

Engaging Communities in Education and Research: PBRNs, AHEC, and CTSA

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Abstract

Background: Community engagement has become a prominent element in medical research and is an important component of the Clinical and Translational Science Awards program. Area Health Education Centers engage communities in education and workforce development.

Methods: Engaging Communities in Education and Research (ECER) is a successful collaboration among the Colorado Area Health Education Center (AHEC), the Colorado Clinical Translational Science Institute, and Shared Network of Collaborative Ambulatory Practices and Partners—Colorado's practice-based research collaborative. The ECER Conference is an annual conference of community members, health care providers, clinical preceptors, AHEC board members, university faculty, primary care investigators, program administrators, and community organization leaders.

Results: Over 1,000 people have participated in the ECER Conference representing all regions of Colorado. Several projects from the "new ideas" breakout session have been developed and completed. Six-month follow-up provided evidence of numerous new collaborations, campus-community partnerships, and developing research projects. Several new collaborations highlight the long-term nature of building on relationships started at the ECER Conference.

Discussion and Conclusion: ECER has been a successful collaboration to develop and support campus-community collaborations in Colorado. Although seemingly just a simple 3-day conference, we have found that this event has led to many important partnerships. *Clin Trans Sci* 2012; Volume 5: 250–258

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Background

Engaging the community in education and research has become increasingly important for medical and healthcare institutions during the past 20 years.^{1–6} Community engagement (CE) has also become a major element in medical and public health research, particularly in the area of health disparity research.^{7–10} Despite its importance, there are often barriers to successful CE.^{11–13} Identifying communities interested in collaboration, meeting community members and leaders, and understanding the health concerns of a community are often difficult for an academic researcher. Likewise, community members interested in academic partners may not know whom to contact about their interest and research or may be intimidated by the formal academic institutions.

The foundation of CE in research and education is relationships. In Colorado, two organizations recognized an opportunity to help reduce some of the barriers to CE by creating an expanded, supportive forum for interprofessional health workers to connect, form new relationships, and strengthen existing relationships. The Shared Network of Collaborative Ambulatory Practices and Partners (SNOCAP, a practice-based research network organization) and the Colorado Area Health Education Center (AHEC, an organization focused on health education and health career development) both had held a decade of successful annual convocations and conferences. Three years ago, the two groups combined efforts and resources to create one larger event, bringing together interprofessional health care providers, academic health educators and researchers, and community-based organizations from rural and urban parts of the state. In its second year, the Colorado Clinical Translational Science Institute (CCTSI) CE Core also became a partner in this

conference. The result, Engaging Communities in Education and Research (ECER) Conference is an example of how several separate, but related groups, can provide a new venue for increasing CE and collaboration to improve the health of the state through education, training, research, partnership, and communication.

The work of each partner relates and contributes to CE efforts around the state. Practice-based research networks engage a variety of clinical practices and the communities in which they provide care.¹⁴ AHEC engage communities in health professional education and workforce development.^{15,16} Community clinicians provide a significant amount of clinical education and training to health professional students in all disciplines, and are key participants in practice-based research.^{17–21} CE is a prominent component of the National Institute of Health (NIH) Roadmap and the Clinical and Translational Science Awards program.^{22,23}

Although numerous programs within the university setting attempt to engage their local and regional communities, there is scant literature on practical steps and activities that fully engage the community in bi-directional communication and collaboration. In this manuscript, we describe a successful and practical CE collaboration among the Colorado AHEC, SNOCAP, and CCTSI. *Table 1* describes the major conference partners and their specific involvement and focus areas.

ECER is a two and a half day conference held in Vail, Colorado aimed at bringing rural and urban underserved community members and interprofessional health care providers together with academic educators and researchers and community-based organizations committed to improving the health of all Colorado.

