“Bradford Community Immunization Access Assessment: Creating a Vaccine Access Network”

University of Pittsburgh at Bradford
Dr. Livingston Alexander
President
300 Campus Drive
Bradford, PA 16701
814-362-7510

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Dr. Tammy Haley
Director, Nursing & Radiological Science
Associate Professor, Nursing
Faculty Co-Director, ATP
University of Pittsburgh at Bradford
814-362-7640
tmh24@pitt.edu

Dr. Lisa Fiorentino
Director, Center for Rural Health Practice
Associate Professor, Nursing
Faculty Co-Director, ATP
University of Pittsburgh at Bradford
814-362-7640
l mf1@pitt.edu
Title of Project: **Bradford Community Immunization Access Assessment: Bridging the Gap**

Grant Period: **July 1, 2017 – May 31, 2018**

Grantee Name: **University of Pittsburgh - Bradford**

Project Director: **Dr. Tammy Haley & Dr. Lisa Fiorentino**

Description of Project:

The University of Pittsburgh at Bradford has been an active participant in the Appalachian Teaching Project since 2010. This year’s project builds on the findings of the 2016-2017 ATP Project. In line with the Appalachian Teaching Project Scope of Work, the 2017-2018 project sought to address the ARC Goals of a ready workforce [Goal 2], and the development of leadership and community capacity [Goal 5].

With an eye toward building community capacity in Appalachia, the University of Pittsburgh at Bradford students were able to successfully catalog current community resources for the provision of immunizations for adults; identify persons responsible for the management of most office based immunization related activity, recognizing that nurses are the immunization network; identify educational needs and a best practice model [standing protocol] for office based support and referral among providers of immunization services; and collect information for provider driven and/or community based education to reduce existing barriers to immunization and enhance existing assets.

Activities:

To be eligible for participation in the Appalachian Teaching Project, all student participants were enrolled in NUR 1401: Introduction to Nursing Research and/or NUR 1404: Community Health Nursing. Blending components from nursing research and community health nursing, project directors and students sought to specifically address the question, “How do we build community capacity in order to shape a positive future for Appalachia?” with the implementation of phase II of the Bradford Community Immunization Access Assessment: Bridging the Gap.

Completion of the requirements for the Appalachian Teaching Project 2017-2018 Scope of Work was addressed by the following activities:

- Discussions with community partner representatives (Collaborative Board members, Ms. Lee Sizemore, Director of McKean County Department of
Human Services, and Mr. Bob Esch, ARG Vice President of External Affairs; President, McKean Co. Collaborative Board), at the completion of the 2016-2017 ATP project to identify next steps and reaffirm the partnership commitment.

- Skype session with Mr. Kostas Skordas, Director, Regional Planning and Research, UPB students, and project directors to review ARC mission, project goals, and class progress.
- Skype session with students, project directors, and University of Pittsburgh Human Research Protections Office [HRPO] Senior Research Review Analyst, Exempt and Expedited, Erin Grabowski to review human subjects protections and IRB process.
- Student completion of IRB [HRPO] training: Biomedical & Behavioral Sciences Research; Research Involving Human Subjects; Responsible Conduct of Research.
- Meeting with students, project directors, and Collaborative Board members Ms. Lee Sizemore and Mr. Bob Esch to discuss project goals and process. Focus on extending the project to include the local VA clinic, cataloguing of existing resources, outlining current practice for the referral process among local providers, and identifying educational needs.
  o To highlight the collaborative nature of this partnership, the Collaborative Board members shared newly created Board materials (attached) that provide for increased community visibility and clarity of Board purpose based on feedback and suggestions provided by 2016-2017 ATP students at the spring 2017 Collaborative Board Annual meeting [see attached]. ATP students identified that increased visibility and awareness of the Boards role/function within the community may help to foster support and facilitate sustainability of Board efforts within the local community. The materials included graphic icons that can be used in publications and publicity for sponsored events to identify a Board event, clearly defined statements of sub-committee purpose, and an easily accessible statement of Board Purpose and Goals. A group photo of the Board and the ATP Cohort was included.
- The collection of data by student pairs through the use of semi-structured interviews with local healthcare providers and pharmacists was conducted. Data were used to compile comprehensive summary of current resources, assess current practice for referral, and identify educational needs of the local providers and their practice population(s) in the Bradford community.

