



CENTER FOR
**INTERPROFESSIONAL
PRACTICE AND EDUCATION**

Trial to Improve Interprofessional Practice Behaviors at a Student-Run, Free Clinic

*2016 Interprofessional Care
for the 21st Century:
Redefining Education and
Practice Conference*
Jefferson Center for
InterProfessional Education



Lauren Wright, BS
Josselyn Howell, BS
Brian Grice, BS
Steven Horbal, MPH

Allie Evans, RN, BSPH
Javier Sevilla-Martir, MD
Aurelian Bidulescu, MD, PhD, MPH
Andrea Pfeifle, EdD, PT, FNAP

Funded by the National Center for Interprofessional Practice and Education – The Nexus Innovations Incubator

Introduction

- Lauren Wright, BS and Josselyn Howell, BS
- Seniors at the Indiana University School of Nursing, Accelerated BSN Program
- Indiana University Student Outreach Clinic Nursing Board Members (Research, Operations), and Nursing Clinic Managers
- Pre-nursing background and research involvement



Presentation Outline

Trial to Improve Interprofessional Practice Behaviors at a Student-Run, Free Clinic

- Overview of the Clinic
- Identified Problem
- The Nexus Innovations Incubator Network Partnership
- IU Center for Interprofessional Practice and Education
- Research Purpose
- Methods
- Expected Outcomes
- Barriers & Challenges
- Overcoming Barriers
- Overarching Impact
- Personal Reflections
- Questions/Comments



Indiana University Student Outreach Clinic (IUSOC)

- 11 Disciplines
 - Dentistry
 - Global Health
 - Law
 - Medicine
 - Nursing
 - Occupational Therapy
 - Ophthalmology
 - Pharmacy
 - Physical Therapy
 - Public Health
 - Social Work
- 3 Institutions
 - Butler University
 - Indiana University
 - University of Indianapolis

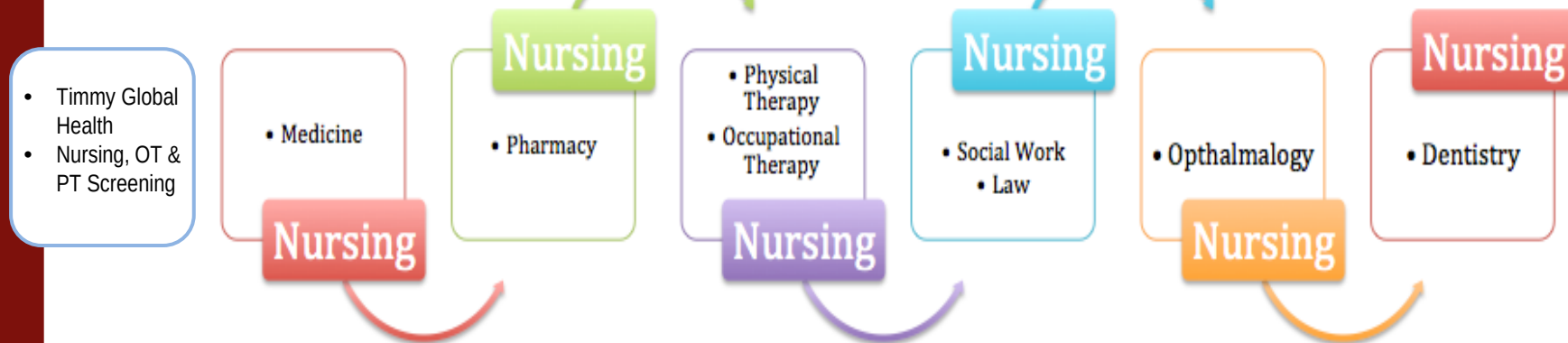
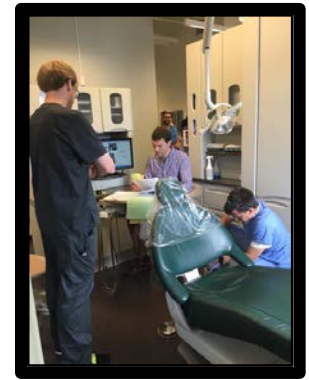
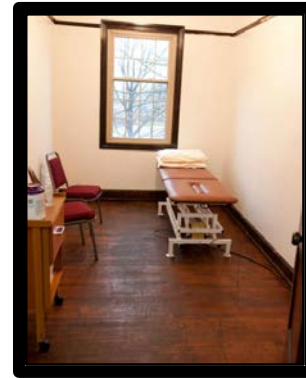


