

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

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January 1, 2016- June 30, 2017

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## ATP 2016-2107 Final Report Narrative

**Title of Project: Bradford Community Immunization Access Assessment: Creating a Vaccine Access Network**

**Grant Period: January 1, 2016 – June 30, 2017**

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

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

### **Description of Project:**

While the University of Pittsburgh at Bradford has been an active participant in the Appalachian Teaching Project since 2010, this year's project reflected a shift in focus that is viewed to be in line with the Appalachian Teaching Project Scope of Work and the Appalachian Regional Commissions Strategic Investment Goals of a ready workforce [Goal 2], the development of leadership and community capacity [Goal 5], and the experience and expertise of the new project directors.

In an effort to innovate, partner, and invest in building community capacity in Appalachia, the University of Pittsburgh at Bradford identified and evaluated community factors influencing access to recommended immunizations, assessed the feasibility for the creation of a community resource network for increasing immunization access, and began examining necessary next steps to improve access and limit perceived barriers to immunization within the Bradford, PA community.

### **Activities:**

To be eligible for participation in the Appalachian Teaching Project, all student participants were enrolled in NUR 1402: Introduction to Nursing Research and/or NUR 1404: Community Health Nursing. Blending components from nursing research and community health, 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 the Bradford Community Immunization Access Assessment

Completion of the requirements for the Appalachian Teaching Project 2016-2017 Scope of Work was addressed by the following activities:

- Discussions prior to the submission of the ATP grant proposal 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), to identify a critical community challenge (immunization access), and secure partnership commitment.

- Meeting at UPB with Project Directors and community partner representatives after project approval (Ms. Lee Sizemore and Mr. Bob Esch), to confirm planning and scope of work for the upcoming term.
- Presentation for the McKean County Senior Center Board of Directors to outline project goals and affirm participation as a data collection site.
- 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 Debra Olson, RN from the McKean County Health Department [DOH] to discuss project. Focus on county immunization status, immunization specific needs by age group, current referral process, DOH immunization coverage.
- Meeting at UPB with students, project directors, and community partner members of the Collaborative Board, Ms. Lee Sizemore, and Mr. Bob Esch to review project progress, discuss community and provider surveys and seek project input.
- Collection of data through the use of a windshield survey, survey completion and semi-structured interviews with local healthcare providers and pharmacists, and semi-structured interviews with lay community dwellers at three locations (soup kitchen, senior center, and university setting) to assess community strengths, assets, needs, limitations, and barriers related to vaccine access in the Bradford community. Additional information related to willingness/interest of participation in a potential community Vaccine Access Network was gathered from healthcare providers and pharmacists.

### **Presentations:**

- October 25, 2016, Bradford Zonta Club. Poster and podium presentation.
- November 5, 2016, Penn-York Undergraduate Research Conference, Allegany, NY. Poster and podium presentation.
- November 9, 2016, McKean County Collaborative Board Annual Strategic Planning Meeting. Poster and podium presentation.
- December 3, 2016, Appalachian Teaching Project Conference, Arlington, VA. Poster and podium presentation.
- January 3, 2017, Bradford Kiwanis Club meeting. Podium presentation.
- March 9-12, 2017, Appalachian Studies Association Conference, Blacksburg, VA. Panel discussion.

## **Project Outcomes:**

The project successfully provided for the assessment of community resources for the provision of immunizations for adults and the elderly in the Bradford community. Through the assessment of local healthcare providers and pharmacists using a structured survey format with a follow-up semi-structured interview to assure completeness of data collected, a more comprehensive understanding of the existing community resources for adult immunization was obtained.

Through the collection of data from community members and health care providers, needs including enhanced community access to transportation, low levels of community knowledge related to immunization requirements and risks, an increased understanding of the appropriate channels for provider collaboration and referral, and appropriate space allocation for non-clinical site administration of vaccines, were identified.

Existing community assets or strengths including identification of providers currently accepting new patients, a more accurate overview of the available immunizations by provider, the identification of provider access for uninsured patients, and the venues for information seeking in the lay community was gained.

