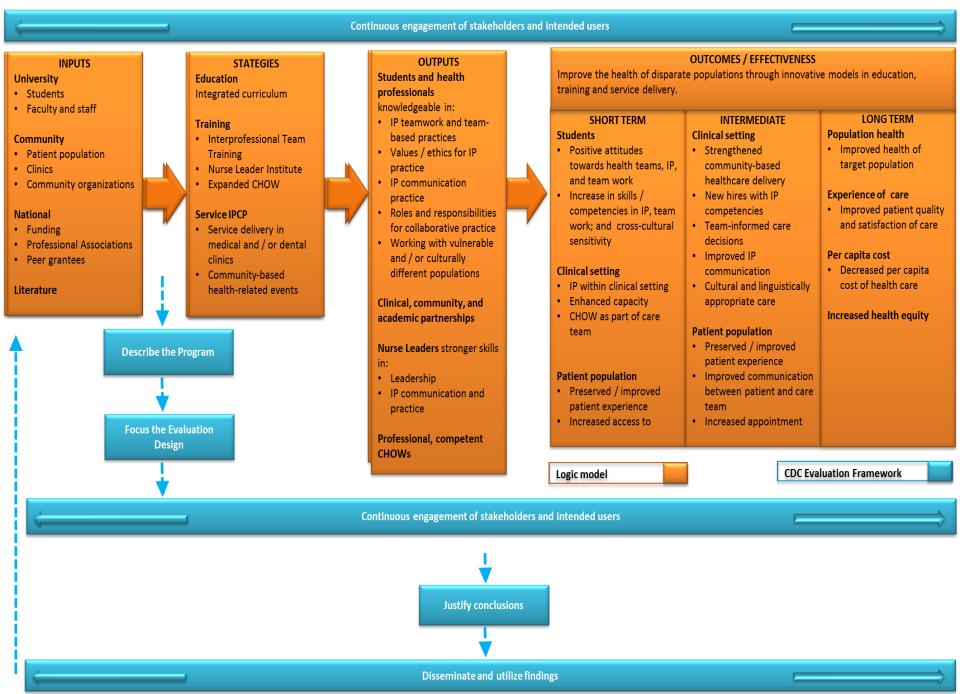
- Attitudes toward health teams
- Readiness for IP Learning
- IP Collaboration Scale
- Team Skills Scale
- Cultural Sensitivity





Process evaluation

Outcome evaluation



## **Process Evaluation-Grant Management**

"The need that the grant is attempting to address is complex, because it isn't just service delivery (although that's a large component of it).

"Its also preparing future providers to deliver services in a culturally congruent and acceptable way. And it's preparing leadership so that such services can be guided, mentored and sustainable...into the future...

"Its so complex that you need this team of different types of organizations that do [this] type of work to really address the problem."



## **Process Evaluation-Grant Management, cont.**

## Method:

• Polling focus group

## **Results:**

- The steering committee was rated as <u>highly</u> <u>efficient</u> and <u>effective</u>.
- Much of the committee's success was attributed to the <u>strong leadership</u> and <u>dedication among</u> <u>partners.</u>



## **Process Evaluation-Grant Management, cont.**

Polling Question	Agree	Strongly agree
Members are dedicated to the idea that we can make the CHANNELS grant a success.	8.3%	83.3%
Members have a clear sense of their roles and responsibilities.	54.6%	45.5%
Members are creating new knowledge or insights together.	16.7%	83.3%
Members have the connections they need to achieve the CHANNELS goals.	16.7%	75%
Members communicate openly with one another.	75%	16.7%
What we are trying to accomplish with the CHANNELS grant would be difficult for any single organization to accomplish by itself.	9.1%	90.9%



# **Student Education Evaluation Methods and Results**

## Tools:

- Surveys
- Focus Groups

## **Existing instruments used:**

- Attitudes Towards Interprofessional Health Care Teams / Education Scales
- Cultural Competence
   Assessment
- TeamSTEPPS