Presentations:

- October 18, 2017, Bradford Rotary Club, podium presentation. Presentation cancelled due to extenuating circumstance. Campus presentation scheduled with the Rotary Club invited to the rescheduled event.
- November 1, 2017, McKean County Collaborative Board Annual Strategic Planning Meeting. Poster and podium presentation. Presentation rescheduled by the Board. Students were unable to attend the rescheduled meeting due
to class conflicts. Campus presentation scheduled with the Board and Rotary Club invited to the rescheduled event.

- November 2, 2017, University of Pittsburgh at Bradford podium presentation. Members of the Collaborative Board and Rotary Club invited.
- March 9-12, 2018, Appalachian Studies Association Conference, Cincinnati, OH. Poster accepted for presentation. Due to scheduling conflicts, ATP students were unable to attend the conference this year. The student poster was displayed at the conference with a faculty Co-Director present to answer project questions.

**Project Outcomes:**

The overarching goals for the University of Pittsburgh at Bradford 2017-2018 ATP project as proposed have been met, despite a smaller than anticipated student cohort. Six students were enrolled in the project and were engaged as active learners and participants in all aspects of the community based Immunization Assessment project. Through work with the ATP project the students were able to develop an awareness of community assets that can foster sustainability of services and actively engage in community based research to extend the identification and development of existing assets to promote immunization access and utilization among residents of the Bradford community.

The project successfully provided for the cataloguing of available community resources for the provision of adult immunizations in the Bradford community. Through the assessment of local healthcare providers and pharmacists using a semi-structured interview format a more comprehensive understanding of the existing community resources was obtained.

Through the collection of data from health care providers, identified needs included enhanced education for provider utilization of available tracking systems [PA-SIIS]; targeted patient [immunization] education needs; increased understanding of the appropriate channels for provider collaboration and referral; and appropriate office based screening, education, and follow up protocols.

The identification of ongoing underutilization of the Statewide Immunization Information System (PA-SIIS) among providers and corporate limitations for utilization among chain pharmacies creates an additional opportunity for action. The newly developed collaboration with a local healthcare office will provide the foundation for the community wide dissemination of a sustainable “best practice” model for screening, referral, and follow up, while a framework for enhanced community education based on data obtained has been proposed.
Problems Encountered:

Based on recommendations of the community partner, we attempted to expand data collection to include the local VA service provider. Unfortunately, we were unable to secure participation from the site for the collection of data.

Additionally, issues arose with the scheduling/rescheduling of community based presentations. As the initial schedule of events was outlined prior to the start of the term based on student class schedules, the unexpected rescheduling of events based on partner need proved challenging. This issue was addressed by providing a campus based program with invitations extended to community partners, key constituents, and stakeholders.

Program Continuation and Sustainability:

As an indirect result of involvement in the project, the Collaborative Board began work toward enhancing community recognition of Board activities to generate additional support and foster sustainability through increased visibility and awareness based on feedback and recommendations of last year’s ATP student participants.

As identified in the previously submitted logic model (Appendix A), we have achieved the short term outcomes for this project which included an increased awareness of community based services, increased community collaboration, increased recognition of adult immunization requirements, and an increased understanding of the collaborative process for those involved.

The continued community collaboration this year has also served to help meet some of the medium term outcomes for strengthening of the community partnerships with the University and the development of tangible skills for student participants that are transferrable to many workplace settings. These skills include the conducting of community based participatory research, the process and value of community assessment, and the use of networking to build capacity and strengthen infrastructure. The acquisition of these skills by student participants is likely to have a long-term impact that extends well beyond the scope of this project.

This program of research and focused community engagement has raised awareness about local healthcare issues within our rural Appalachian community and has provided a framework for which education among lay community dwellers and healthcare providers may be enhanced to further support immunization referral, the acquisition of immunizations, and immunization tracking/reporting. Additionally, new partnerships have been formed with local providers and the University to enhance the local healthcare infrastructure for the provision of immunization services within the Bradford community.
Conclusions and Recommendations:

This project has provided additional information that will allow for further collaborative efforts aimed at strengthening the health of this rural northern Appalachian community. Through the identification of nurses as key actors in the screening, provision, and referral of immunization services, we are able to identify concrete strategies for addressing issues of community and provider education to create a sustainable resource network for increasing immunization within the Bradford community.

Ongoing collaboration with the University and our identified community partners is likely to have broad impact in the area of immunization resource utilization and efficiency. By continuing to address factors that influence vaccine access and resultant illness due to lack of access, we may impact the overall health of the community diminishing barriers for participation in the workforce resulting in improvements in health conditions that have the potential to impact the region’s economic competitiveness.

