



PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE FINAL RESEARCH REPORT

Testing the Appreciative Inquiry and Boot Camp Translation Methods for Identifying and Sharing Local Solutions to Health Care Issues

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ABSTRACT

Background: Our team sought to identify and pilot test the Appreciative Inquiry/Boot Camp Translation (AI/BCT) method to detect and translate local evidence of success with important health topics and concerns. For local health concerns for which suitable evidence is not available, AI generates evidence by engaging patients who have found solutions. BCT translates evidence into locally meaningful messages, calls to action, and materials. We sought to test the combined AI/BCT methodology as a patient-centered method to generate patient-centered evidence and interventions.

Objectives: Conduct 6 projects with underserved rural and urban Colorado communities using the AI/BCT method to select priority health topics, identify factors that facilitate successful health outcomes related to the topic, and translate local evidence-based recommendations into local solutions.

1. Identify and describe the components of the AI/BCT method essential to engaging patients and community members in patient-centered research.
2. Produce a training program for patients, health care professionals, and academic researchers to disseminate AI/BCT to improve patient engagement for patient-centered outcomes.

Methods:

Objective 1: Community members in rural and urban areas and academic partners used AI/BCT to address the following topics: rural access to mental health support, urban access to mental health support, chronic pain management, patient-centered medical home implementation, and sleep apnea diagnosis and treatment.

Objective 2: We conducted a formative evaluation to identify the key AI/BCT content and process components.

Objective 3: We compiled the essential AI/BCT components into an educational curriculum and evaluated both an extended and a brief AI/BCT training.

Results:

Aim 1: Five AI/BCTs successfully generated community-sourced solutions to local health concerns and translated these into constructs and language accessible to patients, community members, and practices in diverse, underserved urban and rural communities. The AI process required more resources than originally anticipated, resulting in the completion of only 5 AI/BCT projects instead of 6.

Aim 2: We identified 5 essential components of the AI/BCT method. First, selecting topics suitable for AI is critical. Second, the focus on “what worked” for AI interviews is required but might be a challenge for researchers trained in problem-focused approaches. Third, the

qualitative analyst must have a solid understanding of AI and BCT. Fourth, project leaders must ensure adequate resources of time and team members. Fifth, the way AI data are presented for BCT is important: BCT facilitators and medical experts should illustrate the local relevance of the AI data and the rigor used to collect and analyze that data.

Aim 3: Evaluation of our 1.5-day training showed 100% agreement that AI/BCT could help trainees partner with communities in research; 89% of participants agreed that the training taught them the skills they needed to use AI/BCT successfully in research.

Conclusions: AI/BCT is an effective method to address local health concerns for which evidence is not readily available. We successfully tested this method and produced a program for training others in its use in their communities and patient populations.

Limitations and Subpopulation Considerations: Not all topics are a good fit for AI/BCT. The method requires stories of successfully addressing the selected health topic.

BACKGROUND

The translation of health-related scientific discoveries into clinical guidelines and everyday clinical practice can take years or decades, and many discoveries never make it into daily practice.^{1, 2} The advent of evidence-based guidelines, in contrast to consensus-based guidelines, has been a major advance.³ These discoveries and guidelines pertain to the wide spectrum of health conditions and ages encountered in primary care. However, discoveries and guidelines do not exist for all health conditions that are of importance to communities, or the existing evidence and guidelines might apply to only a limited group (such as certain ages, cultures, or ethnicities). In these instances, a method is needed to develop community-relevant evidence from patients and community members who have found their own pathways to success through perseverance or trial and error, instead of using an academic, top-down, barrier-focused approach that ignores the resourcefulness, skills, and knowledge of patients and community assets.

We became aware of the notion that available evidence does not always apply to the health issues raised by specific local communities while working in our long-standing partnership between the High Plains Research Network (HPRN) Community Advisory Council (CAC) and the University of Colorado Denver's Department of Family Medicine (CU-DFM). The HPRN CAC had identified mental health as a priority issue in its region of eastern Colorado. To help focus its goals for patient-centered research and action, the group undertook a yearlong process of learning about mental health from various experts, including definitions and epidemiology of major conditions, integrated behavioral health, suicide prevention, and policy.