Cohort	No. of Studen ts	Disciplines Represented
Summer 2013	94	Dental Hygiene, Nursing
Fall 2013	97	Dental Hygiene, Nursing
Winter 2014	28	Nursing, Social Work
Summer 2014	117	Nursing, Occupational Therapy, Physician Assistant
<i>Up next:</i> Fall 2014	~130	Dental Hygiene, Nursing, Social Work



# **Student Education Evaluation Methods and Results, cont.**

#### **Results across cohorts:**

- 71% 82% of students had prior experience with IPE\*
- Students report positive attitudes at baseline
  - 69 90% of all attitude measures received over 70% IPCP-affirming scores at baseline
- Students find IPCP beneficial to patient care
- 93 -100% of respondents felt "The interprofessional approach improves the quality of care to patients/clients"
- \* Data for Cohorts 2-4 only

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# Student Education Evaluation Methods and Results, cont.

"As OT's we can't diagnose, so our referrals are coming from behavioral doctors and then most likely if they're seeing OT's they're seeing some other form of therapy and if you're in a hospital setting you have to be able to talk to the doctors and nurses and communicate the care, it's essential."

- UNE Occupational Therapy Student, 2014 Focus Group



# Training Evaluation Methodology and Results

#### Tools:

- Surveys
- Interviews
- CHOW daily logs

#### **Existing instruments used**:

- Attitudes Towards Interprofessional Health Care Teams / Education Scales
- Cultural Competence Assessment
- TeamSTEPPS
- Participant Evaluation

#### Demographics:

- 3 Cohorts
- Ages 20-60, 41 Participants
- 52% Masters, 26.1% Bachelors, 13% Associate, 4% Doctoral, 4% Secondary



# Training Evaluation Methodology and Results, cont.

#### Results

- Improved TeamSTEPPS learning outcomes
- Improvement in 3 measures related to "Attitudes Towards IP Health Care Teams"
  - Developing an interprofessional patient/client care plan is excessively time consuming.
  - The interprofessional approach permits health professionals to meet the needs of family caregivers as well as patients.
  - Hospital patients who receive interprofessional team care are better prepared for discharge than other patients.
- No significant findings on "Attitudes towards IP education"



## **CHOW's**

## About:

- October 2013 July 2014
- 2 CHOWs (2 FTE)
  - 221 unique clients
  - 622 "contacts" logged

## **Demographics:**

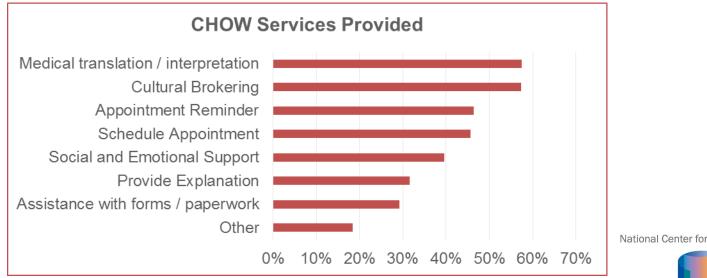
- 43% Arabic, 44% Somali, 4% English,
  3% Other, 5% Missing data
- 90% MaineCare coverage



## CHOW's, cont.

## **Top 3 client barriers identified by clients:**

- Cultural issues (91%)
- Does not understand health care system (68%)
- Language (73%)





## **Nurse Leader Institute**

## About:

- 11 Nurses graduated in 2014
- Community Impact Projects:
  - Provide customer service training to clinic staff
  - Certify nurses to use telehealth equipment
  - Create a resource manual for immigrant and refugee services
  - Educate parents about prescription drug abuse
  - Hold school-based health fairs



## Nurse Leader Institute, cont.

#### Findings:

• Participants felt the opportunity to network with colleagues was the most helpful aspect of the program



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## **IPCP Services Methodology**

#### Tools:

- Surveys
- Administrative Data
- CHOW logs
- Electronic Health Records
- National / Statewide Surveillance
- Patient Surveys