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Partner	What is their participation?	Who attends	Components specific to this partner
AHEC	Planning	AHEC Program staff	
	Meeting logistics	AHEC Center staff	Faculty Development
	Major funding	AHEC Center Board Members	AHEC Board Meeting
SNOCAP		Clinical Preceptors	Preceptor Appreciation
	Planning	High Plains Research Network	
	Major funding	Colorado Research Network	Research presentations
		BIGHORN	Research Poster session
		CopperNet—Pharmacy PBRN	New Study ideas
		The Center for Medial Transport Research	SNOCAP meeting
		Colorado Public Health PBRN	
CCTSI—CE Core		Pediatric PBRN	
	Planning	PACT Council members	
	Funding	CE Staff	Pre-Conference PACT
	Preconference retreat	CCTSI Directors and staff	Council Retreat
COHO			Community engagement
	Planning	COHO staff	
	Funding		Research dissemination New study ideas

AHEC = Area Health Education Center; SNOCAP = Shared Network of Collaborative Ambulatory Practices and Partners; CCTSI CE Core = Colorado Clinical Translational Science Institute Community Engagement Core; COHO = Colorado Health Outcomes Program.

Table 1. Engaging Communities in Education and Research (ECER) partners.

Methods

Conference planning and implementation

The SNOCAP and AHEC planning group begins meeting approximately 6 months before the event. Meeting logistics are managed by the AHEC staff. SNOCAP and AHEC identify topics of interest based on previous conferences, current research and educational efforts, and local, state, and national trends in research and healthcare education. Because AHEC represents each of the healthcare disciplines, breakout sessions are led by faculty from each of the healthcare professional faculty including medicine, nursing, pharmacy, dentistry, public health, physical therapy, physician assistant, and behavioral health. Many clinical faculty are involved in practice-based research network studies with SNOCAP, and time is allotted to provide updates on current research, discuss outcomes of completed research, and identify new ideas for clinical practice-based research network (PBRN) research. Continuing education is provided for much of the conference for all disciplines.

The conference serves as one of the major preceptor development and appreciation activities of the Colorado AHEC and is the annual meeting for SNOCAP and serves to provide research project updates, new idea generation, and a thank you to providers and practices. The conference is free to attendees. Conference sponsors cover the cost of two nights lodging at the Vail Marriott, all meals including a celebration banquet for participants and family, conference materials and handouts, continuing education fees, and a conference gift and bag. The conference costs approximately 500 per participant.

Because continuing education is offered for most of the disciplines, all aspects of the conference are rigorously evaluated including the conference location and amenities, plenary speakers,

breakout and continuing education sessions, discipline-specific meetings, and social networking activities. We conducted a 6-month follow-up survey to ascertain new collaborations and activities. Outcome measures include the number of participants, conference evaluations, new relationships and collaborations, and new and ongoing projects and programs derived from these collaborations.

Conference schedule

The Conference begins at noon on a Friday in the fall of each year. *Table 2* provides a description of the annual conference schedule. Friday afternoon is dedicated to research. Presentations illustrate how practice-based research engages clinicians, practice staff, and community members throughout all phases of research projects and activities that occur inside the walls of the practices and out in the community. The Rapid Fire Research sessions provide updates on a variety of research studies in progress, and outcomes from previous research studies. Several short presentations provide one or two important findings or main messages from research. A second, longer “String of Pearls” session focuses on a clinical theme (such as asthma or hypertension), and includes presentations from a mix of university faculty, community healthcare professionals, and community members. In addition to results, this session highlights specific lessons learned (or “pearls”) from the perspective of the research team participants, clinicians, and others involved in the study.

A large networking poster session and reception is held Friday evening that includes food and drink. With more than 40 posters on health education programs and research studies as the backdrop, this event provides an excellent opportunity for all participants to share their work, learn from each other, and

