2013 Indiana National Health Service Corps Project

Recruitment, Retention, and Evaluation
Associated with American Recovery and Reinvestment Act of 2009

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SECTION 1: INTRODUCTION

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EXECUTIVE SUMMARY

Healthcare workforce shortages are central to healthcare reform discussions and are critical areas of interest for Indiana State Department of Health (ISDH). The National Health Service Corps (NHSC) is a financial incentive program that provides scholarship or loan repayment to primary healthcare providers in return for periods of obligation serving federally designated underserved communities. The American Recovery and Reinvestment Act of 2009 (ARRA) increased funding to the NHSC program with the intent of strengthening and expanding the NHSC program capacity. In addition to building workforce capacity, funding was made available to State Primary Care Offices (PCOs) for the coordination and implementation of activities to support NHSC participants, enhance recruitment and retention post-obligation, and evaluation of the impact of ARRA funding for the NHSC program.

Indiana Area Health Education Centers (AHEC) Network entered into a contract with ISDH for the purpose of supporting current ARRA-funded NHSC scholars, clinicians, and obligation sites to improve retention and provider satisfaction. In addition, a team of researchers at the Center for Health Policy (CHP) in the Richard M. Fairbanks School of Public Health, Indiana University Purdue University Indianapolis (IUPUI) were subcontracted to perform an evaluation of activities outlined in the AHEC contract and evaluate the impact of ARRA funding on NHSC clinician retention, primary healthcare access, and primary care capacity. The NHSC project team was comprised of key personnel from AHEC and CHP. The team developed and administered surveys, conducted key informant interviews, and facilitated focus groups. The activities were carried out to gather data on perspectives and experiences of ARRA-funded NHSC clinicians and site administrators in order to generate recommendations for the Indiana NHSC Program.

ARRA-funded NHSC clinicians reported that their obligation site's mission and goals were among the key factors contributing to satisfaction with their NHSC service. In fact, clinicians reported that the most important factor in choosing to participate in the NHSC program was the desire to help people in an underserved area. Poor organizational management at obligation sites was a common theme among the NHSC clinicians and a barrier to satisfaction. Interestingly, obligation site administrators reported that it was best to recruit clinicians with the same cultural and ethnic background as their patient population; however, clinicians overwhelmingly did not believe that their cultural background needed to match that of their patients for successful care.

From the site administrator's perspective, the NHSC obligation site application process was identified as the biggest barrier to implementing the NHSC program. Specific issues with this process included: changes to the application time period, availability of information, and additional required documentation. NHSC site administrators indicated that having NHSC clinicians at their service site increased the facility's ability to reach new at-risk populations, provide more care to the populations they already reached, and provide a broader array of services to their patients.

The NHSC project team employed innovative methods to evaluate the impact of ARRA funding. Capacity was evaluated using Geographic Information System (GIS) mapping which highlights the change in healthcare workforce capacity prior to and after implementation of ARRA. The largest capacity increases occurred in urban areas for primary care physicians, mental healthcare providers, and primary care nurse practitioners. Indiana had a net decrease in dentists within the same period, and there were so few physician assistants working in Indiana that it is difficult to see a change in the physician assistant workforce before and after ARRA. In addition, obligation sites reported ARRA funding enabled increased healthcare access for existing patients from vulnerable populations.

Findings from the 2013 Indiana ARRA Funded National Health Service Corps Recruitment, Retention, and Evaluation Project provide valuable insight into the strengths and weaknesses of the NHSC program in Indiana. A lack of centralized administration to provide oversight and support for NHSC participants emerged as a weakness throughout this project. Currently, a number of organizations contribute to the NHSC program in Indiana, but these efforts are unorganized and inefficient. Another major theme identified as a weakness of the NHSC program was the lack of marketing and awareness among potential participants. The first recommendation is meant to enhance the administrative structure of the NHSC for the State of Indiana. The second recommendation focuses on improving the marketability of the NHSC program and is pertinent at the federal level. To address the shortage of primary care clinicians and the healthcare crisis at both the State and Federal level NHSC processes must be streamlined to increase efficiency, and marketing strategies should be centered around the strengths of the NHSC program.

BACKGROUND

It is well known that access to primary healthcare services is associated with better health outcomes (Starfield, Shi, & Macinko, 2005). The geographic distribution of the workforce that delivers these services is among the critical factors that play a role in health care access (Hall, Lemak, Steingraber, & Schaffer, 2008). Unfortunately, an inequitable distribution of the health workforce threatens access for many people within the United States and worldwide (Dussault & Franceschini, 2006). Rural and low-income urban communities are most profoundly affected by this distribution problem (Rabinowitz, 1993).

Numerous factors contribute to the mal-distribution of health workforce, including lack of financial incentives and lack of professional and personal opportunities (Zaidi, 1996). A number of strategies have emerged to address this mal-distribution; these include targeted recruitment for training programs, scholarships/grants, and financial incentives (Rabinowitz, 1999). These strategies aid recruitment of healthcare providers to underserved communities; however, retention following periods of obligation or following receipt of incentives is critical in order to sustainably address health workforce shortages. Little information exists on the long-term effectiveness of such programs within Indiana. Understanding the characteristics associated with health workforce retention and the perceived barriers are crucial to the development of policies and programs targeting recruitment and retention concurrently.

While NHSC recruitment efforts have been successful, the retention rate for NHSC participants in Indiana's underserved areas (both urban and rural) after period of obligation is relatively unknown. An article published in the Nov/Dec 1998 edition of Physician Executive, reported on an unknown study citing a 20% retention rate for NHSC physician participants in rural areas. In 2000, a formal evaluation of the NHSC program was submitted to the DHHS by the Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill. This report examined the one-month post obligation retention of NHSC alumni and the retention intentions of NHSC participants, but did not provide a long-term perspective on NHSC retention. Health Resources and Services Administration (HRSA) is interested in learning the specific impact of ARRA-funding on the NHSC. Surveying NHSC clinicians (in-obligation and post-obligation) and their corresponding obligation site(s) will help identify and understand specific experiences, perceptions, and intentions of these groups.

INDIANA ARRA-NHSC PROJECT

History

In the United States, Health Resources and Services Administration (HRSA) within the Department of Health and Human Services (DHHS), operates the National Health Service Corps (NHSC) program. Since 1970, the NHSC program has provided financial incentives to primary healthcare workforce members for years of service in geographic areas that have been designated as underserved based on provider to population ratio. These incentives are focused on reducing the burden of federal student loans for participants.

Environment

The American Recovery and Reinvestment Act of 2009 (ARRA), signed into law on February 17, 2009, provided $300 million to aid in the recruitment and retention of primary care providers through the National Health Service Corps (NHSC). Through ARRA, HRSA made available $8.5 million for the State Primary Care Offices (PCO) for a two-year project period starting no later than September 30, 2011. The funding increased the States' ability to coordinate activities toward strengthening the primary care workforce. The purpose of the additional funding was to assist PCOs in the coordination and conduct of activities within their State/U.S. Territory as it relates to the retention of primary care providers as a result of the National Health Service Corps (NHSC) initiative under ARRA. In Indiana, the PCO established contracts with key stakeholder organizations to carry out the activities to enhance the National Health Service Corps for the state.

PROJECT CONTRACTS

Contract 1: Supporting NHSC Scholars and Clinicians/ Enhancing Retention

On November 1st, 2012 the Indiana Area Health Education Centers (AHEC) Network entered into a programmatic contract with the Indiana State Department of Health (ISDH) for the purpose of supporting current ARRA funded NHSC scholars, clinicians, and obligation sites to improve retention and satisfaction. The full amount of the contract between AHEC and ISDH was $155,656.

Programmatic Contract Objectives

1. Address challenges and barriers present in Indiana that prevent recruitment and retention of health professionals in underserved areas.
2. Support current and past ARRA-funded NHSC scholars and other students in preparation for service in underserved communities.
3. Engage in efforts to retain ARRA-funded NHSC/SLRP loan repayment clinicians.
4. Provide technical assistance to clinical sites with ARRA-funded NHSC/SLRP clinicians for the purposes of retention.

Contract 2: Evaluation: Impact of ARRA and Programmatic Contract

In addition to the programmatic contract with AHEC, a team of researchers at the Center for Health Policy (CHP) in the Richard M. Fairbanks School of Public Health, Indiana University Purdue University Indianapolis (IUPUI) was subcontracted to perform an evaluation of activities as outlined in the AHEC contract and examine additional factors affecting NHSC clinician retention post-obligation. The contract with CHP was $32,500.

Evaluation Contract Objectives

1. Assess the impact of ARRA funding on 1) access to primary care services, 2) workforce supply and distribution, and 3) NHSC provider retention.
2. Evaluate retention/support strategies.

SUMMARY

The following document provides information on the deliverables associated with each contract for the *2013 Indiana ARRA Funded NHSC Recruitment, Retention, and Evaluation Project*. Section one presents each objective of the programmatic contract as a sub-section. Section two presents objectives of the evaluation contract. Methodologies for each sub-section are described in brief within this document. Due to document length, only key data are presented within the sub-sections. Additional data are presented in the appendices. Any questions regarding this document or request for additional data may be directed to hlmaxey@iupui.edu or cnorwoo@iupui.edu.

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OBJECTIVE I: IDENTIFY CHALLENGES/BARRIERS

Purpose

A modest amount of literature on health care professional satisfaction and barriers to retention in underserved communities exists. A formal, national level evaluation of the National Health Service Corps program was performed by the Cecil G. Sheps Health Services Research Center at the University of North Carolina in 1998. The final report, *Evaluation of the Effectiveness of the National Health Service Corps,* was published in 2000 and contained information on a nationally representative sample of NHSC clinicians and scholars. This study provided insight on the barriers and challenges associated with NHSC retention, but a number of limitations threaten the generalizability of findings. First, findings of the 1998 evaluation are dated (over 15 years) and may not be representative of ARRA-funded NHSC clinicians and scholars. Second, findings of a national level study may not accurately reflect the NHSC experience within a given state due to variations in professional practice environment.

As such, the first task that the Indiana NHSC Project team from AHEC and CHP undertook was the collection of data on the experiences, perceptions, and intentions of ARRA-funded NHSC clinicians and the administrators at their respective obligation sites. Different approaches were taken to collect data on this group: 1) survey tools were designed and administered and 2) key informant tools were designed and interviews were administered. This section provides detailed information on contracted activities for objective 1.

Activity 1: Data Collection

Literature Review and Survey Tool Development

A literature review on health provider retention was performed to identify previous studies and their survey tools in order to determine the preferable design for the project. The team determined that the survey tools design should closely follow the format of the 1998 surveys administered to NHSC clinicians, scholars and site administrators for the national evaluation. The original tools were obtained from the Cecil G. Sheps Health Service Research Center archives. Pertinent questions from the clinician and administrator surveys were incorporated into the survey tools used for this project. In addition to the 1998 survey tool questions, a number of questions were incorporated into the clinician survey to explore new domains and current issues not previously considered. Among these were 1) four questions representing an altruism scale originally published in the 2006 version of the General Social Survey, 2) a number of questions on knowledge, experience and perspective of Community/Lay health workers, and 3) use and type of electronic health record systems.

Survey Administration

NHSC Clinicians

The NHSC clinician survey was designed and administered electronically through REDCap. REDCap is a survey administration tool available to academic affiliates through the Indiana Clinical Translations Sciences Institute (CTSI). The tool enables the survey administration process: design, dissemination, collection, and analysis. The final survey tool, found in Appendix A, contained approximately 56 questions, excluding demographic characteristics.

A formal message with instructions and a link to the survey was initially emailed to all ARRA-funded NHSC Clinicians in Indiana through the RedCap system and is found in Appendix A. Survey non-respondents received (four) weekly follow-up reminders from REDCap following initial dissemination. Twice, at five and six weeks personal email messages were sent to remaining non-responders from the project team members. The final survey sample included 26 (54%) of the 48 ARRA-funded NHSC clinicians. The demographic information for the study population and the survey sample are included in Tables 1 & 2.

NHSC Clinician Survey: Population Demographics			
	Missing Response	**Mean**	**Std. Dev.**
Start Age	3		
All ARRA Funded Clinicians		37.27	7.95
End Age	3		
All ARRA Funded Clinicians		39.55	7.95
Age	3		
All ARRA Funded Clinicians		40.47	7.93
	Missing Response	**Number**	**Percent**
Retention	2		
Retained at NHSC service site		25	55.6
Not retained		20	44.4
Sex	14		
Male		8	24.2
Female		25	75.8
Race	8		
White		33	84.6
Non-white		6	15.4
Ethnicity	8		
Hispanic or Latino		0	0.0
Not Hispanic or Latino		39	100.0
SP_BIN	0		
NHSC Scholarship Program		0	0.0
NHSC Loan Repayment Program		47	100.0
Provider Discipline	0		
Allopathic Physician		5	10.6
Certified Nurse Midwife		1	2.1
Dentist		3	6.4
Health Service Psychologist		4	8.5
Licensed Clinical Social Worker		8	17.0
Licensed Professional Counselor		11	23.4
Nurse Practitioner		11	23.4
Physician Assistant		4	8.5

Table 1: *Demographic Information of Clinician Survey Population*

NHSC Clinician Survey: Sample Demographics			
	Missing Response	**Mean**	**Std. Dev.**
Start Age			
Sample ARRA Funded Clinicians	0	34.7	6.01
End Age			
Sample ARRA Funded Clinicians	0	37.07	5.83
Age			
Sample Funded ARRA Clinicians	0	38.01	5.87
	Missing Response	**Number**	**Percent**
Retention	0		
Retained at NHSC service site		23	88.5
Not retained		3	11.5
Sex	0		
Male		4	15.4
Female		22	84.6
Race	0		
White		23	88.5
Non-white		3	11.5
Ethnicity	1		
Hispanic or Latino		0	0
Not Hispanic or Latino		25	100
Medicaid	1		
Accepts Medicaid		25	100
Does not Accept Medicaid		0	0
SP_BIN	0		
NHSC Scholarship Program		0	0
NHSC Loan Repayment Program		26	100
Provider Discipline	0		
Allopathic Physician		0	0.0
Certified Nurse Midwife		1	3.8
Dentist		2	7.7
Health Service Psychologist		2	7.7
Licensed Clinical Social Worker		7	26.9
Licensed Professional Counselor		6	23.1
Nurse Practitioner		5	19.2
Physician Assistant		3	11.5

Table 2: *Demographic Information of Clinician Survey Sample*

Site Administrators

Due to the extent of quantitative information to be collected, the NHSC Site Administrator surveys were administered manually. The final site administrator survey tool, found in Appendix B, contained 22 questions. The initial round of administrator surveys were mailed to obligation sites addresses to the attention of administrators using the U.S. Postal Service. Second and third rounds of dissemination were emailed to non-responders at two and four weeks post implementation. The sample included 40 obligation sites and 33 site administrators. A number of administrators provide oversight and support for multiple obligation sites. Survey responses were collected from 9 (27%) of the 33 NHSC site administrators.

Key Informant Tools

In addition to surveys, the project team developed 2 key informant interview tools to collect qualitative data. Finalized key informant tools are provided in Appendix C (Clinician) and Appendix D (Administrator). The NHSC clinician tool contained 10 questions, and the site administrator tool contained total 7 questions.

Key Informant Interview Procedure

Due to the geographic distribution of clinicians and service sites across the state of Indiana, the project team leveraged their relationship with the regional AHEC offices for interviewing support. AHEC regional offices were invited to participate in key informant interviewing. To promote standardization, training was developed and administered to interviewers on March 18th at the State AHEC Meeting. Interviewers not able to attend the in person training session, led by Dr. Terrell Zolinger, were required to complete on-line training and pass a post-training review. Training materials and a complete list of interviews performed by AHEC regional office is provided in Appendix E and Appendix F, respectively. A total of 18 NHSC clinicians and 15 site administrators completed key informant interviews.

Activity 2: Analysis of Survey Data

Survey and key informant interview data were prepared and analyzed by the project team members. Details of the data preparation are provided below.

Survey Data Preparation

Clinician survey data were automatically coded when extracted from REDCap into Microsoft Excel©. Administrator survey data were coded and entered into Microsoft Excel©. Responses for questions in Likert scale format were assigned appropriate values, and responses to open-ended questions were maintained. Note that all five point Likert Scale variables were dichotomized by collapsing the variables for analysis. Agreement was defined as "Agree" or "Strongly Agree". Disagreement was defined as "Disagree" and "Strongly Disagree". All neutral responses were excluded from analysis.

Key Informant Data Preparation

Key informant data were themed and coded by multiple team members to decrease variability. Themes were identified separately by team members and subsequently assessed for concordance. Common themes were assigned numeric values for analyses. All key informant data were coded to facilitate data analyses. Prepared survey and key informant data were merged into one Microsoft Excel© dataset for analysis. Analyses were performed using SAS Enterprise 4.3©.

Activity 3: Survey Findings

NHSC Clinician Survey

Tables and text in this section represent data that were collected from the survey and interview samples of ARRA-funded NHSC clinicians. Only key findings and summaries are presented here. Additional data are presented in Appendix O and can be obtained by contacting Hannah Maxey, hlmaxey@iupui.edu,or Connor Norwood, cnorwoo@iupui.edu.

NHSC Obligation Site Selection

Self-selection of obligation site may lead to higher levels of satisfaction and longer periods of retention post-obligation. Table 3 presents the ARRA-funded NHSC clinician's perspectives on selection of their NHSC obligation site. Among the notable findings, 86% of NHSC clinicians reported that the obligation site met their professional needs and goals.

Factors Contributing to NHSC Site Selection			
	Missing	**Number**	**Percent**
The number of sites available to me in the placement cycle were adequate	9		
Agree		9	52.9
Disagree		8	47.1
I was able to find a site that met most of my professional needs and goals	4		
Agree		19	86.4
Disagree		3	13.6
My visits to the site played a deciding role in my selection of a site	10		
Agree		10	62.5
Disagree		6	37.5
The NHSC gave me adequate preparation for negotiating with my site	13		
Agree		7	53.8
Disagree		6	46.2
I was willing to serve at any NHSC site available	6		
Agree		9	45.0
Disagree		11	55.0

Table 3: NHSC provider perspectives on obligation site selection

Cultural Competency

Cultural competency is critical in healthcare. ARRA-funded NHSC clinicians were asked to respond to a matrix of questions capturing their perspective on cultural competency. Table 4 presents these data. All of the respondents agreed that understanding their patient's socio-cultural background was important to their practice. In addition, 95% percent of respondents reported that serving in underserved communities contributed to their job satisfaction. The most notable finding was that 63.2% of respondents reported that matching healthcare providers to a community based on their social and cultural background was not necessary. This finding contrasts current literature, which focuses on the patient perspective. Current literature cites matching healthcare providers to a community based on social and cultural factors is preferable and improves health outcome (Saha, Komaromy, Koepsell, & Bindman, 1999). Additional research is required to elucidate the specific reasons for the contrast in perspectives.

NHSC Clinician's Perspective on Cultural Competency			
	Missing	**Number**	**Percent**
Understanding my patients' socio-cultural background is crucial to my ability to effectively provide health care to them.	0		
Agree		26	100.0
Disagree		0	0.0
It is best to match a clinician to a site serving population who's social and cultural backgrounds are similar to that of the clinician.	7		
Agree		7	36.8
Disagree		12	63.2
It is the clinician's responsibility to acquire necessary social and cultural competencies when serving in a medically underserved site.	1		
Agree		23	92.0
Disagree		2	8.0
Serving low income patients contributes to my job satisfaction.	4		
Agree		21	95.5
Disagree		1	4.5
Clinicians in medically underserved areas are generally accepted by their patients, even if they are of a different cultural background.	5		
Agree		19	90.5
Disagree		2	9.5

Table 4: NHSC Clinician's Perspective on Cultural Competency

NHSC Clinician Satisfaction with Obligation Site

NHSC clinician satisfaction is important to the success of the NHSC program at various levels. Satisfaction among participants is likely to foster high morale within the NHSC program, which may contribute to increased retention post-obligation and a decrease in loss of productivity due to missed work days for health and well-being. Table 5 presents NHSC clinician satisfaction associated with obligation site characteristics. High levels of satisfaction were reported across these factors. However, "Fringe Benefits" and "Access to Specialists" were associated with lower levels of satisfaction among clinicians.

NHSC Clinician Site Satisfaction			
	Missing	**Satisfied**	**Not Satisfied**
Availability of clerical/administrative support?	2	89.5	10.5
Financial stability of the site/practice organization?	3	87.5	12.5
Triage system for patient care?	3	80.0	20.0
Physical condition of the health care facility?	4	82.6	17.4
Fringe Benefits	7	61.1	38.9
Continuing medical education benefits paid for by the site?	3	85.0	15.0
Malpractice coverage by the employer?	2	90.0	10.0
Total Compensation	4	80.0	20.0
Reputation of the site in the local community?	5	78.3	21.7
Reputation of the sire in the medical community?	5	78.3	21.7
Flexibility of daily clinical scheduling	4	82.6	17.4
Night and weekend call duties	4	78.9	21.1
The mission and goals of site?	0	100.0	0.0
Access to specialists	7	63.2	36.8
Number of health care providers at site	4	80.0	20.0
Other health care providers/patient care system in the community?	4	78.9	21.1

Table 5: NHSC clinician satisfaction associated with obligation site characteristics

Community Surrounding the Obligation Site

Understanding how NHSC clinicians and their families perceive the community in which they serve is critical to the success of the NHSC program. Clinicians were asked to indicate whether they agreed or disagreed with statements about their feelings and their family's feelings regarding the community in which they work and live. Generally, clinicians indicated that their spouses and children had adequate resources available to them in the community. Nearly half of respondents (44.4%) indicated that it was difficult for single people to socialize in their community. Few respondents were concerned about crime in their community, but nearly 40% indicated that concerns for their personal safety at their obligation site would play a role in whether or not they decided to remain at their site after their obligation period.

NHSC Site Community Elements Contributing to Clinician Satisfaction			
	Missing	**Agree**	**Disagree**
My spouse/partner is happy in the community where we live for my NHSC Service	0	100.0	0.0
Satisfactory professional opportunities for my spouse are available in the community where we live for my NHSC service	2	86.7	13.3
My children are happy in the community where we live for my NHSC service.	0	100.0	0.0
Satisfactory educational opportunities for my children are available in the community where we live for my NHSC service.	1	90.0	10.0
Staying in this community is likely to be a problem given my current family situation	10	28.6	71.4
The crime rate in the community where my NHSC practice site is located will be a factor in my decision about remaining there past my NHSC commitment.	15	21.1	78.9
Concern for my personal safety at the facility where I work will be a factor in my decision about remaining there past my NHSC commitment.	11	38.9	61.1
Socializing in the community is difficult for single people.	5	44.4	55.6

Table 6: NHSC obligation site community factors effecting provider satisfaction

Retention of NHSC Clinicians at Obligation Site by Satisfaction with Site Characteristics

Understanding the obligation site factors that influence retention of NHSC is important to generating recommendations to enhance provider retention. NHSC clinicians responded to a series of questions to determine their satisfaction with their obligation. The responses were linked to their retention status and analyzed. Significant findings are reported in table 7. Financial stability, malpractice coverage, and clinical manpower of the obligation site were the largest barriers to provider retention. It is important to note that small sample size numbers may limit these analyses.

Provider Satisfaction Associated with Obligation Site Characteristics					
Satisfaction by Site Retention	**P-value**	**Retained**		**Not Retained**	
Financial stability of the site/practice organization?	0.0316	**Number**	**Percent**	**Number**	**Percent**
Agree		20	95.2	1	33.3
Disagree		1	4.8	2	66.7
Malpractice coverage by the employer?	0.0158	**Number**	**Percent**	**Number**	**Percent**
Agree		17	100.0	1	33.3
Disagree		0	0.0	2	66.7
Number of health care providers at site	0.0316	**Number**	**Percent**	**Number**	**Percent**
Agree		16	88.9	0	0.0
Disagree		2	11.1	2	100.0

Table 7: Significant findings of provider satisfaction associated with obligation site characteristics

Family Status of NHSC Clinicians

The research team sought to examine if family status was associated with survey respondents reported satisfaction on various factors. This information can be used to target initiatives to increase NHSC provider satisfaction.