### **Existing instruments used:**

- CG-CAHPS 12-Month Survey with Patient-Centered Medical Home Items (Adult)
- Adapted NIH Vision-related Quality of Life Survey



### **Riverton Health Center**

#### About:

- Small health center situated in housing complex, with:
  - Family Nurse Practitioner, 2 CHOWs, 1 Social Worker (MSW) and Students

#### Demographics:

- 60% MaineCare insurance (Medicaid)
- 35% No insurance
- 5% Medicare or private insurance

#### Findings:

(From June 2013 – April 2014):

- 384 appointments scheduled at Riverton Health Clinic
- Overall appointment adherence: 57.2%
- Increasing number of patients utilizing the clinic as their medical home



## Clinician & Group - Consumer Assessment of Healthcare Providers and Systems (CG-CAHPS)

#### About:

 CAHPS-Gold standard for measuring patient satisfaction and informing decision making

CChps<sup>®</sup> Surveys and Tools to Advance Patient-Centered Care

### Findings:

	Measure	Top Box Score			
	How often this provider explained things in a way that was easy to understand (n=15)	i ü			
	How often the clerks and receptionists at this provider's office as helpful as you thought they should be (n=15)	86.7%			
	When you made an appointment for a check- up or routine care, how often did you got an appointment as soon as you needed (n=13)	38.5%			
	How often this provider showed respect for what you had to say (n=15)	100%			
Τ	TRAINING EDUCATION				

#### **SERVICE - IPCP**



### **Health on the Move**

#### **Event:**

- Initiative of the Cumberland
   District Public Health Council
- CHANNELS-funded CHOWs
   provided critical event support
- UNE Nursing students conducted blood pressure screenings and prediabetes risk assessments
- UNE pharmacy students answered questions on medication safety

#### **Demographics of Attendees:\***

- 47% MaineCare coverage (Medicaid)
- 73% Had a doctor / PCP
- 58% Had been to their PCP in last year
- 67% Did not have a dentist
- 50% Reported they or their child needed eye glasses
- Survey languages: 44% English, 24% Arabic, 20% French. 13% Somali

\*Results from self-reported data from entrance survey, n=131



## **Public Health Activities – Vision Initiatives**

#### Reach:

- 150+ vision screenings completed
- ~150 free Adlens self-adjusting glasses distributed

### **Demographics:**

- Ages range: 6-82 years old
- Over 50% had some visual impairment

### Findings:

• High demand and need for vision services

Reasons for needing glasses (July 2014):

- "She will use driving."
- "Squinting a lot, has headaches."
- "Has glasses- not updated in a long time: says vision is 0 without glasses."
- "[Respondent had] Glaucoma - last eye exam over a year ago."



#### Public Health Activities – Oral Health ("SmilePartners")

#### Reach:

• 158 people screened

#### **Demographics:**

- Average age: 37
- Language
  - 56% Arabic; 33% Somali;
     7% French; 4% Other

<b>Preliminary Data</b> <i>February 2013 – September 2014</i>	
Screenings	158
Home visits	55
X-rays	42
Dental cleanings	20
Graduated program	12



# **Training Evaluation Methodology and Results**

#### Tools:

- Surveys
- Interviews
- CHOW daily logs

#### **Existing instruments used**:

- Attitudes Towards Interprofessional Health Care Teams / Education Scales
- Cultural Competence Assessment
- TeamSTEPPS
- Participant Evaluation



# Training Evaluation Methodology and Results, cont.

#### Demographics

- 3 Cohorts
- Ages 20-60, 41 Participants
- 52% Masters, 26.1% Bachelors, 13% Associate,4% Doctoral, 4% Secondary

#### Results

- Improved TeamSTEPPS learning outcomes
- Improvement in 3 measures related to "Attitudes Towards IP Health Care Teams"
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# **IPE Evaluation Results**

#### Tools:

- Student Surveys
- Student and Provider Focus Groups
- Patient Satisfaction Surveys