2009	Morning	Afternoon	Evening
Friday	• Conference preparation	• SNOCAP Research	• Networking reception
		• AHEC Center board meetings	• Poster session
Saturday	• Keynote—Stephen Thomas and Sandra Quinn “Engaging Communities in Education and Research”	• AHEC Regional Lunch	• Networking reception
	• Breakout sessions—20	• Health Insurance Reform Panel	• Celebration banquet and entertainment
		• Combined medical Clerkship working group	
		• Free time	
Sunday	• SNOCAP new research ideas working group	• Adjourn	–
	• AHEC Statewide Board meeting	• Clean up	
	• Discipline specific education		
2010*,†			
Friday	• Conference preparation	• SNOCAP Research	• Networking Reception
	• Preconference oral Health	• Rapid Fire Research	• Poster session
	• PACT Council Retreat	• String of Pearls <i>Asthma</i>	
		• AHEC Center Boards	
Saturday	• Keynote—Richard Wender—“Service Research”	• AHEC Regional Lunch	• Networking reception
	• Breakout sessions —24	• Healthcare Reform 101	• Celebration Banquet
		• Medical Marijuana Panel	• Entertainment
		• Free time	
		• 5K Run for a cause	
Sunday	• Plenary—Phyllis Albritton, “Colorado Regional Health Information Organization (CORHIO)”	• Adjourn	–
	• Discipline specific education	• Clean up	
	• AHEC Statewide Board meeting		
	• SNOCAP Research		
2011			
Friday	• Conference preparation	• SNOCAP Research	• Networking reception
		• Rapid Fire Research	• Poster session
		• String of Pearls <i>Hypertension</i>	
Saturday	• Keynote—America Bracho, “Focusing on Common Ground, Engaging Communities Where They Are At”	• AHEC Regional Lunches	• Networking reception
		• Workshop—Preventing Provider Burnout	• Celebration banquet and entertainment
		• 5K Run for a cause	
	• Breakout sessions—24		
		• AHEC Statewide Advisory Council	
Sunday	• Plenary—Phil Kalin, “Center for Improving Value in Health Care (CIVHC)”	• Adjourn	–
	• SNOCAP new research ideas working group	• Clean up	
	• AHEC Statewide Board meeting		
	• Discipline specific education and training		

*An oral health preconference was held Thursday noon to Friday noon.

†The CCTSI PACT Council held its annual retreat Thursday noon to Friday noon.

Table 2. Engaging Communities in Education and Research Conference Schedule.

engage other networking conversations. The reception includes a formal activity to increase networking. A survey is distributed to all participants and includes questions that require talking with poster presenters and other participants to complete. A drawing is held for all those who complete the survey for a free iPad, providing an incentive for active networking.

Saturday is designed as an interprofessional education and research day. The morning begins with a welcome and overview from a leader of one of the host organizations. The conference keynote speaker, which has been a nationally recognized guest, provides a thematic presentation related to CE. Drs. Stephen Thomas and Sandra Quinn provided a framework for deep and sustainable CE derived from their work in Pittsburg. Dr. Richard Wender challenged the group to provide “service-research” as a tool for learning and providing direct clinical care. Dr. American Bracho provoked us to consider the importance of place in our education and research. Each speaker motivated the group to interact, step outside typical comfort zones, and collaborate across traditional boundaries.

More than 20 breakout sessions are held to complete the morning schedule. Breakout sessions are designed to be interprofessional and relevant to all participants covering topics in medicine, nursing, pharmacy, dentistry, public health, physical therapy, behavioral health, and research. Faculty, community organizations, health professionals, and community members have led breakout sessions. These sessions are interactive and provide valuable time and space for networking around specific research, education, and clinical topics.

Saturday lunch is designed as a regional event according to AHEC region. Each AHEC Center hosts a lunch for those from their region bringing together researchers with clinical preceptors and community members, AHEC board members, and other regional organizational leaders. Many participants know others in their discipline or organization, but often do not know the folks in their region working in other healthcare organizations. These regional lunches offer another venue for regional networking and new ideas.

Saturday afternoon provides the opportunity to attend a special “hot topic” session or enjoy a few hours of rest and relaxation. The past three years the hot topic sessions covered healthcare reform, medical marijuana, and clinician burnout, including expert panels on each topic. Frequently, individuals and groups use this time to further discuss new ideas and collaborations begun the day before.

A special 5-km “ECER run/walk is held mid-afternoon to raise money for Colorado charities. More than 40 attendees participate each year and have raised over 4,000.

Saturday evening is a celebration dinner banquet. Most participants in the ECER Conference volunteer their time to teach or collect data or participate in programs and research. The banquet is a token of appreciation for their hard work and commitment to improving the health of Coloradans. After-dinner entertainment features a comedian or humorist.

