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Rural Community–Academic Partnership Model for Community Engagement and Partnered Research

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Abstract

Background: A rural community–academic partnership was developed in 1997 between the Eastern Shore Area Health Education Center (ESAHEC) and the University of Maryland School of Medicine's (UMSOM) Office of Policy and Planning (OPP). The model supports partnered research, bidirectional interactions, and community and health professional education.

Objectives: The primary aim was to develop a sustainable community–academic partnership that addressed health and social issues on the rural Eastern Shore.

Lessons Learned: Mutual respect and trust led to sustained, bidirectional interactions and communication. Community and academic partner empowerment were supported by shared grant funds. Continual refinement of the partnership and programs occurred in response to community input and qualitative and quantitative research.

Results: The partnership led to community empowerment, increased willingness to participate in clinical trials and biospecimen donation, leveraged grant funds, partnered research, and policies to support health and social interventions.

Conclusions: This partnership model has significant benefits and demonstrates its relevance for addressing complex rural health issues. Innovative aspects of the model include shared university grants, community inclusion on research protocols, bidirectional research planning and research ethics training of partners and communities. The model is replicable in other rural areas of the United States.

Keywords

Rural community–academic engagement, bidirectional partnership, health disparities, bioethics, rural health, partnered research, health policy

This paper describes lessons learned and progress to date for a community–academic partnership model serving rural Maryland. In 1997, a bidirectional community–academic partnership was developed between ESAHEC and UMSOM OPP. UMSOM is the largest school in the University of Maryland Baltimore (UMB). Established in 1997, the ESAHEC is a nonprofit organization that serves the healthcare access needs of all the regions' nine counties. It is one of three centers in Maryland and 255 centers across the United States.¹ The ESAHEC is a trusted and respected

leader and is supported by grant funds from Health Resources Services Administration (HRSA) and the state health department. The ESAHEC interacts with educational, industry, healthcare, social service, faith-based, and other organizations in the region.

ESAHEC offers traditional AHEC programs and services such as clinical education for health professional students, Kindergarten through 12th-grade health careers pipeline programs, and continuing education (CE) for established healthcare professionals. These traditional core services each

focus on some aspect of the recruitment and retention of healthcare professionals to this rural, underserved region. The clinical education program is dedicated to preparing individuals to more effectively provide healthcare services in underserved areas through student rural rotations with clinical preceptors at federally qualified health centers, community hospitals, health departments, and private practices. This serves to provide not only a rural, clinical experience, but also to recruit the students to return to the region to practice. The health careers program is focused on making students aware of careers in health through presentations, tours of healthcare facilities and colleges, career fairs, and job shadowing opportunities. Additionally, a Mini Med School for Teens that is a collaborative effort with the Upper Shore Workforce Investment Board provides health careers education and opportunities to underrepresented youth. A strong CE program provides training for practicing healthcare professionals on topics that enables them to improve care delivered to the underserved population. Interdisciplinary and discipline-specific training are developed in cooperation

with local providers and organizations, and/or in response to requests through extensive existing program evaluations.

The ESAHEC is governed by a 15-member board of directors with representation from each of the nine counties served. Individual members include healthcare professionals, an elected official, county health officers, clinicians from community health centers, chief executive officers of community hospitals, private businesses, and consumers. Meetings are always open to any and all interested parties. The core functions of the AHEC are perfect for developing community partnered research, and translation of research results because they provide access to extensive grassroots connections in this rural, underserved community. The objective of this model is to develop a sustainable, bidirectional community-academic partnership between ESAHEC and OPP to address health and social needs on the rural Eastern Shore of Maryland.

The OPP is an office in the UMSOM that was established in 1994 to address emerging issues in healthcare access, community-based research and health disparities. It is administered by an associate dean. The focus of the OPP is

