Title: Longitudinal Evaluation Practices of Health Workforce Development Programs: An Incremental Approach to Evaluability Assessment

Short Title: Using Longitudinal Evaluation Practices as an Incremental Approach to Evaluability Assessment

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Highlights

- We sought to identify practices used by AHECs for tracking long-term outcomes (beyond one year) of Area Health Education Center-supported program participants once they have successfully completed a health professions training program.
- The study was a mixed-methods assessment designed to collect data on the description of activities, policies and/or programs used by AHECs or similar organizations to measure the extent to which AHEC alumni end up in health careers.
- In the spring of 2016, 30 AHEC representatives from 19 states completed the National AHEC Organization (NAO) evaluability assessment survey.
- The findings of the evaluability assessment of AHEC-supported programs were synthesized into a reference guide with program is classified as evidence-based, effective, promising, or emerging based on the level of evaluative evidence.
- The resulting evaluation practices assessment now serves as a valuable tool for the AHEC network to promote dialogue among stakeholders thereby fostering a shared understanding of assessment standards of evidence for the purposes of programmatic quality improvement.

Key Words: Area Health Education Centers, evaluability assessment, longitudinal evaluation
1. Introduction

Community-based organizations often face substantial fiscal and staffing constraints that impact their ability to evaluate health workforce development learning experiences. These challenges indicate an increased need for efficient methods to identify programs or interventions with demonstrated evidence of effectiveness that can be replicated and expanded (Losby, Vaughan, Davis & Tucker-Brown, 2015; Spencer, et al., 2013). As federal funding for workforce development programs comes under close Congressional budgetary scrutiny based on proven impact and outcomes, it is critical that these programs are engaged in program evaluation that provides the data to support their continued existence. For this reason, the evaluation of federally funded programs, such as the Area Health Education Centers, is vital for program planning, quality improvement, and determination of long-term impact. Challenges that must be addressed when looking at federally funded programs include: 1) variation in the capacity and commitment to evaluation; 2) the presence and interests of multiple stakeholders; 3) staff and managerial commitment; and 4) fears about cross-site comparisons and being “graded” by the funding institution. (Fredericks, Carman, & Birkland, 2002).

1.1 The Area Health Education Centers

The Area Health Education Center (AHEC) Program was established in 1972 to improve the supply, distribution, retention and quality of primary care and other health practitioners in medically underserved areas (Bacon, 2000). Administered by the U.S. Department of Health and Human Services (DHHS)-Health Resources and Services Administration (HRSA) Bureau of Health Workforce, the AHEC program is part of a national effort to improve access to primary care health services through the education and training of health professionals. The Bureau of Health Workforce expects AHECs to advance three specific national health workforce goals: 1) prepare a diverse, culturally competent primary care workforce representative of the communities we serve; 2) improve workforce distribution throughout the nation, particularly among rural and underserved areas and populations; and 3) develop and maintain a health care workforce that is prepared to deliver high quality care in a transforming health care delivery system with an emphasis on rural and underserved areas and communities (HRSA, 2016). To meet this mission, AHECs implement a wide range of educational activities at many points in the
career pathway including high school, college, paraprofessional, graduate, and post-graduate residency training. All programs are based in medical schools or schools of nursing and represent an academic-community partnership model based on the needs of the communities served by regional AHECs. Despite a long history, AHECs are challenged to demonstrate evidence that AHEC-supported programs result in individuals practicing as health care professionals or primary care providers serving rural, disadvantaged, and medically underserved communities.

AHECs measure success in the short-term through knowledge/attitude change and intent to practice in underserved areas. Intermediate measures include high school graduation and matriculation into college/health professions training programs (Figure 1). Long-term success is measured by health professions training completion/graduation and practice in underserved areas. This pipeline is a workforce development continuum focused on recruitment and training of students to serve as practicing health care professionals and primary care providers in rural, primary care, and medically underserved communities.