HPRN CAC member Chris Bennett explained, "We began studying mental health in eastern Colorado by looking at lots of research to improve mental health outcomes. Most of it revolved around implementing evidence-based guidelines for specific treatments for specific illnesses or system-level changes. As each expert talked, we routinely kept coming back to 'That's awesome work, but not quite what we think our community needs.' We realized that we wanted to tackle the problem of how do we help people overcome the barriers to access the

mental health care system and support *before* they have a mental health crisis? This was the question that wasn't sufficiently answered in the research or evidence-based guidelines." Maret Felzien, another member of the HPRN CAC, added, "The existing guidelines and information didn't introduce a way forward for us. We needed a way to work on improving and preventing mental health outcomes from a locally informed base. We needed a round peg for a round hole versus a square peg in a round hole."

Inspired by the experience of the HPRN CAC, the CU-DFM practice-based research network's community and patient advisory councils and 2040 Partners for Health worked to fill this methods gap and to change the environment of slow translation of evidence into practice by identifying and testing the method described in this report. We call this method Appreciative Inquiry/Boot Camp Translation (AI/BCT); it is designed to access local patient and community members' successes and translate them into evidence and interventions that are locally relevant and actionable.

Appreciative Inquiry

Appreciative Inquiry (AI) is a process that can be used to understand successes and positive attributes while envisioning the possibilities of organizations.⁴ AI has been applied frequently in corporate settings to advance organizational change and is used in health care to focus on spreading successes.⁵ Its roots are in sociology research as it applies to organizational change and behavior. Medical research is one area in which AI is starting to gain traction and momentum.⁶ When applied as a research methodology in health care, AI investigates individual experiences and stories to inform health practices that will improve health outcomes.

We applied AI to elicit stories of success from individuals who have learned to successfully work through the topics selected for this study, where evidence did not exist or was not applicable owing to the uniqueness of the local issue or context. Our application of AI is consistent with the work of Moore and Charvat⁵ and Scott et al,⁷ who also sought to use individuals' stories to uncover evidence of how processes and outcomes in health could be realized. By using this method, we captured stories of underlying elements and conditions that fostered success (otherwise known as *positive deviants*), rather than the trials and setbacks

they encountered on their way to success. AI can then leverage or replicate those elements and conditions of success to improve everyday outcomes.

Boot Camp Translation

The second component of the AI/BCT methodology is a process called Boot Camp Translation (BCT). BCT, rooted in the principles of community-based participatory research, is an evidence-based process (studied with previous PCORI funding: www.pcori.org/research-results/2012/pilot-project-evaluation-boot-camp-translation-process) that engages local community members in partnership with academic researchers. Partners work together to translate complex evidence-based guidelines and medical terminology into locally relevant and actionable health messages and dissemination strategies.^{8,9}

In the AI/BCT method, the locally generated solutions identified using AI become the evidence and guidelines that are translated during the BCT process. The goal is to create locally relevant programs, actionable messages, and sustainable care.

This methods study tested the combined use of AI and BCT to create successful strategies to address community-identified health issues for which evidence is lacking or limited. Our study attempts to demonstrate the usefulness of the AI/BCT method to address community-identified health issues regarding which gaps exist in patient-centered outcomes research.

Specific Aims

The following were our 3 specific aims:

1. Conduct 6 AI/BCT projects with underserved rural and urban Colorado communities to select priority health topics, identify factors that facilitate successful health outcomes related to the topic, and translate evidence-based recommendations into local solutions.
2. Identify and describe the components of the AI/BCT model for engaging patients and community members in patient-centered research.

3. Produce a training program for academic researchers, patients, and health care professionals to learn and use AI/BCT to improve patient engagement for patient-centered outcomes.

PATIENT AND STAKEHOLDER PARTICIPATION

This project is the result of successful engagement of community and patient advisors across the spectrum of project activities, including before and during the grant application process. The AI/BCT protocol required active participation from community members and patients. For this discussion, we will use *community members* to refer to nonacademic study team members.

We leveraged the long-standing community partnerships associated with CU-DFM's practice-based research networks (PBRNs) for this study. This was a key method of identifying and recruiting stakeholders. The HPRN is a practice- and community-based PBRN in rural eastern Colorado. The HPRN CAC is composed of 13 community members from the region. The Colorado Research Network (CaReNet) is another PBRN that works with safety net and residency practices along the Front Range and in the San Luis Valley; it has a Patient Advisory Council (PAC) made up of 13 patient partners who reside in the Denver metro area. A third primary partner was 2040 Partners for Health, a nonprofit, community-based health and participatory research organization that works with diverse, underserved neighborhoods in the eastern Denver and northwestern Aurora metropolitan area. 2040 Partners for Health has a Community Council of approximately 14 people to guide its work. All of these groups include people from diverse educational, occupational, and socioeconomic backgrounds. With a few exceptions, members are not medical or public health professionals.