The project identified several barriers to vaccine access in the Bradford community including a lack of on-site availability for most vaccines at point of care, a lack of inquiry about vaccine status by healthcare providers, and underutilization of the Statewide Immunization Information System (PA-SIIS) among providers. Additional barriers identified among community dwellers include myths, fears, and costs associated with vaccination.

While we identified that 72% of provider participants are interested or want more information regarding a vaccine access network, competing professional interests and a lack of community coordination must be addressed in order to move forward. While we have identified interest and support, additional research with community partners and stakeholders is needed.

## **Problems Encountered:**

Based on information gained in the early stages of planning and implementation through collaboration with our community partners, it was identified that the priority need for immunization was present almost exclusively in the adult/elderly population. Therefore, the adult/elderly population were the focus for the project. Resources for children and adolescents (previously identified in a single goal: Assessment of community resources for the provision of immunizations for children, adolescents, adults, and the elderly) were not included in the assessment of community resources.

## **Program Continuation and Sustainability:**

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.

As an indirect result of involvement in the project, additional community-based collaborative opportunities have been presented to the University and the community resulting in the availability of student internships with the Collaborative Board and its member agencies and an increase in young adult participation on the Collaborative Board. These efforts have further strengthened community partnerships and built support for continued participation in future Appalachian Teaching Project programs.

This program of research and focused community engagement project has raised awareness about local healthcare issues within our rural Appalachian community and identified a need for enhanced education among lay community dwellers and healthcare providers related to the realities of immunization risks/benefits and PASIIS, respectively. Additionally, it has generated support among local community members and healthcare providers for further exploration of a sustainable collaborative provider network to enhance access to immunizations in the Bradford community, thereby allowing for the continuation and sustainability of this project in the Bradford community.

## **Conclusions and Recommendations:**

This project has provided vital foundational information that will allow for further collaborative efforts aimed at strengthening the health of this rural northern Appalachian community. Recognizing that increased communication and collaboration is needed among stakeholders, we are able to identify potential next steps in addressing the feasibility of creating a sustainable community resource network for increasing immunization access.

By continuing to address factors that influence vaccine access and resultant illness due to lack of access, we may not only impact the overall health of the community but also may diminish barriers for participation in the workforce and see

improvements in health conditions that have the potential to impact the region's economic competitiveness.

Continued collaboration with the University and our community partner, the McKean County Collaborative Board, is likely to have broad impact in the area of healthcare and local industry enhancing partnerships and fostering future community collaboration on many levels (see personal correspondence, supporting materials). The McKean County Collaborative Board is a community-improvement partnership comprised of parents, citizens, elected officials, and representatives from the health, business, human service, faith-based, and education sectors. While the McKean county Collaborative Board is identified as a single community partner, the composition of the Board is such that input was gained from a wide variety of community agencies with this partnership. Increasing cooperation and collaboration across diverse areas of community influence are the relationships that we believe hold the greatest promise to create transformative community change in the Bradford community.

### **Supporting Materials:**

Bradford Era, October 27, 2016. Zonta Club of Bradford announcement of Appalachian Teaching Project presentation. [http://www.bradfordera.com/lifestyles/zonta-club-of-bradford/article\\_1e953478-9bc6-11e6-8979-5ffb0a5459e4.html](http://www.bradfordera.com/lifestyles/zonta-club-of-bradford/article_1e953478-9bc6-11e6-8979-5ffb0a5459e4.html)

Bradford Era, November 12, 2016. Pitt-Bradford nursing students conduct community-based research project. [http://www.bradfordera.com/news/pitt-bradford-nursing-students-conduct-community-based-research-project/article\\_94613502-a87e-11e6-b764-eb423c8034c2.html](http://www.bradfordera.com/news/pitt-bradford-nursing-students-conduct-community-based-research-project/article_94613502-a87e-11e6-b764-eb423c8034c2.html)