The family status of an NHSC clinician was based on whether clinicians indicated that they were married or in a domestic partnership and if they had minor children (under 18 years old). Clinicians who responded affirmatively to either of those two questions were considered to be living with a family and those who did not were considered single for the purposes of analyses. Table 8 presents the significant findings for the analyses.

Factors Influenced by Family Status					
Satisfaction by Family Status	**P-value**	**Family**		**Single**	
Reputation of the site in the medical community?	0.0078	**Number**	**Percent**	**Number**	**Percent**
Agree		16	94.1	2	33.3
Disagree		1	5.9	4	66.7
Number of health care providers at site	0.0134	**Number**	**Percent**	**Number**	**Percent**
Agree		15	93.8	1	25.0
Disagree		1	6.3	3	75.0
Family Status by Cultural Competency	**P-value**	**Family**		**Single**	
It is best to match a clinician to a site serving population who's social and cultural backgrounds are similar to that of the clinician.	0.0379	**Number**	**Percent**	**Number**	**Percent**
Agree		3	21.4	4	80.0
Disagree		11	78.6	1	20.0
Family Status by Reason	**P-value**	**Family**		**Single**	
I needed a Scholarship for my Health Profession Education	0.0353	**Number**	**Percent**	**Number**	**Percent**
Agree		1	5.6	3	50.0
Disagree		17	94.4	3	50.0

Table 8: Significant findings of family status association with provider satisfaction

The differences in perceptions of satisfaction with obligation site facility, cultural competency, and reasons for joining the NHSC program by family status gives an understanding of the factors important to single clinicians and those with a family. Only comparisons with statistically significant results are shown. Clinicians living with a family were more likely than single clinicians to be satisfied with the reputation of their obligation site in the medical community and were more likely to agree that their site had an adequate number of clinicians. Single clinicians were more likely to agree that clinicians should be matched to a site that serves a population with a similar cultural background to the clinician. Single clinicians were also more likely than clinicians raising a family to have joined the NHSC because they needed a scholarship to complete their health professional training.

Parental Status of NHSC Clinicians

In addition to family status, the research team examined whether the parental status of an NHSC clinician was associated with their reported level of satisfaction. Parental status was determined by clinician's response to having minor children (under 18 years old). NHSC clinicians who were parents were more likely to be satisfied with the reputation of their obligation site in the medical community than their non-parent counterparts.

Factors Influenced by Parental Status					
Satisfaction by Parental Status	**P-vale**	**Yes**		**No**	
Reputation of the site in the medical community?	0.0075	**Number**	**Percent**	**Number**	**Percent**
Agree		13	100.0	5	50.0
Disagree		0	0.0	5	50.0

Table 9: Significant findings for parental status on reported provider satisfaction

NHSC Clinician Key Informant Interview

NHSC clinicians were asked to indicate the pros and cons of their obligation. Additionally they were asked to report the biggest challenges they faced regarding the NHSC program. Overall, clinicians appreciated the mission of their NHSC site as well as strong site administration. Other reported strengths of the NHSC sites were being immersed in the community in which they serve and the diversity of their patient population. The most commonly reported weakness of NHSC sites was a lack of organizational management. Other factors that clinicians considered weaknesses included: diversity of patients, a lack of specialty care at or near their site, and a lack of professional growth and advancement opportunities. However, several clinicians indicated that they felt their facility had no weaknesses to be reported. The biggest challenge reported by NHSC clinicians was dealing with site administration. "Patient specific challenges" was also a commonly reported challenge.

NHSC Clinician Interview: Obligation Site Pros and Cons			
NHSC Site	**Missing**	**Number (Mean)**	**Percent (SD)**
Pros of NHSC Site	**4**		
Strong site administration		4	28.6
Diversity		2	14.3
Mission		5	35.7
Community Immersion		3	21.4
Cons of NHSC Site	**0**		
No Cons		3	16.7
Poor organizational management		8	44.4
Diversity		3	16.7
Professional silos		3	16.7
Professional growth/advancement		1	5.6
Biggest Challenge Faced with NHSC Program	**0**		
Financial resource		1	5.6
Patient specific challenges		6	33.3
Site administration		7	38.9
Lack of community health services		2	11.1
Federal program challenges		0	0.0
No challenges		1	5.6
Environment challenges (rural)		1	5.6

Table 10: NHSC clinician self-reported obligation site pros and cons

NHSC Site Administrator Key Informant Interview

NHSC Site Administrators were asked to indicate the effect the NHSC program has had on their organization, the benefits the NHSC program provides to their organization or community, and the challenges/barriers with their NHSC involvement. The majority of site administrators (80.0%) reported that recruitment of clinicians increased through participation with NHSC. Additionally, 20% of administrators saw increased retention of clinicians at their organization. Administrators indicated that the recruitment of high quality providers for the community was a benefit of the NHSC program. Increased access to care and expanded scope of services provided to the community were also cited as benefits of the NHSC program. The biggest challenges faced by administrators were difficulties with the NHSC site approval application process and organizational management of the site. Uncertainty regarding shortage designation status and HPSA scoring were also mentioned by administrators as challenges.

NHSC Site Administrator Interview: Perspective on NHSC			
	Missing	**Number**	**Percent**
Effect of NHSC on Organization	**0**		
Recruitment		12	80.0
Retention		3	20.0
Benefits of NHSC on Organization or community	**0**		
Increased access		4	26.7
Recruitment of high quality providers		7	46.7
Increased scope of service		4	26.7
Challenges and Barriers Faced with NHSC	**0**		
Application process challenges		6	40.0
Organizational management issues		5	33.3
Uncertain of shortage designation		1	6.7
None		2	13.3
HPSA scoring		1	6.7

Table 10: NHSC Obligation Site Administrator Perspectives on NHSC

NHSC Site Administrator Survey

Year Site Became NHSC Obligation Site

Administrators were asked to indicate the first year that their site was approved as an NHSC site. Four of seven respondents reported that their site was approved as an NHSC site prior to implementation of ARRA in 2009. This indicates that only a small portion of new NHSC obligation sites were established during the ARRA funding period.

Year NHSC was First Established			
	Missing	**Number**	**Percent**
Year	**2**		
1998		1	14.3
2002		1	14.3
2008		2	28.6
2009		1	14.3
2010		2	28.6

Table 11: Year NHSC obligation site status was first obtained

Fringe Benefits Offered by Obligation Site

Fringe benefits offered by surveyed NHSC sites are displayed in Table 12. All respondents indicated that their site offered medical/dental insurance and all but one indicated that they offered life insurance. Seven of the nine administrators indicated that their site offered long term and short term disability as well as a supplemental retirement plan. Only two sites indicated that they offered a salaried retirement plan. Sites offered an average of 16 vacation days and 6 sick days per year.

Clinic's Standard Benefit Package			
	Missing	**Number (Mean)**	**Percent (SD)**
Medical/ Dental Insurance	0		
Yes		9	100.0
No		0	0.0
Life Insurance	0		
Yes		8	88.9
No		1	11.1
Long term disability	0		
Yes		7	77.8
No		2	22.2
Short term disability	0		
Yes		7	77.8
No		2	22.2
Supplemental retirement plan	0		
Yes		7	77.8
No		2	22.2
Salaried retirement plan	0		
Yes		2	22.2
No		7	77.8
Vacation (days/year)	0		
Yes		16.56	9.96
Holidays (days/year)	0		
Yes		6.22	3.27

Table 12: NHSC obligation site fringe benefits

NHSC Clinician Compensation at Obligation Sites

Table 13 shows the salary and compensation information for various types of health care professionals at their site. Starting salaries were listed for 11 of the 16 health care disciplines represented and current salaries were listed for 10 of the 16 disciplines. Signing bonuses were provided to family practitioners, general internists, and pediatricians at several sites.

NHSC Site Average Salary & Compensation									
	Starting Annual Salary			Sign-on Bonus			Current Annual Salary		
Discipline	**Mean**	**St. D.**	**n**	**Mean**	**St. D.**	**n**	**Mean**	**St. D.**	**n**
Family Practitioner	147,832.00	25,024.14	6	16,166.67	17,221.59	3	148,853.80	15,438.04	5
General Internist	170,000.00	28,284.27	2	20,500.00	21,920.31	2	150,000.00		1
Pediatrician	159,026.67	26,473.42	3	20,500.00	21,920.31	2	178,373.00	9,371.99	2
Obstetrician/Gynecologist									
Psychiatrist									
Dentists	112,500.00	24,748.74	2				114,400.00	22,061.73	2
Dental hygienist	33/hr		1				35/hr		1
Physician Assistant	67,500.00		1				80,600.00		1
Nurse Practitioner	75,598.50	12,005.38	4				76,998.50	4,763.89	4
Nurse Midwife	80,000.00		1				85,000.00		1
Marriage and Family Therapist									
Licensed Professional Counselor									
Health Service Psychologist	69,333.33	16,510.10	3				85,616.00	13,342.05	3
Licensed Clinical Social Worker	50,200.00	11,939.11	3				56,472.00	11,939.11	3
Psychiatric Nurse Specialist									
Community Health Workers	35,000.00		1						

Table 13: NHSC Obligation Site Compensation
**missing cells indicate no data collected*

Obligation Site Administrator Perspectives on Barriers and Challenges to Recruitment and Retention

NHSC site administrators' perspectives on factors that affect recruitment and retention at their site are shown in Table 14. Half of the respondents indicated that salary considerations did not make recruitment of NHSC clinicians more difficult than non-NHSC clinicians. No respondents felt that recruiting non-NHSC clinicians was easier than recruiting NHSC clinicians. Site administrators felt that it was easier to retain NHSC loan repayors than NHSC scholars. No respondents indicated that they had difficulty retaining NHSC physicians and only one respondent indicated that it was difficult to retain NHSC non-physician providers. Two respondents indicated that it was easier to recruit NHSC clinicians whose cultural background matched the culture of patients. The majority of respondents felt that their facilities, resources, and their organization's reputation in the community attracted NHSC clinicians to their site. Only one respondent felt that recruitment bonuses aided in the retention of NHSC clinicians beyond their service obligation. However, one respondent felt that recruitment bonuses hindered the retention of NHSC clinicians post-obligation.

Factors Affecting Recruitment and Retention at NHSC Site			
	Missing	**Number**	**Percent**
Salary considerations make it more difficult for our organization to recruit an NHSC clinician than a non-NHSC clinician.	1		
Agree		1	12.5
Neutral		3	37.5
Disagree		4	50.0
On average, recruiting non-NHSC clinicians is easier than recruiting NHSC clinicians	1		
Agree		0	0.0
Neutral		4	50.0
Disagree		4	50.0
It is easier to retain an NHSC loan repayor than an NHSC scholar at our organization	1		
Agree		4	50.0
Neutral		3	37.5
Disagree		1	12.5
Retention of NHSC physicians is a problem at our organization	1		
Agree		0	0.0
Neutral		2	25.0
Disagree		6	75.0
Retention of NHSC non-physician clinicians is a problem at our organization	1		
Agree		1	12.5
Neutral		2	25.0
Disagree		5	62.5
It is easier to recruit NHSC clinicians whose cultural and or ethnic background is similar to that of our clients.	1		
Agree		2	25.0
Neutral		6	75.0
Disagree		0	0.0
Our facilities and the resources available at our organization are attractive to clinicians considering retention at the end of their NHSC repayment	1		
Agree		6	75.0
Neutral		2	25.0
Disagree		0	0.0
The reputation of our site in the community is attractive to clinicians considering retention at the end of the NHSC assignment	1		
Agree		7	87.5
Neutral		1	12.5
Disagree		0	0.0
The use of a recruitment bonus encourages NHSC clinicians to stay beyond their obligation.	1		
Agree		1	12.5
Neutral		6	75.0
Disagree		1	12.5

Table 14: NHSC obligation site administrator perspective on factors affecting recruitment and retention

OBJECTIVE II: SUPPORTING NHSC SCHOLARS

Purpose

The evaluation of the NHSC completed in 2000 by the Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill determined that a lack of experience, knowledge, or exposure to underserved communities prior to beginning service in these areas negatively impacts provider satisfaction. As a result, Objective II of the Indiana NHSC Project was to support current and past ARRA-funded NHSC scholars and other students in preparation for service in underserved communities. Objective II consisted of three proposed activities including:

1. Identification and evaluation of current programs at health professional training programs that promote training opportunities in underserved areas
2. Development of a web-based resource to centralize information on rotations and training opportunities in underserved areas
3. Coordination of two site visitations and one seminar featuring FQHC sites to support ARRA-funded scholars

A description of how each activity was conducted and the outcomes or results for each activity is reported in the subsequent sections.

Activity 1: Promoting Underserved Training Opportunities

The Indiana AHEC Regional Centers were sub-contracted to complete inventories and document all the underserved clinical rotation training opportunities within their region. Since the AHEC regional sites have established relationships with local providers, health care facilities, and health professional training programs, it was ideal to have each region complete an inventory within their respective regions. An excel spreadsheet was created with the most up-to-date list of AHEC clinical rotations organized by regional site. Additional information was required for the scope of the Indiana NHSC Project. Therefore, each regional AHEC center director was provided with a detailed document outlining what information was required and how the information should be recorded. The data collection instructions are included in Appendix G. The required data fields are provided in Table 15.

Required Data Fields			
Variable	**Required**	**New Field**	**Format**
AHEC Region	Yes	No	NA
School/Program	Yes	Yes	NA
Unlisted School	Optional	Yes	NA
Discipline	Optional	No	NA
Formatted Discipline	Yes	Yes	NA
Specialty	Yes	Yes	NA
Degree Type	Yes	Yes	NA
Year Added	Yes	Yes	4 Digit Year
Site Name	Yes	No	NA
Organization	Yes	Yes	NA
Site Type	Yes	Yes	NA
Preceptor Last Name	Yes	Yes	NA
Preceptor First name	Yes	Yes	NA
Position Title	Optional	Yes	NA
Address	Yes	No	**714 North Senate Avenue
City	Yes	No	Indianapolis
County	Yes	Yes	Marion
State	Yes	Yes	*IN
Zip Code	Yes	No	*46202
Preceptor/ Contact Phone Number	Yes	Yes	*(317) 278-0360
Fax	Optional	Yes	*(317) 278-0360
Email	Yes	Yes	cwnorwoo@iupui.edu
URL	Optional	Yes	NA
Underserved	Yes	Yes	Yes/No
Designation	Yes	Yes	NA
NHSC Eligible	Yes	Yes	Yes/No
Primary Data Source	Yes	Yes	NA
Secondary Data Source	Yes	Yes	NA
Data Updated	Yes	Yes	*12/03/12
Updater ID	Yes	Yes	NA

Table 15: Required clinical experience data fields for Objective II of the Indiana NHSC Project.

Each center director was required to meet three deliverables, which included:

1. Fill in all missing data fields for all previously documented clinical AHEC rotations or experiences.

2. Add any AHEC rotations or experiences in underserved areas within the region, which are missing from the existing excel file.

3. Contact all health professional training programs in the region that train NHSC eligible disciplines to request information and document all required data fields for non-AHEC clinical rotations or experiences in underserved settings.

Deliverables 1 and 2 were to be completed and submitted to the Indiana AHEC Network office by February 14, 2013. Deliverable 3 was to be completed and submitted by March 31, 2013. Each region was compensated a fixed rate of $1,000 upon the successful completion and submission of the three deliverables.

The Indiana NHSC Project research team worked with Indiana University School of Medicine to obtain information and document all required 3rd and 4th year clerkships that were provide in underserved locations within the primary care specialties including Family Medicine, Internal Medicine, Pediatrics, and Obstetrics/ Gynecology. Unfortunately, the decentralized medical education and administrative structure of the IU School of Medicine made gathering the information difficult. The research team was able to gather the 2011-2012 third year clerkships data from the Department of Family Medicine, but was unable to obtain the data from the other 3 primary care departments within the school of medicine.

Activity 2: Web-Based Resource

Indiana AHEC Network contracted IU Communications (IUC) to develop a web-based resource containing the aforementioned underserved clinical rotations database. The resource is a microsite developed within the AHEC website and will act as an aggregator of all documented clinical opportunities available in underserved communities throughout the state which support NHSC eligible disciplines. The rotations database is a MySQL database and clinical opportunities are searchable by various data fields including County, Health Service Discipline, and other relevant fields. Additional data fields were collected during data collection to include all relevant information as the objective is to have students understand what clinical experience

opportunities are available to them and to provide them with the necessary information to obtain additional information regarding the opportunity.

A training opportunity was defined as "underserved" if the location in which it was offered was designated as a Health Professional Shortage Area (HPSA) or a Medically Underserved Area (MUA) as determined by (HRSA). The website also provides the students with the link to HRSA's National Shortage Designation Database (http://www.hrsa.gov/shortage/) for additional information regarding HPSA and MUA designations. Furthermore, all documented training opportunities indicate if they are currently approved NHSC sites. The website provides the link for students to reference the most current list of approved NHSC sites by going to the NHSC page of HRSA's data warehouse at http://datawarehouse.hrsa.gov/nhscdetail.aspx. A count tracker was added to the website to allow AHEC and ISDH to determine the resource's utility.

Activity 3: FQHC Site Visits and Seminar

The NHSC research team attempted to coordinate two site visits and one seminar featuring Federally Qualified Community Health Centers (FQHC) sites to support ARRA-funded NHSC scholars and other students in preparation for service in underserved communities. Currently, there are 2 NHSC Scholars in Indiana University School of Medicine and 1 NHSC Scholar in the Indiana University School of Dentistry. Two of the scholars are located in Indianapolis, whereas the third scholar is located at Indiana University South Bend. As a result, the two FQHCs that were selected to host the site visitations were Raphael Health Center of Indianapolis and Indiana Health Center at South Bend. NHSC Scholars were notified of the development of the opportunity in January of 2013.

Rhonda Stephens, DDS at Raphael Health Center volunteered to lead the site visitation as well a one hour seminar featuring migrant/homeless FQHCs. Dr. Stephens is a NHSC Loan Repayment alumna, experienced FQHC staff and has continued to advocate for underserved populations and communities in her service area. Furthermore, she is working on completing her Masters of Public Health at the Indiana University Richard M. Fairbanks School of Public Health at IUPUI. The site visit was schedule to take place on July 11, 2013 from 9:30AM to 11:30AM followed by the one hour seminar. NHSC Scholars were notified of the date and time of the event. The Indiana University Student Association of Public Health Dentistry was also notified and invited to attend the site visit and seminar to enhance their learning experience. The research team coordinated with David Chapman, Practice Manager of Indiana Health Center at South Bend, to set up the second FQHC site visit.

OBJECTIVE III: ENHANCING RETENTION

Purpose

NHSC clinicians and other health care providers working in underserved communities play a vital role in integrating public health into healthcare delivery as they typically work in public health facilities such as Federally Qualified Health Centers (FQHC). Previously, provider satisfaction has been used as a predictor of retention of health care providers in underserved communities. Therefore, engaging in activities to increase provider satisfaction is imperative to enhance retention of primary care, oral health, and mental health professionals. Additionally, increasing retention rates of NHSC providers will further leverage the Federal investment in the NHSC program. Objective III of the Indiana NHSC Project was to engage in efforts to retain ARRA-funded NHSC loan repayment clinicians.

Activity 1: Supporting NHSC

Strategic Collaboration

An Indiana National Health Service Corps Retreat was held on April 2nd during the 2013 Indiana National Public Health Week Conference (IPHC), in Indianapolis. ARRA-funded NHSC clinicians were invited to attend the retreat to be recognized for their service and to provide them with additional opportunities such as continuing education units. The IPHC was strategically chosen to host the retreat in order to build awareness of the value NHSC clinicians provide in the public health community and of their role in integrating public health into their communities. The IPHC brochure is included in Appendix H. Furthermore, the retreat was a platform for the clinicians to share their experiences, while providing networking opportunities with other NHSC clinicians in order to build a sense of community.

Recognition

One of the primary goals of the retreat was to recognize and show appreciation to the clinicians for their service. Lieutenant Governor, Sue Ellspermann, was invited to address the providers at the retreat. Lt. Gov. Ellspermann understands the numerous challenges facing the recruitment and retention of health care providers in underserved communities and therefore made recognizing the NHSC providers for their contributions to Hoosier Health a priority. Her address was delivered during the seated luncheon to over 300 attendees, which included leaders

in public health and health care from Indiana. In addition, each ARRA-funded NHSC clinician received a certificate signed by Dr. William VanNess, Commissioner of the Indiana State Department of Health, which was presented by Dr. Richard Kiovsky, director of the Indiana AHEC Network. The certificate of appreciation is included in Appendix I.

Continuing Education, Community Building, and Strategic Planning

NHSC clinicians were provided with continuing education in accordance with their professions requirements. Continuing education was provided on various key areas in public health. Dr. Stephen Jay, professor of medicine and public health at Indiana University and a national leader in public health advocacy, lead a breakout session for NHSC clinicians on the importance of health care provider's role in public health and health care advocacy beyond the clinical setting. This session was a highlight of the event and sparked interest among the providers. A second breakout session, which shared preliminary survey data from Objective I, was conducted for NHSC providers and was delivered in the format of a focus group. An advisory committee was formed during the breakout session, which resulted in valuable feedback and recommendations. The breakout session information and objectives are included in Appendix J. All additional retreat information including Retreat Invitation, Lt. Gov. Address, and CEU Material are included in Appendix K-L.

OBJECTIVE IV: TECHNICAL ASSISTANCE

In the Midwest, Indiana, Minnesota and Wisconsin initiated a project to support the retention of NHSC providers in underserved areas by developing a Retention Toolkit as a resource to help NHSC sites with provider retention. The 2012 Midwest National Health Service Corps Retention Toolkit was created by The National Rural Health Resource Center and the National Rural Recruitment and Retention Network (3RNet) under contracts with ISDH, Minnesota Department of Health, Office of Rural Health and Primary Care, Wisconsin Department of Health Services, and the Wisconsin Primary Health Care Association. The Retention Toolkit contains a variety of instruments and tools for use at each stage of a health care organization's retention plan. The toolkit includes worksheets, sample surveys, agendas, and plans that may be utilized with all types of providers and can be downloaded on the Indiana AHEC Network website (http://ahec.iupui.edu/index.php?cID=221). The tool ensures that providers are properly orientated to the practice, integrated into the community and recognized for their service and impact on local health care.

The 2012 Midwest NHSC Retention Toolkit was summarized and presented in webinar format in September of 2012 by Sally Buck, Associate Director of the National Rural Health Resource Center. The webinar discussed the purpose of the toolkit. Additionally, it highlighted challenges of retention and presented the major sections of the toolkit including retention plans, retention elements, and retention resources. The slides used to deliver the webinar can be downloaded from the Indiana AHEC Network website (http://ahec.iupui.edu/index.php?cID=221).

Objective IV of the Indiana NHSC Project was to provide technical assistance to clinical sites with ARRA-funded NHSC clinicians for the purposes of retention. The project team accomplished this by disseminating the toolkit developed by 3RNet and other retention materials to ARRA-funded NHSC site administrators via email, the AHEC webpage, and the 16th Annual Indiana Rural Health Association (IRHA) Conference. The toolkit was emailed to 23 ARRA-funded NHSC site administrators, which were pulled from the original data file provided by the Office of Primary Care at ISDH. A webpage tracker was added to the page to document how many hits the 3RNet Retention Toolkit was receiving. Lastly, the toolkit was disseminated via the AHEC booth at the 16th Annual IRHA Conference on August 7th & 8th.

SECTION 3: EVALUATION CONTRACT
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OBJECTIVE V: ASSESSING THE IMPACT OF ARRA

Purpose

Understanding the effectiveness of resource allocation is critical to inform and enhance future policy and decision-making. As such assessing the impact of ARRA funding on the NHSC program in Indiana was among the key objectives of this project. The evaluation plan outlined methods for measuring the impact of ARRA funding for the NHSC program on 1) access to primary health care services, 2) health workforce supply and distribution, and 3) NHSC clinician retention.