Neighborhood Fellowship Church
Indianapolis, Near East-Side
Free Primary Care Services on Saturdays

*Dental Clinic down the street at People's Health Center



Basic Clinic Flow



Identified Problem

The student research leaders at the clinic identified a need to enhance student knowledge about roles, scope of practice, and training of the various professions at the clinic.



Leaders are concerned that lack of knowledge is reducing interprofessional collaboration and contributing to inappropriate, over-, or under-utilization of services.



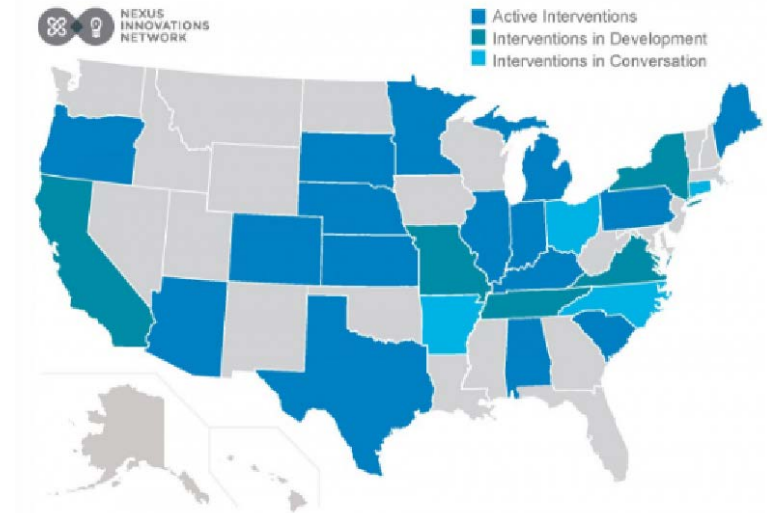
National Center for Interprofessional Practice and Education – Nexus Innovations Incubator

Purpose: Leading, coordinating, and studying the impact of interprofessional collaborative practice and education on the experience of health and health care, population health, and reducing per capita cost of health care.



NATIONAL CENTER for
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Nexusipe.org



The Nexus Innovations Incubator Network is the National Center's learning "laboratory," where a collaborative of higher education and health systems partners committed to designing innovative models that advance interprofessional education and collaborative practice together.