**Figure 1. AHEC Health Workforce Development Continuum**

[Diagram showing the pipeline stages: High School Graduation, Matriculate to College, Matriculate to Health Science Education, Grad/Complete Health Science Education, Practice/Job in AHEC Service Area, Retention in AHEC Service Area (esp. underserved)]
1.2 Evaluation preparation and purpose

The National AHEC Organization (NAO) is the professional association that represents, supports and advances the national AHEC network of 49 programs and centers with a mission to improve health by leading the nation in the recruitment, training and retention of a diverse health workforce for underserved communities. While AHECs are well-versed in program development and facilitation, the ability to reach conclusive findings about program outcomes and impact is not possible unless there is a system with the capacity to collect evaluation data (Wholey, 1979). To address this concern, developing and sustaining a Culture of Evaluation and Learning was identified as an NAO priority during a 2011-12 NAO strategic planning initiative.

In response to concurrent discussions with DHHS-HRSA staff about the challenges in tracking consistent long-term outcomes that demonstrated achievement of the AHEC program goals, the National AHEC Organization’s Culture of Evaluation and Learning Work Group convened select HRSA staff, AHEC program evaluators and program leadership, and others involved in data collection and reporting. The focus was on whether AHEC alumni (i.e., students with experience in AHEC programs) end up in health careers serving underserved areas/communities; community-based organizations; accredited primary care residency training programs; federally qualified health centers, rural health clinics, public health departments or other similar facilities; and serving health disparity populations.

The Culture of Evaluation and Learning Work Group leadership engaged in exploratory discussions with the HRSA’s AHEC Branch Chief about evaluability assessment, based on previous work done by the Centers for Disease Control. The main question was whether conducting an evaluability assessment across the AHEC network was appropriate, feasible, and useful and if it would demonstrate the program’s achievements. While there is lack of agreement in the literature on a definition for evaluability assessment, in principle, it can be viewed as “whether a project can be evaluated in its current state” and in practice, whether program systems and capacity can produce the data needed for evaluation (Davies, 2013). In this case, evaluability assessment, better described as “exploratory evaluation” or a “pre-evaluation exercise,” was used to identify existing specific processes for longitudinal tracking of program alumni and determine to what extent AHEC-supported programs contribute to the AHEC
mission to improve the supply, distribution, retention and quality of primary care and other health practitioners in medically underserved areas. This incremental approach to evaluability assessment was the first time evaluation capacity, structure, and processes throughout the AHEC network were assessed at this level. The purpose was to collect foundational data that could provide a more circumspect look, given the limited resources, at the feasibility, usefulness, and justification of conducting a more in-depth, thorough, and costly full evaluability assessment of the AHEC program.

1.3 Evaluability assessment, considerations, and barriers

Often viewed as a “pre-evaluation activity,” an evaluability assessment collects information to determine if a program can be successfully evaluated or if there are areas that can be strengthened prior to conducting a more in-depth evaluation (UNIFEM, 2009). It was designed to gage the program’s capacity and readiness for effectiveness evaluation in order to maximize the chances that any subsequent evaluation of programs, practices, or policies will result in useful information (Dunet, Losby, & Tucker-Brown, 2013; Leviton, Khan, Rog, & Dawkins, 2010). The evaluability assessment is a valuable method to identify programs that show promise to address community needs and collect information to assist planners in identifying the resources needed to achieve objectives, or to adjust their objectives in light of program reality. The Work Group used the evaluability assessment method to map out the key evaluation question of “Do AHEC Alumni (students with experiences in AHEC programs) end up in health careers?; in primary care?; serving underserved areas/communities?; serving community-based organizations, accredited primary care residency training programs, federally qualified health centers, rural health clinics, public health departments or other similar facilities?; and/or serving health disparity populations?” (Figure 2) (Leviton, et al., 2010). It also identifies potential indicators for evaluability, includes a well-defined program design, consistent implementation, a data system capable to collect evaluation measures, some indication of successfully reaching outcomes, and willingness of the program team to conduct a formal evaluation of the initiative (Dunet, et al., 2013).

Barriers to evaluability assessments include variation in the capacity and commitment to evaluation, the presence and interests of multiple stakeholders, staff and managerial commitment, fears about cross-site comparisons and being “graded” by the funding institution,
and fears about meeting the high standards of rigor for evaluation (Fredricks, et al., 2002). In order to better leverage AHEC-supported programs and resources, it was vital that both federal and local AHEC leaders involved develop realistic expectations about potential and performance in order to utilize available resources to maximum capacity.