Community members participated in all aspects of this study. They identified and refined AI/BCT topics, which included both rural and urban access to mental health support, chronic pain management, and sleep apnea diagnosis and treatment. A fifth topic, patient-centered medical home (PCMH), was selected by the research team on the basis of conversations with providers and staff at PBRN practices and others working in this topic area. The community groups reviewed and approved recruitment materials and suggested revisions to the interview guides for the AIs in which their communities were involved (including an introduction, an explanation of the study, lead questions, and probing questions). Community

members also played key roles in identifying potential participants in their networks and communities for AI interviews and by contacting local friends, colleagues, health providers, and others about the project. As a community-based organization, 2040 Partners for Health used its extensive networks to help identify and recruit participants. PBRNs were a key source of potential participants for the PCMH AI interviews.

Community partners were involved in data analysis for each AI/BCT. Each group reviewed preliminary themes from the AI data analysis, which enabled them to ensure that our early results seemed reasonable within the context of their community and to identify anything that seemed out of line. A small number of community members met with the academic study team to review coded data and helped identify themes, patterns, and questions. To prepare for this activity, they participated in a training program for community members on human subjects research.¹⁰

The BCT process further engaged community members in the translation of the new local evidence for successfully addressing each AI/BCT topic into messages and materials for specific communities. A total of 63 local community members participated in the 5 BCTs. The HPRN CAC and CaReNet PAC members each participated in 1 BCT (rural access to mental health support and chronic pain management, respectively). 2040 Partners for Health identified community members to participate in the urban access to mental health support BCT and the sleep apnea diagnosis and treatment BCT. The PCMH implementation BCT formed a group that included physicians, medical assistants, educators, and practice facilitators from the Denver metropolitan area. These participants were identified by the research through PBRN practice rosters and through the researchers' knowledge of relevant health professional organizations.

Community members were engaged in the dissemination of each AI/BCT's results and of the overall study results. 2040 Partners for Health leaders and members of the CaReNet PAC presented or co-presented posters and oral presentations with study updates and results at local and international meetings, including the North American Primary Care Research Group Annual Meeting (NAPCRG, international), the NAPCRG Practice-based Research Network

meeting (international), and the Engaging Communities in Education and Research conference in Breckenridge, Colorado.

Partnering with community members influenced this research in key ways. We believe that the rigor and quality of the study were improved because of our community members' engagement. The level of participation and engagement in both the AI interviews and the BCTs demonstrated the relevance of the AI/BCT method. Further, having communities identify health topics of importance strengthened the relevance of topics used to address our overall research question regarding the utility of AI/BCT. Engaging community members and patients in the recruitment of AI participants put a local face on the project and widened the pool from which we could identify AI participants.

Finally, our engagement plan resulted in a major advance in how our IRB asks researchers to prepare community partners who are part of a project team.¹⁰ Rather than requiring community partners to complete the typical Collaborative Institutional Training Initiative for human subjects research, our IRB has adopted a process whereby researchers and community partners engage in a structured reading and discussion of the *Belmont Report*¹¹ and the elements of consent and human subject protections. This procedure resulted in a fruitful discussion and advanced processes, such as flagging agendas when human subject data are being discussed. In addition, working with community members introduces another level of researcher accountability, testing researchers' ability to thoroughly understand a process and to present information in a format that community members can digest without oversimplifying it.

METHODS

Overview

To briefly rephrase our aims, we strove to (1) test the utility of Appreciative Inquiry/Boot Camp Translation (AI/BCT) as a formal method to create locally based, testable interventions for issues for which evidence is either nonexistent or nonapplicable for a particular population or community; (2) test the methods' ability to engage patients and community members throughout the process; and (3) develop and evaluate a training program for teaching others the AI/BCT method.

Research Design

We used a qualitative, observational design for our project, implementing 5 AI/BCTs and providing training on the method. We proposed and used qualitative methods with a formative evaluation to assess the application of AI/BCT to 5 health topics and used quantitative surveys to evaluate the training program.