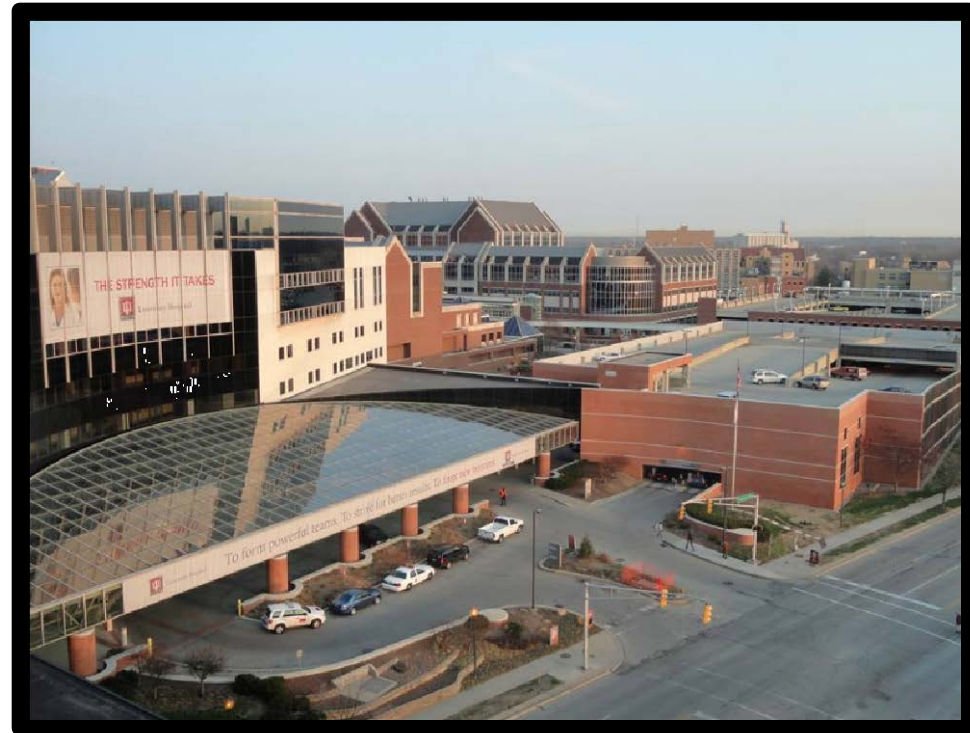


CENTER FOR INTERPROFESSIONAL PRACTICE AND EDUCATION

Indiana University Center for Interprofessional Practice and Education

Vision: All Indiana University learners are systematically prepared to collaborate across professions to improve population and individual health outcomes through high quality team-based care.

Our project is under the guidance and leadership of Dr. Andrea Pfeifle, director of the Center, Dr. Sevilla-Martir, medicine faculty who started the clinic, and Dr. Bidelescu, biostatistician . In addition, the Center hired a project manager and two co-clinic managers to assist us in implementing our clinic Nexus project.



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Research Purpose



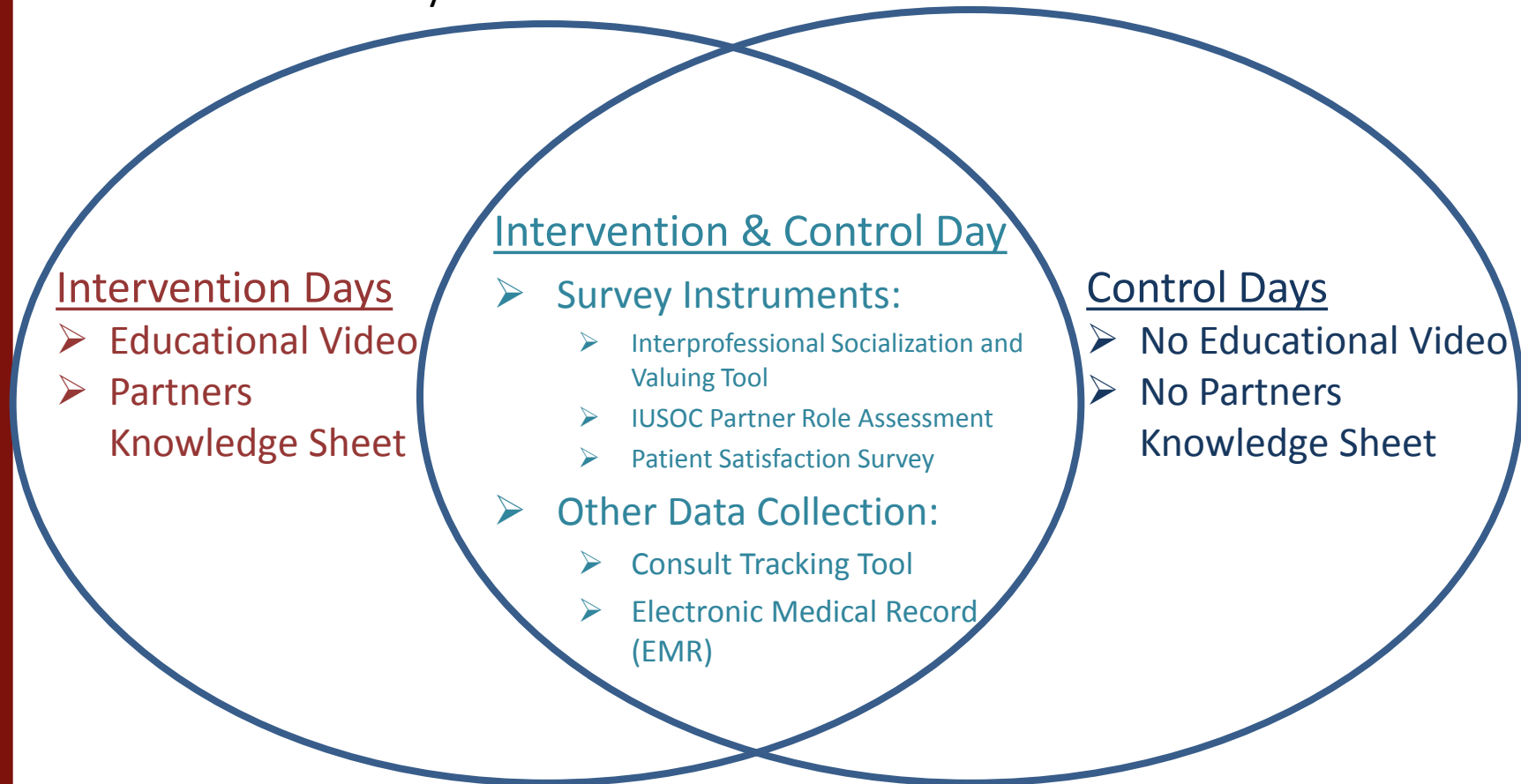
The research purpose is to test the effectiveness of implementing a cluster randomized-controlled intervention designed to improve interprofessional practice behaviors in the clinic by enhancing knowledge of partner roles.