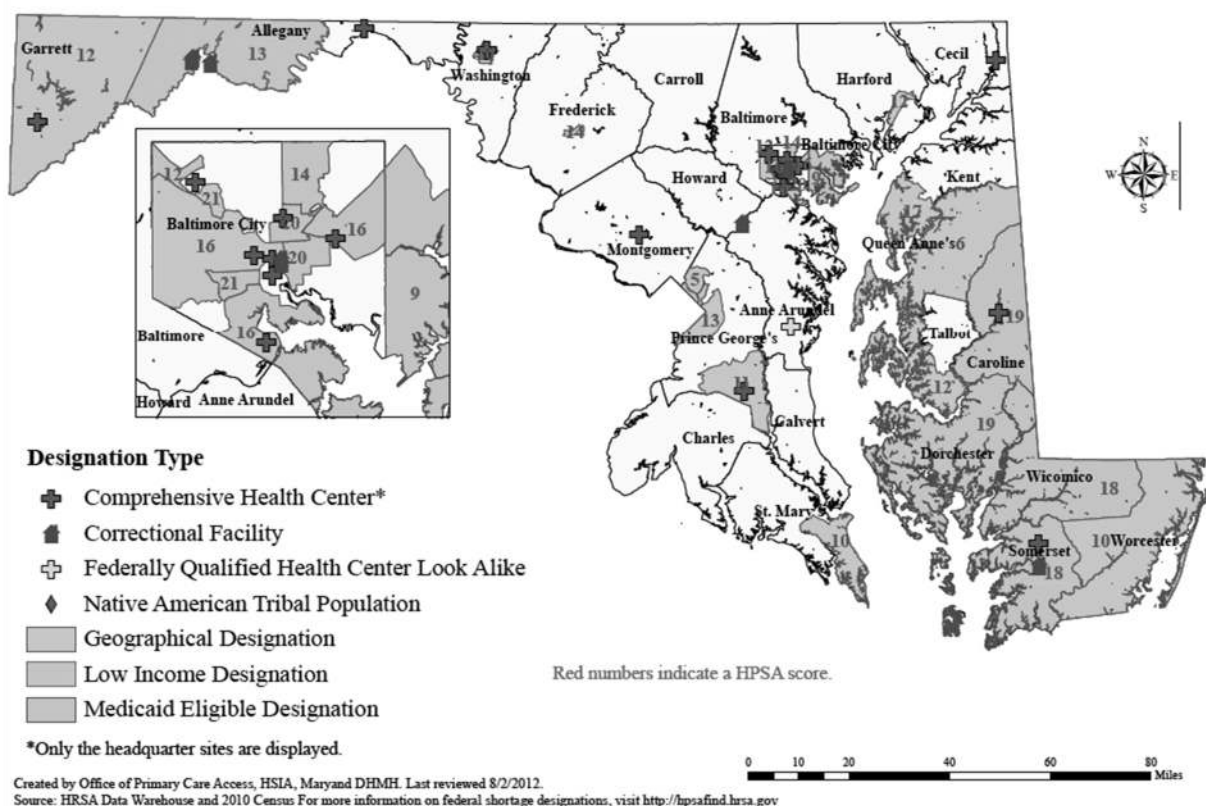


Figure 1. Maryland Health Professional Shortage Area (HPSA) designations for primary care as of August 2, 2012.

health disparities and community based research at UMSOM. This office administers the statewide Maryland Area Health Education Center Program for the university. The Maryland Area Health Education Center Program has two rural (the ESAHEC and Western Maryland AHEC) and one urban centers, and a program office. Over a 17-year period, OPP has developed the campus-wide organized research center on health policy and health services research and the Center for Health Disparities Research. These centers focus on health and research policy and support research-guided community engagement. Promoting diversity in clinical trial accrual to ensure participation of communities that are traditionally underrepresented in research is a major focus.

This community-academic partnership was designed to address rural health needs in this region of Maryland through the development of and support for partnered research, clinical trials education and recruitment, bioethics education, and public trust in research.

The state of Maryland has a population of 5.7 million and is composed of 24 jurisdictions, 23 counties, and Baltimore City. The Eastern Shore of Maryland, a nine-county region, is the largest rural region in the state with over 400,000 population and diverse communities. As shown in Figure 1, six of the nine counties on the Eastern Shore have been fully designated as primary care health professional shortage areas by the HRSA, and three have been designated as partial primary care health professional shortage areas.² The region is racially and ethnically diverse. The population of Somerset County is 42.3% African American, whereas the population of Cecil County is 6.2% African American. Other counties with high minority population are Dorchester (27.7%) and Wicomico (24.2%).³ Hispanics represent a growing percentage of the region's population at 4%. Health indices and social needs mirror those of other rural areas of the United States, including lack of public transportation, healthcare workforce shortages for primary care physicians, poverty, and chronic disease rates that are higher than those in urban areas.