Bradford Era, November 22, 2016. Pitt-Bradford students present at St. Bonaventure. [http://www.bradfordera.com/lifestyles/pitt-bradford-students-present-at-st-bonaventure/article\\_1d5f0c5a-b048-11e6-9e00-3bbcf6f142d6.html](http://www.bradfordera.com/lifestyles/pitt-bradford-students-present-at-st-bonaventure/article_1d5f0c5a-b048-11e6-9e00-3bbcf6f142d6.html)

Appalachian Studies Association Conference schedule of sessions. Session 8.6 Lessons from the Appalachian teaching Project: Multidisciplinary approaches to bolster community health and well-being. Panel Discussion. <http://appalachianstudies.org/annualconference/files/2017-schedule-of-sessions2.pdf>

## Collaborative Board Meeting Agenda

<b>McKean County Collaborative Board Annual Strategic Planning Meeting November 9, 2016</b>	
<b>Agenda</b>	
<b>8:30-9:00</b>	<b>Welcome, Introductions, and Complimentary Breakfast</b>
<b>9:00-9:45</b>	<b>Board Business</b> <ul style="list-style-type: none"><li>• Chair nomination and vote</li><li>• Co-Chair nomination and vote</li></ul> <b>Collaborative Café</b> <ul style="list-style-type: none"><li>• Discussion on the 2016 successes made in the community to help improve the lives of children and families in McKean County in relationship to the Collaborative Board Focus areas.<ul style="list-style-type: none"><li>○ Early Learning</li><li>○ Collaboration</li><li>○ Trauma Task Force Committee</li><li>○ Housing Coalition</li><li>○ Youth</li></ul></li></ul>
<b>9:45-10:45</b>	<b>Small group planning</b>
<b>10:45-11:00</b>	<b>Report-out</b>
<b>11:00-11:30</b>	<b>Presentation:</b> Bradford Community Immunization Access Assessment: Creating a Network, by University of Pitt-Bradford Nursing students

## Correspondence from community partner member

**From:** Bob Esch [<mailto:besch@amref.com>]  
**Sent:** Monday, January 23, 2017 11:12 AM  
**To:** Haley, Tammy Michelle <[tmh24@pitt.edu](mailto:tmh24@pitt.edu)>  
**Subject:** Immunization Study

Good Morning,

Can you provide me with a summary document that outlines the project? I would like to share the work with ARG Management. It is a great opportunity emphasize the importance of collaboration in our Community.

Thanks

Bob Esch



# Bradford Community Immunization Access Assessment: Feasibility of a Vaccine Access Network



Kellie Nugent, RN, Jenifer Anthony, RN, Chelsea Erick, RN, Alecia Myers, RN, Rilan Galicic, RN, Christina Moore, RN, David Demers, RN, Zachary Hadfield, RN, Richard Brand, RN, Jasmina Hajdarevic, RN, Francine Augustine, RN, Emily Groves, RN.

University of Pittsburgh at Bradford RN-BSN Program

## Background and Significance

- Immunizations are a vital asset to improve community health.
- The Affordable Care Act [ACA]**<sup>1</sup>
  - Covers recommended vaccinations to in-network providers without cost sharing.
  - Accessibility not guaranteed which may cause confusion and missed vaccination opportunity.
- The Section 317 Program**<sup>2</sup>
  - Implemented in October 2012 under ACA.
  - Provides vaccines to underinsured children and adolescents not covered under Vaccine for Children Program.
  - Remaining funding provides for uninsured and underinsured adult vaccination.
- The Bradford Community**
  - Not all local providers carry all recommended vaccinations.
  - The 2015 BRMC Community Health Needs Assessment identified access to adult immunizations as a community need.<sup>3</sup>
  - Mortality rates from vaccine preventable disease [VPD] is consistently higher than the PA state average.<sup>4</sup>

## Project Goals

### Identification of:

- Existing assets which facilitate access to immunization.
- Existing barriers which prohibit or limit access to immunization.
- Potential vaccine access network partners to create a sustainable infrastructure to expand access to all community members.

### Assessment of:

- Community resources for the provision of immunizations for adults.
- Community needs related to maintaining currency of immunization for all community members.