Activity 1*:* Measuring Change in Distribution pre- and post- ARRA implementation

Geographic Information System (GIS) mapping was used to examine changes in health workforce supply and distribution at the county level that occurred after the implementation of ARRA. GIS maps in this section depict the change (increase or decrease) of primary care, mental health, and dental healthcare providers within an Indiana county between the license renewal cycle prior to ARRA implementation and the most current license renewal cycle. GIS maps demonstrate fluctuations in supply and distribution during this period that may or may not be associated with ARRA funding. GIS maps and summary of findings for profession are summarized on subsequent pages. Specific methods used to calculate/quantify these changes are described below.

Methods

Health professionals must renew their license with the Indiana Professional Licensing Agency (IPLA) once every two years. During the re-licensure process each clinician is offered a brief, voluntary survey. The maps presented in this report were generated from survey data collected on each health profession at the time of license renewal.

The maps show the change in health professionals' practice location by county from before ARRA funding and after ARRA funding. Because renewal periods are staggered, the years from which data was extracted differs for each health profession. Physician data was taken from the 2007 and 2011 renewal periods. Dentist data was taken from the 2009 and 2011 renewal periods. Mental health professional data was taken from the 2006 and 2010 renewal periods. Nurse practitioner (registered nurses) data was taken from the 2007 and 2011 renewal periods. Physician assistant data was taken from the 2008 and 2010 renewal periods. Psychologist data was only available for 2010, therefore no map was produced for psychologists because no comparison was possible.

Physicians

The total number of physician FTEs in Indiana (decreased/increased) from 2007 to 2011. Urban counties tended to show the greatest change (both increases and decreases) in the number of physicians, while rural counties had smaller changes. Lake County had the largest increase in physicians, adding over 180 physician FTEs. Delaware County, on the other hand, had the largest decrease in physician FTEs, losing nearly 40. Of Indiana's 92 counties, 22 counties lost physician FTEs while the remaining 70 counties either gained FTEs or had no change. Counties that contained major cities such as Allen (Fort Wayne), Lake (Gary), Vigo (Terre Haute), and Vanderburgh (Evansville) had some of the largest gains in physician FTEs. A notable exception was Marion County (Indianapolis), which lost 12.25 FTEs. The loss of physician FTEs in Marion County may be partially explained by the corresponding increase in FTEs in the surrounding suburban counties including Hamilton, Hendricks, and Johnson Counties.

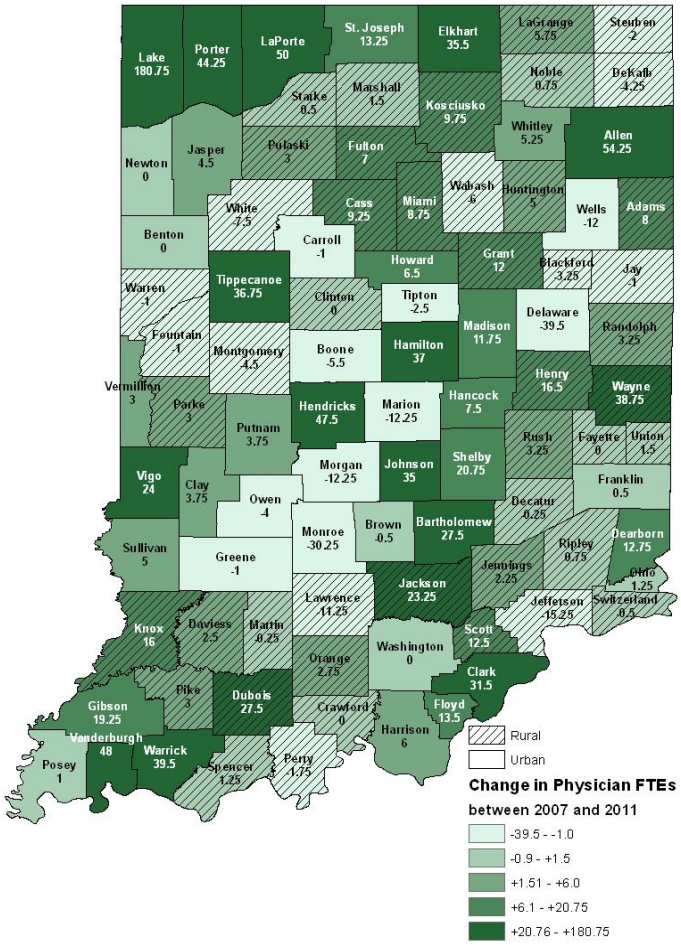

Figure 1: County Level Change in Physician Distribution between Following ARRA

Dentists

The total number of dentist FTEs in Indiana decreased from 2009 to 2011. Urban counties showed a larger decrease in dentist FTEs than rural counties. Rural counties lost fewer dentists, and, in some cases, gained dentists. Only 9 of 92 counties increased their number of dentist FTEs. Decatur County, located in southeastern Indiana, had the largest increase in dentist FTEs, but even this was only a modest gain of four dentist FTEs. Unexpectedly, Marion County had the largest decrease in dentist FTEs of all Indiana counties. This is result is surprising due to the fact that Indianapolis, located in Marion County, is home to the only dental school in the state.

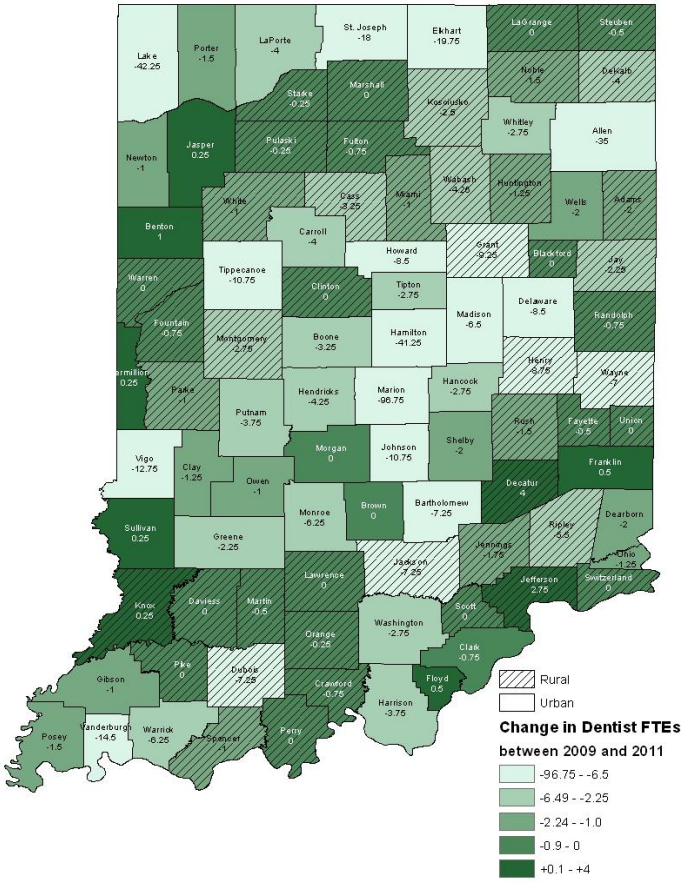

Figure 2: County Level Change in Dentist Distribution between Following ARRA

Mental Health Professionals

Data from 2008 were unavailable for mental health professionals so 2006 data were used as the baseline in this comparison. Mental health professionals include all Master's trained mental health providers including: social workers, marriage and family therapists, mental health counselors, and behavioral therapists. Psychologists and psychiatrists are not included in this map.

The total number of mental health professional FTEs in Indiana (increased/decreased) from 2006 to 2010. Urban counties generally had an increased number of mental health professionals, while rural counties tended to have a small change (either gain or loss) in the number of providers. Only 18 of 92 counties had a decrease in the number of mental health provider FTEs. Marion County had the largest increase in mental health professionals, adding nearly 350 FTEs from 2006 to 2010. Lawrence County lost the most mental health professionals, but the total loss was only four FTEs.

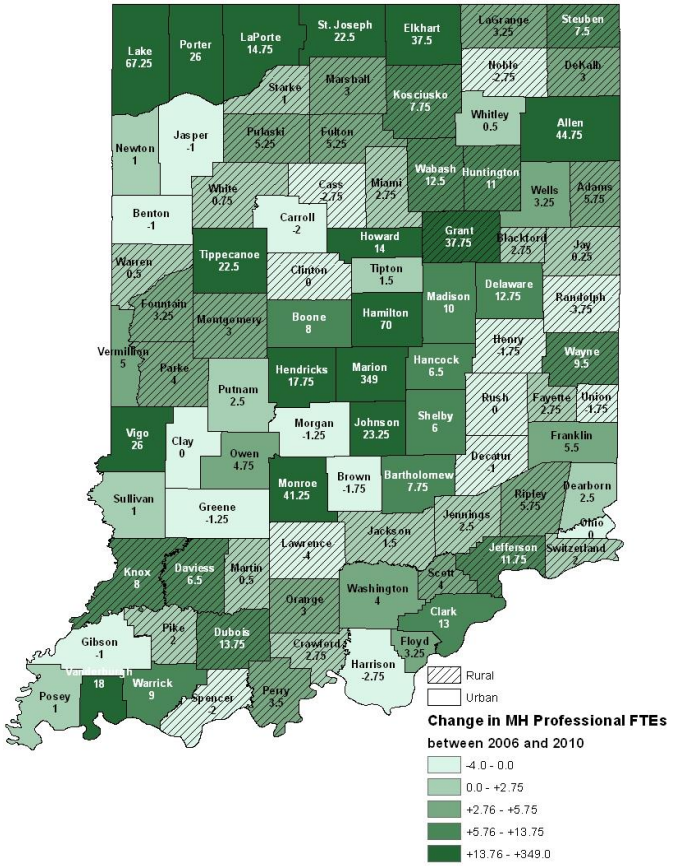

Figure 3: County Level Change in Mental Health Professional Distribution between Following ARRA

Nurse Practitioners

The total number of nurse practitioner FTEs in Indiana (increased/decreased) from 2007 to 2011. There were 23 counties that decreased their number of nurse practitioner FTEs, while the remaining 69 counties either had no change in FTEs or increased their number of nurse practitioners. Urban counties had larger changes (both gains and losses) than rural counties. Marion County had the largest increase in nurse practitioners, gaining 121 FTEs. Huntington County had the largest decrease in nurse practitioner FTEs, losing 5.

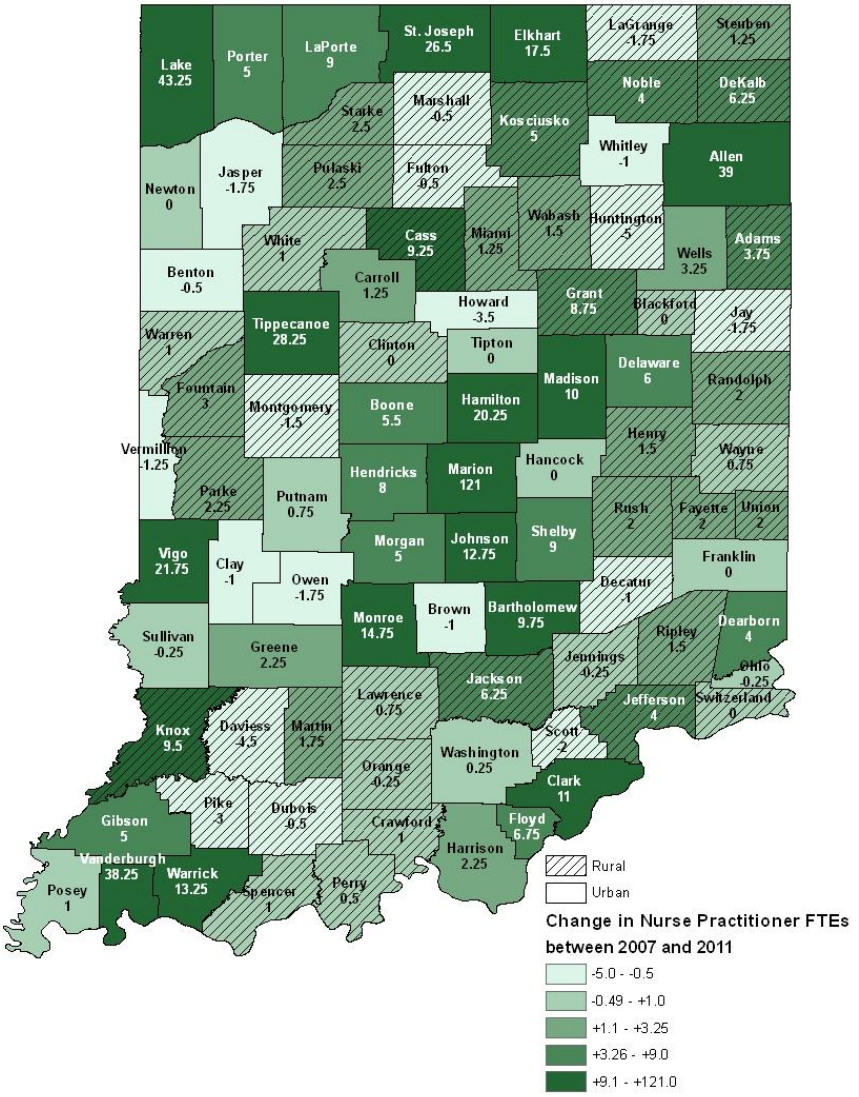

Figure 4: County Level Change in Nurse Practitioner Distribution between Following ARRA

Physician Assistants

The total number of physician assistant FTEs in Indiana (increased/decreased) from 2008 to 2010. Nearly half (41 of 92) of Indiana's counties showed no change in the number of physician assistants practicing within them. However, this result is due to the fact that many Indiana counties have no practicing physician assistants. The physician assistant workforce in Indiana is small. Physician assistants primarily practiced in the most populous counties such as: Allen, Lake, Marion, Monroe, St. Joseph, Vanderburgh, and Vigo. Marion County had the largest increase in physician assistants, adding over 12 FTEs. On the other hand, Vanderburgh County had the largest decrease in physician assistants, losing 9.25.

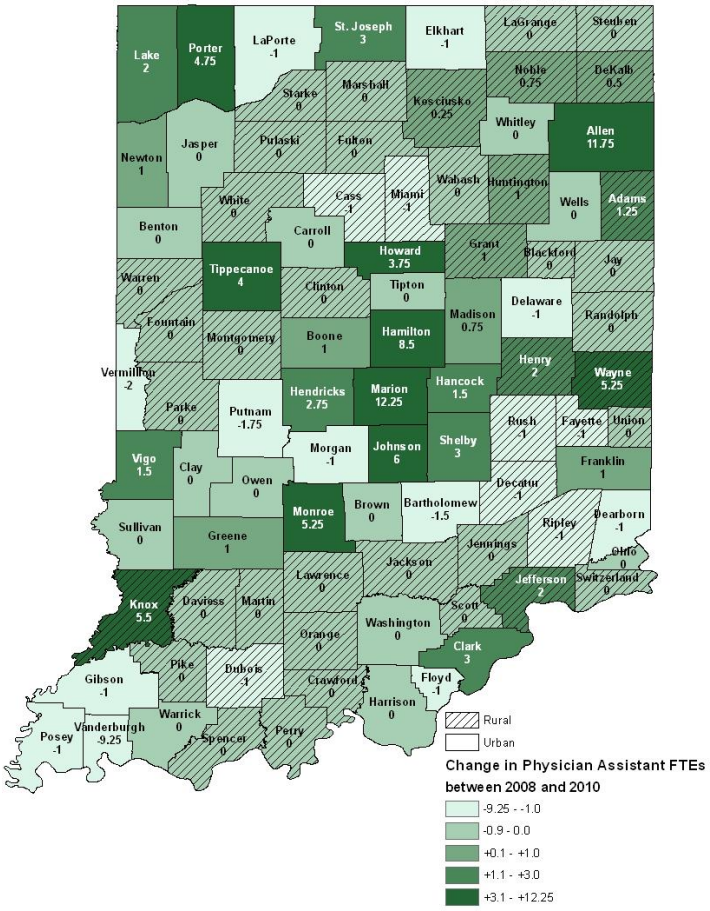

Figure 5: County Level Change in Physician Assistant Distribution between Following ARRA

Activity 2: Measuring Impact of ARRA on Access to Services

Methods

In order to measure impact of ARRA on access to primary care services, questions were imbedded in the survey tools for clinicians and administrators to identify whether ARRA funded clinicians increased the capacity and/or increased/expanded the services provided by the obligation site. Details on survey design and administration are found in Objective 1 of this report. Administrator survey questions 15 and 16 were specifically designed to gather the site administrator's perspective on the impact that ARRA funded NHSC provider on services and capacity. Similarly, on page 8 of the clinician survey questionnaire, respondents were asked to indicate whether they believed they expanded services or capacity at their obligation site. Survey data are self-reported and are subject to associated limitations. Use of longitudinal data (example: service utilization reports) may provide a more direct means of measuring the impact of ARRA funding on access; however, these data were not readily available during the contract period.

Results for the data collected to measure access are presented in table and text format beginning on the following page.

Expanding Reach and Services for At Risk Hoosier Populations at Obligations Sites

The following table present data on the impact of ARRA funding on access to primary health care services at NHSC obligation sites. The largest increases were seen in service expansion to at risk populations. The largest increase in services was reported for the chronically ill, elderly, ethnic minorities, adolescents, and children. Within obligations sites, ARRA funding expanded access to healthcare services for existing patients from vulnerable populations in Indiana.

Expanded Ability to Reach At Risk Populations						
	Reach this population which we did not serve before		Serve additional patients within this population which we served before		Provide a broader array of services to our patients	
Patient Population	Number	Percent	Number	Percent	Number	Percent
Pregnant Women	2	22.2	3	33.3	0	0.0
Newborns	1	11.1	4	44.4	1	11.1
Young Children	2	22.2	6	66.7	2	22.2
Adolescents	2	22.2	6	66.7	2	22.2
Ethnic Minorities	1	11.1	7	77.8	0	0.0
The Chronically Ill	0	0.0	7	77.8	0	0.0
HIV/AIDS Patients	4	44.4	1	11.1	2	22.2
The Elderly	0	0.0	6	66.7	0	0.0
Nursing Home Residents	0	0.0	3	33.3	0	0.0
The Uninsured	1	11.1	6	66.7	0	0.0
The Homeless	0	0.0	4	44.4	0	0.0
Other	0	0.0	1	11.1	0	0.0

Table 1: NHSC Obligation Site Administrator Perspective on NHSC Clinicians Contribution to Expansion of Service

ARRA Funded NHSC Clinicians Perspective on Self-perceived Impact on Access to Healthcare Services at Obligations Site

The following table present data on the self-perceived impact ARRA funded clinicians had on access to primary health care services at NHSC obligation sites. The largest increases were seen in service expansion to at risk populations. In line with the results found in the previous table, the biggest increases were seen in expansion of services to existing patient populations. Together these data suggest that, among survey respondents, ARRA funding expanded the array of services that existing patients received, but did not expanded access to new patient populations. Additional research is needed to elucidate the specific reasons for this.

Additional Services Provided due to NHSC Service			
	Missing	**Number**	**Percent**
Reached any new patient populations not previously served by the site.	7		
Yes		7	36.8
No		12	63.2
Has increased the array of services to one or more existing patient populations.	7		
Yes		12	63.2
No		7	36.8
Did you, by virtue of your previous specialty and/or training, bring to your NHSC site a health care service or services not previously available to your community.	0		
Yes		7	26.9
No		19	73.1

Table 2: NHSC Clinicians Perspective on Contribution to Expansion of Service

Activity 3: Impact of ARRA Funding on Retention of NHSC Clinicians

Methods

In order to determine retention of NHSC clinicians, providers reported their current practice site in the NHSC Clinician Survey, which was compared to their obligation site. Clinicians were considered retained if they were still practicing at their obligation site when responding to the survey. In addition, the research team reviewed secondary data sources to gather current practice location information for survey non-respondents. Also, questions 8 and 9 from the key informant interview tool asked clinicians about the influence NHSC service had on their career and their future career plans. The information gathered from the interview was used to project intention to be retained for respondents.

Results

The retention results are provided in the subsequent graphs and tables. Table 3 (below), demonstrates that 23 (88.5% of the survey sample) ARRA funded NHSC providers were retained at their original obligation site as of the date they completed the ARRA funded NHSC Clinician Survey. While this represents a relatively small sample of NHSC providers, the level of retention is notably higher than was reported in the 1998 national survey of NHSC clinicians.

RETENTION			
	Missing Response	**Number**	**Percent**
Retention	0		
Retained at NHSC service site		23	88.5
Not retained		3	11.5

Table 3: Retention of ARRA funded NHSC Clinicnans

The bar graph in figure 6 (next page) dipicts the one-month retention of NHSC clincians in the loan repayment program (LRP) in blue and the one-month to 18 month retention of Indiana ARRA NHSC clinicians in the LRP. While the specific time frames used to measure retention are different, a greater propotion of NHSC are retained in the ARRA sample than the 1998 national sample. This is likely due to multiple factors such as the economy. Additional research is needed to explore the reasons for these differences.

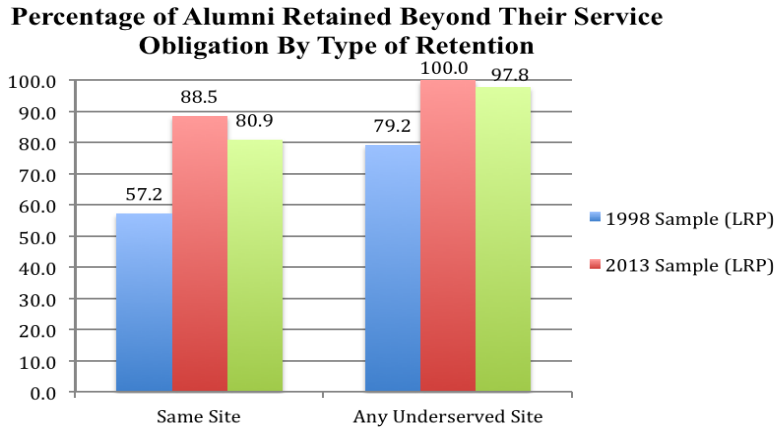

Figure 6: Retention in NHSC LRP: 1998 National Sample vs. Indiana ARRA Sample

Intention to be retained was also measured to project the proportion of ARRA funded NHSC clinicians that were likely to be retained as a part of the healthcare safety-net. One hundred percent of the survey respondents reported that their NHSC service increased the likelihood they they would continue practicing in an underserved area. In addition, one hundred percent of the sample reported that they are likely to continue accepting Medicaid in the future.

Intention to Be Retained			
	Missing	**Number**	**Percent**
Has your experience with the NHSC program increased the likelihood that you will practice in another underserved location in the future?	8		
Yes		18	100.0
No		0	0.0
Do you plan to continue accepting Medicaid patients in your future?	1		
Yes		25	100.0
No		0	0.0

Table 4: ARRA Funded NHSC Intention to be Retained

OBJECTIVE VI: EVALUATION OF PROGRAMMATIC ACTIVITIES

Purpose

Evaluating the objectives and activities associated with the programmatic contract was a key component of the evaluation contract. As such evaluation activities were developed to measure the impact of each programmatic objective. Evaluation information is presented on subsequent pages in the same order programmatic objectives were presented in Section 2 of this report.

Programmatic Objective 1: Identification of Challenges/Barriers

The NHSC project team successfully completed the data collection activities outlined in objective 1. Data were collected using a multi-method approach, including survey questionnaires and key informant interview tools. Specific information on the design of these tools can be found in the write-up of programmatic objective 1 in Section 2 of this current report.

Survey tools were developed and administered to all 48 ARRA funded providers and 23 administrators that oversaw the NHSC program at 40 obligation sites. A sequence of follow-up reminders (4 automated messages and 2 personal email messages) were used to enhance NHSC clinician survey had a response. The final response rate was 4% (n=26) of the 48 ARRA funded NHSC clinicians. Similarly, three rounds of surveys were mailed to NHSC obligation site administrators. The final response rate of 27% (n=9) of 23 administrators.