On the Eastern Shore, the rate of heart disease deaths per 100,000 populations (age adjusted) is 211.7 (compared with state of Maryland at 194.0); the rate of cancer deaths per 100,000 (age adjusted all sites) is 205.9 (compared with the state rate of 177.7); infant mortality rates range as high as 18.8 per 1,000 births in Dorchester county and 3.2 in Cecil county;

and 32% of Eastern Shore adults reported a body mass index of 30 kg/m² or greater.^{4,5}

METHODS

Development of this partnership took considerable time and commitment to collaboration that was rooted in respect, trust and shared goals for community benefit. These values are reflected in published community-academic partnership models,⁶ like Healthier Wisconsin Partnership Program 2000 and the Centers for Community and Academic Research Partnerships.⁷ The community partnered research aspects of our model incorporate principles of community-engaged research and community-based participatory research, which support equity in partner engagement in the research process based on each partner's strengths.⁸⁻¹¹ There is limited discussion in the literature of community-academic partnerships that require transfer of university grant funds to community partners. Sharing grant funds was incorporated into our partnership as an essential component of trust building, research skill development, empowerment, and research translation.

Principles that guided early development of this partnership model are reflected in elements of a variety of frameworks for community engagement in research such as that developed in 2007 by the National Institutes of Health (NIH) Director's Council of Public Representatives and community empowerment theory.^{7,12,13} These identify values and principles that must be understood and embraced by both the community and academic partner, which include (1) mutual understanding of definition and scope of community engagement in research, (2) strong community-academic partnership, (3) equitable power and responsibility, (4) capacity building, and (5) collaborative dissemination plans.¹⁴ These values are among those that reflect personal, social, cultural, environmental, and organizational beliefs and commitments that were defined and are celebrated in our bidirectional partnership. As a result of a lengthy literature review and strategic planning process, we decided to incorporate selected elements from frameworks such as the NIH Council of Public Representatives mentioned, tailoring our partnership to meet mutually agreed upon values. A process for interactive decision making was established at the beginning of the partnership. Goals, programs, and collaborative research projects were selected after an intensive process of face to face meetings, emails, videoconferencing

sessions, and phone calls until partners were in agreement. Components of the curricula for continuing medical education (CME)/CE programs and Mini Medical School are selected in a number of ways. First, we held a “call for topics” from the public and healthcare professionals. These are then matched to faculty and community clinician expertise and included in the program and a curriculum and pre post evaluation are developed. When CME/CE credits are awarded, we adhere to standard practices for development of program goals, objectives and evaluation. Second, we jointly developed curricula on bioethics and biospecimen science based on results of formative research and interest expressed by the public. Third, we jointly developed a clinical trials 101 educational program that was based on extensive literature reviews, trial methods, and requests from program attendees for additional information. We enriched our community-academic model by including mandatory community human subjects protections training, research training, and sharing of university grant funding with the community partner. Human subjects training for the community partner was mandatory for the following reasons: (1) It was required of all formal community partners where NIH research grant funds were transferred in order to be compliant with standard research ethics requirements for investigators; and (2) this training is a tool used to develop community organization research skills and to increase research literacy among community partners. We have found human subjects protections training fosters literacy in research ethics and assists in the removal of the mystery and stigma that communities often associate with research and researchers. This is especially relevant for rural and underserved communities where there are historical examples of research abuses in rural research participants such as the Public Health Service Study of Untreated Syphilis in rural Macon County, Alabama, or Tuskegee. (3) Human subjects protections training is an empowerment tool that increases readiness of the community partner for active participation in partnered research. Once training is complete, staff of the ESAHEC was included on electronic institutional review board research protocol submissions to the university. Inclusion of partners on the research team’s protocols necessitated development of internal procedures at the university to include nonfaculty community partners as research personnel on our institutional review board submissions and grant applications.

Grant funding for a Bioethics and Health Disparities Research Center at the UMB supported human subjects protections training, a popular community Bioethics Mini Medical School and CE/CME programs in Baltimore, the Eastern Shore, and other parts of the state. The awarded National Institute on Minority Health and Health Disparities bioethics research infrastructure grant included ESAHEC personnel as co investigators.