Data Sources and Datasets

Our data sources were patients and community members who had successfully addressed the health topics of interest, participants in our BCTs, participants in our AI/BCT trainings, and our study team members. Qualitative data consisted of AI interview data, observations and notes on our AI/BCT processes, and descriptions of the BCT results (messages and materials). We also used notes from our study team meetings. Quantitative data were limited to participants' evaluations of our trainings.

Evaluation Framework

To determine the success of the AI/BCT process, our team needed to track progress and use an active evaluation method. After reviewing various options, we chose a formative evaluation framework to guide our process.¹²

In a formative evaluation process (sometimes referred to as an internal process), the internal team evaluates the program or project while the program activities are in progress.

This approach allows an internal team to participate actively while developing the AI and the BCT. In our study, our monthly team meetings became a very important structure for this process. For each AI/BCT, research team members took extensive field notes regarding their experience and shared them at the study team meetings.

We focused on components of the AI/BCT process that contributed to or detracted from success. We repeated this process during and after each AI/BCT, and lessons learned were adopted for later rounds. For example, the first AI/BCT primarily used a focus group format to collect AI information, with only a few individual interviews. We learned that we preferred individual interviews for AI because they allowed participants to provide more detailed information. This lesson was applied to subsequent AI/BCTs.

At the team meetings we also considered issues across AI/BCTs, such as how well a particular format process worked (or did not work) for different health topics and contexts. This cross-cutting view helped identify the essential elements of the AI/BCT process and pinpointed which adaptations were appropriate for various situations.

Study Outcomes

To satisfy aim 1, we collected 5 sets of evidence of successes through the AI interviews; the BCT process produced 5 sets of messages and materials, along with dissemination strategies. We addressed aim 2 through our formative evaluation of 5 implementations of the AI/BCT method; we defined outcomes as the identification of components of the AI/BCT model essential to engaging patients and community members in patient-centered research. An additional outcome was understanding the overall success of the method and its utility for addressing local health concerns and topics for which evidence-based guidelines are lacking. To address aim 3, we also evaluated the trainings we conducted; the outcomes were the results of our trainee survey.

Analytical and Statistical Approaches

For the AI interviews, we applied qualitative analysis methods using a grounded theory approach. Observations of successes in our process were captured and recorded during study

team meetings. Quantitative evaluation data from our trainings were recorded and analyzed using descriptive methods.

Conduct of the Study

The study was conducted through the implementation of the 5 AI/BCTs, our formative evaluation, and our AI/BCT trainings. The following sections describe the actual process followed in our AI/BCTs.

Modifications to Original Protocol

We made 2 modifications to our approach during the project. First, as we attempted to apply qualitative comparative analysis (QCA) to our AI interview data, we realized and confirmed with our consultant expert in QCA that the process was not appropriate for AI analysis. QCA requires both positive and negative outcomes to work; by design, AI focuses on successes, so we moved to a grounded theory analysis for our data. Second, we learned that group interviews for AI provided less rich data than individual interviews. After our first 2 AI/BCTs (rural access to mental health support and urban access to mental health support), we conducted only individual AI interviews.

We learned midway through the study that the AI process requires more resources than we originally anticipated, including more time and team member support to complete recruitment, data collection, data coding, analysis, and presentation organization tasks. Thus, we conducted 5 rather than our proposed 6 AI/BCTs.

Identification of Health Topics

We began the AI/BCT process by identifying the health topics. For 4 of the 5 AI/BCT projects, we combined a Delphi method approach to identify and reach consensus on the health care issues of importance in each community with a review of the academic literature on the community-identified topics to determine need, feasibility, and current evidence base.¹³ The Delphi method is a widely used technique that is well suited for consensus building.¹⁴ We

used it¹⁵ as an iterative process with community members to narrow topics to a practical priority list for which there was general consensus (not unanimous agreement).¹⁶

Members of the High Plains Research Network Community Advisory Council (HPRN CAC) in rural eastern Colorado, the Colorado Research Network Patient Advisory Council (CaReNet PAC), and the 2040 Partners for Health Community Council in the urban Denver area participated in this process on behalf of their respective communities. The topic of PCMH implementation was identified through multiple conversations with providers and practice staff in the CU-DFM's practice-based research networks and the Practice Transformation Program at CU. PCMH is a well-established model to help primary care practices transform to or move toward more relationship-based care focused on prevention, but practices have widely variable levels of success implementing the model.