**Figure 2. NAO Evaluation Questions to Identify Promising Programs and Evaluation/Data Collection Toolkit**

<table>
<thead>
<tr>
<th>Health Careers Promotion and Preparation</th>
<th>Community Based Student Education</th>
<th>Exploratory Data Collection Examples</th>
<th>Evaluation/Data Toolkit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do AHEC Alumni (students with experiences in AHEC programs) end up</td>
<td>Longitudinal data collection</td>
<td>Inventory of Resources for Data Collection</td>
<td></td>
</tr>
<tr>
<td>In health careers?</td>
<td>Individual baseline data</td>
<td>Tracking Forms</td>
<td></td>
</tr>
<tr>
<td>In primary care?</td>
<td>Follow up surveys</td>
<td>Pre/Post Tests</td>
<td></td>
</tr>
<tr>
<td>Serving underserved areas/communities?</td>
<td>Student clearinghouse data</td>
<td>Longitudinal Tracking Surveys</td>
<td></td>
</tr>
<tr>
<td>Serving community-based organizations, accredited primary care residency training programs, federally qualified health centers, rural health clinics, public health departments or other facilities?</td>
<td>College/University placement data</td>
<td>Best Practices Guide</td>
<td></td>
</tr>
<tr>
<td>Serving health disparity populations?</td>
<td>Medical license databases</td>
<td>Data Warehouse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Best practices</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2. Methods**

Following development and pilot testing of the survey tool, in the spring of 2016, the NAO Committee on Outcomes Research and Evaluation (CORE) conducted an evaluability assessment (i.e., “exploratory or pre-evaluation”) to identify practices used by AHECs for tracking long-term outcomes (beyond one year) of their program participants. The evaluability assessment survey tool collected data on: 1) description of activities, policies and/or programs used by AHECs or similar organizations to measure the extent to which AHEC alumni end up in health careers; 2) overview of the critical elements/resources needed to implement aforementioned activities, policies or programs; 3) the process used to collect data for the evaluation of the activities, policies or programs; and 4) reporting on the strength(s) and weakness(es) of
activities, policies or programs. The pre-evaluation assessment was designed to assess a program’s capacity and readiness for an effectiveness evaluation and then an effectiveness evaluation of the selected program(s). The assessment approach guided subsequent identification of resources in evaluating health workforce programs and served as a platform for developing strong evaluation designs for programs in the field, thereby yielding practice-based evidence in the field (Losby, 2015). The key evaluation question for the survey was “Do AHEC Alumni (students with experiences in AHEC programs) end up in health careers; in primary care; serving underserved areas/communities; serving community-based organizations, accredited primary care residency training programs, federally qualified health centers, rural health clinics, public health departments or other similar facilities; and/or serving health disparity populations?” The initial evaluability assessment survey serves as the data collection step of the incremental evaluability assessment process. Subsequent work will include convening an expert panel to validate the results. The goal of convening the small group is to provide panel members the opportunity to discuss assessments, engage in dialogue, and explore content related to the level of evidence based on the public health impact determination and quality of evidence provided (Losby et al., 2015).

This study received exempt approval by the Institutional Review Board of Indiana University (protocol number 1507421146).

2.1 Participants

In the fall of 2015, the initial evaluability assessment survey was developed and piloted with a small group (n= 6) of AHECs from six states. In spring of 2016, the full survey was disseminated via NAO’s Monday Update electronic newsletter reaching representatives from the more than 300 AHEC program offices and centers that serve 43 states and territories in the United States. This announcement described the project and invited AHECs to share methods and effective strategies for tracking longitudinal outcomes of their health workforce programs. To optimize participation, the announcement was repeated in the Monday Update four times on a weekly basis. Participants had roughly six weeks to complete the 30-minute survey.