#### **Existing instruments used:**

- Readiness for Interprofessional Learning Scale
- Interprofessional Collaboration Scale
- Attitudes Towards Health Care Teams Scale
- Team Skills Scale
- Cultural Competence Assessment

#### Demographics:

- 4 Cohorts
- Ages 22-49 years, 51 Participants
- Graduate nursing, pharmacy, dental students

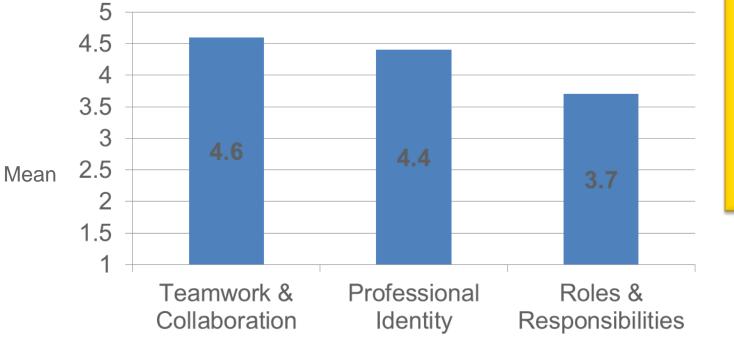




## **IPE Evaluation Results, cont.**

**Readiness for Interprofessional Learning Scale** (McFadyen et al., 2005)

- 19 items, 1 = strongly disagree to 5 = strongly agree
- Administered at baseline
- Students: n = 49



Students reported very high readiness to participate on IPCP teams, and openness to learn from/with other students. They reported moderately high positive feelings about their role.





Students reported

high levels of communication

among team

members, high

high levels of

professionals

cooperation and

collaboration, and

affiliation with other

Interprofessional Practice and

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# **IPE Evaluation Results, cont.**

Interprofessional Collaboration Scale (Kenaszchuk et al., 2010)

- 14 items, 1 = strongly disagree to 4 = strongly agree
- Administered at end of rotation
- Students: n = 34

(higher is better on 20 Isolation scale). 15 12 Sum of 8 10 Items 15.4 15.1 4 5 0 0 (Isolation)National Center for Communication Accomodation



Students reported a

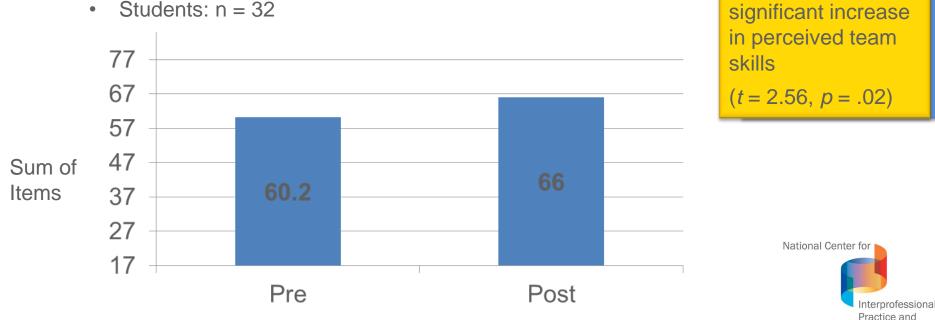
Education

### **IPE Evaluation Results, cont.**

**Team Skills Scale** 

(Hepburn, Tsukuda, & Fasser, 1998)

- Assesses team members' perceptions of their own skills
- 17 items rated on 5 pt scale, 1=Poor, 2=Fair, 3=Good, 4=Very Good, and 5=Excellent (possible range 17 – 85)
- · Administered at baseline and end of rotation