In addition to surveys, key informant interviews were used to gather qualitative information from both the ARRA funded NHSC clinicians and obligation site administrators. The NHSC project team leveraged their relationship with regional AHEC to efficiently complete key informant interviews. A total of 18 NHSC clinicians and 15 site administrators completed key informant interviews. It is important to note that a standardized training was developed and administered to all interviewees to enhance quality of the data that were collected.

Barriers and challenges that were identified by NHSC clinicians and site administrators are found in the tables and text presented under Programmatic Objective 1. These data, in addition to data reviewed by the advisory committee at the NHSC Retreat, and were used to generate the recommendations presented in final section of this report. The final report will be submitted to the Indiana State Department of Health, the Bureau of Health Professions at Health Resources Services Administration, the Indiana Primary Health Care Association, Indiana Area Health Education Center Network office, ARRA funded NHSC clinicians and their obligation site administrators, and various other stake holders for feedback.

Programmatic Objective 2: Supporting NHSC Scholars

Data collection for the underserved clinical rotations inventory was completed by March 31st by all AHEC Regional Centers. The data was compiled into excel and cleaned by the research team. A total of 529 clinical experiences were documented. A breakdown of disciplines is provided in figures 7-10.

Health Service Discipline	
Mental Health	**Count**
Clinical Psychology (PsyD)	24
Licensed Clinical Social Worker (LCSW)	17
Clinical/Mental Health Counseling	12
Clinical Psychology (MS)	8
Marriage & Family Therapist (MFT)	6
Psychologist (Health Service)	6
Mental Health Total	73
Primary Care	
Physician Assistant (PA)	138
Medical Doctor (MD)	117
Nurse Practitioner (NP)	42
Doctor of Osteopathy (DO)	1
Primary Care Total	298
Oral Health	
Dental Hygienist (RDH)	68
Dentist (DDS,DMD)	5
Oral Health Total	73
Total Documented Rotations	529

Table 5: Breakdown of documented clinical experiences by health field and discipline.

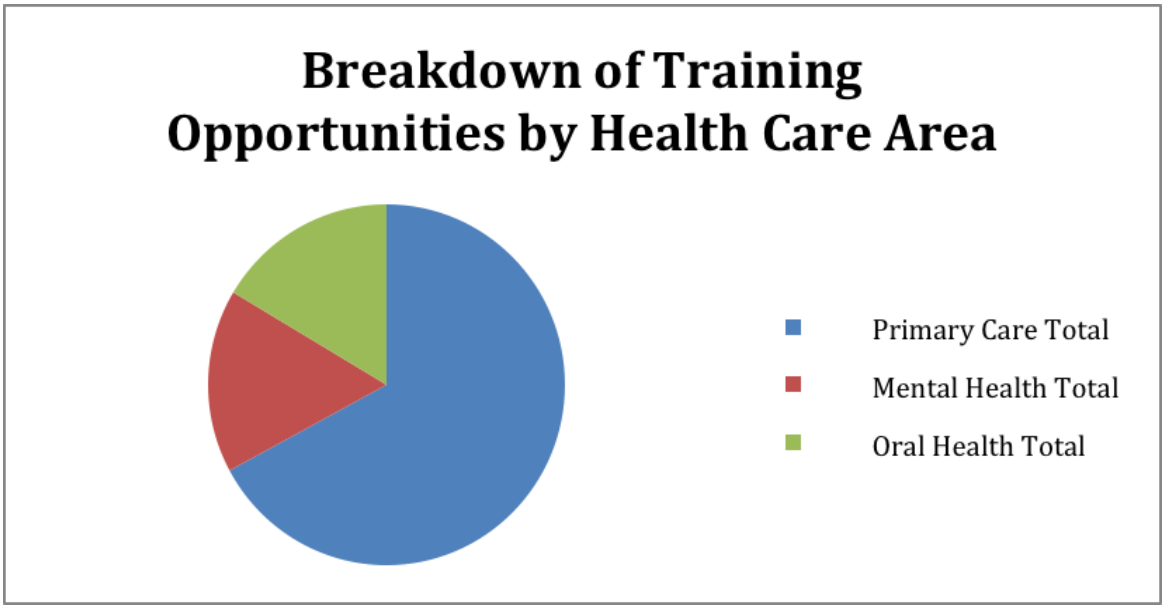

Figure 7: Breakdown of documented clinical experiences by health field and discipline.

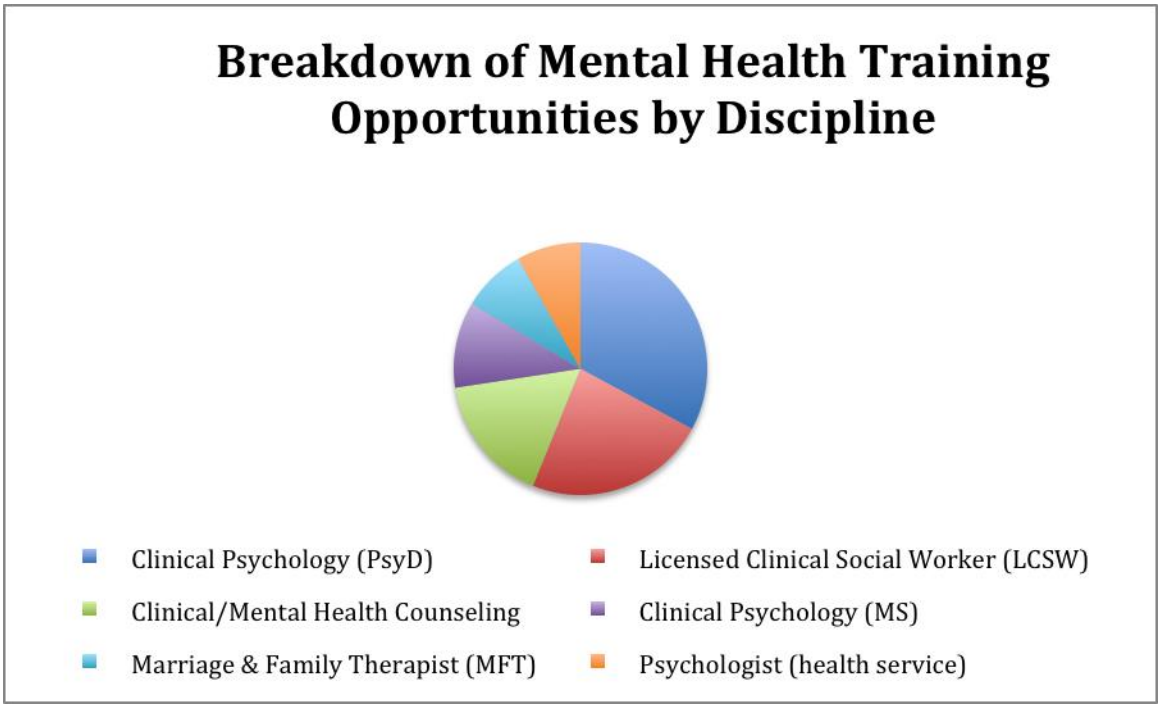

Figure 8: Breakdown of documented mental health clinical experiences by discipline.

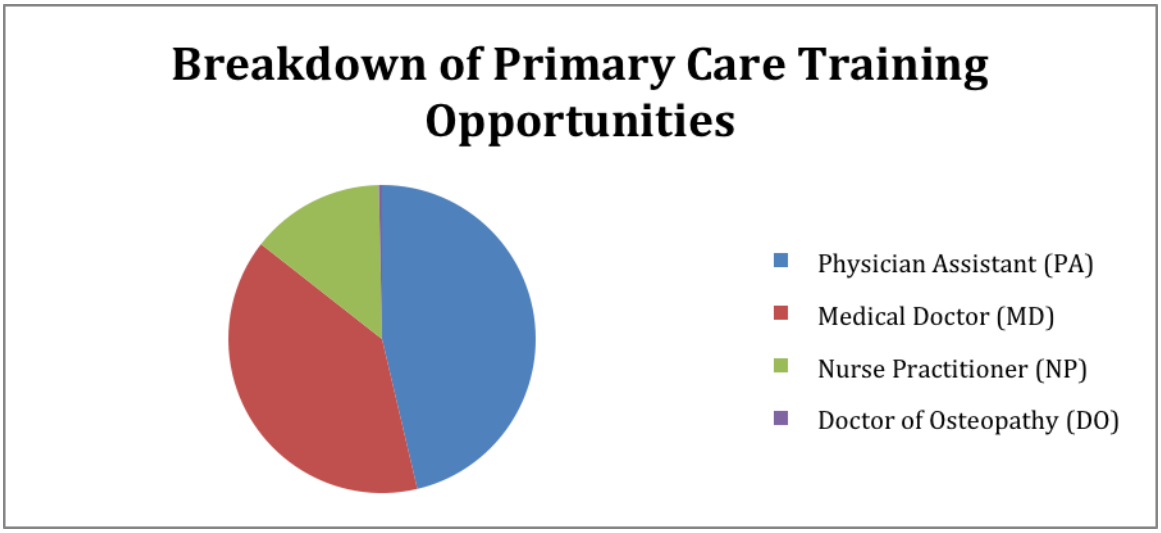

Figure 9: Breakdown of documented primary care clinical experiences by discipline.

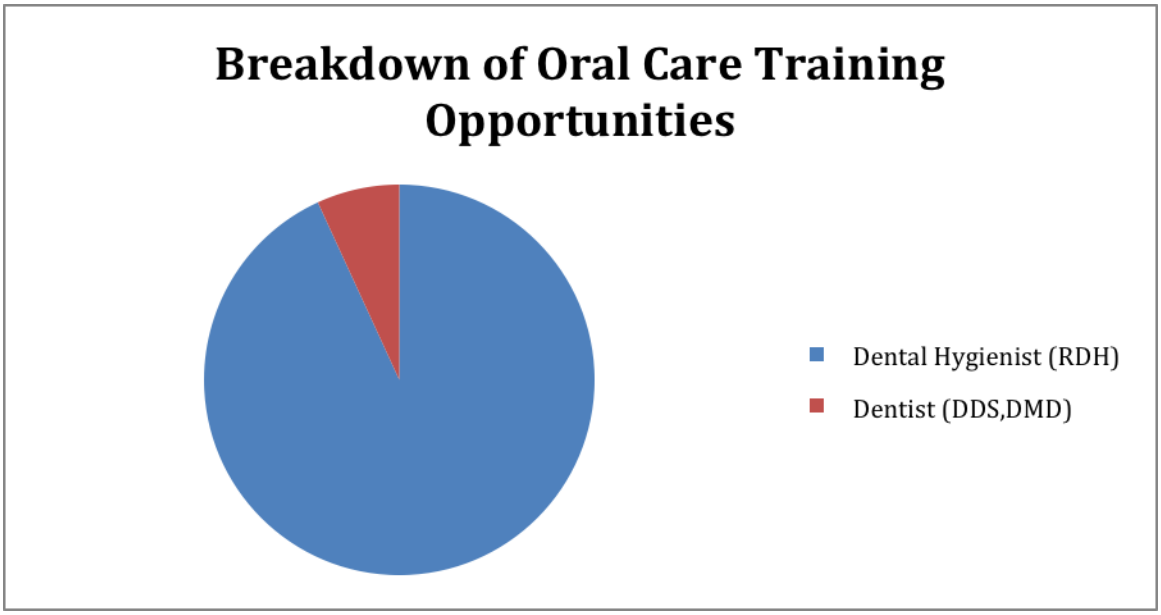

Figure 10: Breakdown of documented oral health clinical experiences by discipline.

The Underserved Clinical Rotations Database is completed, but web-based resource is currently under review by key stakeholders for evaluation before launching the resource. The database allows students to search for training opportunities in underserved communities for their respective disciplines based on geographic region and other search criteria.

Although two FQHC site visits were scheduled and coordinated by the research team, they were not executed due to lack of interest and availability from the NHSC Scholars. Several emails over a course of several months were exchanged with the three current NHSC Scholars. Only one NHSC Scholar responded to communications and was interested in the opportunity. However, dental student's schedules at IU School of Dentistry are determined months in advance due to clinical requirements. The dental student's schedules do not allow for much flexibility due competition and difficulty in obtaining patients to fulfill clinical competencies. As a result, the research team inquired with the scholars about other forms of support that would be of value or interest to them. However, no response was received from the students.

Programmatic Objective 3: Enhancing Retention

Supporting NHSC: Evaluation of Retreat Experience

The Indiana National Health Service Corps Retreat was held on Tuesday April 2, 2013. All 48 clinicians in the cohort of ARRA-funded NHSC providers were invited to register and attend the event. AHEC sent out the invitations for the retreat via email. The invitation for the event is provided in Appendix K. AHEC provided reimbursement for travel and lodging. The Indiana Public Health Conference registration fee was also covered. A total of 8 clinicians registered for the event. However, only 6 clinicians were able to attend. Figure 11 shows the breakdown of NHSC professions represented at the retreat.

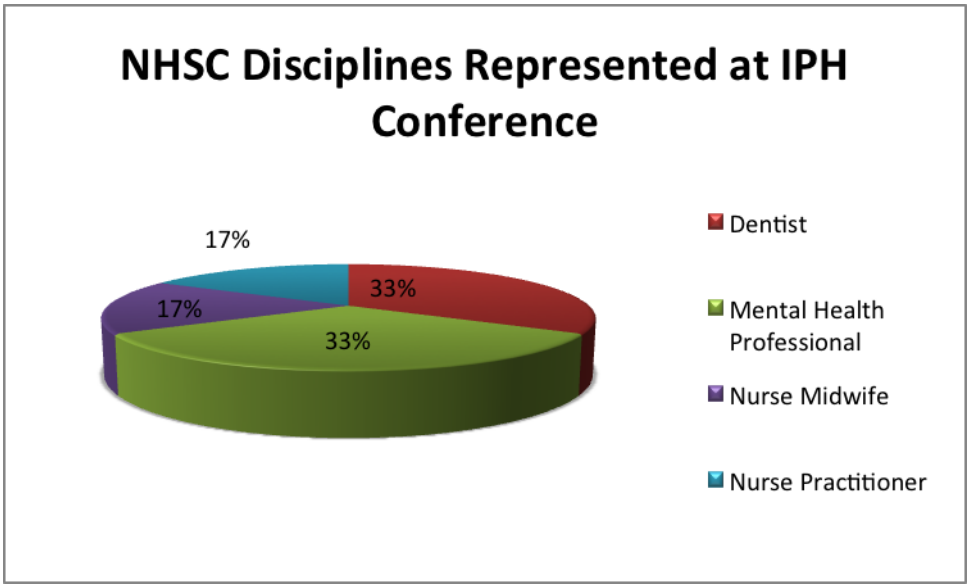

Figure 11: National Health Service Corps disciplines represented at the Indiana NHSC Retreat.

Each NHSC clinician who attended the retreat was asked to complete a de-identified evaluation of the event. The evaluation was administered via REDCap and contained 15 questions that provided feedback on the execution, experience and content of the retreat. Four of the six clinicians completed the evaluation providing a 67 percent response rate. The evaluation form and questions are included in Appendix M.

The structure and execution of the retreat received positive feedback with an overall satisfaction rate of 87.5 percent. Figure 12 provides the satisfaction rates of each component of the structure and execution of the event including registration, AHEC support, and compensation/reimbursement. The evaluation also captured feedback regarding the clinicians experience at the retreat. Overall, the NHSC retreat received a satisfaction rating of 75 percent for the experience and content at the event. Figure 13 depicts the satisfaction ratings for experience and content of the retreat into three categories including retreat experience, building a sense of community, and desire for future retreats.

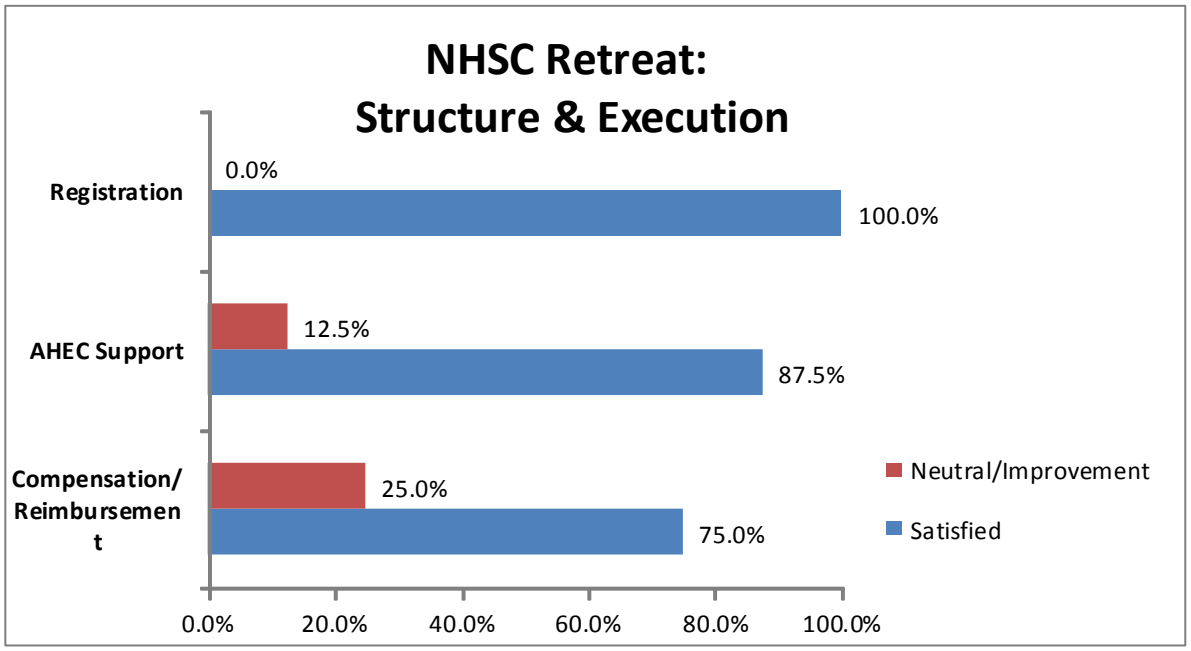

Figure 12: Satisfaction rates for the structure and execution of the Indiana NHSC Retreat.

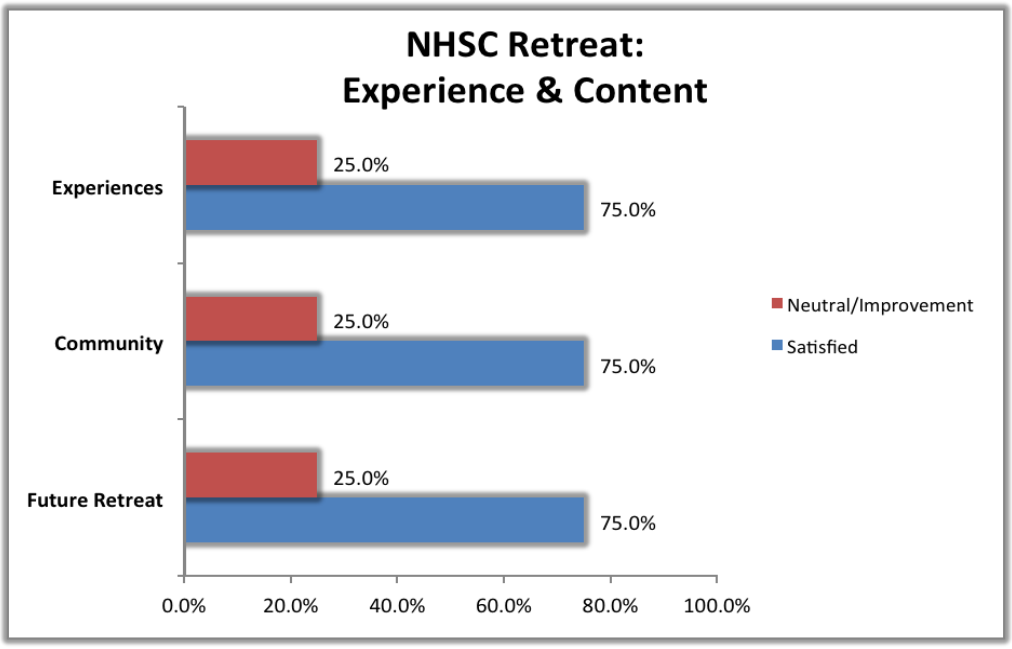

Figure 13: Satisfaction ratings for the Indiana NHSC Retreat experience and content**.**

Summary

The 2013 Indiana NHSC Retreat held at the Indiana Public Health Conference received overwhelmingly positive feedback and provided an ideal platform to build awareness of the role of NHSC providers in public health. NHSC clinicians emphasized the value of "being able to share experiences" and "connecting with others [NHSC clinicians]". One provider even suggested that the retreat should be longer in order to provide even more opportunities in the future. Also, the NHSC group favored the idea of having future retreats to continue to build the NHSC community and network. The Indiana NHSC Retreat was effective in offering support to NHSC providers, recognizing them for their service, and building awareness in public health, even though the project team had strict time restraints and a condensed timeline for purposes of planning

Supporting NHSC: Focus Group Results

The focus group and advisory committee completed a Strength, Weakness, Opportunity, & Threat analysis (SWOT) to help identify gaps and provide strategic recommendations to eliminating those gaps while improving the NHSC program in the State of Indiana. The information gathered from the SWOT analysis was separated into three levels including Federal State, and NHSC Site. Tables 6 and 7 present the strengths, weaknesses, opportunities and threats identified by the focus group during the SWOT analysis.

SWOT: Strength & Weaknesses				
		Federal	**State**	**Site**
Strength	Inter-professional Collaboration	✓	✓	✓
	Comprehensive Clinical Care			✓
	Federal Funding for Expansion and Improvement	✓	✓	
	Electronic Health Record	✓	✓	✓
	Orientation Training for NHSC	✓		
Weaknesses	Lack of Marketing and Awareness	✓	✓	
	Ambassadors Lack Training and Direction for NHSC	✓	✓	
	Potential Obligation Sites Are Not Readily Identifiable	✓	✓	
	Rural Providers Feel Socially and Professionally Isolated	✓	✓	✓
	Lack of Communication Between Site Administrator and NHSC Provider			✓
	Quantity Valued Above Quality			✓
	Administrative Issues With Contracts and Extension Applications	✓		
	No Room for Advancement			✓
	Fulfillment of Obligation is Only Expectation			✓
	Current Marketing Focuses on Monetary Gain and Not Mission of the Program	✓		
	Obligation Makes Providers Feel Trapped	✓		

Table 6: Strengths and weaknesses of the National Health Service Crops program

Several strengths of the NHSC program were identified. The focus group identified the availability of federal funding for expansion and improvement to be strength. Additionally, the use of Electronic Medical Records (EMR) was acknowledged as a benefit and strength of the NHSC program. Furthermore, the focus group agreed that the NHSC program promoted inter-professional collaboration and increased the ability for practitioners to offer comprehensive clinical care at their obligation sites.

One of the major themes identified as a weakness of the NHSC program was the lack of marketing and awareness. Current marketing strategies focus on monetary gain and not on the mission of the NHSC program. NHSC providers are dedicated to serving underserved populations and are more interested in the mission match of providing healthcare to underserved populations. The idea of obligation contracts and lengthy reporting requirements only makes the providers feel trapped. Additionally, lack of communication at all levels was a reoccurring theme while discussing the weaknesses of the NHSC program.

SWOT: Opportunity & Threats				
		Federal	**State**	**Site**
Opportunities	Desire Networking and Training		✓	
	Interest in Advocacy		✓	
	Ability to Educate and Advocate to Students and Residents during Rotations			✓
	Expansion of Health Insurance Increasing Demand and Potential NHSC Positions to Strengthen the Safety-Net	✓		
	Providers Feel Ownership Over Site			✓
	Organizational Capacity: Area Health Education Center Network, Indiana Primary Health Care Association, Indiana Rural Health Association, etc.		✓	
	Decentralized Medical Training		✓	
	New Medical School (Marion University)		✓	
	Structure of the Professional Licensing Agency		✓	
	Health Workforce Shortages		✓	
Threats	Perception of Lower Pay in Public Health	✓		
	Funding Cuts	✓	✓	✓
	Clinic Performance tied to Provider Performance	✓	✓	✓

Table 7: Opportunities and Threats of the National Health Service Crops program at the Federal, State, and Site level.