2.2: Summary of Measures and Procedures

In 2013, the National AHEC Organization (NAO) brought together 20 individuals from 11 states to serve as work group designed to develop an organizational culture of evaluation and learning
as a continuation of the NAO strategic planning priority described earlier. More specifically, the group was charged with developing a longitudinal evaluation schema designed to assist organizational members with demonstrating the success of their programs. Given the daunting task, the workgroup took the initial incremental step of conducting an evaluability assessment to identify practices used by AHECs for tracking long-term outcomes (beyond one year) of their program participants once they successfully completed a health professions training program.

The survey was divided into two parts. Part I asked respondents to identify methods and sources used to collect outcomes relating to the primary care workforce for former AHEC trainees. Part II asked respondents to identify and describe a specific AHEC-supported program that had been evaluated and demonstrated success, including how secondary data and/or other databases were utilized to track long-term outcomes. Participants were then asked to rank the selected program according to the U.S. Rural Health Information Hub (RHIhub) criteria. The RHIhub evidence-based program rubric identifies a program as Evidence-based, Effective, Promising, or Emerging, based on the level of evidence available for the evaluation approach (Rural Health Information Hub, 2015). The ranking of program and associated criteria was modified based on research by Brennan, Castro, Brownson, Claus, and Orleans (2011) that identifies specific indicators and inclusion criteria used to classify the level of evidence demonstrating evaluation outcomes of a program (Table 1).

3. Results

In the spring of 2016, 30 AHEC program and center representatives from 19 states and territories (44% of the states and territories within the NAO network) completed the NAO evaluability assessment survey. AHEC roles held by participants varied greatly, including executive and associate directors, developers, program coordinators and managers, and administrative assistants. While the response rate appeared low, qualitative feedback provided by participants suggested that a sizeable number of NAO members did not feel a strong enough comfort level with evaluation to respond to an initial evaluability assessment survey. Thus, the responding sample likely represents the NAO membership that coordinates ongoing evaluation efforts for AHEC-supported programs.
Participants engage in AHEC-supported programs that span the educational curriculum (Figure 1) – from middle and high school and undergraduate college education programs [known as health careers promotion and preparation (HCPP)] to community-based as a health profession training student [known as community-based student education (CBSE)]. Approximately 70% (n=21) AHEC representatives reported conducting longitudinal evaluation on HCPP programs and 60% (n=18) identified conducting longitudinal evaluation on community-based student education (CBSE) programs. Of those tracking participants from HCPP programs, 5% (n=1) tracked their students for one year, 29% (n=6) for two to four years, 14% (n=3) for five years, and 52% (n=11) more than five years. Of those tracking participants from CBSE programs, 0% (n=0) tracked their students for one year, 33% (n=6) for two to four years, 11% (n=2) for five years, and 33% (n=6) more than five years (Figure 3).

**Figure 3: Longitudinal Tracking of Program Alumni**

The remaining four respondents did not specify a time frame for tracking the longitudinal outcomes of participants. AHEC’s work with a wide variety of health professions training programs included but are not limited to medical, nursing, dental, public health and allied health students. Among those AHECs tracking participants from CBSE programs, 94% (n=17) tracked medical students, 50% (n=9) tracked residents and fellows, 50% (n=9) tracked nursing students, 50% (n=9) tracked physician assistant students, 44% (n=8) tracked nurse practitioner students, and 56% (n=10) tracked student from additional disciplines such as dentistry, social work, pharmacy, physical therapy, psychology, allied health, behavioral health, public health, respiratory therapy and radiologic technology.
3.1 Program Evaluation Parameters and Characteristics

AHEC personnel reported using a variety of parameters and characteristics when tracking outcomes on AHEC alumni entering health professions careers (Figure 4). Identified parameters included post-high school employment in a health-related field/underserved area (55%, n=16), matriculation into paraprofessional or professional health training program (76%, n=22), graduation from paraprofessional or professional health training program (83%, n=24), post-license practice in a medically underserved community (55%, n=16), rural area (62%, n=18), or primary care setting (55%, n=17) and post-license retention of the practitioner in a medically underserved community (14%, n=4), rural area (17%, n=5), or primary care setting (17%, n=5).