Sunday begins with a plenary address by a Colorado organizational leader. This provides an important update for all participants on an important healthcare activity in Colorado. In 2010, the Executive Director of the Colorado Regional Health Information Exchange (CORHIO) provided an important and timely update on Colorado’s Health Information Exchange for participants that highlighted both the statewide nature of CORHIO’s work and the need for local engagement.²⁴ The

Director of the Colorado Center for Improving Value in Health Care provided a 2011 update on the development of an all-payer database.

Several hours are carved out after the Sunday plenary for specific groups and organizations to meet. These sessions are discipline specific, and geared to provide updates and benchmarking for education and clinical training. Each clinical discipline provides preceptor development in a variety of topics ranging from specific clinical education to evaluating learners to identifying the “teachable moment,” to practical skills such as working with electronic health records and web-based clinical tools. AHEC board members convene for their annual update and strategic planning session.

The meeting is adjourned at noon on Sunday for free time and travel.

Results

More than 1,000 people have participated in the ECER Conference the past 3 years representing all regions of Colorado. *Table 3* describes the demographics of ECER participants. There is a wide range of health professions represented. The central Colorado region, which includes the Denver metropolitan region and Colorado Springs, had the most participants because the major academic partners are located in this region. There were participants from nearly every county in Colorado. Many participants listed multiple affiliations as they may work with various agencies and organizations, all of which are active partners with the ECER Conference. This number represents a substantial increase in overall participation in the individual prior conferences.

Although only 19% reported that their primary affiliation is community member; the preceptors, AHEC board members and many of the researchers are also primarily community members. In 2010, we changed the data collection methods to better reflect our CE efforts. 2010 attendees included 30 AHEC board members, 67 university faculty (many were community-based volunteer clinical faculty), 85 rural preceptors, and 51 community members. In 2011, there were 441 attendees, with just 125 representing the University of Colorado. More than 200 clinical preceptors from various disciplines participated in 2011.

Evaluations were overwhelmingly positive about all aspects of the conference (*Tables 4* and *5*). On the basis of evaluations from 2009, several changes were implemented and conference evaluations improved in 2010. A Sunday combined plenary session was added to start the morning. Speakers and breakout session leaders were provided a stronger context of CE so presentations included more practical skills and participant involvement and activity. It is beyond the scope of this paper to describe the evaluation of every breakout session but in general, they were rated highly. Finally, the poster session was expanded and lengthened to allow more networking opportunity.

A 6-month follow-up survey provided evidence of numerous new collaborations, campus-community partnerships, and developing research projects. Numerous attendees met potential collaborators and reported new relationships with other attendees. Others reported getting reacquainted with individuals or organizations they knew before the meeting.

Examples of new collaborations

In the follow-up survey, most attendees (70%) reported new relationships and collaborations and several respondents provided in-depth comments about the ongoing relationships first

Demographic	Total (N = 1091)	%
Primary profession reported*		
Medicine	206	19
Nursing	118	11
Advanced practice nursing	33	3
Dental medicine	104	9
Pharmacy	69	6
Physician assistant	42	4
Physical therapy	19	2
Behavioral health	14	1
Public health	43	4
Research	105	9
Community member	201	19
Other	137	13
AHEC region*		
Central AHEC	649	59
Centennial NE AHEC	165	15
Southeast AHEC	77	7
San Luis Valley AHEC	55	5
Southwest AHEC	17	2
Western AHEC	71	7
Other	57	5
Rural	411	38
Urban	680	62
Primary Conference Affiliation		
AHEC	227	21
SNOCAP	220	20
University of Colorado	510	48
CCTSI	75	7
Rocky Vista University	20	2
Other	19	2
Race only collected in 2010		
Caucasian	258	75
Black/African American	25	7
Hispanic/Latino	47	14
Native American	2	0.5
Asian	11	3
Other	3	0.5

*Some respondents did not provide complete demographic data. Some respondents reported more than one primary profession or affiliation.

Table 3. Engaging Communities in Education and Research Participants.

developed as a result of participation in the ECER Conference. *Table 6* provides a list of many new collaborations and activities started at the conference. The following examples illustrate the breadth and depth of several successful new collaborations.