Two examples of grants which incorporated shared grant funds were National Cancer Institute (NCI) grants focused on development of community-based cancer disparities research capacity and infrastructure, the Maryland Special Populations Research Network and the Maryland Community Network Program (CNP). The principal investigator made the decision to provide 68% of the CNP funds to community organizations, including to the ESAHEC, for their predefined roles in partnered research, and translation activities in cancer disparities research.¹⁵⁻¹⁷ This funding was an important component of developing formal partnerships with key stakeholders across the state. These infrastructure grant’s funds were used to build local, long-term community capacity to participate in and conduct health disparities research and related outreach and education. Because the Maryland Special Populations Research Network and CNP grant mechanisms were so heavily focused on community participatory interactions between traditional cancer researchers and the community, it required formal participation in the research processes of community based organizations or stakeholders, such as the ESAHEC.^{18,19} This organization represented an organization that was credible and trusted in their communities, had organizational expertise, and was committed to the improvement of health of the public. Grant funds were used to support pilot studies, clinical trials, and other study recruitment, clinical trial infrastructure development, staff salary and office operations, community and physician educational programs, and videoconferencing equipment.

This partnership flourished because of the willingness of both a community-based organization and faculty in an academic institution to engage in a transformative and sustained relationship that required mutual trust and honesty.

An overview of the processes and actions utilized to establish and maintain this partnership are provided in Table 1. Four processes and action categories are as follows.

Table 1. Key Steps in Rural Bidirectional Community–Academic Partnerships

Step	Components
Planning, Establishing, Maintaining Partnership	<p>Define community, needs and interests and GIS map community assets. Underlying principles include mutual respect of each partner's strengths and leadership; benefit for each partner; bidirectional interactions, including communication. This process is constantly evolving as new needs and resources are identified. This requires intensive planning, interaction, shared ownership and trust over a sustained time period. Signed memoranda of understanding with roles defined.</p> <p>Identify community contact (individuals and organizations and select representatives).</p> <p>Train community partners in research ethics and bioethics, peer review research design, clinical trials, health disparities data use, human subjects' protection and HIPAA, managing grant funds and submission of progress reports, developing study hypotheses.</p> <p>Train academics in community engagement, CBPR, literacy appropriate skills, communication of research results to public, and cultural competency.</p> <p>Develop formal needs assessments and update assets maps: Community and academics review research aims, questions, approve tools and methods of data collection; data collection schedules.</p> <p>Determine academic knowledge of historical community issues and public views of academics; cultural issues approaches and key sources of trusted health information.</p> <p>Determine community knowledge of key health issues and health related data.</p> <p>AHEC provides mechanisms for community partner's inclusion in university's research grant internal routing pre award; AHEC provides mechanism for post award subcontracts for community partner.</p> <p>End of award; preparation of joint manuscripts; implementation of community interventions; monitoring and evaluation.</p> <p>This process is time consuming, iterative, and includes monitoring and program evaluation throughout.</p>
Partnered Research: Examples of Studies	
Clinical Trial Survey	<p>Survey of knowledge, attitudes, barriers to clinical trial participation.</p> <p>Sociodemographic factors in cancer patient accrual to NCI treatment trials</p> <p>Survey of healthcare access, insurance, barriers, perceived health status, chronic disease risk factors, and trial barriers.</p>
Focus Group Studies	<p>Formative research on awareness of biobanks and interest/barriers to tissue, biospecimen donation in rural communities.</p> <p>Formative research on issues and barriers to clinical trial participation among caregivers, patients who have participated, and general public.</p> <p>Pre- and post-evaluation of Mini Med Community Course on bioethics, research ethics, clinical trials, and health disparities.</p> <p>Randomized clinical trials on use of community health workers as patient navigators for cancer screening for urban and rural African Americans.</p> <p>Randomized clinical trials on use of telehome care patient monitoring of home health patients who are chronically ill with CHF, COPD, HTN, and DM in 2 rural regions. Partners included two rural home healthcare agencies and AHECs.</p>
Programs and Outreach	
Community Education on Clinical Trials, Bioethics, Biospecimen Donation	<p>Community Bioethics Mini Medical School Programs are free, 4-week educational programs that have included ethical issues for specific diseases, ethics in research, bioethics, human subject protections, clinical trial participation, and how these are related to health disparities. Additional community education programs have been held on specific cancer sites, cardiovascular disease, asthma, stroke, clinical trials, and tissue donation.</p>
Health Professional Continuing Education	<p>Continuing education programs were developed for physicians, nurses, social workers and allied healthcare personnel to increase their knowledge of advances in disease management, ethics in research, description of risks/benefits for patients participating in clinical trials, current clinical trials open for enrollment, and research tested interventions and best practice models of proven public health and clinical interventions.</p>