Methods

Cluster randomized-control design

- Intervention days randomly selected over two month increments
- 6 months to a year



Intervention

- Educational Video
 - Each partner briefly describes role & services provided



Intervention

- Partners Knowledge Sheet
 - Lists top 3-5 roles of each clinic partner

Indiana University Student Outreach Clinic (IUSOC) Partners Knowledge Sheet

IU School of Dentistry

1. Acute non-emergent care: dental pain, extractions, and fillings.
2. Oral cancer screenings.
3. Digital panoramic and periapical radiographs.
4. Cleanings for qualifying individuals.
5. Implement the "Healthy Smiles for Employment" program that provides front teeth for individuals looking to improve their career opportunities.

IU Robert H. McKinney School of Law and Indiana Legal Services

1. Connect clients with Indiana Legal Service, which provides free legal advice and attorneys to low income and indigent residents of Indiana.
2. Connect clients with alternative legal resources, when their legal issue does not fall within the services provided by Indiana Legal Services.
3. Answer simple legal questions regarding concerns such as: looking up court documents, locating legal facilities, addressing housing and landlord issues, filing business paperwork, and accessing government benefits and records.
4. Provide legal education and information about topics like: divorce, child support, immigration, filing lawsuits, and filing complaints with state and federal government agencies.

IU School of Medicine

1. Serve as a point of contact for patients in medical, social, and legal need to coordinate and monitor their current and future care.
2. Provide acute, non-emergent care and management of chronic illnesses.
3. Basic lab testing for: sexually transmitted infections, diabetes- hemoglobin A1c & blood sugar, pregnancy.
4. Promotion of wellness via well-exams, health screenings including vision, health education, motivational counseling for healthy behaviors, and consultations to appropriate partners.
5. Brief pediatric care prior to transitioning to a primary care physician after three visits.

IU School of Nursing

1. Nurse Navigator: travel with patients to the necessary partners and complete patient navigation notes to keep the patient informed of their visit.
2. Educator: provide education regarding the patient's visit and motivate patients to achieve their own health goals.
3. Health Screener: collaborate with OT and PT students to identify the needs of patients and navigate them to the necessary partners.
4. Patient Advocate: speak up for the patient to support their needs.
5. Care Coordinator: bridge the gaps between patient care to ensure the right care at the right time.