There are several factors have contributed to the opportunities for the NHSC. First and foremost, the current health workforce shortage nationwide and within the State of Indiana has created a high demand for NHSC clinicians and their services. Also, the decentralized medical training and addition of the Marion University College of Osteopathic Medicine provides opportunities for healthcare professional and NHSC clinicians in the State of Indiana. Furthermore, the State of Indiana has a strong network of stakeholders interested public health and healthcare, which effectively increases the organizational capacity of the State. The major threat to the NHSC program identified by the focus group at the NHSC retreat was the perception of lower pay in public health and funding cuts. It was also noted that the clinic's performance being tied to the provider's performance was a threat and created unrest among the NHSC providers.

Programmatic Objective IV- Technical Assistance

The research team provided technical assistance to ARRA-funded NHSC sites by disseminating the 3RNet Retention Toolkit via email, the AHEC webpage, and the IRHA Annual Conference. The toolkit was emailed to 23 ARRA-funded NHSC site administrators, which corresponded to 40 unique NHSC sites. Additionally, the 3RNet Retention Toolkit tracker cannot be accurately reported at this time due to Indiana University School of Medicine System updates[1]. The IRHA conference had 607 people in attendance. Table 8 shows the three methods of dissemination and their respective dissemination counts.

3RNet Retention Toolkit: Quantifying Dissemination	
Dissemination Method	**Count**
Email	
ARRA-Funded NHSC Site Administrators	23
Unique NHSC Site UDS Numbers	40
Indiana Rural Health Association 16th Annual Conference	607

Table 8: 3RNet Retention Toolkit dissemination methods and counts.

[1] Contact Connor Norwood at cwnorwoo@iupui.edu for an accurate 3RNet Retention Toolkit utilization count.

SECTION IV: DISCUSSION AND RECOMMENDATIONS

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DISCUSSION

The 2013 ARRA-Funded NHSC Recruitment and Retention Project was undertaken with the purpose of assisting the Indiana State Department of Health Office of Primary Care in the coordination and implementation of activities within Indiana as it relates to the retention of primary care providers as a result of the National Health Service Corps initiative as a part of the American Recovery and Reinvestment Act of 2009. The research team at Indiana AHEC Network worked to identify challenges and barriers of recruitment and retention of NHSC Loan Repayors & Scholars in Indiana, which led to the development of activities designed to support NHSC Clinicians and Sites.

NHSC Clinicians

Recruitment and retention of clinicians is essential for advancing the workforce in underserved areas. Pre-professional exposure to underserved communities is one strategy for enhancing recruitment, and civic engagement is a key principal in health professional training. However, most ARRA-funded NHSC clinicians reported having little experience with urban or rural underserved medical areas prior to NHSC service. The reported lack of experience in underserved areas may highlight a gap in community based training initiatives in Indiana. Fortunately, regardless of the lack of exposure most clinicians reported that the desire to help underserved people was the reason they sought out NHSC service.

Obligation site factors such as placement and satisfaction are crucial for this development. Finding an organization that met professional needs and goals was a key factor in obligation site selection among ARRA-funded NHSC clinicians. Obligation site mission and goals that aligned with a provider's personal and professional mission and goals is an advantage to the NHSC program and a key contributor to NHSC clinician satisfaction.

Making a contribution to the community is important to NHSC clinicians. Most ARRA-funded NHSC clinicians believed that their presence at the obligation site allowed them to provide a greater array of services to populations served. NHSC clinicians reported that they were responsible for implementing new community oriented primary care programs through their facility. Adolescent health was the most commonly addressed issue targeted by community oriented primary care programs. Interestingly, administrators found it best to recruit clinicians with the same cultural and ethnic background as the patients they serve; however, clinicians did

not believe that their cultural background needed match that of their patients to provide high quality health care.

NHSC service was career transforming for ARRA-funded NHSC clinicians. Many clinicians indicated that they intend to continue working in underserved areas after completion of their NHSC obligation. Also, all of the clinicians said that they would continue to accept Medicaid in the future.

NHSC Site Administrators

The perspectives of NHSC obligation site administrators convey valuable information. Administrators report recruitment as the most significant impact of the NHSC program on their organization. Obligation site status enabled the recruitment of high quality healthcare providers which increased access and scope of services offered by many sites. NHSC site administrators indicated that having NHSC clinicians at their site increased the facility's ability to reach new at-risk populations, provide more care to populations they already served, and provide a broader array of services to their patients. Site administrators found NHSC clinicians easier to recruit and retain than non-NHSC providers. However, many were satisfied with retention rates, and felt that their organizations reputation within the community was a key factor in retaining clinicians post-obligation.

The NHSC program is not without its challenges. Among NHSC obligation site administrators, the site application processes were noted as a challenge to developing and implementing the NHSC program. Administrators cited that the time period for applying, availability of information, and quantity of required documents were barriers to the NHSC program.

Indiana NHSC Program

In addition to the surveys and structured key informant interviews, the NHSC project team conducted several interviews with key individuals involved with the NHSC at various levels to better understand the history and process of the NHSC program in Indiana and at the federal level.

Academic Perspective: NHSC Scholars Program

Jose Espada, Director of Medical Student Financial Aid at IU School of Medicine (IUSM), provided a historical overview of the NHSC scholars program in Indiana. IUSM had 12 NHSC Scholars in 1995, compared to the 3 NHSC Scholars in 2013. In the mid, 1990s the NHSC program underwent some structural changes, where the 10 NHSC regional offices became the regional hubs for applications, resource dissemination, and support services. In the discussion, Jose identified a number of challenges, including: the lack and availability of resources for medical students; a general lack of knowledge and understanding of the program by medical students; and, inadequate support services from the regional office as the major barrier to program participation for potential NHSC Scholars.

A Successful Model: Massachusetts

Linda Cragin, Director of the Massachusetts AHEC Program and NHSC Ambassador, was interviewed regarding her experience with the NHSC Ambassador program. The NHSC Ambassador program was developed with the goal of using volunteers to build awareness of the NHSC program, recruit providers, and serve as mentors to NHSC providers. The general consensus from the interview with Linda and from conversations with other NHSC Ambassadors throughout the State of Indiana was that there is a lack of understanding of the responsibilities and role of the NHSC Ambassador due to lack of training and information. Furthermore, it was reported that volunteers are unable to designate the appropriate amount of time and effort to be effective in meeting the mission of the NHSC Ambassador Program.

Indiana Processes: The Role of the Indiana Primary Health Care Association

The NHSC research team met with Natalie Brown, Shortage Designations and National Health Service Corps Program Director, on May 15th. Ms. Brown is employed by the Indiana Primary Health Care Association (IPHCA). The meeting was established for the purpose of understanding the specific role of IPHCA in the Indiana NHSC program. In this meeting Ms. Brown explained that her role primarily focused on supporting obligation sites. She does not have formal interaction with the NHSC clinicians, NHSC applicants, interested individuals, or stakeholders such as academic institutions with health professional training programs. The discussion with Ms. Brown demonstrated a gap in supporting NHSC clinicians and marketing the NHSC program to clinicians in Indiana.

Collectively these interviews shed light on environmental factors that impact the NHSC program in Indiana. The lack of coordination for NHSC activities was a common theme throughout these discussions. This lack of coordination is likely the result of a number of factors, which includes limited resources for NHSC activities. Centralization of these activities is likely to increase efficiency and effectiveness of the NHSC program in Indiana.

CONCLUSION

The 2013 ARRA Funded NHSC Recruitment, Retention and Evaluation project provides information on the impact of ARRA funding on the NHSC program in Indiana, and sheds light on the factors contributing to NHSC program successes, challenges, and future opportunities.

ARRA funding strengthens the NHSC in Indiana. This funding enabled increased access to healthcare for underserved Hoosiers that receive health services at NHSC obligation sites. ARRA implementation is also likely to have contributed to improving health workforce capacity in select underserved communities in Indiana. Retention rates among ARRA-funded NHSC providers are substantially higher than in previous years.

The NHSC program helps healthcare providers to fulfill their personal and professional goals, while realizing their passion for caring for underserved patients. While financial gain is key to their service, the alignment of personal mission and perceived contribution to community are the biggest drivers of provider satisfaction. ARRA-funded NHSC clinicians are likely to be serving underserved Hoosiers healthcare need for many years to come.

Supporting these providers, the sites they serve, and ensuring adequate infrastructure for future NHSC program success is critical to maintaining the trajectory set forth by ARRA. Based upon the findings of this project, key recommendations have been generated for consideration by the State of Indiana and the Department of Health and Human Services. Although brief, these recommendations are the result of countless hours of data analysis and critical thinking on behalf of researchers, NHSC clinicians, and community stakeholders.

RECOMMENDATIONS

Findings from the 2013 Indiana ARRA Funded National Health Service Corps Recruitment, Retention, and Evaluation Project provide valuable insight into the strengths and weaknesses of the NHSC program in Indiana. Recommendations for enhancing the NHSC program in Indiana were generated following extensive review of the data that were collected during the project and in consideration of key stakeholders. The first recommendation focuses on enhancing the administrative structure of the NHSC for the State of Indiana. The second recommendation focuses on enhancing the marketability of the NHSC program and is pertinent at the federal level. It is important to note that these recommendations are based upon the findings of this project and may not be generalizable outside of the State of Indiana or with non-ARRA funded NHSC providers. Although, a comparison of ARRA-funded versus non-ARRA funded NHSC demonstrates few demographic differences between the groups.

Recommendation 1: State of Indiana

Identify one organization to oversee the continuum of the NHSC program in Indiana

Background

A lack of centralized administration (oversight and support) for NHSC emerged as a weakness throughout this project from multiple perspectives. Currently, a number of organizations contribute to the NHSC program in Indiana, but these efforts are unorganized and inefficient. For example, the Indiana Primary Health Care Association (IPHCA) oversees assistance and support for NHSC obligation sites, but provides no support or assistance for NHSC clinicians. Currently, the NHSC clinicians receive support through the federal government's web- based portal. In addition, there are no coordinated efforts to market the NHSC program to students within Indiana health professions training programs. These gaps in the continuum of the NHSC program limit program efficiency and benefits.

Action

It is recommended that one organization be identified for ownership of all NHSC program activities. This organization should be unbiased in its representation of health professionals or disciplines represented in the NHSC. It is not recommended that an organization that serves one discipline or profession oversee the NHSC program. Ideally, this organization will serve as the epicenter for NHSC program activities, including: coordination of pre-professional marketing to health professions training program; organize Indiana NHSC ambassadors; support and assist NHSC clinicians through networking events and other activities; and, support health professions students and practicing health professionals with NHSC through the NHSC application process. If oversight of support to obligation sites were maintained at IPHCA, it is recommended that IPHCA work closely with this key organization to coordinate activities.

Recommendation 2: NHSC Program, Health Resources Services Administration, Department of Health and Human Services

Move to a Mission Based Marketing Strategy for the NHSC Program

Background

One of the major themes identified as a weakness of the NHSC program was the lack of marketing and awareness. Current marketing strategies focus on monetary gain and not on the mission of the NHSC program. NHSC providers are dedicated to serving underserved populations and are more interested in the mission match of providing healthcare to underserved populations. The idea of obligation contracts and lengthy reporting requirements only makes the providers feel trapped. Additionally, lack of communication at all levels was a reoccurring theme while discussing the weaknesses of the NHSC program.

Action

It is recommended that the federal National Health Service Corps program consider developing a mission based marketing strategy, which focuses on the recruitment of clinicians that share the common mission to serve underserved communities and populations. Pursing a mission based marketing strategy, will aid in the recruitment and retention of healthcare providers who share NHSC's mission to build healthy communities by increasing access to health care services for underserved communities and populations.

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SECTION 6: APPENDICES

APPENDIX A: NHSC Clinician Survey Tool

APPENDIX B: NHSC Administrator Survey Tool

APPENDIX C: NHSC Clinician Key Informant Interview Tool

APPENDIX D: NHSC Administrator Key Informant Interview Tool

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INDIANA AREA HEALTH
EDUCATION CENTERS PROGRAM

INDIANA UNIVERSITY
School of Medicine

Dear National Health Service Corps Clinician,

The National Health Service Corps (NHSC) Program currently serves over 10.5 million patients at over 14,000 approved NHSC sites. Without your support, dedication, and commitment to the program and serving vulnerable populations the program would struggle to thrive.

As you are aware, the Indiana State Department of Health (ISDH) has partnered with the Indiana Area Health Education Centers (AHEC) Network on a Health Resources and Services Administration - funded project to evaluate the National Health Service Corps (NHSC) Loan Repayment program. An on-line survey has been developed to collect information from you for the NHSC evaluation. Many of the questions in this survey were originally developed for a national evaluation of the NHSC program that occurred in 1998. Your participation is this survey is critical to a successful evaluation of the NHSC program in Indiana.

The NHSC survey is available for you complete at:
https://redcap.uits.iu.edu/surveys/?s=PCxmuQ.

As a follow-up to the survey, Indiana AHEC Staff will be contacting you in the upcoming weeks to schedule a supplemental interview. This interview will take approximately 20 minutes. Please do not hesitate to contact us with questions regarding the survey, interview, or the project in general.

Thank you for your time and contribution!

Sincerely,

Connor W. Norwood

Connor W. Norwood
Indiana AHEC Network
Project Coordinator
Email: cwnorwoo@iupui.edu
Phone: 317-278-0360
Cell: 317-730-3991

National Health Service Corps Recruitment and Retention

The survey below serves to gather feedback and information regarding your experience with the National Health Service Corps. (NHSC) program. Please fill out all required fields to help Indiana State Department of Health and Indiana Area Health Education Centers (AHEC) Network improve the NHSC program.

First Name _____

Last Name _____

Maiden Name (if applicable) _____

What is your Date of Birth? _____
(mm/dd/yyyy)

Experience Prior to Your NHSC Service

During your health professions education, did you have any of the following experiences with an URBAN medically underserved population?

- ☐ Student rotation
- ☐ Internship rotation
- ☐ Residency rotation
- ☐ Other experience
- ☐ As a student, I had no experience with the medically underserved

If you selected 1 - 4 above, how many weeks altogether were spent in these experiences? Please give a cumulative total if you had more than one such experience.

_____

During your health professions education, did you have any of the following experiences with a RURAL medically underserved population?

- ☐ Student rotation
- ☐ Internship rotation
- ☐ Residency rotation
- ☐ Other experience
- ☐ As a student, I had no experience with the medically underserved

If you selected 1 - 4 above, how many weeks altogether were spent in these experiences? Please give a cumulative total if you had more than one such experience.

_____

How did you hear about the National Health Service Corps (NHSC) program? (Check all that apply)

- ☐ Area Health Education Centers
- ☐ Clinical Experience
- ☐ Friends or Family
- ☐ Healthcare Focused Event (conference, networking, retreat)
- ☐ Health Professions Training Program (Professor, Advisor, Financial Aid office)
- ☐ Indiana Primary Health Care Association
- ☐ Indiana Rural Health Association
- ☐ Indiana State Health Department
- ☐ Scholarship Search or Internet Search
- ☐ Other

If you answered "Other", please explain where you heard about the NHSC program.

_____

Thinking back to when you first considered service in the NHSC, please indicate the extent to which you agree or disagree with each statement below.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I needed a scholarship to complete my medical, dental, or health profession education.	☐	☐	☐	☐	☐
I needed financial assistance to pay off debt that I had already incurred during my education as a health professional.	☐	☐	☐	☐	☐
I wanted a chance to provide health care in an underserved area.	☐	☐	☐	☐	☐
I wanted a chance to provide health care to patients whose cultural or ethnic background differed from my own.	☐	☐	☐	☐	☐
I wanted a chance to provide health care to patients whose cultural or ethnic background was similar to my own.	☐	☐	☐	☐	☐

Before your NHSC assignment how many different NHSC sites did you visit?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10

How much do you agree or disagree with the following statements concerning your experience in selecting your NHSC practice site?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The number of sites available to me in the placement cycle were adequate.	☐	☐	☐	☐	☐
I was able to find a site that met most of my professional needs and goals.	☐	☐	☐	☐	☐
My visits to the site played a deciding role in my selection of a site.	☐	☐	☐	☐	☐
The NHSC gave me adequate preparation for negotiating with my site.	☐	☐	☐	☐	☐
I was willing to serve at any NHSC site available.	☐	☐	☐	☐	☐

To what extent do you agree or disagree with the following general statements about cultural or social factors or personal beliefs involved in serving the medically underserved?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Understanding my patients' socio-cultural background is crucial to my ability to effectively provide health care to them.	☐	☐	☐	☐	☐
It is best to match a clinician to a site serving population whose social and cultural backgrounds are similar to that of the clinician.	☐	☐	☐	☐	☐
It is the clinician's responsibility to acquire necessary social and cultural competencies when serving in a medically underserved site.	☐	☐	☐	☐	☐
Serving low income patients contributes to my job satisfaction.	☐	☐	☐	☐	☐
Clinicians in medically underserved areas are generally accepted by their patients, even if they are of a different cultural background.	☐	☐	☐	☐	☐
People should be willing to help others who are less fortunate.	☐	☐	☐	☐	☐
Those in need have to learn to take care of themselves and not depend on others.	☐	☐	☐	☐	☐
Personally assisting people in trouble is very important to me.	☐	☐	☐	☐	☐
These days people need to look after themselves and not overly worry about others.	☐	☐	☐	☐	☐

Your NHSC Service

How many patient encounters are (or were) you responsible for in an average week? _____

Service Population Questions

Approximately what proportion of your patients are or were...

	0%	1-25%	26-50%	51-75%	76-100%
Medicaid Recipients	☐	☐	☐	☐	☐
Medicare Recipients	☐	☐	☐	☐	☐
Self-Pay	☐	☐	☐	☐	☐
Sliding Fee Scale	☐	☐	☐	☐	☐

Please indicate below if you believe that DUE TO YOUR PRESENCE DURING YOUR NHSC SERVICE your NHSC site:

	YES	NO	UNSURE
has reached any new patient populations not previously served by the site.	☐	☐	☐
has increased the array of services to one or more existing patient populations.	☐	☐	☐

Did you, by virtue of your previous specialty and/or training, bring to your NHSC site a health care service or services not previously available in your community?

☐ Yes
☐ No

What services? (list) _____

Please indicate whether you have initiated any of the following COMMUNITY-ORIENTED PRIMARY CARE PROGRAMS, either directly through your NHSC clinic or through linkages with other local health care organizations during your NHSC service.

	Check all that apply
Prenatal programs (e.g. OB risk assessment/risk reduction program, program to increase post-partum maternal and infant follow-up, etc.)	☐
Pediatric health programs (immunization outreach program, dental sealant program, lead screening program, etc.)	☐
Adolescent health programs (risk behavior awareness & counseling program, family planning & counseling program, etc.)	☐
Adult health programs (cardiovascular risk assessment/reduction dental caries prevention program, cancer screening/control program, etc.)	☐
Special populations programs (migrant/seasonal farm worker outreach programs, health care for the homeless, etc.)	☐
Geriatric Health programs	☐
Other community-oriented primary care programs	☐

Do you teach medical, dental or other health professional students at your current NHSC site(s)?

- ☐ Yes
- ☐ No

If YES, do you have an arrangement with any of the following to teach students in your practice? (Check all that apply.)

- ☐ Teaching Hospital(s)
- ☐ Area Health Education Centers (AHEC)
- ☐ Other Entity
- ☐ Health Professions School(s)
- ☐ Residency Program(s)
- ☐ I do not have an arrangement with any entity for my teaching activities

Outreach workers/specialists (also called community health workers, promotoras, or lay health workers) are defined as natural leaders from target communities who have a mission to serve as a link between the health system and community (Coe, K. 2001).

[Inline Image: "Community health worker.jpg"]

Are you familiar with outreach workers or specialists?

- ☐ Yes
- ☐ No
- ☐ Unsure

Do you currently or have you ever worked with a outreach worker or specialist?

- ☐ Yes
- ☐ No
- ☐ Unsure

Does your current practice use electronic medical records (EMR)?

- ☐ Yes
- ☐ No

What is the name of the system?

_____

Does your current NHSC practice site allow you to perform all the clinical services and activities defined within the state's scope of practice legislation for your discipline?

- ☐ Yes
- ☐ No

If NO, what clinical services are you prevented from performing?

_____

Has your experience with the NHSC program increased the likelihood that you will practice in another underserved location in the future?

- ☐ Yes, definitely
- ☐ Yes
- ☐ Unsure
- ☐ No
- ☐ No, not at all

Do you plan to continue accepting Medicaid patients in your future practice?

- ☐ Yes
- ☐ No
- ☐ Unsure

How satisfied have you been with the following aspects of your current NHSC service.

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Not Applicable
Availability of clerical/administrative support?	☐	☐	☐	☐	☐	☐
Financial stability of the site/practice organization?	☐	☐	☐	☐	☐	☐
Triage system for patient care?	☐	☐	☐	☐	☐	☐
Physical condition of the health care facility?	☐	☐	☐	☐	☐	☐
Fringe benefits?	☐	☐	☐	☐	☐	☐
Continuing medical education benefits paid for by the site?	☐	☐	☐	☐	☐	☐
Malpractice coverage by the employer?	☐	☐	☐	☐	☐	☐
Total compensation?	☐	☐	☐	☐	☐	☐
Reputation of the site in the local community?	☐	☐	☐	☐	☐	☐
Reputation of the site in the medical community?	☐	☐	☐	☐	☐	☐
Flexibility of daily clinical scheduling?	☐	☐	☐	☐	☐	☐
Night and weekend call duties?	☐	☐	☐	☐	☐	☐
The mission and goals of the site?	☐	☐	☐	☐	☐	☐
Access to specialists?	☐	☐	☐	☐	☐	☐
Number of health care providers at the site?	☐	☐	☐	☐	☐	☐
Other health care providers/patient care system in the community?	☐	☐	☐	☐	☐	☐

Please indicate the extent to which you agree or disagree with the following statements describing situations in the community and/or facility in which you live or work during your NHSC service.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
My spouse/partner is happy in the community where we live for my NHSC service.	☐	☐	☐	☐	☐	☐
Satisfactory professional opportunities for my spouse are available in the community where we live for my NHSC service.	☐	☐	☐	☐	☐	☐
My children are happy in the community where we live for my NHSC service.	☐	☐	☐	☐	☐	☐
Satisfactory educational opportunities for my children are available in the community where we live for my NHSC service.	☐	☐	☐	☐	☐	☐
Staying in this community is likely to be a problem given my current family situation.	☐	☐	☐	☐	☐	☐
The crime rate in the community where my NHSC practice site is located will be a factor in my decision about remaining there past my NHSC commitment.	☐	☐	☐	☐	☐	☐
Concern for my personal safety at the facility where I work will be a factor in my decision about remaining there past my NHSC commitment.	☐	☐	☐	☐	☐	☐
Socializing in this community is difficult for single people.	☐	☐	☐	☐	☐	☐

About Your Personal Background

What is your gender?

- ☐ Female
- ☐ Male

What is your race?

- ☐ African American or Black
- ☐ American Indian or Alaskan Native
- ☐ Asian
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White
- ☐ Some other race

What is your ethnicity?

- ☐ Hispanic or Latino
- ☐ Not Hispanic or Latino

Please indicate the name of the high school you attended. _____

Please indicate the city and state where your high school was located. _____

Please indicated the type of high school you attended.

- ☐ Private
- ☐ Public

Please provide the name of the medical, dental, or health professions school attended. _____

Please indicate the city and state of your medical, dental, or health profession school. _____

Please indicate the year you recieved your medical, dental, or health profession degree from this school. _____

Did you complete a post-graduate residency or other postgraduate clinical training?

- ☐ Yes
- ☐ No

Where did you complete post-graduate residency or other postgraduate training? _____

What is your marital status?

- ☐ Single, never married
- ☐ Married or domestic partnership
- ☐ Divorced
- ☐ Separated
- ☐ Widowed

Parental Status Do you currently have children?