Figure 4: Post-AHEC Program Evaluation Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>0%</th>
<th>20%</th>
<th>40%</th>
<th>60%</th>
<th>80%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post high school employment in a health-related field/underserved area</td>
<td></td>
<td></td>
<td></td>
<td>55%</td>
<td>16</td>
<td></td>
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<tr>
<td>Matriculation into paraprofessional or professional health training program</td>
<td></td>
<td></td>
<td></td>
<td>76%</td>
<td>22</td>
<td></td>
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<tr>
<td>Graduation from paraprofessional or professional health training program</td>
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<td></td>
<td></td>
<td>83%</td>
<td>24</td>
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<tr>
<td>Post-license practice in a medically underserved community</td>
<td></td>
<td></td>
<td></td>
<td>55%</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Post-license practice in a rural area</td>
<td></td>
<td></td>
<td></td>
<td>62%</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Post-license practice in a primary care setting</td>
<td></td>
<td></td>
<td></td>
<td>55%</td>
<td>17</td>
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<tr>
<td>Post-license retention of the practitioner in a medically underserved community</td>
<td></td>
<td></td>
<td></td>
<td>14%</td>
<td>4</td>
<td></td>
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<tr>
<td>Post-license retention of the practitioner in a rural area</td>
<td></td>
<td></td>
<td></td>
<td>17%</td>
<td>5</td>
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<tr>
<td>Post-license retention of the practitioner in a primary care setting</td>
<td></td>
<td></td>
<td></td>
<td>17%</td>
<td>5</td>
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</table>

AHECs must rely on a number of primary and secondary data sources for longitudinal tracking of program participants. Identified data sources included student clearinghouse data (50%, n=15), health professions licensing boards or other health professions licensing databases (47%, n=14), medical school academic affairs offices (27%, n=8), student data provided by a high school institutions (17%, n=5), alumni data from two-year and four-year institutions of higher education (10%, n=3), or additional data sources (43%, n=13), such as a state commission on higher education, Health Grades, Health US News, Google, residency programs, National Center on the Analysis of Healthcare Data, internet searches, exit surveys, phone calls, or social media (Facebook, LinkedIn).
3.2 Data Collection Methods

Data collection methods are aligned with the data sources as follows: matching to the AHEC alumna’s practice address and ZIP Code (50%, n=15), social media (47%, n=14), follow-up contact via e-mail address (27%, n=8), on-line surveys (17%, n=5), and mail surveys, telephone or in-person interviews (10%, n=3). Additional methods of tracking AHEC program alumni include matching the participant record with government data (e.g. state commission on higher education and/or professional licensing data), health profession school’s alumni records and medical board records.

3.3 Formative and Summative Evaluation Methods

The formative evaluation measures identified by survey respondents included intention of AHEC alumni to enter a health career, primary care, rural practice, etc. (73%, n=22), program fidelity, such as the adherence to objectives, content, delivery mode, etc. (50%, n=15), and pre-/post-knowledge tests (50%, n=15). The programs’ formative evaluation was measured using self-report intent to enter health major (73%, n=22), self-reported intent to work in primary care (60%, n=18), secondary data sets (33%, n=10) and observational checklists (23%, n=7) (Figure 5).

Figure 5: AHEC Formative and Summative Evaluation Methods

<table>
<thead>
<tr>
<th>Evaluation Measure</th>
<th>0%</th>
<th>20%</th>
<th>40%</th>
<th>60%</th>
<th>80%</th>
<th>100%</th>
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<tbody>
<tr>
<td>Intent of AHEC alumni to enter a health career, primary care</td>
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<td></td>
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<td>73%, 22</td>
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<tr>
<td>Program fidelity</td>
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<td></td>
<td></td>
<td></td>
<td>50%, 15</td>
<td></td>
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<tr>
<td>Pre/post knowledge tests</td>
<td></td>
<td></td>
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<td></td>
<td>50%, 15</td>
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<tr>
<td>Self-reported intent to enter a health major</td>
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<td></td>
<td>73%, 22</td>
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<tr>
<td>Self-reported intent to work in primary care</td>
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<td></td>
<td></td>
<td></td>
<td>60%, 18</td>
</tr>
<tr>
<td>Secondary data sets</td>
<td></td>
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<td></td>
<td></td>
<td>33%, 10</td>
<td></td>
</tr>
<tr>
<td>Observational checklists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23%, 7</td>
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</table>

The main summative evaluation measures identified by survey respondents include the intent of AHEC alumni to practice in a health career, primary care, rural practice, etc. (67%, n= 20). Additional summative evaluation focused on assessing participant motivation to continue to post-secondary education, health professions and self-reflection of their experiences. The
programs’ summative evaluation was measured using self-reported follow-up data such as questionnaires and interview (63%, n= 19) and secondary data sets, such as alumni or placement offices (43%, n= 13).