IRB and Human Subjects

The Colorado Multiple Institutional Review Board (COMIRB) approved our study protocol. COMIRB is the administrative body at the University of Colorado Denver that protects the rights and welfare of human research subjects recruited to participate in research activities. As required by COMIRB, we obtained verbal informed consent from each AI interview participant.

Recruiting people with stories of success. AI is grounded in the concept of success; that is, what has worked for the individual or group. We sought people in the community who had stories of success about the chosen topic. We recruited the study population for AI/BCT using snowball sampling through community partners, collaborators, practices in the CU-DFM's practice-based research networks, and CU's Practice Transformation Program. Community research liaisons and community-based organizational partner staff assisted in recruiting AI participants. Research team and community members placed flyers describing the health topic and AI process at community health centers, churches, and health care practices. As potential participants were identified, the research team monitored demographic characteristics to ensure diversity across gender, race and ethnicity, and other factors. Potential participants

went through a brief 5- to 10-minute phone screening process with research staff to ensure that they had the necessary experiences to provide valid data for the AI process. Screening helped ascertain whether the potential participant's story would include elements of success relevant to the health topic.

The study team, along with the community partners, explicitly defined the elements or markers of success; for example, success in addressing chronic pain was defined as "being able to do most of what one wants or needs to do on most days of the week." After the story briefs were initially screened by staff, the research team reviewed de-identified briefs and chose a final pool of participants for AI interviews.

Conducting AI interviews. We developed a semistructured interview guide to help collect data on the stories of success for each of the AI topics. The guides were designed to enable multiple interviewers to conduct the interviews consistently and collect complete data. The guide included the purpose of the project, the value of each individual interview, and statements of confidentiality, voluntary participation, and reporting of results in group (summary) format.

Each guide provided 1 or 2 key questions⁴ to solicit the positive aspects of the story. We used probing questions to determine the basic demographics and characteristics of additional people involved in the story beyond the interviewee. These demographics and characteristics included age, gender, insurance status, family relationships, employment situation, role in the community, and financial situation. Participants' stories included challenges faced and negative experiences, which provide valuable context for the success elements. Interviewers ensured that participants described the successes and did not focus on negative elements. If participants reverted to barriers or other negatives, the interviewers guided them back to positive aspects; that is, what worked.

Interviews from 12 to 25 participants ensured saturation of themes and experiences from the stories. Most of our topics required more than 20 interviews and stories to reach saturation; however, after 12 interviews on sleep apnea we noted a repetition of similar

experiences and themes, and elected to stop the interviews. For the first 2 AI/BCTs (rural access to mental health support and urban access to mental health support), a study team pair interviewed participants either individually or in a group setting. After encountering difficulty in gathering robust individual data with this method, we decided to move from focus groups to individual interviews for the rest of the AI/BCT topics. We found that individual interviews delivered more robust, singularly focused stories of success. Thus, we used only individual and small group interviews (1-3 participants) for the remaining 3 AI/BCTs (chronic pain management, PCMH implementation, and sleep apnea diagnosis and treatment).

A pair of interviewers conducted the interviews at locations that ensured privacy and participant comfort: for example, a private room at a local organization, a health care facility, a place of employment, a library, or, in a few cases, the participant's home. Group interviews lasted 30 to 120 minutes and individual interviews 30 to 60 minutes. We provided an incentive for participation—a \$50 gift card to a local grocery store or other retailer. We audio-recorded all data collected and took additional notes on content and impressions of the discussion. Staff transcribed and cleaned the audio recordings, and placed them into a qualitative software program¹⁷ (ATLAS.ti, version 6; Scientific Software Development GmbH). We asked each participant to complete a demographic form at the end of the interview (gender, age range, and race).

Analyzing the AI data. Our AI analysis process began with traditional qualitative methods using a grounded theory approach.^{18, 19} A core analysis team of 2 or 3 qualitative researchers first reviewed the transcripts to develop a broad initial coding scheme. This team completed an immersion-crystallization phase in which they reviewed the data to identify themes for organization,²⁰ developed a specific coding structure, coded text segments according to this structure,^{21, 22} identified patterns and relationships across codes and themes, connected themes and patterns to existing knowledge,²³ and corroborated or legitimized the findings. The core team requested additional data from our community partners where needed to confirm or refute insights from the initial analysis.