Indiana University School of Health and Rehabilitation Sciences, Department of Occupational Therapy

1. Assist in regaining independence in activities of daily living (bathing, dressing, grooming, toileting).
2. Enhance stress management and coping skills.
3. Provide a medication management assessment relating to cognitive function.
4. Assess patient readiness for lifestyle changes and assist pharmacy with smoking cessation program.
5. Fabricate wrist/arm/finger orthoses or provide clients with pre-made splints for carpal tunnel, sprains, ligamentous tears, etc.

Butler University College of Pharmacy & Health Sciences

1. Fill and refill prescriptions.
2. Provide medication education.
3. Perform blood pressure assessments for patients.
4. Implement "A Smoke Free Me" smoking cessation program with nicotine replacement and patient counseling.
5. Implement a "Bridge to Access" program to provide free inhalers to qualifying individuals.

IU School of Health and Rehabilitation Sciences, Department of Physical Therapy & University of Indianapolis, Krannert School of Physical Therapy

1. Improve movement and alleviate pain.
2. Enhance function and mobility for a variety of conditions.
3. Implement risk assessments for balance and skin integrity.
4. Prescribe home exercise programs to promote independence in self-care/management for strength, stretching, balance, etc.
5. Prescribe therapeutic exercises to address functional movement deficits and improve functional capabilities.

IU School of Social Work

1. Conduct a "needs assessment" to determine which resources a patient may benefit from.
2. Provide referrals to community resources in regards to health coverage, financial assistance, housing, employment, food, clothing, mental health, and many others.
3. Assist the patient in completing various applications for community resources.
4. Crisis management with faculty supervision.
5. One-to-one consultations to meet client-focused goals and follow-up.

Timmy Global Health at IUPUI

1. Staff the registration table of the clinic by checking-in patients to the clinic.
2. Provide patients with information on the IU-SOC services provided as well as directions to clinic locations, such as the restrooms or the People's Clinic for those requesting dental services.
3. Coordinate with other IU-SOC partners the scheduling of patient appointments in the electronic medical records (EMR) system.

IU School of Medicine, Department of Ophthalmology

1. Performs standard visual assessments
2. Glaucoma testing
3. Provides free reading glasses
4. Refers to community resources for glasses
5. Houses ophthalmologist who writes prescriptions for patients



Survey Instruments

- Interprofessional Socialization & Valuing Scale
 - Used to evaluate the impact of interprofessional education efforts on student ability, comfort, and value in working with other partners

Interprofessional Socialization and Valuing Scale

Introduction
 This instrument is designed to help you explore your perceptions of what you have learned about working with professionals from other disciplines. Please complete the following questionnaire based on your own views of your experiences (through workshops, classes, or practice). Please indicate the degree to which you hold or display each of the beliefs, behaviours, and attitudes that are described. You are asked to consider *where you feel you are now*. You are asked to respond to each statement using a 7-point scale with 1 meaning "Not at All" and 7 meaning "To a Very Great Extent". Please respond by circling the one number that you feel best fits your experience. If you feel the statement does not apply to you please use the zero value (0).

	To a Very Great Extent	To a Great Extent	To a Fairly Great Extent	To a Moderate Extent	To a Small Extent	To a Very Small Extent	Not at All	N/A
At this point in time, based on my participation in Interprofessional education activities and/or clinical practice...								
1. I feel confident in taking on different roles in a team (i.e. leader, participant)	7	6	5	4	3	2	1	0
2. I am comfortable debating issues within a team	7	6	5	4	3	2	1	0
3. I more highly value open and honest communication with team members	7	6	5	4	3	2	1	0
4. I am able to listen to other members on a team	7	6	5	4	3	2	1	0
5. I have gained a better understanding of my own approach to care within an interprofessional team	7	6	5	4	3	2	1	0

© King, Shaw, & Orchard 1 April 2011

(King, Shaw, & Orchard, 2010)



Survey Instruments

- IUSOC Partner Role Assessment
 - Used to assess professional students' knowledge of services provided by clinic partners

Name: _____ Date: _____

IUSOC Partner Role Assessment

Directions: For each number itemed, read the description of an IU student outreach clinic (IUSOC) partner's role. Circle the partner you think performs this role at the clinic. Choose the one best answer for each item.