3.4 Levels of Evidence for Programs

Of the 30 participants that identified a specific AHEC-supported program that had been evaluated and demonstrated, 47% (n=14) identified meeting the criteria of a promising program, 47% (n=14) identified meeting the criteria of an emerging program, 3% (n=1) identified meeting the criteria of an effective program, and 3% (n=1) identified as meeting the criteria of an evidence-based program (Figure 6). In addition to the classified evidence level, each identified program included specific characteristics such as target audience, practice settings, program delivery mode, critical program activities, formative evaluation notes, summative evaluation notes, evaluation steps, necessary resources, and helpful facilitation information such as strengths, weaknesses, areas for improvement, barriers encountered and how they were overcome.

Figure 6: Identified Levels of Evidence for AHEC Programs

3.5 Identified Strengths, Weaknesses, and Areas of Improvement

Strengths identified by survey respondents described the success associated with repeated contact with participants. The benefits of relationships with government, educational and
community-based organizations resulted in secondary data being freely accessible for participant matching purposes. Due to the large number of students in HCPP and CBSE programs that AHECs reach each year, survey respondents identified the necessity to define a specific set of participants to track long term. AHECs identified the benefits of partnering with programs with similar missions such as the HOSA (Health Occupations Students of America) - Future Health Professionals, Health Careers Opportunity Program, and the Future Health Leaders clubs.

Overall weaknesses and barriers identified by survey respondents included limited participation and exposure to program components experienced in extracurricular programs due to inconsistent participation and limited funding and human resources available to reach larger numbers of students in broad and remote geographic areas. AHEC programs that utilize school-based teachers to facilitate health workforce programming and the limited students’ direct contact with AHEC personnel resulted in students not remembering AHEC or being unable to identify an AHEC-sponsored experience. The limited availability of data due to the Family Educational Rights and Privacy Act (FERPA) was also a challenge. Additional weaknesses identified included inconsistent attendance in face-to-face program due to transportation issues and students’ failure to complete online modules/experiences. Challenges in developing student interest in rural and/or primary care practice include: 1) a university infrastructure that limits AHECs’ ability to connect students with clinical opportunities in rural and medically underserved communities and 2) the lack of an AHEC presence or voice on academic committees that would permit their input on curriculum and programmatic changes within the university.

Areas of improvement included working with health workforce partners to develop a baseline measure with which to compare AHEC programmatic results and outcomes. Survey participants identified the desire to expand contact and reach with students throughout the health workforce development pipeline in order to experience earlier opportunities in medically underserved and rural communities. Finally, expanding collaboration with partnering health workforce programs would provide a more comprehensive student experience and maximize the resources to conduct longitudinal evaluation on program outcomes.

4. Discussion

4.1 Overview of results
The initial evaluability assessment survey of AHEC-supported programs had a two-fold purpose: 1) to identify methods and sources used to collect outcomes relating to the primary care workforce for former AHEC trainees and 2) share an inventory of AHEC-supported programs using these methods that have been evaluated and demonstrated success. The results of the initial survey demonstrated that, 47% (n=14) identified meeting the criteria of a promising program, 47% (n=14) identified meeting the criteria of an emerging program, 3% (n=1) identified meeting the criteria of an effective program, and 3% (n=1) identified as meeting the criteria of an evidence-based program. The results have provided a foundation on which to move forward in the evaluability assessment process by convening an expert panel to determine the effectiveness of the evaluations reported, validate the program’s impact on health workforce development and the quality of evidence, and recommend the feasibility and utility of a more in-depth evaluability assessment supported by dedicated funding.