The Colorado Center for Community Development (CCCD) and the CCTSI CE Core met and began a series of collaborations.²⁵ CCCD is located in the School of Architecture. Their students

work with communities throughout Colorado to develop parks and recreational facilities. They have provided architectural plans for playgrounds, learning landscapes, greenways, and community centers to more than 20 rural and urban underserved communities. As a result of the new collaboration, the CCTSI CE Core Director was invited to join their advisory board, and the CCCD Director and staff presented to the CE Core scientific staff. Additional efforts focus on providing education and research support for an urban community exercise program implemented by CCCD. The CCCD received a pilot grant proposal from the CCTSI CE Core in the Fall of 2011 to link the community exercise program to health risk assessments and education.

Colorado's new medical marijuana law prompted a panel discussion on the relationship between medical marijuana offices and primary care providers.²⁶ A prominent medical marijuana prescriber brought a new study idea to the SNOCAP leadership. Over the following 10 months, this new study idea underwent major development and is an upcoming research project in SNOCAP. A new SNOCAP investigator was identified from an urban practice partner, and several unique studies are underway. At the 2011 ECER Conference, results from a provider survey were reported and a breakout session to recruit practices for a new study was held. The research study will begin in the practice-based research networks in early 2012.

The 2009 ECER Conference occurred at the peak of the H1N1 influenza epidemic. During the New Study Ideas breakout session, a family physician in one of our PBRNs proposed a study to how primary care practices prepared for pandemic influenza outbreaks and plans were developed and implemented. Over the next year, with the help of the community physician, we were able to design and conduct a survey, complete data analysis, and present the results at the 2010 ECER Conference. A manuscript is in preparation for submission to a peer-reviewed journal.

Members of the 2040 Partners for Health (PfH) staff met with CCTSI staff to discuss collaborative opportunities. This meeting led to the inclusion of 2040 PfH in the CCTSI Community Immersion Training in CE program. In the past 2 years, 2040 PfH has been a major partner in the Community Immersion Training with numerous researchers spending extended time in the 2040 PfH community and many community members visiting the University campus for additional CE activities. In addition, 2040 PfH has become a collaborator with the School of Medicine urban track for medical students committed to urban underserved care. Seven medical students now work closely with the 2040 PfH community advisory council asking and answering healthcare questions important to this community. This group of students and their community mentor provided a breakout session at the 2011 conference on building community relationships. 2040 PfH community members, medical students, and several faculties will present a workshop on CE at a national primary care education conference in early 2012.

Several AHEC Centers have met community members from their regions resulting in new AHEC Center board members.

Unintended consequences

Unintended consequences often abound in collaborative programs such as the ECER Conference. The addition of the CCTSI CE Core has been an unexpected addition to this annual meeting. The CCTSI CE Core Partnership for Academicians and Communities for Translation (PACT) Council has added excellent experience

Conference component	2009 (N = 141) Agree or Strongly agree %	2010 (N = 156) Agree or Strongly agree %
Location was convenient	87%	93%
Hotel met my expectations	89%	96%
Information presented was useful	90%	96%
Conference provided new knowledge on community engagement	89%	90%
Diverse groups were represented	79%	92%
I have better access to CE resources now	55%	75%
I have used tools I learned at the conference	52%	73%
I have formed new relationships	Not asked	79%
New collaborations have developed with others from the conference	71%	69%

2011 conference 6-month follow-up pending.

Table 4. ECER Conference Evaluation and 6-month follow-up survey.