	Dental	Law	MD	RN	OT	Pharm	PT	Opth	Timmy GH	Social Work
1. Completes patient navigation notes to keep the patient informed of their visit.	Dental	Law	MD	RN	OT	Pharm	PT	Opth	GH	SW
2. Works to improve patient mobility and alleviate pain.	Dental	Law	MD	RN	OT	Pharm	PT	Opth	GH	SW
3. Conducts a "needs assessment" to determine which resources a patient may benefit from.	Dental	Law	MD	RN	OT	Pharm	PT	Opth	GH	SW
4. Provides education on immigration and government agencies.	Dental	Law	MD	RN	OT	Pharm	PT	Opth	GH	SW
5. Screens patients for oral cancer.	Dental	Law	MD	RN	OT	Pharm	PT	Opth	GH	SW
6. Works with patients on stress management and coping skills.	Dental	Law	MD	RN	OT	Pharm	PT	Opth	GH	SW
7. Provides a smoking cessation program with nicotine replacement and patient counseling.	Dental	Law	MD	RN	OT	Pharm	PT	Opth	GH	SW
8. Acts as a patient resource for clinic information and scheduling.	Dental	Law	MD	RN	OT	Pharm	PT	Opth	GH	SW
9. Orders Hemoglobin A1C, blood sugar, and STI testing.	Dental	Law	MD	RN	OT	Pharm	PT	Opth	GH	SW
10. Performs glaucoma testing.	Dental	Law	MD	RN	OT	Pharm	PT	Opth	GH	SW

RN= Nursing
 MD= Medicine
 PT= Physical Therapy
 OT= Occupational Therapy
 STI= Sexual Transmitted Infection

Pharm= Pharmacy
 Dental= Dentistry
 Opth= Ophthalmology
 Timmy GH= Timmy Global Health

Version date: 9.28.16

(Evans & Grice, 2015)



Survey Instruments

- Patient Satisfaction Tool
 - Used to assess patient satisfaction with clinic experience
 - Selection of structured quantitative survey which also includes open ended, free-response questions to facilitate qualitative feedback



Other Data Collection

- Referral Tracking Tool
 - Used to track patient referrals made to each clinic partner
 - Each partner completes individually each day

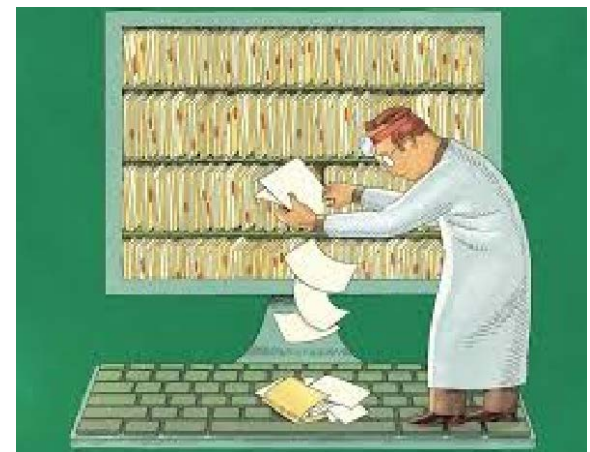


Partner name	Referer's name	Name of patient	Name of partner referred to									Why referred
			Dental	Law	Medicine	Nursing	OT	Pharmacy	PT	Social Work	Timmy Global Health	
Nursing	Lauren Wright	Will Smith					x					Stress management
Nursing	Josselyn Howell	Martina Lopez								x		Food & shelter needs
Nursing	Josselyn Howell	Billy Bob	x									Complains of tooth pain
Social work	Christina Tull	Oscar Ramirez		x								Landlord issues
Medicine	Bethany Diaz	Herb Philp							x			Chronic pain