- ☐ Minor children
- ☐ Adult children
- ☐ Minor and Adult children
- ☐ Childless

Number of minor children in household _____

Do you plan to have or adopt children in the future?

- ☐ Yes
- ☐ No

Do you plan to have or adopt children within

- ☐ 0-5 years
- ☐ 5-10 years
- ☐ 10-15 years

Practice Location

Do you continue to practice at your NHSC service site?

☐ Yes
☐ No

How many hours per week are you currently practicing at the NHSC service site?

☐ 0-8
☐ 9-16
☐ 17-24
☐ 25, 32
☐ 32-40

Aside from you NHSC service site, how many other locations do you currently practice at?

☐ 0
☐ 1
☐ 2
☐ 3
☐ 4

(Note: If you answered "0", you will be directed to question #19)

Why are you not currently practicing?

((optional))

Please type the street address of your principal practice location (the location at which you spend the most practice time):

_____
(Street address)

City: _____

State: _____

Zip Code: _____
(5 digit zip code)

Please type the street address of your secondary practice location. _____

City: _____

State: _____

Zip Code: _____
(5 digit zip code)

Please type the street address of your third practice location. _____

City: _____

State: _____

Zip Code: _____
(5 digit zip code)

Please type the street address of your fourth practice location. _____

City: _____

State: _____

Zip Code: _____
(5 digit zip code)

Estimate the number of hours spent in direct patient care at this location:

	0	1-8	9-16	17-24	25-32	33-40	40 or more
Location # 1:	☐	☐	☐	☐	☐	☐	☐
Location # 2:	☐	☐	☐	☐	☐	☐	☐
Location # 3:	☐	☐	☐	☐	☐	☐	☐
Location # 4:	☐	☐	☐	☐	☐	☐	☐

Prior to this project, were you aware of the Area Health Education Centers (AHEC)?

☐ Yes
☐ No

APPENDIX B: NHSC Site Administrator Survey Tool

Stands for Jobs
INDIANA AHEC NETWORK

Indiana State Department of Health

Survey of Administrators in Sites with ARRA Funded National Health Service Corps Clinicians

We are surveying administrators in organizations staffed by National Health Service Corps (NHSC) clinicians funded by the American Recovery and Reinvestment Act of 2009 (ARRA). The goal is to study the impact of these clinicians on the organizations and communities they serve. The purpose of the study is to determine if ARRA impacted the NHSC program. The questions in this survey were generated for a National level evaluation of the NSHC program that took place in 1998. The use of these questions will allow for comparison to National level data. Please complete the survey in its entirety and return it to the Indiana AHEC Network program office in the prepaid return envelope. You will be contacted for a brief interview regarding your perceptions and opinions about NHSC following the completion of the survey.

Indiana AHEC Network
ATTN: Connor Norwood
714 North Senate Avenue, Suite 205
Indianapolis, IN 46202
Fax: 317-278-0342

Note: The information gathered in this survey is for program evaluation by the State of Indiana and will not be shared with outside sources

I. Background Information

1. Please provide your site name and complete mailing address.

   _____
   _____
   _____

2. First Name

   _____

3. Last Name

   _____

4. What is your position at your organization?

   _____

5. How many years have you been in that position?
   _____

6. Are you a clinician?
   - ☐ NO (*go to question 7*)
   - ☐ YES (*continue to 6a & 6b*)

   a. What discipline? _____
   b. Do you currently provide direct patient care?
      - ☐ NO
      - ☐ YES

7. Please estimate the percentage of time you spend working with clinical staff OR with clinical issues (e.g. providing direct patient care, developing or implementing clinical protocol/policy, assessing service quality assurance in an average week:
   _____% per week

II. Organization Information

8. What type of organization is this? (FQHC, Rural Health Clinic, etc.)
   _____

9. How many clinic sites does your organization have? _____

10. What year did your organization first become eligible for a NHSC placement?*(if your organization has more than the clinic site, give the first year in which any site became eligible)*
    _____

11. Has your organization been continuously eligible since the date above?
    - ☐ YES
    - ☐ NO

    b. If No, how many years total has your organization been eligible to receive a NHSC clinician? _____ (#of yrs)

12. If your organization ever requested, but did not receive a NHSC clinician, please indicate the most recent year in which this occurred.
    - ☐ _____
    - ☐ N/A

13. Please estimate the percentages of your organization's clients which fall into the following categories. Totals will not add up to 100%. (*Give information for all sites as a whole, if yours is a multi-site organization*)
    a. Frail Elderly (>85 years old) _____%
    b. Children under age 18 _____%
    c. Non-English speakers _____%
    d. Migrant/seasonal farm workers _____%
    e. Substance abuse patients _____%
    f. HIV/AIDS patients _____%
    g. Homeless _____%
    h. Medicaid Covered _____%
    i. Medicare Covered _____%
    j. Uninsured (self-pay) _____%
    k. Uninsured (sliding fee) _____%

III. Staffing & Services

14. Please complete the table below on staffing at your organization. We are interested in the <u>number of full time equivalents (FTE)</u> for each group listed below. (If yours is a multi-site organization, please include staffing for all sites as a whole number)

	Total number of current FTE Staff	
	NHSC	**Non-NHSC**
1. Family Practitioner		
2. General Internist		
3. Pediatrician		
4. Obstetrician/Gynecologist		
5. Psychiatrist		
6. Dentists		
7. Dental hygienist		
8. Physician Assistant		
9. Nurse Practitioner		
10. Nurse Midwife		
11. Marriage and Family Therapist		
12. Licensed Professional Counselor		
13. Health Service Psychologist		
14. Licensed Clinical Social Worker		
15. Psychiatric Nurse Specialist		
16. Community Health Workers	**N/A**	

15. Please use the table below to indicate the impact, if any, of your current NHSC clinicians on your organization's ability to reach and serve "at-risk" patient populations. *(circle appropriate response in each cell of the table below)*

The presence of one or more NHSC clinicians has allowed us to… (Check all that apply)			
Patient Population	**Reach this population which we did not serve before**	**Serve additional patients within this population which we served before**	**Provide a broader array of services to our patients**
1. Pregnant Women			
2. Newborns			
3. Young Children			
4. Adolescents			
5. Ethnic Minorities			
6. The Chronically Ill			
7. HIV/AIDS patients			
8. The Elderly			
9. Nursing Home Residents			
10. The uninsured			
11. The homeless			
12. Others _____			

16. NHSC clinicians sometimes add or expand a specific clinical service (e.g. immunizations, diabetes screening, mammography, etc.) that was previously unavailable or underutilized at the clinics in which they serve.
    a. Have any of your current NHSC clinicians added or expanded a clinical service or services at the site(s) where they serve?
        - ☐ NO (If NO go to question 18)
        - ☐ YES (If YES, please complete the table below)

Provider Salary and Compensation			
NHSC Discipline	**Clinical service(s) added? (Circle one)**	**Clinical service(s) expanded?**	**Describe specific clinical service(s) added or expanded by NHSC clinician**
	YES NO	YES NO	
	YES NO	YES NO	
	YES NO	YES NO	
	YES NO	YES NO	
	YES NO	YES NO	
	YES NO	YES NO	

17. To the best of your ability, please list the names of all the past and current NHSC clinicians that are **CURRENTLY** working at your clinic.
    1. _____
    2. _____
    3. _____
    4. _____
    5. _____
    6. _____
    7. _____
    8. _____
    9. _____
    10. _____

IV. Compensation of NHSC clinicians at your clinic.

18. Which of the following are included in your clinic's standard benefit package offered to clinicians?
    - ☐ Medical/dental insurance
    - ☐ Life insurance
    - ☐ Long term disability
    - ☐ Short term disability
    - ☐ Supplemental retirement plan
    - ☐ Salaried retirement plan
    - ☐ Vacation ____ (days/year)
    - ☐ Holidays ____ (days/year)
    - ☐ Other _____

19. Which of the following considerations are used in determining the salary levels and benefit packages of your current clinicians (NHSC and non-NHSC)? *(check all that apply)*
    - ☐ Years of clinical experience
    - ☐ Clinical performance level
    - ☐ Educational achievements
    - ☐ Clinical leadership appointment
    - ☐ Years of continuous service with our clinic
    - ☐ Industry compensation standards by discipline
    - ☐ Demand for services in local markets
    - ☐ Scholarship or loan repayor status
    - ☐ Other considerations *(list)* _____

20. Please provide the following information concerning the average compensation of the NHSC clinicians currently at your organization. Include clinician type (MD/DO, dentist, PA, NP, or NM/CNM).

**** List all salaries and bonuses in thousands.***

Salaries & Compensation				
Discipline	**Starting Annual Salary**	**Sign-on Bonus**	**Current Annual Salary**	**Productivity Bonus**
1. Family Practitioner				
2. General Internist				
3. Pediatrician				
4. Obstetrician/Gynecologist				
5. Psychiatrist				
6. Dentists				
7. Dental hygienist				
8. Physician Assistant				
9. Nurse Practitioner				
10. Nurse Midwife				
11. Marriage and Family Therapist				
12. Licensed Professional Counselor				
13. Health Service Psychologist				
14. Licensed Clinical Social Worker				
15. Psychiatric Nurse Specialist				
16. Community Health Workers				

V. About Recruitment & Retention at Your Clinic

21. How much do you agree or disagree with the following statements concerning factors affecting recruitment and retention of NHSC clinicians beyond their NHSC service commitment.

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 =Strongly Agree

Salary considerations make it more difficult for our organization to recruit an NHSC clinician than a non-NHSC clinician.	1	2	3	4	5
On average, recruiting non-NHSC clinicians is easier than recruiting NHSC clinicians	1	2	3	4	5
It is easier to retain an NHSC loan repayor than an NHSC scholar at our organization	1	2	3	4	5
Retention of NHSC physicians is a problem at our organization	1	2	3	4	5
Retention of NHSC non-physician clinicians is a problem at our organization	1	2	3	4	5
It is easier to recruit NHSC clinicians whose cultural and or ethnic background is similar to that of our clients.	1	2	3	4	5
Our facilities and the resources available at our organization are attractive to clinicians considering retention at the end of their NHSC repayment	1	2	3	4	5
The reputation of our site in the community is attractive to clinicians considering retention at the end of the NHSC assignment	1	2	3	4	5
The use of a recruitment bonus encourages NHSC clinicians to stay beyond their obligation.	1	2	3	4	5

22. Does your organization work with any of the following programs in regards to the NHSC program? (check all that apply)

- ☐ Area Health Education Centers (AHEC)
- ☐ Indian Primary Health Care Association (IPHCA)
- ☐ Indiana State Department of Health (Office of Primary Care)
- ☐ Indiana Rural Health Association
- ☐ NHSC Chicago Regional Office
- ☐ Academic Institutions (please specify _____)
- ☐ Other _____

Thank you for taking the time to fill out the survey and participating in the efforts to improve the NHSC program and ultimately make a difference in healthcare access to underserved populations and communities.

APPENDIX C: NHSC Clinician Key Informant Interview Tool

2013 Indiana NHSC Evaluation
Key Informant Interview Tool
NHSC Clinician

Indiana State Department of Health

Background:

The purpose of this interview is to collect information about your experience with the NHSC program. The American Recovery and Reinvestment Act (ARRA) implemented in 2009 increased funding for the NHSC program with the intent of increasing the number of NHSC clinicians. We are interested in learning how the implementation of this funding has impacted health organizations in the State of Indiana. All the information gathered will be de-identified before any analysis and reporting.

Question:

1. How and when did you first learn about the NHSC program?
2. Please describe the process you went through to become a NHSC clinician?
    a. What type of support did you receive throughout this process?
    b. What organizations or key individuals helped with this process?
3. Once at your NHSC site, what type(s) of on-going support did you receive and from whom?
4. What are some pros and cons of your NHSC service site, and how did they contribute your experience?
5. Was your NHSC experience what you expected it to be? Please explain.
6. What is the most prominent health issue you observed during NHSC service?
7. What was the biggest challenge that you experienced during your NHSC service?
8. How has being an NHSC clinician affected your career plans?
9. Where do you plan to be ten years from today?
10. Is there anything else you would like to tell us about your experience in the NHSC?

APPENDIX D: NHSC Administrator Key Informant Interview Tool

2013 Indiana NHSC Evaluation
Key Informant Interview Tool
NHSC Site Administrator

Indiana State Department of Health

Background:

The purpose of this interview is to collect information about your organizations experience with the NHSC program. The American Recovery and Reinvestment Act (ARRA) implemented in 2009 increased funding for the NHSC program with the intent of increasing the number of NHSC clinicians. We are interested in learning how the implementation of this funding has impacted health organizations in the State of Indiana. All the information gathered will be de-identified before any analysis and reporting.

Question:

1. How did your organization first learn about and/or become involved with the NHSC program?

2. What was the process your organization went through to become an NHSC service site?

    a. What type of support did you receive during the process of becoming an NHSC service site?

    b. What organizations or key individuals helped with this process?

3. How has being an NHSC service site affected your organization?

4. How has the NHSC program benefited your organization and the community you serve?

5. Has your organization experienced any challenges/barriers with NHSC program pre- or post- implementation?

6. If your organization had NHSC clinicians prior to implementation of ARRA in 2009, did you notice any differences/changes in the NHSC program after implementation?

7. Is there anything else you would like to tell us about your organizations experience with the NHSC program?

APPENDIX E: Key Informant Interview Training Material

INDIANA AREA HEALTH
EDUCATION CENTERS PROGRAM

INDIANA UNIVERSITY
School of Medicine

Training Instructions

If you have anyone conducting interviews that did not attend the Center Directors meeting on March 18, 2013, they will need to complete the online training session before conducting any interviews. The individuals in your region that need to complete the training were identified on the main letter. The instructions for completing the interview training are as follows:

1. Watch the 15 minute online video at:
   http://www.youtube.com/watch?v=OIj3BNrrA38

2. Take the online review quiz at:
   https://redcap.uits.iu.edu/surveys/?s=cSC7V4

Once the interviewer has completed the online survey, a notification will be sent to the network office. You will receive a confirmation email that the training is complete and that they may continue with the interview process.

Thanks,

Connor W. Norwood
Project Coordinator
Indiana AHEC Network
cwnorwoo@iupui.edu
Phone 317-278-0360

NHSC Evaluation Data Collection: Training

Terrell W. Zollinger, DrPH
Hannah Maxey, MPH, RDH
Connor Norwood

Aligning Workforce Programs: NHSC & AHEC

Hannah Maxey, MPH, RDH

Current Project

- National Health Service Corps
  - ARRA funding
    - Support clinicians/scholars and obligations sites
    - **Identify clinician and site administrator experiences and perspectives***
    - Understand the impact of ARRA funding on the distribution of health care providers and access to health care

Experiences and Perspectives: Why is this important?

- Help us understand **successful strategies and barriers** to retention of providers in underserved communities
- Enhance pertinent policies and programming
- And. . . .

Making Connections: Strengthening Communities

Promotes a Shared Mission

AHEC: improving the supply and distribution of healthcare professionals through community/academic educational partnerships.

NHSC: supporting qualified health care providers dedicated to working in areas of the United States with limited access to care.

Improving Access

Conducting Key Informant Interviews

Terrell W. Zollinger, DrPH

Purpose

- Supplement the on-line survey
- Identify awareness, attitudes and perceived barriers that affect participation in the National Health Service Corps program
  - Clinic
  - Provider
- Build a stronger connection between your AHEC and the clinics/providers

Overview

- Making the appointment
- Introducing yourself, project – use script
- Asking questions – use script
- Taking notes – no recording
- Thanking the key informant

Making the Appointment

- Review protocol/script
- Have script in hand for those who want to conduct it now by phone (face-to-face is preferable)
- Contact key informant
- Mention letter
- Ask for 20 minutes
- Set date, time

Introducing Yourself and Project

- Hello, my name is _____ from _____.
- The ___AHEC____ is conducting a study of the National Health Service Corp in Indiana. Read intro on script.

Asking Questions

- More flexible than survey – it's a conversation
- Follow script – but
- If the respondent has already answered a question, don't ask again
- Listen, listen, listen

Taking Notes

- Use 1 page for each question
- Record KEY points
  - Make note of STRONG feelings
- Write key statements EXACTLY as spoken
- DO NOT show your feelings -- be neutral

Thanks!

- Thank key informant

After the Interview

- Finish notes
  - Finish thoughts, make sure your notes clearly state the responses
  - Spell out shorthand
- Send notes and data form to Connor at the Network office

Logistics

Connor Norwood
cwnorwoo@iupui.edu
317-278-0360

The Interviewees

- Administrators & Clinicians
- Excel file sent to center directors
- The Retreat

Administrators

- When calling to set up the appointment…
  - Confirm the interviewee is the key contact person
  - Ask for correct contact

The Process

- Survey will be completed prior to interview
- Clinician Survey completed online
- Admin. survey will be turned into interviewer at the interview
  - Option to mail or fax

Time Frame

- DUE DATE:
  Friday, May 3rd
  - 7 weeks

Materials

- Key informant assignment list
- Clinician & Admin. Survey Tool
- Key Informant Interview Tools
- Admin./Clinician Communication letters

Review

Connor W. Norwood
cwnorwoo@iupui.edu
317-278-0360

Review Link:

Key Informant Review

1) First Name _____

2) Last Name _____

3) Email Address _____

4) Before scheduling any key informant interviews, you should review all the material provided including the survey tools, interview tools, and communication documents.
- ☐ True
- ☐ False

5) Why is it important to be prepared with the script and interview material when scheduling the interview?
- ☐ Being prepared will help determine a good time to administer the interview.
- ☐ Many times key informants will want to complete the interview at that time.
- ☐ Being prepared increases the likelihood that the key informant will answer the phone.
- ☐ I don't need to be prepared.

6) All interviews should be conducted face to face if possible, regardless of the budget.
- ☐ True
- ☐ False

7) When introducing yourself to the administrator you do not need to follow the script provided, but must cover the key points.
- ☐ True
- ☐ False

8) Before scheduling the interview, you should...
- ☐ Confirm the administrator is still overseeing the NHSC program at that sight.
- ☐ Introduce yourself and the project.
- ☐ Review all of the material provided
- ☐ Panic

(Check all that apply)

9) If the key informant has answered the next question during a previous question, you should still ask it.
- ☐ True
- ☐ False

10) To ensure you capture as much information as possible you should....
- ☐ Take thorough notes.
- ☐ Take your time, even if you need to pause.
- ☐ Record one question per page.
- ☐ Summarize and compile your information as soon as possible following the interview.

11) A key informant interview is conversational, and aims to identify common themes and strong feelings. You should record word for word phrases that stand out, and make notes of common themes that you encounter.
- ☐ True
- ☐ False

12) I affirm that I have reviewed the training video and completed the review survey.
- ☐ Yes
- ☐ No

INDIANA AREA HEALTH
EDUCATION CENTERS PROGRAM
INDIANA UNIVERSITY
School of Medicine

Louise,

First and foremost, thank you for all your help on this project. It seems to be coming together and will be over before we know it. We are getting ready to start the interview process for the project. The budget for WCI-AHEC (Indiana State University) is as follows:

WCI-AHEC (Indiana State University)					
Clinician		**Administrator**			
Face to Face	**Phone**	**Face to Face**	**Phone**	**Inventory**	**Total**
Qty=1@$500 ($500)	QTY=0	Qty=1@$500 ($500)	0	Qty=1@$1000($1,000)	$2000

Please note that there is an allowance for phone and face to face interviews. Please stick to the number indicated for both types of interviews. The following individuals at WCI-AHEC (Indiana State University) will need to follow the training session instructions attached to this letter before performing any key informant interviews:

- Janet Rose

Attached you will find: interview assignments, training instructions, the interview tools and communication materials to clinicians and administrators that you will need to review before starting the interviews. As mentioned previously, several clinicians will be attending the Retreat on April 2, 2013. The clinicians attending the event in your region are:

- Julia Wernz

If you are interested in sending a staff member to the event or having myself or Hannah Maxey perform the interview please let me know. Again thank you for your time and effort with this project. Please feel free to contact me with questions or concerns which can be directed to cwnorwoo@iupui.edu or 317-278-0360.

Sincerely,

Connor W. Norwood

714 North Senate Avenue, Suite 205 Indianapolis, Indiana 46202 (317)278-8893 (317)278-0342 (fax) www.ahec.iupui.edu

Connor W. Norwood
IU Department of Family Medicine
Project Coordinator - Indiana AHEC
Email: cwnorwoo@iupui.edu

APPENDIX F: List of Key Informant Interviews

Clinician Key Informant Interviews			
First Name	**Last Name**	**Clinician Discipline**	**Site Name**
Jeannine	Everett	Nurse Practitioner	Community Mental Health Center, inc.
Lori	Kopfenstein	Nurse Practitioner	Family Health Services
Joseph	Wangerin	Physician Assistant	IMH Kentland Clinic
Valerie	Johnson	Nurse Practitioner	Healthy Children Health Teens & Family Planning
Paige	McDaniel	Certified Nurse Midwife	Southeast Health Center Inc.
Priya	Thomas	Dentist	Cottage Corner Community Health Center
Brittany	Webb	Nurse Practitioner	Southeast Health Center Inc.
Lori	Coffey	Licensed Clinical Social Worker	Four County Counseling Center
Monica	McMain	Nurse Practitioner	Community Health Center of Miami County
Michelle	Reeve	Licensed Clinical Social Worker	Four County Counseling Center
Marci	Brown	Licensed Professional Counselor	Noble County Bowen Center
Katrina	Ott	Licensed Clinical Social Worker	Bowen Center Huntington County Office
Rhonda	Stephens	Dentist	Raphael Health Center
Regina	Hildenbrand	Licensed Professional Counselor	Greene Education Services
Quinn	West	Nurse Practitioner	Healthlinc, Inc.
Philip	Broshears	Allopathic Phys.	Deaconess Clinic Downtown
Jessica	Cooper	Licensed Clinical Social Worker	Southern Hills Counseling Center
Julia	Wernz	Health Service Psychologist	Vermillion-Parke Community Health Center

Administrator Key Informant Interviews		
First Name	**Last Name**	**Site Name**
Kelly	Steward	Community Mental Health Center, inc.
BethAnn	Perkins	Family Health Services
Christy	Tidwell	Cottage Corner Community Health Center
Gregg	Grote	Shalom Health Care Center, Inc.
Donald	Trainor	Southeast Health Center Inc.
Annette	Krintz	Four County Counseling Center
Kimberly	Snyder	Bowen Center Warsaw Office
Betty	McBride	Open Door Health Services
Virginia	Moore	Park Center Decatur Office
Jeanni	McCarthy	Foundations Family Medicine
David	Christeson	Deaconess Clinic Downtown
Amanda	Berberich	Echo Community Health Care, Inc.
Joe	Kimmel	Southern Hills Counseling Center
Elizabeth	Morgan	Vermillion-Parke Community Health Center
Sophia	Mendez-Bork	Healthlinc, Inc.

APPENDIX G: Instructions for Clinical Rotations Data Collection

INDIANA AREA HEALTH
EDUCATION CENTERS PROGRAM
INDIANA UNIVERSITY
School of Medicine

August 30, 2013

Greetings Center Directors:

We are finally ready to start data collection for the Clinical Rotations Database as part of the National Health Service Corps project. Over the last couple of weeks we have had discussions on what should be collected and how it should be done. Some things have changed since we met back in December.

I have enclosed 4 documents. The first document is a list of tasks that needs to be completed by each center. The second document is the list of variables that are included in the database and the definitions of them. The third document is the excel file that has been prefilled with the most current data. Each center will be responsible for filling in the missing fields completely and accurately. It is also necessary for each center to list *ALL* clinical rotations in the region for professions involved in the NHSC Loan Repayment Program and Scholarship Programs. The last file included is a reference guide to filling out excel file. It is a questionnaire format of the excel file and variables and will serve to further clarify the data entry process.