table continues

Table 1. *continued*

Step	Components
Policy Research and Advocacy	The role of policy and policy research and advocacy has gained attention as an important tool in research translation, guaranteeing access to beneficial interventions (i.e., cancer screening and follow up and others, support for health interventions, prevention and mandated healthcare benefits). Community advocacy was cultivated by training partners in this area. Partners quickly developed expertise and were successful in briefing elected officials on key health needs and advocating for a number of legislative and regulatory initiatives. Selected legislation and regulation examples are Telemedicine Reimbursement Study, Rural Physician Task Force, Mandated Health Benefits, Health Disparities Report Card, Clean Indoor Act, Rural Prostate Cancer Education Demonstration Project, State Income Tax Research Check Off, Maryland Loan Assistance Repayment Program, Breast cancer screening and follow up for low income women. These are only a few of the many successes.

AHEC, area health education center; CBPR, community-based participatory research; CHF, congestive heart failure; COPD, chronic obstructive pulmonary disease; DM, diabetes mellitus; Geographic Information Systems, ●●●; HIPAA, Health Insurance Portability and Accountability Act; HTN, hypertension; NCI, National Cancer Institute.

Planning, Establishing, and Maintaining the Partnership

Numerous bidirectional partnerships have been developed across the state. This paper focuses on the rural partnership with the ESAHEC because it is among the most mature and sustained partnerships. This partnership is formal, operationalized through Memoranda of Understandings and signed subcontracts between ESAHEC and the University/OPP. These Memoranda of Understanding specify roles for the community partners, specific deliverables, funding source, time period, and the procedure and address to submit invoices. There is also the requirement to maintain active human subjects protections training certificates. The mandatory aspect of the partnership is shared grant funding, predominantly from university grants, for predefined research, education and other roles. Sharing funds demonstrates the academic partner's recognition of the expertise the community organization brings to the partnership and to the research. It also fosters organizational empowerment, trust, and sustainability. Training on data collection and interpretation of health data, study design/analysis, pre- and post-grant management and reporting, use of Geographic Information Systems (GIS) for community assets mapping used in outreach programs, and grant writing are topics covered in ongoing training for the community organizations. The academic partner must also have ongoing training, which includes topics such as partnered research methods, community history and values, culture and health, and effective communication to the public of complex research results.

Partnered Research

Selection of research topics and grants to support the

research may originate in the community or the university. The final selection of research topics is jointly made. Qualitative, mixed methods, and quantitative research studies are jointly developed and reviewed by each partner. Examples of collaborative studies are listed in Table 1. Randomized Controlled Trials are also included as part of participatory research in the partnership.

Programs and Outreach

Topics for educational programs for the public and for community health professionals often originate from these groups. CME credits for physicians are provided through the School of Medicine. CE credits for nurses, pharmacists, social workers, and allied health professionals are provided by the ESAHEC. Access to large groups of stakeholders and local healthcare professionals through the ESAHEC is an outstanding resource for organizing CE programs on clinical best practices, research tested interventions, dissemination of advances in research and disease management, and available clinical trials and how to refer patients. Outreach to promote educational programs and for recruitment to studies is guided by community assets mapping using GIS.

Policy Research and Advocacy

The role of policy and advocacy as a research translation tool is critical for supporting access to beneficial interventions, namely, cancer screening and follow-up, public health interventions, prevention, and mandated healthcare benefits. This model has successfully incorporated advocacy and policy research to support state and federal legislation and regulation

in rural health, workforce, healthcare access, and other health disparities related areas.²⁰

RESULTS TO DATE

This partnership is a work in progress. Results are framed as “lessons learned” to date and are discussed and listed in Table 2. Planning, establishing, and maintaining partnerships is a time-consuming process that requires a high level of flexibility. Decisions on partnership goals, roles, programs, research, which grants to apply for and evaluation metrics require patience of each partner, and an appreciation of each other’s views.