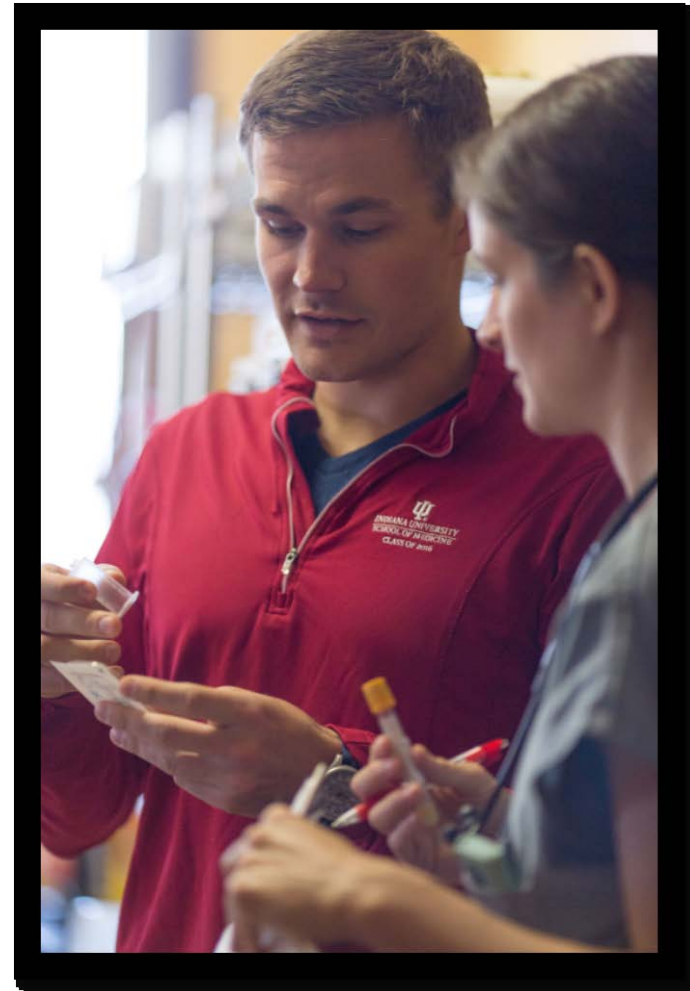
Other Data Collection

- EMR
 - Used to document patient health measures and service utilization
 - Areas of interest
 - Health measures related to chronic disease management aided by treatment of multiple partners (blood pressure, glucose, cholesterol, pain, smoking)
 - Resource utilization (i.e. insurance sign ups, access to food support programs)
 - Frequency of return rates (relation to healthcare cost)



Expected Outcomes

- Improved Population Health
 - Increased percentage of appropriate referrals
 - Increase efficiency of care for a patient visit
- Improved Patient Satisfaction
 - More holistic management of diseases and associated comorbidities
- Reduction in Per Capita Cost
 - Improved value as indicated by number of appropriate referrals
 - Reduction in the number of visits needed to manage illnesses or injuries
- Improved Provider Satisfaction
 - Improved perception of the quality of care provided
 - Enhanced interactions and relationships among providers of services



Barriers & Challenges



- Interprofessional collaboration to design and implement study
- Original study design focused on collaborative Screening Tool – ethical concerns for control days
- Designing study to minimize disruption to normal clinic flow
- Subject recruitment, acquisition of all data points



Overcoming Barriers Collaboration

Interprofessional collaboration to design and implement study

- Within Nexus research group, multiple opinions on best focus for study – difficulty reaching consensus
- All study procedures must be approved by all IUSOC partners and Pastor Jim (Partner's meeting)
- Disseminating project information to partners in a timely fashion

Solutions:

1. Nominating co-leaders to draft initial design which created a foundation for study design and modification.



2. Hiring of one project manager and two co-clinic managers at the Center to lead, organize, and help to implement project.