Session topic, Attendance (I) Material was relevant (II*), I will be able to immediately use the information presented (III*)	I	II %	III %		I	II %	III %
Integrating Home BP monitoring into practice	11	100	100	Implicit bias and health disparity: primary results	20	100	81
Inseparable: primary care and mental health	29	100	90	Your bridge to communities and campus: how community liaisons help us do better research	28	N/A	N/A
Clinical problems and potential solutions: new study ideas	13	100	100	Public health and primary care: what are opportunities for PBRNs	17	100	57
Exploring the value of data sharing for practice, quality improvement, and research	18	100	61	Clinical problems and potential solutions: new study ideas	9	100	67
Evidence-based medicine	26	91	68	Everything you ever wanted to know about USPSTF	19	100	81
Links between clinics and community: opportunities for public health	37	96	43	Links between clinics and community: opportunities for public health in healthcare reform	24	100	94
Coordinating clinical rotations in your region	11	100	100	Financial success in rural practice	27	100	75
Drug induced oral adverse reactions	36	89	61	Drug-induced oral adverse reactions	23	100	88
Innovative learning opportunities for Colorado nurses	21	93	80	Practice in your pocket. Really? Google Health, The iPhone, Android OS, Netbooks, iPad.	37	89	66
What the Heck's an AHEC?	12	100	88	Incorporating oral healthcare into routine prenatal care	16	100	100
Healthcare policy and advocacy 101	29	95	86	Addressing the primary care needs of Colorado –Graduate Medical Ed.	9	90	90
Total attendance session 1	243	–	–	Total attendance session 2	229	–	–

Percent rating agree or strongly agree.

Table 5. Example of educational breakout sessions 2010.

and leadership in CE, and broadens the reach of the conference to more underrepresented minority populations. The PACT Council now holds its annual retreat on the day before the conference. Last year a local funder supported a preconference workshop on infant oral health that drew more than 100 participants, many of whom were unfamiliar with any of the ECER partners. This provided

another opportunity for engaging community members from all over Colorado in ongoing healthcare programs.

Finally, the interest in the conference now exceeds the capacity of the current meeting venue. In 2011, the registration period closed early due to unexpectedly high registration numbers. Although this is a sign that the conference has gained

We found new preceptors.

Established contacts with new individual and organizations working with Latinos in urban and rural settings.

I am involved with the Aurora LIGHTS workforce pipeline program now.

Found new relationship with Regis University and Rocky Vista faculty.

I learned about the opportunity for our organization to be a practicum site for the MPH program.

Strengthened relationships with colleagues at the School of Public Health.

I met several great contacts at the reception dinner.

Have built a much stronger relationship with the Stapleton 2040 community group. They are now part of the Colorado Clinical Translational Science Institute (CCTSI) Immersion Training Program.

Met Health Occupation Student Association (HOSA) representative.

Will work with a new colleague in another discipline to establish a community partnership.

Met many other AHEC Board members from the other regions.

Excellent connection with the other community doctors.

Became a member of SNOCAP.

I am now a member of the Cavity Free at Three advisory board.

I was able to strengthen relationships with preceptors, especially during the regional lunches.

New relationship with the Salud clinics related to integrated behavioral health work.

I made a connection with the Colorado Non-Profit Association.

Feedback from a NHSC alum promoted a policy recommendation to HRSA.

Met with folks from Stapleton 2040 and have met with them again several times since the conference.

I worked with the Prevention Research Center on a grant proposal.

We started a rural diabetes education program in target areas with the state health department.

Adding TOPS to our clinical offerings.

Will work on developing a new dental network.

Signed up to be a preceptor for the School of Public Health.

Connected with the Office of Primary Care.

I am enrolling more patients in the A-CARE Home Blood Pressure program now.

Working with the Cancer Coalition now.

Will introduce Cavity Free at Three to the Sunrise Community Health Center.

Connected with LiveWell Colorado.

Hope to improve my relationship with the Public Health system in Colorado.

New collaboration with the School of Public Health.

Met the folks from the National Health Service Corps.

Setting up an interdisciplinary practice-based research network.

Met folks from the Colorado Center for Community Development in the School of Architecture. They help design local recreation areas. We are now collaborating with them to implement healthy living activity programs in those recreation areas. Joined their advisory board. We meet together regularly.

Collaborations on community-based doula programs.

Working with Marillac Clinic.

Stronger relationship between Adams State School of Nursing and the University of Colorado College of Nursing.

I was able to partner with a research from The Children's Hospital to work on a case study about high altitude pulmonary edema.

Connections with the Center for Nursing Excellence.