Each center will need to have the existing rotations and all new AHEC rotations in the region completed no later than Wednesday, February 19, 2013. The data should be submitted to Connor Norwood at cwnorwoo@iupui.edu. All other rotations in the region must be reported by Friday, March, 29, 2013. If there are any questions regarding the data collection or format, please feel free to contact Staci Walters at sjwalter@iupui.edu or myself. Angela will be providing details regarding compensation for the deliverables.

Sincerely,

Connor W. Norwood

Connor W. Norwood
IU Department of Family Medicine
Project Coordinator - Indiana AHEC
714 N. Senate Avenue, Suite 205
Indianapolis, IN 46202
Office: 317.278.0360

National Health Service Corps
Project

Objectives

1. **Obj. 1**: Fill in missing information and data fields on existing clinical experiences already listed in the file.
2. **Obj. 2**: Add any new AHEC rotations or clinical experiences that are not currently listed in the excel file.
3. **Obj. 3**: Identify and add all clinical rotations and experiences in your AHEC region for NHSC Loan Repayment and Scholarship programs to the excel file.
    a. NHSC Professions to include:
        i. *Medicine (MD/DO)- Primary Care*
        ii. *Physician Assistant (PA)- Primary care*
        iii. *Nursing-Primary Care (NPs, Midwife, psychiatric nurse specialist)*
        iv. *Dentist*
        v. *Dental Hygienist*
        vi. *Health Service Psychologist*
        vii. *Licensed Clinical Social Worker*
        viii. *Licensed Professional Counselor*
        ix. *Marriage and Family Therapist*

Deadlines

Objectives 1 & 2 are to be submitted to the network office by Wednesday, February 19, 2013.

Objective 3 is to be submitted to the network office by Friday March 29, 2013

NHSC Data Collection: Instructions

Connor W. Norwood
December 3, 2012
cwnorwoo@iupui.edu
317-278-0360

Purpose

- AHEC Proposed Activity: Identify and evaluate current rotations at Indiana University School of Medicine and other health profession schools that promote training opportunities in underserved areas (NHSC eligible disciplines).
  - AHEC Proposed Task: Inventory current rotations.

What Variables Do we Want to Compile?

- Pages 3-4 of instruction guide
- Clarifies variable and desired information

"AHEC clinical placements put health professions students in real world settings: migrant, urban, rural, community health clinics and health departments working with underserved populations". ~ AHEC

Data Collection

- Fill in data fields for existing AHEC rotations
- Add all AHEC rotations not currently listed in the eligible disciplines
- Add all rotations from NHSC eligible Health Professions Training Programs in your region, not currently AHEC.
- Complete all Required Fields
- Double check formatting and sources
- Email file to cwnorwoo@iupui.edu
  - Feb. 1st ??

Required Data Fields			
Variable	**Required**	**New Field**	**Format**
AHEC Region	Yes	No	NA
School/Program	Yes	Yes	NA
Unlisted School	Optional	Yes	NA
Discipline	Optional	No	NA
NHSC Discipline	Yes	Yes	NA
NHSC Specialty	Yes	Yes	NA
Rotation Specialty	Yes	Yes	NA
Degree Type	Yes	Yes	NA
Year Added	Yes	Yes	4 Digit Year
Site Name	Yes	No	NA
Organization	Yes	Yes	NA
Site Type	Yes	Yes	NA
Preceptor Last Name	Yes	Yes	NA
Preceptor First name	Yes	Yes	NA
Position Title	Optional	Yes	NA
Address	Yes	No	**714 North Senate Avenue
City	Yes	No	Indianapolis
County	Yes	Yes	Marion
State	Yes	Yes	*IN

Required Data Fields			
Zip Code	Yes	No	*46202
Contact First Name	Yes	Yes	NA
Contact Last Name	Yes	Yes	NA
Contact Phone Number	Yes	Yes	*(317) 278-0360
Fax	Optional	Yes	*(317) 278-0360
Email	Yes	Yes	cwnorwoo@iupui.edu
URL	Optional	Yes	NA
Underserved	Yes	Yes	Yes/No
Designation	Yes	Yes	NA
NHSC Eligible	Yes	Yes	Yes/No
Primary Data Source	Yes	Yes	NA
Secondary Data Source	Yes	Yes	NA
Data Updated	Yes	Yes	*12/03/12
Updater ID	Yes	Yes	NA

**Cell is preformatted to only allow for specific number of digits and will auto-format the cell*

***Street address entries should use no abbreviations*

"School/Program"

- The database will be organized by school/program.
- Multiple Schools
  - Separate line for each school
- Multiple Programs
  - Separate line for each program
    - Ball State Department of Counseling Psychology
    - Ball State School of Nursing

"Discipline"

- Discipline
  - General discipline or previously listed discipline
- Select the NHSC eligible discipline, or select "not eligible"

Eligible Disciplines			
	• **Medicine (MD/DO)** — Family Medicine — Obstetrics/Gynecology — General Internal Medicine — Geriatrics — General Pediatrics — General Psychiatry • **Physician Assistant (primary care)**	• **Nursing** — Primary Care Nurse Practitioner (adult, family, pediatric, psychiatric/mental health, geriatrics and women's health) — Certified Nurse-Midwife — Psychiatric Nurse Specialist	• **Dentistry (DDS, DMD)** • **Dental Hygienist** • **Mental and Behavioral Health** — Psychologist (health service) — Licensed clinical Social Worker — Licensed professional counselor — Marriage and family therapist

"Specialty"

NATIONAL HEALTH SERVICE CORPS

- NHSC Eligibility
- Allopathic Physician
  - Family Medicine (NHSC eligible)
  - Internal medicine (NHSC eligible)
  - Pediatrics (NHSC eligible)
  - Neurology (Not NHSC eligible)
- Nurse
  - Certified Midwife
  - Nurse Practitioner
    - Family Nurse Practitioner (NHSC Eligible)
    - Pediatrics (NHSC Eligible)
    - Cardiology (Not NHSC Eligible)
  - Psychiatric nurse specialist

"Underserved/Designation"

- *http://bhpr.hrsa.gov/shortage/*
- *Search by site address*
- *Designations:*
  - *HPSA*
    - *Mental*
      Dental
    - *Primary Care*
  - *MUA/P*
- *If current designation:*
  - *Underserved Cell = Yes*

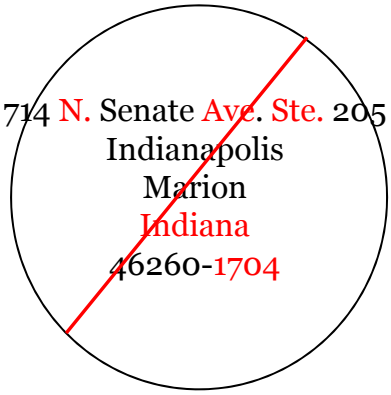
"NHSC Eligible"

- Is the site eligible for NHSC clinicians and scholars?
- Appendix A
  - Site Eligibility Guide
- Appendix B
  - NHSC LRP Fact Sheet
- Appendix C
  - NHSC Scholarship Fact Sheet

"AHEC is uniquely qualified to facilitate clinical placements because of its linkages to local healthcare resources and organizations." ~AHEC

Address Format

- Correct Format
  - 714 North Senate Avenue Suite 205
  - Indianapolis
  - Marion
  - IN
  - 46260



"Data Sources"

- Primary
  - Interview
  - Survey
  - Phone call
- Secondary
  - Previous data
- Can we find the source?

Discussion

- Questions?
- Suggestions?
- Concerns?

Variables

AHEC_Region – *Area Health Education Center Region in which rotation is being provided*

University – *Name of health professional school providing training*

Unlisted School – *Name of health profession college or university for which the rotation is eligible *(only if program was not found under university list)*

Degree_Type – *Level of education required in specified school/program to complete training*

Program- *The name of the program providing the health professions training.*

Other_Program- *name of the program offering the training if not found under program list*

NHSC Profession – NHSC *Health profession eligible for the rotation*

Other Profession- *Profession, if not a part of the NHSC Scholarship or Loan Repayment programs*

Physician_Specialty- *The specialty that the rotation targets.*

Nurse_Specialty- The specialty that the rotation targets

Mental/Behavioral_Specialty- *The specialty that the rotation targets.*

Year_Added – *The year the rotation was established*

Rotation_Name – *Name of the rotation or site*

Sponsoring Organization – *Name of organization sponsoring the rotation*

Site_Type - *Type of facility or organization administering the rotation*

Contact_First_Name – *First name of the contact person for the rotation*

Contact_Last_Name – *Last name of the contact person for the rotation*

Address – *Street address of the rotation*

City – *City name where the rotation is provided*

County – *County name where the rotation is provided*

State – *Two letter state abbreviation where the rotation is provided*

Zip_Code – *five digit postal code where the rotation is provided*

Contact_Phone_Number – *Phone number for the contact person overseeing the rotation*

Fax – *Fax number for the contact person of the rotation*

Email – *Email for the contact person of the rotation*

URL – *Website for the rotation or the site where the rotation is provided*

Preceptor_First_Name – *First name of the preceptor for the rotation*

Preceptor_Last_Name – *Last name of the preceptor for the rotation*

Underserved – *identifies if the rotation is considered an underserved location*

Primary_Data_Source – *Identifies and cites the research conducted to collect missing data*

Secondary_Data_Source – *Identifies sources of data or information previously compiled that were used to collect missing data fields*

Date_Updated – *the latest date the entry was updated*

Updater_ID – *Identifying username or credentials of person who entered the data*

APPENDIX H: IRHA 16th Annual Conference Brochure

JW MARRIOTT.
INDIANAPOLIS

10 S. West Street
Indianapolis, IN 46204
1-866-704-6162
1-317-860-5800

2013 IRHA Annual Meeting & 16th Annual Rural Health Conference

Conference Brochure Index

Conference Description

IRHA's Annual Conference brings together physicians, nurses, pharmacists, public health professionals, and other rural health practitioners and advocates with residents of rural communities. Practitioners from the field and national experts discuss current topics, as well as share the experiences of others in public health and rural health care delivery, along with the latest information regarding the start-up and on-going management of rural health care delivery models.

Conference Objectives

At the conclusion of the Conference, participants should be able to:

* Understand the benefits of Interprofessional Education (IPE) in health care training;
* Understand how rural areas are affected by trauma, how those areas can be helped through a developed statewide trauma system, and how rural areas can help themselves benefit;
* Review the major challenges and potential health strategies to address the growing problem of prescription drug abuse in Indiana and the United States;
* Understand how the provisions of the Affordable Care Act might impact oral health in rural Indiana;
* Apply contemporary knowledge about health care quality to the smaller rural provider setting;
* Identify practices and technologies that can improve the care of patients and can be implemented by rural providers.

About IRHA

The Indiana Rural Health Association (IRHA) is a not-for-profit organization representing a diverse statewide membership consisting of individuals and organizations committed to the improvement of health and resources for rural Hoosiers. IRHA seeks to provide a meaningful forum for assessing the strengths and weaknesses of the health and safety of rural communities in Indiana. IRHA seeks to provide educational programs that focus on the unique needs of the residents of rural Indiana and the providers who serve them. IRHA also works to educate the public on relevant issues and focus unified efforts to bring about the necessary changes in public and private policies to ensure that all rural Hoosiers have access to quality health care in their own communities. More information about the IRHA can be accessed through www.indianaruralhealth.org.

Targeted Audience

- Administrators
- Case Managers
- Certified Professionals in Healthcare Quality
- Clinical Managers
- Dentists
- Dental Hygienists
- Discharge Planners
- Health Professional Students
- Hospital Board of Directors' Members
- Information Technology Staff
- Mental Health Professionals
- Nurses
- Pharmacists
- Physicians
- Public Health Professionals
- Quality Improvement Professionals
- Social Workers
- Utilization Reviewers
- Rural Health Clinic Coders
- Rural Health Clinic Billing Staff
- Rural EMS
- First Responders
- Other health care staff from hospitals and rural clinics

Educational Grants

This activity is supported by a contribution from Lilly USA, LLC.

This education activity is funded in part by the Indiana State Department of Health/State Office of Rural Health federal grant #A70-3-079765.

Administrators

The Indiana State Board of Health Facility Administrators (IHFA) has approved IRHA as a sponsor of continuing education programs for health facility administrators. IRHA's license number is 98000258A.

In Collaboration with HFMA of Indiana

hfma indiana chapter
healthcare financial management association

2013 IRHA Annual Conference Agenda at a Glance

Tuesday, August 6, 2013
Leadership Seminar 1:00 to 5:00 p.m.

Welcome/Networking Reception
5:00 p.m.

Wednesday, August 7, 2013

8:00-9:00 a.m.
Registration/Breakfast/Exhibitor Networking/
Silent Auction

9:00-9:30 a.m.
Welcome/Call to Order/Introduction of
Board Candidates, Health Professional Students,
and Introduction of Dr. William VanNess
Indiana State Health Commissioner

9:30-10:15 a.m.
Keynote Address
"Adapting for a Healthier Future"
Alan Morgan, MPA, Chief Executive Officer
National Rural Health Association

10:25-11:10 a.m.
Concurrent Sessions I

11:15 a.m.-12:00 p.m.
Concurrent Sessions II

12:00-1:30 p.m.
Lunch in Exhibit Hall
Exhibitor Networking

1:30-2:15 p.m.
Concurrent Sessions III

2:15-3:45 p.m.
Reception in Exhibit Hall/

3:45-4:15 p.m.
Plenary Session
"Preserving Access to Rural Health Care"
Congressman Todd Young

4:15-5:00 p.m.
General Membership Meeting/Poster Awards
Silent Auction bidding closes at 5:00 p.m.

Fund Raiser Feature:

Silent Auction to benefit health professional students' scholarships

August 6 and 7, 2013

Location: Between General Session and Exhibit Hall

Thursday, August 8, 2013

7:00-8:00 a.m.
Breakfast/Exhibitor Networking

8:00-9:30 a.m.
Plenary Session
"Indiana's Prescription Drug Abuse Epidemic"
Honorable Greg Zoeller, Indiana Attorney
General and the State's Prescription Drug Abuse
Task Force Panel

9:30-10:00 a.m.
Exhibitor Door Prizes

10:15-11:00 a.m.
Concurrent Sessions IV

11:00-11:45 a.m.
Concurrent Sessions V

12:00-2:15 p.m.
Awards Luncheon

Plenary Session
"A Statewide Trauma System:
What It Would Mean for Indiana"
Dr. Kayur Patel, Dr. Timothy Pohlman,
Art Logsdon, Meredith Addison
(Facilitator: Spencer Grover, MHA, FACHE,
Indiana Hospital Association)

Keynote Address
"Adapting for a Healthier Future
from a Physician's Viewpoint"
Congressman Larry Bucshon

2:15 p.m.
Adjournment

Featuring

IRHA Blood Drive
by Indiana Blood Center

One Day Only!!!

August 7, 2013
11:00 a.m. to 3:00 p.m.

Give the gift of life!
You'll have someone's undying gratitude.

Indiana Rural Health Association
2013 Annual Conference
August 7 and 8, 2013

Tuesday, August 6, 2013
Leadership Seminar 1:00 to 5:00 p.m.

Welcome/Networking Reception
5:00 p.m.

Wednesday, August 7, 2013

8:00-9:00 a.m.
Registration/Breakfast/Exhibitor Networking/
Silent Auction

9:00-9:30 a.m.
(Grand Ballroom 6)
Welcome/Call to Order/Introduction of
Board Candidates, Health Professional Students,
and Introduction of Dr. William VanNess
Indiana State Health Commissioner

9:30-10:15 a.m.
Keynote Address
"Adapting for a Healthier Future
Alan Morgan, MPA, Chief Executive Officer
National Rural Health Association

10:25-11:10 a.m.
Concurrent Sessions I

1 National IPE Initiatives Partnering with Indiana and a Unique Virtual Approach to Health Care Training
Richard Kiovsky, MD
James Buechler, MD
Jackie Mathis, MS
Angela Powell, MSN, RN
John Wheat
(Grand Ballroom 7)

2 Innovative Collaboration to Reduce Patient Harm and Readmissions
Carolyn Konfirst, RN, MS, DrPH
Lisa Craiger, RN, BSN
Connie McDowell, RN
Deb Hummel, RN, MSN, MBA
Greg Pratt, RPh
(Grand Ballroom 8)

3 Patient Engagement—Patient Portal Populated with Data from a Health Information Exchange
Donna Nobbe
Trisha Prickel
Jeffrey Hatcher, MD
(Grand Ballroom 9)

4 The Affordable Care Act and Oral Health in Rural Indiana
James Miller, DDS, MSD, PhD
(Grand Ballroom 10)

5 Transforming into a Patient-Centered Medical Home—A Painful, but Rewarding Process and Putting the Patient First: Using Quality to Transform Primary Care
Elizabeth Morgan Burrows, JD
Stephanie Jeffery, MBA
Natalie Stewart
(Rooms 309/310)

6 Hoosier Rural Hospital Value in an Era of Healthcare Reform
Gregory Wolf, MEd, MBA
(Room 305)

7 Legislative and Regulatory Update for Rural Hospitals
Andy Rinzel, CPA
Bob Brandenburg, CPA
(Room 306)

11:15 a.m.-12:00 p.m.
Concurrent Sessions II

1 Hospital-Centered Community Health Plans
Kimber McCarson
Joseph Guzman
(Grand Ballroom 7)

2 Heads Up! A Little Clarity Amid the Concussion Debate
Jim Turner, DO
(Grand Ballroom 8)

3 Building an HIE Network and Virtual Community to Improve Quality of Care
Scott Kidder
Tom Liddell
Steve Witz
(Grand Ballroom 9)

4 Community Health Workers: Indiana's Unsung Heroes
JoBeth McCarthy-Jean, MPH
Martha Levey, EdD
Bruce VanDusen, AAS
(Grand Ballroom 10)

5 RHC Policies and Procedures
Robin VeltKamp
(Rooms 309/310)

6 **The New Analytics: Hospital Strength Index, Medicare per Beneficiary Cascade, and Population Health**
Scott Goodspeed, DHA, FACHE
(Room 305)

7 **Market Outlook and Review**
Craig Dobbs, MBA
(Room 306)

12:00-1:30 p.m.
Lunch in Exhibit Hall
Exhibitor Networking

1:30-2:15 p.m.
Concurrent Sessions III

1 **Keys to Leading in a Complex Industry**
Jack Bebiak, MBA
Sara Johnson, MHA
(Grand Ballroom 7)

2 **I Don't Remember: Dementia or Normal Aging**
Dee Mayfield, CDP, NCCDP authorized trainer
(Grand Ballroom 8)

3 **The Power of the Glove: Rural EKG Transmissions**
Angela Powell, MSN, RN
(Grand Ballroom 9)

4 **Indiana's Health Workforce: Description, Distribution, and Strategic Recommendation to Empowered Decision Making**
Hannah Maxey, MPH, RDH
Connor Norwood, MHA
Zachary Sheff, MPH
(Grand Ballroom 10)

5 **What's New with Rural Health Clinic Billing?**
Charles James, MBA
(Rooms 309/310)

6 **Fresh Tactics: Unlocking the Potential of Pharmacy in Your Hospital**
Joseph Dula, PharmD, BCPS
(Room 305)

7 **The Landscape of Hospital Finance—2013 & Beyond: How Borrowers Will Access Debt Capital**
Chris Blanda, MBA
(Room 306)

2:15-3:45 p.m.
Reception in Exhibit Hall

3:45-4:15 p.m.
Plenary Session
"Preserving Access to Rural Health Care"
Congressman Todd Young
(Grand Ballroom 6)

4:15-5:00 p.m.
General Membership Meeting/Poster Awards
Silent Auction bidding closes at 5:00 p.m.

Thursday, August 8, 2013

7:00-8:00 a.m.
(Exhibit Hall)
Breakfast/Exhibitor Networking

8:00-9:30 a.m.
Plenary Session
"Indiana's Prescription Drug Abuse Epidemic"
Honorable Greg Zoeller, Indiana Attorney General and the State's Prescription Drug Abuse Task Force Panel
(Grand Ballroom 6)

9:30-10:00 a.m.
Exhibitor Door Prizes
(Exhibit Hall)

10:15-11:00 a.m.
Concurrent Sessions IV

1 **Maximizing the Effectiveness of Community Healthcare Boards**
Mark Giesting, MBA
Mary Ann Wise-Castner
Jim Roberts, EdD
Tim Putnam, DHA, MBA, FACHE
(Grand Ballroom 7)

2 **Now We See You, Then We Won't: Enriching Every Encounter**
Eric Yancy, MD
Heidi Harris-Broumund, MD
(Grand Ballroom 8)

3 **Telehealth SustainABILITY: Where Did the Money Go?**
Joe Biggs, PhD
Jeff Harper, PhD
(Grand Ballroom 9)

4 **Breaking the Habit: Helping Providers Help Families**
Carrie Evans, BS, CPP
Eden Bezy, MPH
Michelle Stucker, BS, CPP
Monique Hill-French, MPH
Michael McDonald, MS
(Grand Ballroom 10)

5 **Future of Clinical Pharmacy Practice in Rural Health**
Lisa Anne Boothby, PharmD, BCPS
(Rooms 309/310)

6 **How Providers are Reaching Rural Patients with Chronic Diseases Before They Get to the Hospital**
Ronald Menze, AIA, ACHA, EDAC
(Room 305)

7 **ICD-10 Operational Impacts: Are You Prepared?**
Deborah Grider, CDIP, CCS-P, CPC, CPC-H, CPC-I, CPC-P, CPMA, CEMC
(Room 306)

11:00-11:45 a.m.
Concurrent Sessions V

1 **Programs to Recruit Tomorrow's Rural Health Career Professionals**
Janet Rose
(Grand Ballroom 7)

2 **Neonatal and Pediatric Abstinence Syndrome**
Mahnee Dinsmore, MD
(Grand Ballroom 8)

3 **Telehealth's Role in Health Care Reform**
Jonathan Neufeld, PhD
Becky Sanders
(Grand Ballroom 9)

4 **Building a Community Domestic Violence Task Force: Perspectives and Lessons Learned from Two Rural Communities**
Catherine Sherwood-Laughlin, HDS, MPH
Linda Henderson, MA
Mayor Shawna Girgis, MSW
Dave Newgent
Cathy Wyatt, MS
(Grand Ballroom 10)

5 **Prescription Drug Abuse—Educating Your Communities and Columbus Police Department's Response to Prescription Drug Diversion**
Denise Fields, PharmD
Sergeant Jay Frederick
(Rooms 309/310)

6 **IRHA/Leadership Partnership**
Jack Bebiak, MBA
Don Kelso, MBA
Aaron Hazzard
Deena Dodd
(Room 305)

7 **Smart Money? Evaluating Alternative Funding Sources for Facility Development**
Perry White
Matt Cler
(Room 306)

12:00-2:15 p.m.
Awards Luncheon

Plenary Session
"A Statewide Trauma System: What It Would Mean for Indiana"
Dr. Kayur Patel, Dr. Timothy Pohlman, Art Logsdon, Meredith Addison
(Facilitator: Spencer Grover, MHA, FACHE, Indiana Hospital Association)

Keynote Address
"Adapting for a Healthier Future from a Physician's Viewpoint"
Congressman Larry Bucshon

2:15 p.m.
Adjournment

Featured Keynote and Plenary Speakers

Alan Morgan, MPA, serves as Chief Executive Officer for the National Rural Health Association. He has more than 23 years' experience in health policy development at the state and federal level. He served as staff for former U.S. Congressman Dick Nichols and former Kansas Governor Mike Hayden. Additionally, his experience includes tenures with the American Society of Clinical Pathologists and with the Heart Rhythm Society, where he established a Washington, DC-based government affairs office. Prior to joining, NRHA, he served as a federal lobbyist for VHA, Inc.

Morgan's health policy articles have been published in: The American Journal of Clinical Medicine, The Journal of Rural Health, The Journal of Cardiovascular Management, The Journal of Pacing and Clinical Electrophysiology, Cardiac Electrophysiology Review, and in Laboratory Medicine. He also served as a co-author for the publication "Policy & Politics in Nursing and Health Care" and for the publication "Rural Populations and Health."