Preliminary results from analyses of pre- and post-test evaluations from attendees at the jointly sponsored Mini Medical Schools show increased awareness of fundamentals of a number of chronic diseases that affect the shore. It also suggests greater awareness of research, its role and design aspects, the definition of clinical trials and types of trials, as well as increased awareness of the principles of bioethics at completion. This educational program is an intensive learning opportunity for both the public and community-based healthcare professionals. By honestly presenting ethical considerations in research, research ethics, regulations, and past research abuses, the stigma and mystery often associated with research are mitigated. Preliminary review of other studies show that there has been a reported increase in public trust in research resulting in a greater willingness to participate in clinical trials or to refer patients to trials.

Over the past 2 years, with grant support from the Center to Reduce Cancer Health Disparities/NCI, we initiated community education and healthcare professional CE (CME/CE) programs on biobanks and biospecimen donation. Through formative research, we learned that informed consent preferences and privacy concerns were significant factors related to distrust of researchers who do research with biospecimens, especially when stored for future use in genetic studies. Results of qualitative research in this region have continued to inform the components of community educational program curricula.

A community-based cancer clinical trial research program on the Eastern Shore has benefitted from this partnership and vice versa. Dr. Baquet and Dr. Mary DeShields, a community-based oncologist and director of Eastern Shore Oncology, collaborated on the development of this cancer clinical trial

research program, the ESAHEC held related CE programs and community Mini Medical schools that discussed cancer causes and prevention, open cancer trials, trial eligibility, protocol, and referral procedures. This novel rural cancer trial program was awarded an Department of Health and Human Services Secretary’s Committee on Science and Policy “National Best Practice Award” designation. The details on patient accrual and number of cancer protocols from this program are included in a separate publication that is under development.

A powerful outcome from this partnership is the resulting empowerment of the ESAHEC and the UMSOM. Both organizations have increased the ability to jointly assess healthcare needs and trends, conduct joint research and program planning and evaluation, and collaborate on grants. The UMSOM has benefitted in a number of ways. The participating faculty are better communicators, are more culturally sensitive, and have an increased focus on addressing health disparities through research in partnership with communities.

Significant grant funding supports sustainability and includes over \$2.6 million dollars awarded to ESAHEC from university grants. This requires constant grant writing in order to maintain and expand the partnership and its programs and research. The overall grant portfolio in excess of \$75 million and specific grant roles for a broad range of community organizations was described in another publication.²¹

Interest in the model as a best practice for community engagement has led to invited requests by NIH and the NIH-funded Clinical Translational Science Award and Research Centers in Minority Serving Institution grantees to provide presentations on different aspects of our model for bidirectional community engagement in research, and research ethics training in the community. Our group has also participated in training other investigators and NIH extramural researchers and staff. Accepted poster and oral presentations at meetings such as the National AHEC Organization, National Rural Health Association, the Maryland Rural Health Association annual meeting, and others provided regional or national opportunities to describe and disseminate information on this model. We trained American Cancer Society South Atlantic Division health systems directors from hospitals across the eight jurisdictions and staff on engagement of low-resource communities in research and education, and finally we trained county health departments on community