Able to connect better with the AHEC from Colorado Springs that significantly improved our relationship. Got to know Dr. Velasquez and Dr. Reginald Garcia better.

Developed a project on discrimination and health with medical students working with a community advisory board and 2040 Partners for Health.

Stronger relationship with southeast Colorado health facilities, especially, Lamar, Grenada, Eads, and Cheyenne Wells.

Previous relationship strengthened with Pueblo Community Health Center and Spanish Peaks Regional Medical Center.

Found new partners, Ben Miller, Center for African American Health, School of Public Health.

We found new preceptors.

The conference gave me the opportunity to connect with our rural Physical Therapy preceptors; one is now a member of our clinical education advisory committee and assisting with our strategic planning process.

New rural preceptors for my Internal Medicine Residents.

I have personally established a solid relationship with the leaders of the University of Colorado School of Physical Therapy.

Participated in a demo of Dr. Danielle Varda's Partner Tool and discussing its use in a PACT project.

Developed stronger ties to the University.

I became a member of the Southwest Colorado AHEC Board of Directors.

I have had ongoing conversations with the local AHEC Director and faculty from the University of Colorado, none of whom I knew before the conference.

This meeting allowed me to improve the teaching connections between University of Colorado Medical School and St Mary's residency.

Relationship with Common Ground International and Rory Foster for teaching medical Spanish to our interprofessional students.

Table 6. New collaborations and partnerships 2009 and 2010.

wider recognition, it also meant that some past participants were unable to attend. It also means that the planning team will have to consider whether increasing conference attendance will still fulfill the mission of the conference.

Discussion

ECER demonstrates how practice-based research networks, AHEC, and Clinical Translational Science awardees can successfully combine efforts and resources to develop and support campus–community collaborations. Although seemingly just a simple 3-day conference, this event has led to many important partnerships. The conference includes attendees from all aspects of healthcare including healthcare providers, educators, researchers, community members, patients, organizational leaders, and local funding agencies. Each of the organizing partners brings an area of expertise to the conference to provide a rich combination of education, research, clinical care, and policy. The conference aligned major goals and objectives for each of the partner organizations and for individual participants.

The schedule was created to provide times of focused content to allow for in-depth presentation and conversation. Friday's research focus provides extended time for presenting a wide variety of completed and ongoing research efforts. The "String of Pearls" session focused on one clinical topic has been particularly successful, as attendees see the depth of study possible within one area. The other research sessions provide a variety of presenters to discuss their clinical interest and research. The poster session was quite lively with attendees having an opportunity to meet and discuss a wide variety of topics. We heard numerous anecdotal stories that this networking reception/poster session served a pivotal role in setting the tone of the meeting as one of engagement and collaboration.

The conference is quite expensive at more than 500 per participant, however; given that most of participants are volunteer faculty, researchers, board members, and community members, this is a small price to pay for the efforts contributed by participants throughout the year. Identifying yearly and long-term funding for the conference requires creativity and significant fund-raising efforts. The major partners each invest significant resources in the conference. Sponsors, including individual professional schools (School of Medicine, Pharmacy, etc.) and local philanthropic foundations provide valuable additional support varying from 1,000 to 10,000. Often, sponsors are willing to provide resources

for a specific component of the conference, for example, the keynote speaker, or a series of breakout sessions on a focused topic. Our workforce development grants include support for faculty development that we have used to support the preceptor portions of the conference. Additional plans include applying for an Agency of Health Research and Quality (AHRQ) or NIH research conference grant. On the basis of our experience and data, we believe the conference is an investment in all components of our work, and the return on investment has been extremely positive to date.

Evaluating the conference has been important, as each year, we adapt and make changes and additions based on the yearly feedback. We receive feedback from 50%–60% of participants whose ideas may not reflect the total population. We will continue to emphasize to participants the importance of feedback, and use surveys and interviews with key stakeholders to evaluate the conference and make changes as necessary.

Conclusion

The ECER Conference has successfully brought together hundreds of healthcare providers, educators, researchers, and community members to share their healthcare experiences, expertise, and resources. New and strengthened collaborations have grown and developed into significant programs and research projects in rural and urban underserved communities throughout Colorado.

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