Overcoming Barriers

Study Design

- **Original study design focus - collaborative Screening Tool**
 - Screening Tool: originally implemented by Nursing, with OT and PT collaboration within past year
 - Understanding of screening tool would lead to increase in knowledge of roles & services provided, resulting in more holistic patient care (increased referrals)
 - Screening Tool educational review vs. as intervention itself
 - Ethical concerns for control days repeatedly discussed within research group, and by partners at Partner's Meeting.
- **Solution:** Simplify intervention to include educational video and knowledge tool



Overcoming Barriers

Study Design

- **Designing study to minimize disruption to normal clinic flow**
 - Earlier call time for huddle on intervention days – 9:30am vs. 10:00 am on Saturday morning
 - Burdening volunteers and leaders with additional procedures: longer huddle, referral tracking, surveys
 - When brainstorming methods, difficulty identifying procedures that were feasible to implement at the clinic
- **Solution:** Support from clinic leaders (partner buy-in), coordination and leadership by study manager and co-managers



Overcoming Barriers

Subject recruitment and retention

- **Subject recruitment, acquisition of all data points**
 - As previously mentioned, earlier call time for students on intervention days
 - Educating students on implementing study procedures (referral tracking) while they may be focused on learning individual clinic role
 - Students asked to complete surveys before leaving in the afternoon
- **Solution:** Study implementation by project manager and co-managers. Communication between project leaders and partner clinic managers



Overarching Impact at the IUSOC



- Study may lead to a standard clinic orientation for all partners
- Improvements in communication and teamwork
- Enhanced utilization of clinic partner resources, leading to improved health outcomes
- Improved documentation and data collection
- Improved outcomes in patients at IUSOC: satisfaction & health



Personal Reflection - Josselyn



- Enhanced knowledge of professional roles, especially OT, PT, and Law, and how partners function at the clinic
- Appreciation for interprofessional collaboration in conducting research
- Appreciation for interprofessional education in general
- Stimulating research experience
- Interest in involvement with clinical research in the future



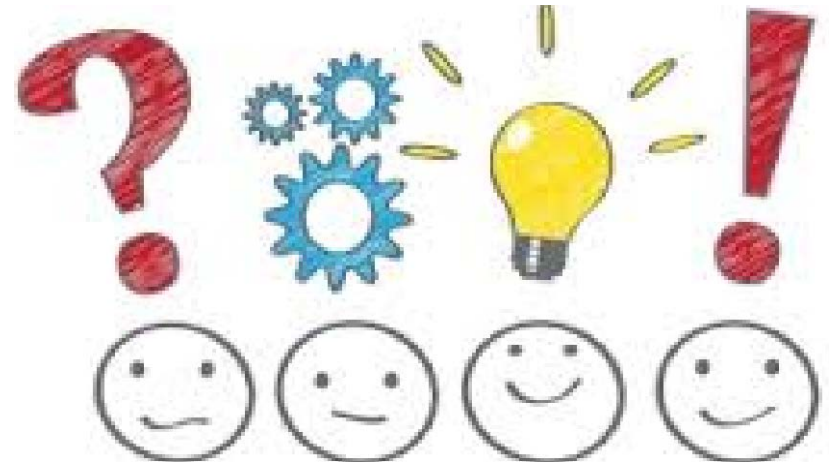
Personal Reflection - Lauren



- Great opportunity to collaborate, problem-solve, & learn
 - Other professional students
 - Faculty & staff
 - People around the country implementing interprofessional projects (Nexus Conference)
- Pushing past barriers & challenges
 - A project I believe in...it all comes back to the patients
 - Forming relationships
 - Regular communication
 - Leadership development



Questions/Comments



Contact Information

Lauren Wright

wrightlm@umail.iu.edu

600 Barnhill Drive

Indianapolis, IN 46202

Josselyn Howell

howell3@umail.iu.edu

600 Barnhill Drive

Indianapolis, IN 46202



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