Table 2. Lessons Learned

Lesson	Examples
Shared funding is essential for demonstrating respect, trust, empowerment and sustainability.	<p>Constant grant writing and submissions are required to support partnership activities. Grant roles are predefined and jointly agreed upon prior to submission.</p> <p>Funding opportunity announcements are jointly selected.</p> <p>Grant application outlines are jointly developed.</p> <p>Sections are assigned to each partner then reviewed and edited by the other partner.</p> <p>Budget decisions with budget justifications are decided prior to grant submission and included in the grant.</p> <p>Decisions are made on which group will submit the grant.</p> <p>Post grant award sessions jointly discuss plans for the research or educational programs supported by grants, and due dates for required progress reports. Training in procedures to submit invoices to the university are discussed.</p>
Training and retraining of community partners is necessary.	<p>Ongoing training in NIH and other research grant writing, grants management pre and post award and reporting, how to use data, research design, clinical trials 101, research ethics, human subject protections, data collection for mixed methods research, survey research (community organization roles). Training in bioethics and research ethics is critical for the acceleration of research and research translation and to remove the mystery and stigma views of the community toward clinical research and research professionals. This will support inclusion of community partners on IRB protocols for partnered research.</p> <p>Research 101 course is important because it teaches non-researchers research design, analysis, evaluation, and publications as a translation tool.</p> <p>Joint training also occurs.</p>
Education and training of academic faculty and staff is necessary.	<p>Ongoing training is provided in culturally appropriate strategies to support interaction with nonacademic community organizations and the public utilizing communication strategies to improve explanations of complex health matters and research results in a respectful and literacy appropriate manner.</p> <p>Joint training also occurs.</p>
Mandatory evaluation of the partnership and programs is required to assess effectiveness and make changes where needed.	<p>Evaluation research and program evaluation of all key program functions, processes, and activities for assessing immediate, intermediate and long-term program outcomes. We obtained external evaluation research support from MBH, Limited, an evaluation research firm in the DC area.</p>
Addressing community distrust of academic institutions is important.	<p>For community physicians, distrust of academic institutions is real and requires willingness on the part of academics to outreach to community partners for meetings by meeting outside of academia instead of requiring that community organizations always come to the university for meetings. Academic organizations must emphasize the value of community partner engagement in the success of the bidirectional partnership. The initial distrust by the Eastern Shore region health professionals was related to history and concern over losing patients to the academic institution. A commitment to transparency of motives is critically important.</p>
Policy research, advocacy, and policy activities are important to support translation/ dissemination of research results, support access to beneficial interventions and support science guided advocacy and regulations/legislation.	<p>Education of elected officials and their staffs and other policy makers is important on advances in research and health indices for their constituents.</p> <p>Monitoring community health data and needs helps to guide policy and legislative action.</p> <p>Community training in advocacy using health data and research results is effective.</p>
We observed the evolution of community health education programs and topics based on community interest, needs and requests.	<p>Topics are informed by formative and survey research and discussions at community meetings. We started with health disparities and clinical trials education, then Mini Med Schools and health literacy in a clinical trials 101 course. We then incorporated bioethics and research ethics training, and recently the importance of biospecimen, tissue donation and research advances and biospecimen science.</p>
Building trust between partners takes time and patience of all partners.	<p>A long-term commitment to work together is necessary to achieve common goals such as improvement in community health, leveraging funding to support sustainability of programs, partnered research to identify needs and solutions.</p>

IRB, institutional review board; NIH, National Institutes of Health.

engagement and clinical trials.^{22,23} Jeanne Bromwell, deputy director of ESAHEC, was invited by NCI to present to the network of Community Health Educators on the preliminary results of our research on biospecimen donation barriers in rural communities, partnered research, and the components of successful community engagement in research.

Finally, policy research and advocacy are important to support research or science-guided advocacy, research translation, and dissemination of research results. Advocacy for several key legislative and regulatory actions was supported by the ESAHEC, their constituents, and other community partners. Their testimony at hearings and briefings of Maryland elected officials and their staff on regional health issues and needs supported successful passage of a number of legislative bills and regulatory actions.

CONCLUSIONS

This model for rural community–academic partnerships has led to significant benefits and outcomes. It demonstrates the strengths and relevance of the model for addressing rural and complex health issues, as well as fostering public trust in research. Innovative aspects include sharing of university grants with ESAHEC and training of the community partner in research ethics and study design. This collaboration has led to organizational empowerment, greater public trust in research, policy advancement, and research skill development. Training of the academic partner is equally important for

developing skills in the conduct of community partnered research, communication, and cultural and community competence.

The model is replicable in other rural areas. Using this model requires a sustained commitment to bidirectional interactions between the community and academic partner. Successful partnerships are built on principles such as trust, communication, and respect. Shared grant funding from the academic partner is required and it is transformative for both partners. This demonstrates respect for the expertise of the community organization and results in both empowerment and sustainability. This work in progress will continue to be refined. Although very time intensive, the rewards from this partnership have produced sustained collaboration and enrichment of each partner, their institutions, and participating communities.

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