The findings of the initial evaluability assessment of AHEC-supported programs were synthesized into a resource guide for use by NAO members. Each identified program was outlined with specific characteristics such as target audience, practice settings, program delivery mode, critical program activities, formative evaluation notes, summative evaluation notes, evaluation steps, necessary resources; helpful facilitation information such as strengths, weaknesses, areas for improvement, barriers encountered and how they were overcome; and which category of evidence in which the program is classified (evidence-based, effective, promising, or emerging). The results of the evaluability assessment were used to produce a valuable tool for the NAO and its member AHEC program offices and centers that comprise the national AHEC network. It can serve to promote dialogue among stakeholders and foster a shared understanding for assessment standards of evidence for the purposes of programmatic quality improvement and the longitudinal tracking of program alumni. This approach has the potential to assist in determining to what extent AHEC-supported programs fulfill their mission to improve the supply, distribution, retention and quality of primary care and other health practitioners in medically underserved areas.

4.2 Limitations of study

There are several limitations associated with this study. The first limitation is the sample size of the study. The response from 30 participants is not likely to encompass the vast array of
activities in which AHECs are engaged in communities across the nation. A larger sample size/response rate might have ensured a more representative picture of AHECs as a whole. The low response rate is likely associated with the small staff size of most AHECs (typically 1-3 staff members per center); limited scope of work; unfamiliarity with the terminology and processes used; and the lack of sufficient funding to adequately support staff dedicated to program and outcomes evaluation. A second limitation is the self-reported nature of the survey. Similar to the low response rate, a small staff with limited evaluation knowledge and experience within the individual AHECs may result in differences in understanding the evaluation terminology and processes. A final limitation is the dearth of research looking specifically at the utility of evaluability assessments of health workforce development programs and the lack of sufficient funding to support those efforts. The tools and resources used in this study were based upon public health program research, which assessed different types of outcomes than would be needed for health workforce development programs.

5. Conclusion

Findings from this assessment underscore the need for stakeholder support (i.e., university, school counselors, community-based organizations); clearly defined longitudinal tracking characteristics and resource expectations; cultivation of program alumni as potential mentors; utilization of secondary data sources/warehouses (e.g., National Student Clearinghouse, health care licensing databases, school alumni offices), and implementation of an evaluation plan for quality improvement and tracking longitudinal outcome measures. AHECs should consider utilizing a standard program evaluation template (e.g., Center for Disease Control and Prevention’s Framework for Program Evaluation in Public Health) to ensure greater consistency and to measure process, outcomes and impact across the network. Consideration should also be given to support a project evaluator focused on collection of long term outcomes and aggregating the outcomes data across AHEC programs.

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construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.”

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References


Table 1: Levels of Evidence of for Programs

<table>
<thead>
<tr>
<th>RANKING</th>
<th>LEVEL OF EVIDENCE*</th>
<th>RANKING CRITERIA**</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVIDENCE-BASED</td>
<td>Strategies identified in published systematic reviews, syntheses, or meta-analyses as producing significant, positive health or behavioral outcomes, and intermediate policy, environmental, or economic impacts on the basis of a structured review of published high-quality, peer-reviewed studies and evaluation reports</td>
<td>A review study of the approach in a peer-reviewed publication</td>
</tr>
<tr>
<td>EFFECTIVE</td>
<td>Strategies demonstrated in published high quality, peer-reviewed studies and evaluation reports to produce significant positive health or behavioral outcomes, and policy, environment, or economic impacts</td>
<td>Reported in a peer-reviewed publication</td>
</tr>
<tr>
<td>PROMISING</td>
<td>Strategies based on evidence from published or unpublished evaluation studies or exploratory evaluations showing meaningful, plausible positive health or behavioral outcomes, and policy, environment, or economic impacts</td>
<td>Formal program evaluation was conducted and results are available publicly (e.g. AHEC website, funding report)</td>
</tr>
<tr>
<td>EMERGING</td>
<td>Strategies include newly implemented, untested innovations, with some face validity, suggesting that strategies may be strong candidates for exploratory evaluation.</td>
<td>Anecdotal account of a program, without documentation of a formal evaluation</td>
</tr>
</tbody>
</table>

* Brennan et al., 2011  ** Rural Assistance Center, 2015