Attachments:

- Poster presentation of project overview and results.
- Publicity for ATP community presentation for project partners.
- Brochure from community partner based on feedback from ATP participants (featuring photo of ATP students and Collaborative Board members.)
Bradford Community Immunization Access: Bridging the Gap

Presented By: Vicki Alexander, RN; Nahdirah Barber, RN; Kelsy Cataldo, RN; Keirsten Counts, RN; Christopher Piechocki, RN; & Elly Smith, RN

Background
Influenza and pneumonia are leading causes of death from vaccine preventable illnesses in Appalachia. Previous research in the Bradford community identified the reduction of health department services, limited community transportation, a lack of community education, circular referrals, high levels of poverty, and a limited number of local physicians as potential barriers to vaccine access and availability.

» The 2016 Appalachian Teaching Project workgroup identified that there is a multifactorial deficit within the Bradford community
  • Community knowledge deficit
  • Under utilization of the PA-SIIS
  • Lack of community coordination

Significance
Annual cost of treatment for vaccine preventable diseases in U.S. is estimated at $26.5 billion.¹

Adult immunization identified as a priority community health need in McKean county.²

Bradford residents are at an increased risk for poor health maintenance.

Leading causes of death related to vaccine preventable diseases are influenza and pneumococcal pneumonia.³

Reduction of local healthcare resources has lead to a significant decrease in vaccine access.

Goals
1. Catalog current community resources.
2. Develop strategies for expanding the use of the PA Statewide Immunization Information System (PA SIIS).
3. Identify educational needs and development strategies to enhance existing assets and reduce barriers to immunization access.
4. Develop strategies for the creation of a community Vaccine Access Network.

Sample Population
» Bradford Area Immunization Providers
  • 5 primary care practices
  • 1 community hospital
  • 3 pharmacies
  • PA Department of Health

Research Design & Methods
Non-experimental, Cross Sectional Design
Data gathered via semi-structured interviews with midlevel providers, physicians, pharmacists, and key community stakeholders.

Interview guide was formed around the overall goals of the project.

Data was evaluated via qualitative analysis of content.

This project was approved by the University of Pittsburgh Human Research Protection Office.

Theoretical Framework
Developed in 1950's by U.S. Public Health Service social psychologists, the Health Belief Model was created to focus on behavioral actions related to health concerns.

Perceptions
- Susceptibility
  - Will get sick
- Severity
  - How sick will I get
- Benefits
  - Prevent bad outcomes & death
- Barriers
  - Cost, access, knowledge deficit & fear

Self-Efficacy & Costs to Action
- Implied Immunizations/Actions

Acknowledgements
» Local healthcare provider research participants
  • McKean County Collaborative Board
  • Appalachian Regional Commission
  • Appalachian Teaching Project
  • University of Pittsburgh at Bradford
    - Center for Rural Health Practice
    - Human Research Protection Office
  • ATP class of 2016

Results
» Nurses manage most programs.
» All vaccines are currently available. Cost, storage, and currency are limitations.
» Flu & pneumonia are the main focus with little awareness of other needs.
  • 95% know about the flu vaccine
  • 0-25% know about other vaccines

“I’d say about 30%, I have a few patients who refuse vaccinations due to religion and some due to fears of getting sick, but usually through proper education, I get fearful patients to get vaccinated.”

“Misinformation persists with the use of circular referrals.
» Insurance: DOH only aids un/underinsured, and provider offices generally aid insured patients.
» Lack of awareness and use of PA SIIS. However, the majority of providers agreed that increased use is needed.
» Identified best practices include the use of standing protocols and electronic integration.
» “Open communication… It makes it easier.”

“Of my patients who are vaccinated at the Pitt field clinic or CHC, they should send a sort of a printout with names of my vaccinated patients.”

Future Implications
» Nurse education
  • PA- SIIS
» Community Education
  • Accessible Immunizations
» Provider Education
  • System Integration
  • Referral Process
  • Immunization Protocols

“Nurses are the Network”

References

Poster presentation of project overview and results. Presented at ATP Conference.
Thursday, November 2, 2017, 5:30 pm
Swarts Hall room 111

Bradford Community Immunization Access: Bridging the Gap

A presentation of the UPB Appalachian Teaching Project

2017 ATP Students:
Vicki Alexander
Nahdirah Barber
Kelsy Cataldo
Keirsten Counts
Christopher Piechocki
Elly Smith

Please join us as we discuss the impact and significance of our current Appalachian Teaching Project and provide updates on our progress

Light refreshments will be provided.
McKean County Collaborative Board

McKean County Collaborative Board

November 1, 2017
McKean County Collaborative Board

Vision

Our vision is to create a safe and positive environment where citizens will be healthy, educated and responsible community members.