He holds a bachelor's degree in journalism from University of Kansas and a master's degree in public administration from George Mason University. In 2011, he was selected by readers of Modern Healthcare magazine as being among the top 100 most influential people in healthcare.

William C. VanNess II, MD, was appointed by Governor Mike Pence as the Indiana State Health Commissioner on January 14, 2013. He served as a member of the Executive Board for the Indiana State Department of Health from 2006 to 2012. Prior to his appointment, Dr. VanNess was President and CEO of Community Hospital of Anderson and Madison County. He has worked as medical director at Countryside Manor in Anderson, as well as owner/medical director of Summit Convalescent Center in Summitville and is a former president of the Indiana State Medical Association. Dr. Van Ness has 39 years of health care experience in Indiana, including 24 years in active practice as a board certified family physician.

Dr. VanNess holds a bachelor's degree from Butler University and a medical degree from Indiana University School of Medicine.

Attorney General Greg Zoeller was elected Indiana's 42nd Attorney General November 2008 and sworn into office January 12, 2009. Zoeller was reelected to a second term in November 2012 and sworn into office January 14, 2013. Previously, Zoeller served as the chief deputy AG to his predecessor, Attorney General Steve Carter, making him the first Attorney General to have served in the AG's office prior to being elected.

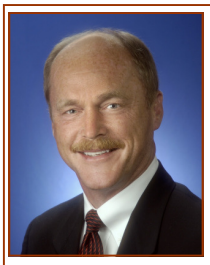
A commitment to service marks the career of Attorney General Zoeller. With a focus on consumer protection, he has expanded the Do Not Call law to include cell phones, increased the legal protections for teachers in returning discipline to the classroom, and protected homeowners facing foreclosures. By battling scam artists with proactive investigations, the Attorney General has made Indiana known as a state that consumer predators want to avoid.

An advocate for the most vulnerable in society, Attorney General Zoeller organizes an annual competition among lawyers and law firms called March Against Hunger that raises food donations to support Indiana's food banks.

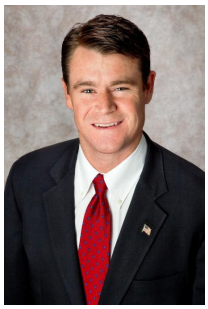
Zoeller for ten years worked as an executive assistant to Dan Quayle, first in Senator Quayle's U.S. Senate office, and then in the Office of the Vice President of the United States. He also served in other government capacities and was in private practice for 10 years before joining the AG Carter's office.

Having studied as an undergraduate at both Purdue University and Indiana University, Zoeller holds "dual citizenship" as both a Boilermaker and an IU Hoosier. He earned his law degree from Indiana University School of Law at Bloomington in 1982. He and his wife Kerrie have three children and live in Indianapolis.

Featured Keynote and Plenary Speakers



Spencer Grover, MHA, FACHE, has been Vice President of Indiana Hospital Association since 1990. The Indiana Hospital Association is a non-profit organization serving all of the Indiana hospitals. IHA's prime functions are representation, advocacy, data, education, and communications. Grover's specific responsibilities include coordinating health policy and regulatory interaction with the Indiana State Department of Health and other state agencies. He had thirteen years in hospital administration in Iowa, Illinois, and Indiana, including eight years as CEO of Starke Memorial Hospital in Knox, Indiana. He is a Fellow of American College of Healthcare Executives. Grover received his B.A. from Vanderbilt University in Nashville, Tennessee, and his MHA from Georgia State University in Atlanta, Georgia.



Congressman Todd Young, MBA, MA, JD, represents the 9th District of Indiana, a 13-county area in the southeast corner of the state. He currently serves on the House Ways and Means Committee, which has jurisdiction over taxes, health care, Social Security, Medicare, international trade, and
welfare. As a member of the of the Ways and Means Committee, he serves on both the Select Revenue Measures and Human Resources Subcommittees. Previously, he served on the House Armed Services Committee and House Budget Committee.

A fifth generation Hoosier and the second of three children of Bruce and Nancy Young, he grew up watching his parents work hard in order to support the family. From a young age, his parents instilled Midwestern family values, personal responsibility, and a strong work ethic in their children. His first jobs were delivering newspapers, mowing lawns, and providing janitorial services at the family business.

After graduating from high school, Young enlisted in the U.S. Navy with the goal of attending the United States Naval Academy in Annapolis, Maryland. A year later, he received an appointment from the Secretary of the Navy and was admitted to Annapolis, where he participated in varsity athletics and was elected a class officer. Young graduated with honors in 1995 and accepted a commission in the U.S. Marine Corps. After training as a rifle platoon commander and service as an intelligence officer, he was then assigned to lead a recruiting effort in Chicago and northwest Indiana. During this time, he put himself through night school at the University of Chicago, where he earned his MBA with a concentration in economics.

After serving a decade in the military, in 2000 Young was honorably discharged as a Captain. He then spent a year in England, where he wrote a thesis on the economic history of Midwestern agriculture and earned an MA from the School of Advanced Study in London. Upon returning to the United States, he accepted a position at The Heritage Foundation and later worked as a legislative assistant in the U.S. Senate.

In 2003, Young returned home to Indiana. He worked several years as a management consultant, advising public and private organizations how they could implement business practices to provide their constituents and customers with more value, often by investing fewer resources.

Soon after returning to Indiana, he met his future wife, Jenny; and he again put himself through night school, this time earning his JD from Indiana University. They married in 2005, and then worked together at a small law firm in Paoli, Indiana, that was started by Jenny's great-grandfather in 1933. They currently live in Bloomington, Indiana, and have four young children: a son, Tucker, and three daughters, Annalise, Abigail, and Ava.

Featured Keynote and Plenary Speakers

"Indiana's Prescription Drug Abuse Epidemic"
Plenary Session Participants:

Taya Fernandes
INSPECT QA Coordinator
Indiana Professional Licensing Agency

Steve McCaffrey, JD
President/CEO of Mental Health America
of Indiana and
Chair, Treatment & Recovery Committee

Tim McClure
Deputy Director of the Attorney General's
Medicaid Fraud Control Unit and
Chair, Enforcement Committee

Deborah McMahan
Allen County Health Commissioner and
Chair, Education Committee

Gabrielle Owens
Deputy Director of the Attorney General's
Licensing Enforcement and
Vice Chair, Take-Back Committee

Eric Wright, PhD
Director, Center for Health Policy,
Indiana University-Purdue University Indianapolis
INSPECT Committee Member

Facilitator:
Attorney General Greg Zoeller

"A Statewide Trauma System:
What It Would Mean for Indiana"
Plenary Session Participants:

Meredith Addison, RN, MSN, CEN, FAEN
Emergency Nurses Association

Art Logsdon, JD
Assistant Commissioner
Health & Human Services
Indiana State Department of Health

Kayur Patel, MD, MRO, FACP, FACPE, FACEP
Medical Director
Health Care Excel

Timothy Pohlman, MD
Professor of Surgery
Indiana University Health-Methodist

Facilitator:
Spencer Grover, MHA, FACHE,
Indiana Hospital Association

Larry Bucshon, MD, (pronounced: "Boo-shon") was born on May 31, 1962, and raised in Kincaid, Illinois, a small town of 1400 people in central Illinois. His life was shaped by this small town upbringing by two hard working parents. His father was an underground coal miner and his mother was a nurse. Both are now retired and still live in Kincaid.

Congressman Bucshon attended the University of Illinois at Urbana-Champaign and, upon receiving his bachelor's degree, attended medical school at the University of Illinois at Chicago. Following medical school, he completed a residency at the Medical College of Wisconsin, where he served as chief resident in surgery, and then remained there to complete a fellowship in cardiothoracic surgery. During this time, he also enlisted with the United States Navy Reserve and served for almost a decade. During his residency, Bucshon met his wife Kathryn, who is also a physician and a practicing anesthesiologist in Evansville.

Prior to being elected to Congress, Bucshon spent his life specializing in cardiothoracic surgery and has performed hundreds of heart surgeries and also served as President of Ohio Valley HeartCare. His outstanding work and leadership in this field led to him being honored as the St. Mary's Medical Staff Physician of the Year in 2007. He also served as Chief of Cardiothoracic Surgery and Medical Director of the open heart recovery intensive care unit at St. Mary's Hospital. He is board certified in Cardiothoracic Surgery by the American Board of Thoracic Surgery. Congressman Bucshon and his wife Kathryn reside in Warrick County with their four children and attend Our Redeemer Lutheran Church in Evansville.

Awards Luncheon Emcee

Mike King— Born in Virginia and raised in North Carolina, Mike King has called Indiana home since January of 1986, when he became the sports anchor at WTHI-TV (CBS) in Terre Haute.

Mike has worked as a journalist and professional broadcaster for 35 years, taking his first full-time job in the field in the late '70's as the sports editor of The Daily Record in Dunn, North Carolina, while still attending Campbell University. In the years that would follow, King would serve as sports anchor at a pair of North Carolina television stations, WNCT-TV (CBS) and WCTI-TV (ABC), before making the move to Indiana.

Mike joined the Indianapolis Motor Speedway Radio Network in 1994 as a pit reporter for Indianapolis 500 broadcasts, and five years later was named the chief announcer for the network. He is currently in his 15th season as the producer/anchor of IndyCar Radio and is the lead announcer for all IndyCar Series events produced and distributed worldwide by the IMS Radio Network. Additionally, Mike anchors coverage of the Firestone Indy Lights Series on the NBC Sports Network. King also previously anchored live coverage of the SAP United States Grand Prix F1 event and the Brickyard 400. Mike also continues to serve as the lead announcer for U.S. radio broadcast of the Red Bull GP MotoGP event run at the Indianapolis Motor Speedway.

In 2011 King took his media/broadcast skills to the Union Hospital Health Group in Terre Haute, Indiana, joining the Public Relations and Marketing Department as a media marketing specialist. He developed a weekly 30-minute radio show, RADIO UNION, that is presented by Union Hospital and heard 52 weeks a year in the Wabash Valley on 98.5 WIBQ-FM. The show highlights medical professionals, community events and technology updates. Additionally, Mike is responsible for producing Union Hospital's radio and television marketing and public service announcement messaging to the community.

Mike was lucky enough to meet the love of his life in Terre Haute and has been married to Nicole Brattain for 23 years. Together, they have 3 great children, Tyler (19), a sophomore at Indiana State, Madison (16), a junior at Terre Haute South, and Abigail (14), freshman at Terre Haute South. The family Golden Retriever, Hoosier, considers himself a 4th King child.

Conference Fee and Hotel Information

Conference Fee

A Conference fee of $300 for both days or $225 for one day includes Conference materials, break refreshments, group meals, reception, and a one-year IRHA membership. Register online at www.indianaruralhealth.org. Students seeking a Conference scholarship should register online at www.indianaruralhealth.org.

JW Marriott Indianapolis Hotel Information

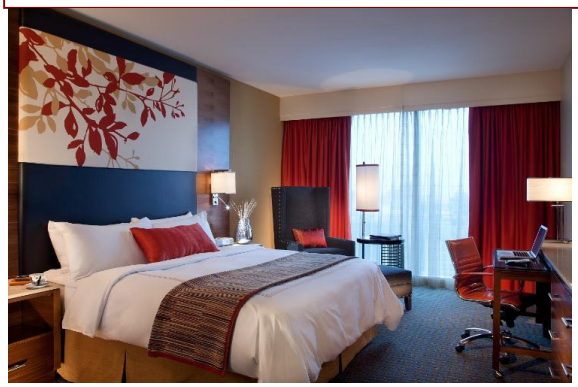
Individuals will be responsible for their own reservations.

IRHA has a discounted room block at the JW Marriott
Room rates: $149.00 per night. Hotel room rates are subject to applicable state & local taxes (currently 17%)

You may reserve your room online at the following link:
https://resweb.passkey.com/go/Rural2013

Or you may call the dedicated phone line 1-877-303-0104 to reserve your room.

Please reserve your room today; **the block discount closes July 15, 2013.**



APPENDIX I: Certificate of Appreciation for NHSC Clinician

AHEC Stands for Jobs
INDIANA AHEC NETWORK

Indiana State Department of Health

The Indiana State Department of Health

presents this

Certificate of Appreciation

which is hereby awarded to

Brandy Dantzer

for

Outstanding dedication, contribution, and support as a health care provider in underserved communities while participating in the National Health Service Corps

Presented on April 2, 2013

William C. VanNess II MD

William C. VanNess II, M.D.
Indiana State Health Commissioner
Indiana State Department of Health, Indianapolis, IN

APPENDIX J: NHSC Retreat Breakout Information

NHSC Breakout Session Objectives

Title:
Healthcare for the Underserved: A Provider's perspective

Speaker: Stephen Jay, MD
(Bio on file)

Description:
Participants will hear from Dr. Stephan Jay who has dedicated his career to improving access to healthcare and population health. He will explain moral and ethical rationale for the provision of healthcare to underserved populations, describe personal and professional benefits and professional benefits and challenges associated with being a health care provider in underserved communities, and will discuss a health care provider's role in advocacy to community health improvement.

Objectives:
- Explain moral and ethical rationale for the provision of health care to underserved populations
- Describe personal and professional benefits and challenges associated with being a health care provider in underserved communities
- Discuss a health care providers role in advocacy for community health improvement

Title:
Advisory Committee Breakout Session

Speaker: Hannah Maxey, MPH, RDH
Hannah is doctoral student in Health Policy and Management at the IU Richard M. Fairbanks School of Public Health at IUPUI. Her current research focuses on health workforce policies aimed at addressing provider mal-distribution. Hannah holds an Indiana State Dental Hygiene license, and has been actively working to improve access to healthcare for underserved communities since 2002.

Description:
The advisory committee breakout session will focus on preliminary data of the Human Resource and Service Administration (HRSA) and Indiana State Department of Health (ISDH) National Health Service Corps (NHSC) project. Hannah Maxey will present preliminary data, perform a SWOT analysis and strive to generate draft recommendations for the NHSC evaluation project and NHSC program.

Objectives:
- Review preliminary results of evaluation of the retention of National Health Service Corps provider post obligation
- Lead discussion to identify Strengths, Weaknesses, Opportunities and Threats (SWOT) for the NHSC program in Indiana University
- Generate draft recommendations for NHSC evaluation project and NHSC program

APPENDIX K: NHSC Retreat Invitation

INDIANA AREA HEALTH
EDUCATION CENTERS PROGRAM

INDIANA UNIVERSITY
School of Medicine

Greetings:

Please mark your calendar for **Tuesday, April 2, 2013**.

Thank you to those who completed the Retreat Interest Survey and provided feedback regarding the event. The planning committee has released the details for the Indiana Joint National Public Health Week Conference, which will host the NHSC Clinician Retreat. This year's theme is *"Public Health is ROI: Save Lives, Save Money".*

Welcoming remarks are scheduled to **begin at 9:00AM** on **Tuesday, April 2, 2013** with registration from 8:00AM to 9:00AM. The conference will be held at the **Sheraton City Center** in **Indianapolis, IN**. If you choose to attend, your registration will be covered and will include all conference materials, sessions, continental breakfast, lunch, afternoon break service, parking, and a certificate of attendance. Additionally, there will be a post conference service for NHSC clinicians.

There is no action for you to take, at this time. The AHEC team is working with the planning committee to resolve details and logistics. Our next correspondence will include instructions for reserving your spot at the conference, more details on the post conference service, continuing education opportunities, and information regarding travel reimbursement procedures.

Sincerely,

Connor W. Norwood

Connor W. Norwood
IU Department of Family Medicine
Project Coordinator - Indiana AHEC
714 N. Senate Avenue, Suite 205
Indianapolis, IN 46202
Office: 317.278.0360
Email: cwnorwoo@iupui.edu

INDIANA AREA HEALTH
EDUCATION CENTERS PROGRAM
INDIANA UNIVERSITY
School of Medicine

Dear NHSC Clinician:

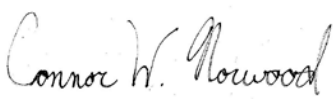
The AHEC team would like to invite you to register for the Indiana Joint National Public Health Week Conference at the Sheraton City Centre on **Tuesday, April 2, 2013** to be recognized by a special guest for your service. This year's theme is "*Public health is ROI: Save Lives, Save Money*".

AHEC will take care of your registration cost and travel reimbursement. Hotel accommodations are available to those who need overnight accommodations for Monday, April 1, 2013 at the Courtyard Marriott. Unfortunately, time is limited and AHEC must confirm the list of individuals who need a hotel room by the end of the week. If you choose to attend, your registration will include all conference materials, sessions, continental breakfast, lunch, afternoon break service, parking, and a certificate of attendance. The conference is scheduled to end at 4:45PM. There are approximately 6.5 Continuing Education Units available at the conference. There will also be two breakout sessions for NHSC clinicians at 10:30AM and 2:30PM.

At this time, please provide us with the information necessary to register you for the conference and secure hotel accommodations by following this link: https://redcap.uits.iu.edu/surveys/?s=mLcXuQ. If you do not respond before 8:00AM on March 18, 2013, we will not be able to guarantee hotel accommodations for you.

If you have any questions please contact Connor Norwood at 317-278-0360 or via email at cwnorwoo@iupui.edu. We look forward to seeing you at the NHSC retreat.

Sincerely,



Connor W. Norwood
Project Coordinator
Indiana AHEC Network
Phone: 317-278-0360
Email: cwnorwoo@iupui.edu

APPENDIX L: NHSC Retreat Lt. Gov. & Retreat Supplemental Material

INDIANA AREA HEALTH
EDUCATION CENTERS PROGRAM

INDIANA UNIVERSITY
School of Medicine

Lt. Governor Ellspermann,

On behalf of Indiana State Department of Health, The Indiana AHEC Network team would like to thank you for taking the time to attend the Indiana Public Health Conference on Tuesday, April 2, 2013 to recognize the National Health Service Corps (NHSC) Clinicians for their dedication and commitment to providing health care to the underserved.

We have provided your staff with all the information you may need for the event, and have provided some background information about the purpose and goal.

Once again we are delighted to have you be a part of this retreat for the National Health Service Corps clinicians and look forward to seeing you on April 2nd.

Sincerely,

NHSC Evaluation Team
Indiana AHEC Network &
Richard M. Fairbanks School of Public Health

714 North Senate Avenue, Suite 205 Indianapolis, Indiana 46202 (317)278-8893 (317)278-0342 (fax) www.ahec.iupui.edu

Event Planning Sheet for: ***Indiana Public Health Conference luncheon – 4/2/13, 12 pm***
Prepared by: Hannah McAfee

Name of Event:	Indiana Public Health Conference
Name of Group Hosting Event:	IU Richard M. Fairbanks School of Public Health at IUPUI
Event Description (i.e., dinner, reception):	Luncheon
Date of Event (Day, Month, Date, Year):	Tuesday, April 2, 2013
Event Run-time:	Lunch is 11:30-1:00; Conference runs 8:00-4:45
Who will accompany the LG:	Joey Fox
Who Requested this Event?	Hannah Maxey & Connor Norwood
Does the event have a theme?	"Public Health is ROI"
Are there some sponsors for the event?	IU Richard M. Fairbanks School of Public Health at IUPUI; IU School of Public Health—Bloomington; Purdue University Health and Human Services; Indiana Public Health Association; Indiana Minority Health Coalition; Indiana Society for Public Health Education; Indiana State Department of Health
LG Responsibilities (speaking, reading proclamation, photos?):	Speaking
Audience Make-up:	Public health professionals, public health students
Number of Attendees:	200-250
Is this event open to the public?	Yes, but registration is required
Location of Event (Site Name, Room and Street Address):	Sheraton City Center, Room: Meridian Ball Room 31 W Ohio St.
Indoor or Outdoor Event:	Indoor
Special attire:	Business
Who will meet the LG?:	Connor Norwood & Hannah Maxey
Where:	After parking in the Sheraton City Centre Parking Garage, take the set of 4 elevators in the middle of the garage to the lower level. Hannah and Connor will meet the Lt. Governor just outside the elevators on the LL, which is right next to the Meridian Ball Room.
Emergency Phone Number	Connor Norwood – 317-730-3991 Hannah Maxey – 317-702-6622
Time of Speech:	Noon
Length of Speech:	Welcome – 3-5 minutes
Suggested Topics for Speech:	See Attached
Who will Introduce the LG:	Ann Alley, ISDH Director of Primary Care Office Substitute: Dr. Richard Kiovsky, Indiana AHEC Network Director
Will there be a Podium?	Yes
Will there be a Microphone?	Yes
Event Coordinator Info:	Connor Norwood, 714 N. Senate, Suite 205, Indianapolis, 46202 Kate Johnson, 714 N. Senate, Indianapolis, 46202
Please include an agenda, if there is one:	See Attached

Indiana NHSC Retreat Summary
April 2, 2013

Project Background

The Indiana Area Health Education Centers (AHEC) Network in collaboration with the Indiana State Health Department has been working to enhance health workforce recruitment and retention in underserved areas with special focus on the National Health Service Corps strategies and contributions.

2013 NHSC Retreat

An Indiana National Health Service Corps Retreat was held on April 2nd during the 2013 Indiana National Public Health Week Conference, at a convention Indianapolis. ARRA-funded NHSC Clinicians were invited to attend a retreat to be recognized for their service and provide them with additional opportunities such as continuing education units.

NHSC Clinician Recognition

Lieutenant Governor, Sue Ellspermann, was invited to address the providers and recognize them for their service. Lt. Gov. Ellspermann was raised in Ferdinand, Indiana, a small rural community. She understands the numerous challenges facing the recruitment and retention of health care providers in underserved communities. She graciously adjusted her schedule to recognize the NHSC providers for their contributions to Hoosier Health. Her address was delivered during the seated luncheon to over 300 attendees, which included leaders in public health and health care from Indiana. In addition, each ARRA funded NHSC clinician received a certificate signed by Dr. William VanNess, Commissioner of the Indiana State Health Department that was presented by Dr. Richard Kiovsky, director of the Indiana Area Health Education Center Network.

Additional Information

The retreat was a success, provided valuable insight from the clinician's perspective, and built a sense of community among the providers. NHSC clinicians were provided with continuing education in accordance with their professions requirements. Continuing education was provided on various key areas in public health. Dr. Stephen Jay, professor of medicine and public health at Indiana University and a national leader in public health advocacy, lead a breakout session on the importance of health care provider's role in public health and health care advocacy beyond the clinical setting. This session was a highlight of the event and sparked interest among the providers.

APPENDIX M: NHSC Retreat Evaluation Tool

NHSC Retreat Evaluation

Thank you for attending the NHSC Retreat and Public Health Week Conference. Your participation in this process will not only help improve the NHSC program's effectiveness in reaching underserved populations, but will also strengthen the NHSC community in Indiana and around the country. Please take a minute to complete this brief survey regarding your experiences at the retreat.

***NOTE: All responses are de-identified and are considered to be completely anonymous.**

For the following questions please indicate whether you strongly agree, agree, disagree, strongly disagree, or feel neutral about the following statements by circling the appropriate response.

1) The registration process was easy to understand and did not take too long to complete.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

2) I was adequately compensated for travel and hotel arrangements.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

3) I was satisfied with the schedule and length of retreat.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

4) Sharing the preliminary findings from the completed surveys was valuable information regarding the recruitment and retention efforts of the NHSC program.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

5) The recognition ceremony was valuable to me both professionally and personally.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

6) Dr. Jay's breakout session regarding advocacy of health in underserved areas was appropriate and valuable information.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

7) I had adequate opportunities to share my experiences and contribute my ideas regarding the NHSC program.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

8) As a result of the retreat I have a stronger sense of community with other NHSC personnel.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

9) In the future, I would attend another NHSC retreat.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

10) Indiana AHEC Network staff did a great job at organizing, planning, and executing the NHSC retreat.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

11) Indiana AHEC Network staff provided support and help when necessary, in regards to the retreat.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

Please answer the following questions by writing your response in the spaces provided below.

12) What did you like best regarding the retreat? _____

13) What did you like least regarding the retreat? _____

14) What improvements, changes, or additions would you like to see for future retreats? _____

15) Please provide any other comments you have. _____

APPENDIX N: NHSC Retreat Continuing Education Material

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