Next, the core team used a formal editing approach¹⁹ to determine themes within and across stories. The key questions were, What are the higher-level ideas that we can take from these stories? and What do the stories say collectively? The team developed thematic summaries and shared them with the overall research team.

Finally, to identify patterns in the stories (ie, similarities in strategies, outcomes, or participant characteristics), the core team used a template approach.²² This was a useful way to organize the data that entailed reviewing transcripts to capture all excerpts relevant to the previously identified themes.

At this point, other members of the research team joined to create a matrix display of themes²⁴—a table representing all the stories using the agreed-upon codes as an organizing framework. The table was structured to identify key issues for all stories, and the stories were grouped by common elements. For example, in our rural access to mental health support AI/BCT, several stories included a young child’s behavioral issues being noticed by teachers, so we grouped them together according to commonalities with respect to the age of the person seeking care and particular symptoms or behavior.

Reporting the results of AI. The report of the AI findings provided the evidence base for the expert presentation given during the BCT process. This presentation was the foundation for the BCT; therefore, we carefully considered how to report the results. The lead qualitative study team member reported the final results to the entire study team and to community partners for discussion and reflection. This team member also presented the final table of distilled, de-identified stories with a list of the key elements of success, a definition of each key element, examples pulled from the stories, and the overall themes from the AI data. De-identified quotations illustrated the elements and themes.

Transitioning from the AI process into BCT. The AI findings were incorporated into the BCT process as the new, locally generated evidence base for the selected topic. A traditional BCT kick-off meeting begins with a half-day, comprehensive educational presentation from a topical expert to provide the community-academic partnership with a high-level understanding

of the evidence-based guidelines, the medical information, and a common language pertaining to the health topic.

For AI/BCT, we altered this presentation slightly to include 2 parts. First, an expert on the health topic gave a presentation on what was known about the topic, including definitions of terms, prevalence and other statistics, known gaps in existing guidelines, and barriers to incorporating guidelines into everyday practice. This presentation grounded the BCT participants in the topic and explained why an AI approach to developing local evidence was necessary. Second, an expert in the AI data presented the AI results (ie, the new local evidence) to describe the identified local strategies for success. This presenter was one of the 2 lead qualitative analysts.

In addition to the usual BCT process of participants asking detailed questions to unpack the science of the evidence, our AI/BCT participants often posed questions that suggested new avenues of inquiry into the AI data. For example, our chronic pain management BCT participants asked why opioids were not more widely discussed in the AI interviews as a means to successfully manage chronic pain. The additional community-guided inquiry into the AI data yielded important insights.

RESULTS

The study results are presented according to the 3 study aims. Aim 1 results describe the selected health topics, themes emerging from the Appreciative Inquiry (AI) data collection, and results from the Boot Camp Translation (BCT) process for each of the 5 AI/BCT topics. Aim 2 results describe the components of the AI/BCT model that are essential for success. Aim 3 results describe the AI/BCT training and the summary evaluation.

Aim 1: Conduct AI/BCT Projects

The AI/BCT process begins with the selection of a health topic that is important to the community. Thus, our first results are the topics identified for the 5 AI/BCTs: (1) rural access to mental health support, (2) urban access to mental health support, (3) chronic pain management, (4) patient-centered medical home (PCMH) implementation, and (5) sleep apnea diagnosis and treatment. Table 1 displays the 5 AI/BCT topics in relation to the partnering organizations and communities.

Table 1. Health Topics Identified by Community Partners for AI/BCT

Topic	Community	Partner Organization	Evidence Gaps
Rural access to mental health support	Rural eastern Colorado	High Plains Research Network Community Advisory Council	How to facilitate access to and the entry process into mental health treatment and support
Urban access to mental health support	Denver metropolitan area	2040 Partners for Health	How to shorten the time to sustained, successful access to mental health care
Chronic pain management	Denver metropolitan area	Colorado Research Network Patient Advisory Council	How to manage chronic pain and maintain function
PCMH implementation	Denver metropolitan area	University of Colorado Practice Transformation Team	How to implement the myriad of resources pertaining to practice transformation
Sleep apnea diagnosis and treatment	Denver metropolitan area	2040 Partners for Health	How to shorten the time to diagnosis and treatment of sleep apnea

Abbreviations: AI/BCT, appreciative inquiry/boot camp translation; PCMH, patient-centered medical home.