Education

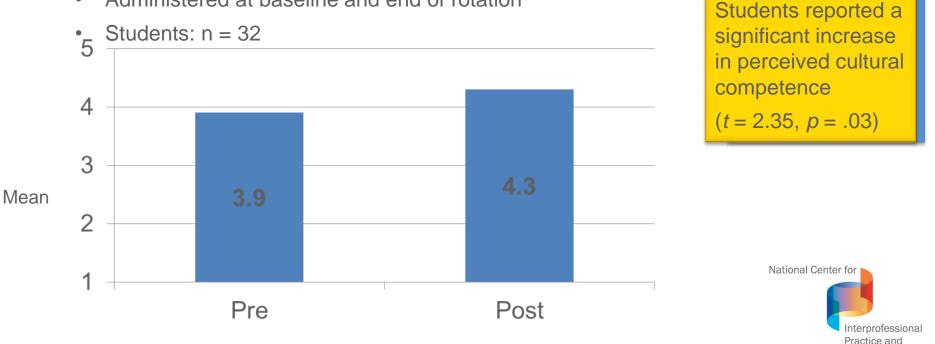
## **IPE Evaluation Results, cont.**

#### Cultural Competence Assessment

(Schim et al., 2004)

- Assesses changes in perceived cultural competence
- Overall perceived cultural competence rated on a scale from 1 = Very Incompetent to 5 = Very Competent







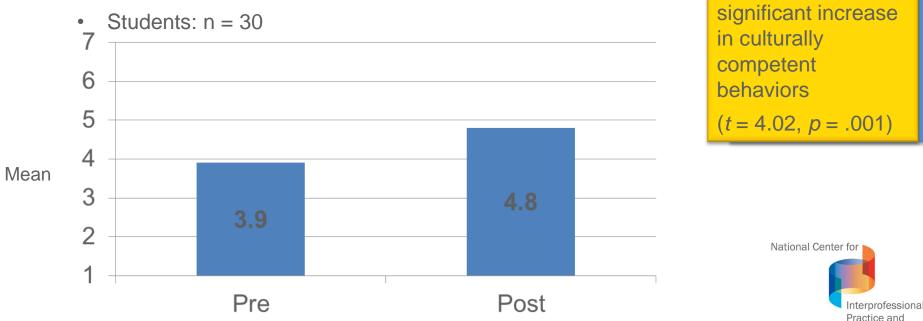
Students reported a

Education

# **IPE Evaluation Results, cont.**

#### Cultural Competence Assessment (Schim et al., 2004)

- Assesses changes in perceived cultural competence
- Cultural Competence Behavior Subscale rating of how often students perform 10 behaviors related to culturally competent care on a scale from 1 = Never to 7 = Always
- Administered at baseline and end of rotation





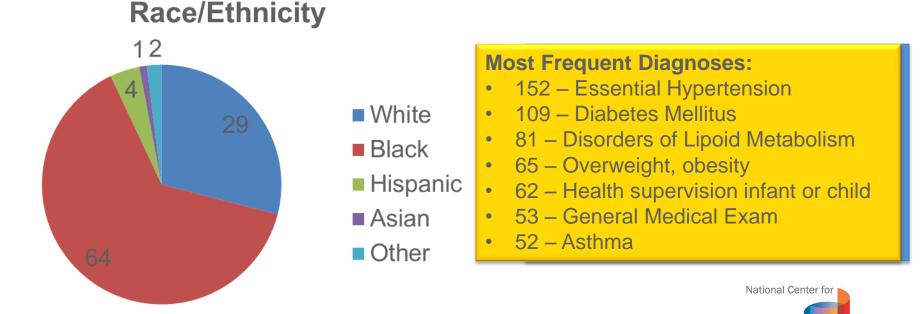
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# **Community-based Healthcare Centers Clinic 1**

Small, young community-based health center:

- Teams of NP students, Pharmacy students, Dental students
- 934 patients seen (64% female; 0 65+ yrs)



#### 47



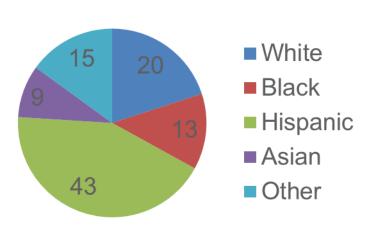
# **Community-based Healthcare Centers Clinic 2**