Our Purpose

- Promote coordination of services.
- Involve citizens in family and service system issues.
- Utilize community-based resources and leadership together with health, school and human services.
- Improve the way existing services are delivered to families.
- Empower citizens to become actively involved in their community.

How we do this

- Community assessment and planning.
- Develop local strategies to improve the lives of children and families.
- Evaluate the effectiveness of these strategies.
- Facilitate collaboration and information sharing.
- Encourage and develop financial support and resource development.
- Promote community awareness of the needs and issues effecting children and families.
Our Goals

- **Stable Families**: Families will provide a stable, supportive environment for their children.

- **Healthy Development during Childhood**: Children will be healthy and start school ready to learn.

- **Healthy Youth Development**: Young people will be valued and feel valuable.

- **Community Collaboration**: The McKean County community will work together to improve the lives of its children.

Our Committees

**Steering Committee**: A leadership committee that develops the agenda, policy and focus of the Collaborative Board.

**Housing Coalition**: A voluntary partnership that addresses housing related needs of low income, homeless individuals, and specialized populations. The Coalition also promotes awareness of housing and homelessness needs, and collaborates to increase housing options for all.
**Trauma Task Force:** A voluntary partnership that promotes trauma-informed practices in the delivery of services to people who have experienced violence and trauma and are seeking support for recovery and healing.

**Early Learning Outreach Council:** A voluntary partnership that works together to promote excellence in early learning and equal access to resources for all families.

**Child Abuse Prevention Month Committee:** A committee that organizes an awareness campaign held in April to prevention child abuse. The month focuses on connecting parents with a caring community; and promoting safety, health and development.

**Kids Fest:** A committee that organizes the premier Child Abuse Prevention Month activity called Kids Fest, which is held on the last Saturday in April in collaboration with the Bradford YMCA. Kids Fest is designed to network families with their community; and to connect families with information about child development, safety and health. In addition to fun activities, developmental screenings are offered for young children in order to detect problems early and connect children to resources.
Appendix A

Program: ATP 2017-2018 Bradford, PA Community Immunization Access: Bridging the Gap Logic Model

Situation: High rates of poverty; uncertain access to recommended immunizations

**Inputs**

- Catalog current community resources for the provision of immunizations for adults
- Incorporation of mid-level providers in the development of strategies for the creation of a VAN focusing on the relationship between competing provider interests.
- Incorporation of mid-level providers in the development of strategies for the expanded use of the PA Statewide Immunization Information System [PA SIIS] by vaccine providers in the Bradford community.
- Incorporation of mid-level providers to further identify educational needs and develop strategies for community education in efforts to enhance existing assets and reduce existing barriers related to immunization.
- Present the project findings to the community partner, civic organization, ATP meeting in Washington, DC, and ASA Conference

**Outputs**

*Activities and Participation*

**Short-term**

- Increased awareness of available community-based services.
- Increased awareness of the importance of community collaboration and understanding of the collaborative process.

**Medium-term**

- Increased collaboration of individual health providers in the Bradford community.
- Increased recognition of recommended adult immunizations requirements.
- Recognition of the importance of dissemination of findings.

**Long-term**

- Partnerships between the University and the McKean County Collaborative Board will be strengthened.
- Awareness of the specific nature of the health issues within Appalachia with regard to immunization status and risk.

**Outcomes**

- Students will:
  - Develop an understanding and demonstrate skills for community-based research.
  - Develop skills to conduct a community assessment.
  - Gain an appreciation for the public health advocacy, confidence, and leadership skills for student participants.

**Assumptions**

- Low rates of vaccine preventable illness are desirable.
- Increasing vaccine access will increase immunization.
- Increased rates of immunization will reduce the burden of disease in the community.

**External Factors**

- High rates of poverty [32.7%] in the Bradford community.
- Current regulations do not guarantee adequacy of payment for providers.
- Recent reductions in vaccine access points due to clinic closures and Pennsylvania Department of Health limits.