A total of 102 people were interviewed across the 5 AI processes. Table 2 summarizes participation in AI interviews for each AI process. We intentionally use the term *Hispanic and Latino* rather than just *Hispanic* throughout this section, as community members informed us that they identify as Latino and not Hispanic, or vice versa.

We next describe the themes that emerged from the AI interview data analysis for each AI/BCT and the results of the BCT for each AI/BCT. Table 3 shows the key questions in the interview guide and the resulting themes for each of the AI/BCT topics.

Rural Access to Mental Health Support

AI results. The rural access to mental health care and support AI/BCT used the AI process to collect data on 29 AI stories from 21 local community members. These stories generated local data that revealed themes about the importance of another person initiating help, using an informal approach and locations (safe venues), and being a connector. AI data also reflected the “handle it on your own” approach to mental health.

BCT results. A group of 17 community members who live in rural eastern Colorado, the AI data expert, and two BCT facilitators participated in this BCT. From the AI data, the BCT group identified key concepts of relationships (having someone to talk to, often someone not in your immediate circle, to overcome the “independence” barrier) and safe venues (mental health care is really *everywhere*, not limited to a health care facility). For this BCT, the resulting messages and materials took the form of a community-based intervention and training program. The High Plains Research Network Community Advisory Council (HPRN CAC) designed the program to prepare community members to help someone with mental and emotional health needs before a crisis occurred and to foster social connectedness.

Table 2. Description of AI Participants

Topic	Participants (N)	Stories (N)	Demographic Description	
Rural access to mental health support	21	29	Gender	76% women
			Age	21-70
			Race/ethnicity	White = 76%; Black = 0%; Hispanic/Latino = 24%; other = 0%
Urban access to mental health support	26	24	Gender	62% women
			Age	25-70
			Race/ethnicity	White = 22%; Black = 50%; Hispanic/Latino = 28%
Chronic pain management	24	24	Gender	83% women
			Age	25-77
			Race/ethnicity	White = 38%; Black = 46%; Hispanic/Latino = 13%; other = 4%
Patient-centered medical home (PCMH) implementation	19	20	Gender	53% women
			Age	25-67
			Race/ethnicity	White = 69%; Black = 0%; Hispanic/Latino = 26%; other = 5%
Sleep apnea diagnosis and treatment	12	12	Gender	66% women
			Age	40-72
			Race/ethnicity	White = 17%; Black = 50%; Hispanic/Latino = 33%

Table 3. AI Topics, Key Questions, and Resulting Themes

Topic	AI Key Question	Themes from AI Interviews
Rural access to mental health support	Think about when you successfully accessed mental health care. Tell us that story. What worked? Who helped? What kind of resource helped? What happened next?	<ul style="list-style-type: none"> • Advocates • Importance of another person who initiates help using an informal approach • Safe venues • Being a connector • “Handle it on your own” approach to mental health
Urban access to mental health support	What happened that helped you or someone you know get a service or some type of care for mental health?	<ul style="list-style-type: none"> • Importance of an advocate • Increased awareness over time of what behaviors were beyond the range of normal • Acceptance • Insurance implications
Chronic pain management	What helps you live with chronic pain so that the pain—and the management of it—does not dominate your everyday life?	<ul style="list-style-type: none"> • Use of multiple strategies to manage and prevent ongoing pain • Mental attitude • Support from others for ongoing management
PCMH implementation	What led to the practice of starting PCMH implementation? What facilitated your PCMH work? What was it about the practice or situation that helped?	<ul style="list-style-type: none"> • Trust • Attitudes • Key role (usually not someone in a traditional leadership position) • Workflow changes/protocols • Practice and individual qualities
Sleep apnea diagnosis and treatment	Tell us the story about when you were properly diagnosed with sleep apnea and successfully treated.	<ul style="list-style-type: none"> • Symptoms • Multiple health care providers • Treatment • Realizing seriousness of condition • Positive outcomes

Abbreviations: AI, appreciative inquiry; PCMH, patient-centered medical home.

The resulting program, Changing Our Mental and Emotional Trajectory (COMET), consists of a 5-step conversation guide with 2 optional additional steps. The COMET guide is equivalent to a patient health questionnaire^{24,25} used in a clinical setting but is constructed for nonclinical users and settings. The 7 steps are (1) acknowledging that the person is not feeling like him- or herself; (2) asking the person how he or she is doing; (3) observing the person's mood or behavior; (4) asking the person about his or her family or social life; (5) inviting the person to engage; (6) providing self-disclosure (optional); and (7) providing information to help the person obtain more assistance or exiting the conversation (optional). The partnership has developed a curriculum to train community members in COMET and aimed to begin the program in the fall of 2018.