Large, urban federally-qualified healthcare center:

• NP students, and Pharmacy students

Race/Ethnicity

• 1,814 patients seen (78% female; 0 - 65+ yrs)



#### **Most Frequent Diagnoses:**

- 320 Normal Pregnancy
- 219 Essential Hypertension
- 184 Screening Malignant Neoplasm
- 136 Diabetes Mellitus
- 134 Screening Bacterial
- 132 Contraceptive Management
- 128 Overweight/obesity
- 117 Health Supervision of infant/child
- 115 Disorders of lipoid metabolism

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### **Qualitative Data**

- Focus groups in three populations provided qualitative data:
  - Students
  - Providers
  - Patients (comments and satisfaction surveys)
- This information offered feedback and guidance as the projects progressed.

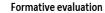


### **Evaluation Gratitude**

Michelle Mitchell, Msc, MS Partnerships for Health, LCC Evaluator for the University of New England project

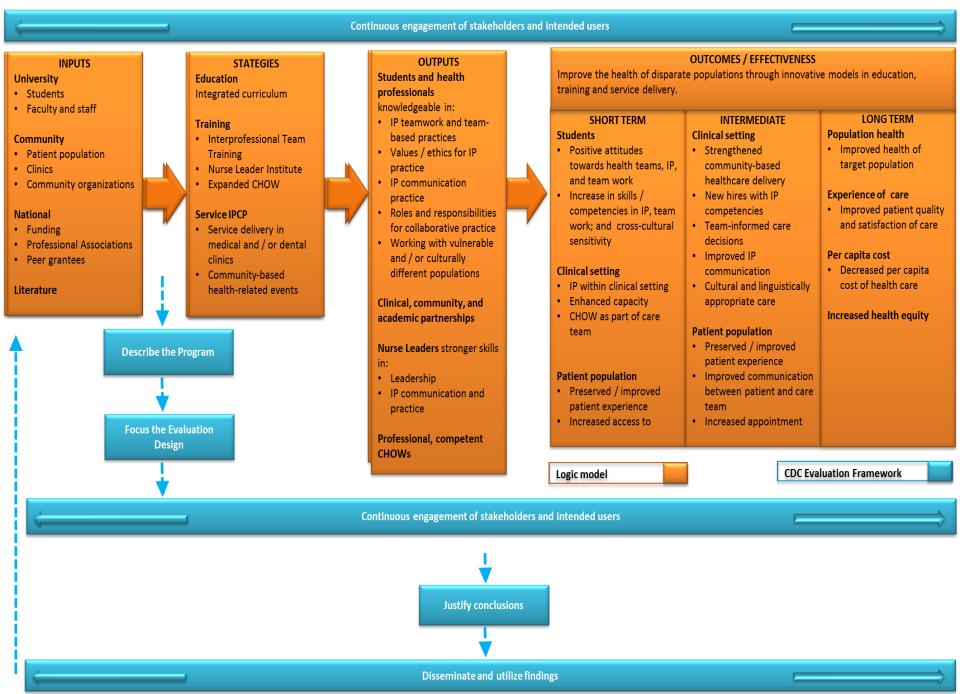
Heather J. Gotham, PhD Associate Research Professor Evaluator for the University of Missouri, Kansas City project





Process evaluation

Outcome evaluation



# Lessons Learned...Are Nuggets for Refinement!

- UNE added RIPLS as a measure
- UMKC considering TeamSTEPPS training
- Process evaluation is critical to overall evaluation processes
- We need more time! Triple Aims require longitudinal study AND patience
- Standardized measures translate across all sorts of projects (resources and partnerships, methodologies, demographics, etc)
- National Center excellent resource to better understand tool validity





# **Questions and Discussion**

Please type your questions in the chat box.

# Join the IPECP Community

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www.nexusipe.org/resource-exchange

Start a conversation

www.nexusipe.org/forum

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