## Review of Literature

- Improved access to vaccines increases vaccination rates.<sup>6</sup>
- About 60% of the 200,000 flu-related hospitalizations occur in people over 65 years old.<sup>6</sup>
- An estimated average of 50,000 Americans die of VPD each year, with more than 99% of the deaths occurring in adults.<sup>7</sup>
- The assessment and delivery of adult vaccinations in the primary care setting remains inconsistent with multiple barriers.<sup>8</sup>
- Automated Clinical Reminders increase vaccination rates.<sup>9</sup>
- Common reasons consumers gave for not receiving immunizations were lack of physician recommendations and mistaken assumptions (i.e. healthy people do not need immunizations).<sup>10</sup>

## Population of Interest

	McKean County	Pennsylvania
Poverty <sup>11</sup>	16.6%	13.5%
Population >65 <sup>12</sup>	17.6%	16.0%
Uninsured <sup>11/13</sup>	9.0%	8%

## Significance to Nursing

The purpose of this project is to identify community strengths, barriers, and resources, which affect rates of immunization.

- Healthcare providers not carrying all recommended vaccines may result in higher rates of VPD.
- Increased hospitalizations due to VPD overtaxes limited resources in rural communities.
- Utilizing the Statewide Immunization Information System (SIIS) improves the efficiency of vaccine data tracking.
- SIIS improves proper allocation of limited resources.

## Conceptual 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.



Poster presentation of project overview. Presented at Zonta, Penn-York Undergraduate Research Conference, and Collaborative Board Annual Meeting





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University of Pittsburgh at Bradford RN-BSN Program



## Background and Significance

- Immunizations are a vital asset to improve community health.
- Healthcare cost attributed to Vaccine Preventable Disease [VPD] is substantial.
- The Affordable Care Act [ACA]**<sup>1</sup>
  - Covers recommended vaccinations to in-network providers without cost sharing.
  - Accessibility not guaranteed which may cause confusion and missed vaccination opportunity.
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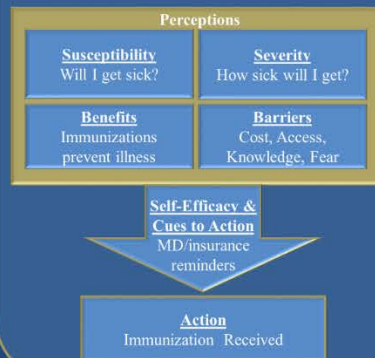
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The purpose of this project is to identify community strengths, barriers, and resources, which affect rates of immunization.

- Healthcare providers not carrying all recommended vaccines may result in higher rates of VPD.
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## Results

- Existing assets
  - 75.4% of participants planned on getting the flu shot this year.
  - 6 out of 7 (85.7%) healthcare providers (HCP) are accepting new patients.
- Existing barriers
  - Community
    - Myths "Autism has to come from somewhere"
    - Fears "there's zinc and stuff in it ..."
    - Cost "No job. No insurance. No resources"
  - HCP
    - More than half (55%) of vaccine providers surveyed do not use the PA SIIS.
    - Less than half (42.9%) of providers surveyed ask about vaccinations at every visit.
- Potential vaccine access network partners
  - Collaborative Board
  - 8 out of 11 (72.7%) providers are interested or want more information regarding a vaccine access network.
- Community resources
  - More than half identified getting immunization information from their healthcare provider.
- Community needs
  - Community wide coordination & communication among providers
    - The circular referral
  - Community need for education for both HCP and community members

## Conclusion

After assessing the feasibility of establishing a vaccine access network within the Bradford Community, we were able to identify community and HCP strengths and barriers. Our findings indicate there is a multifactorial deficit within the community including: a community knowledge deficit, under utilization of the PA SIIS, and lack of community coordination. Further research will be necessary in order to build community capacity and establish a sustainable vaccine access network.

Poster presentation of project overview and results. Presented at Appalachian Teaching Project Conference.

Appendix A

**Program: Bradford, PA Community Immunization Access Logic Model**

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