Urban Access to Mental Health Support

AI results. The urban access to mental health support AI/BCT used the AI process to collect data on 24 stories from 26 local community members. Two of these stories were related by adult mother–child pairs about success achieved when the child was younger. Themes relating to the elements of success included the following: (1) the importance of having an advocate, usually a family member, who continually pursued treatment on behalf of the patient; (2) increasing awareness over time of which behaviors were beyond the range of normal; (3) acceptance of the condition; and (4) the role that insurance played in the presence of and access to services.

BCT results. Participants in this BCT were 12 community members from neighborhoods served by 2040 Partners for Health (which include large black and Hispanic and Latino communities), the topic and AI data experts, and 2 BCT facilitators. The group translated the concept of advocacy into messages about caring, promoting compassion, and reducing guilt or shame. The group saw a need to encourage community members to take action by talking more frequently to each other about mental health. The BCT partnership designed materials to disseminate these messages throughout the community, including stickers carrying the messages “Compassion lives here” and “Embrace mental health” and flyers reading “Somebody

Cares...Talk!" The Somebody Cares campaign emphasizes the importance of community members as catalysts to help fellow community members access care.

Chronic Pain Management

AI results. The AI/BCT on chronic pain management used the AI process to collect data from 24 local community members with various types of chronic pain. Consistent themes included the use of multiple strategies to manage and prevent ongoing pain. The person's mental approach—specifically, having positive beliefs and strong determination—was another prominent theme. Significant others, family members, and health care providers were key for support and ongoing pain management. Although 10 participants regularly used opioid pain medications, all voiced a desire to avoid these medications.

BCT results. The BCT process engaged 12 community members who serve on the Colorado Research Network Patient Advisory Council (CaReNet PAC). Their translation of the AI data and themes resulted in the following 3 main messages: (1) create goals that are more important to you than your pain experiences; (2) you can't always go it alone—find people who will help you be who you were before your pain; and (3) try, try, try; you have permission to try more than one strategy.

The group created the Chronic Pain Management Roadmap to Success to disseminate these messages. Further, recognizing that chronic pain management is a fluid and sometimes long journey, the group designed the roadmap to serve as a tool to help patients find their personal multimethod approach to successfully managing chronic pain. The roadmap is being presented to our partnering PBRN practices, and the CaReNet PAC is exploring other partnerships with groups in the state that work on this topic.

PCMH Implementation

AI results. The AI/BCT on PCMH implementation used the AI process to collect data on 20 AI stories from 19 participants. Key elements of success were trust in one's care team,

someone taking on a key role, standing orders and protocols, attitude shifts over time (toward pro-PCMH), leadership, and openness to change.

BCT results. BCT participants consisted of 13 community partners with previous PCMH experience: medical assistants, a registered nurse, a physician assistant, a physician, a practice facilitator, and representatives of relevant professional organizations, including the Colorado Society of Medical Assistants, Colorado Center for Nursing Excellence, and Colorado Health Institute. Topic and AI data experts, along with 2 BCT facilitators, made up the BCT staffing and support team for this AI/BCT.

From the AI data, the BCT group identified medical assistants as central to success. Trust had a strong connection to every other element of success. The BCT group also concluded that successful implementation of PCMH included not only tactical strategies but also cultural aspects of a practice, such as trust, pride, and professional satisfaction. The BCT group decided to address their messages and materials to practices that were not considering engaging in PCMH work and practices that were considering PCMH work but had not taken action to start the process.

The BCT group designed thought-provoking and provocative messages that would speak to the emotional aspects of practice transformation. The main messages were crafted to create a sense of urgency to take advantage of the many practice transformation initiatives in Colorado, including PCMH implementation. A collection of materials included the main messages and provided more specific information on practice transformation that reflected the AI themes. Materials included a trifold brochure, a short slide presentation, and a short storyboard video for distribution by practice transformation support organizations on websites and in practice visits.

Sleep Apnea Diagnosis and Treatment

AI results. The AI/BCT on sleep apnea diagnosis and treatment used the AI process to collect data from 12 local community members. Emerging themes included symptoms (leading

up to diagnosis); health care (multiple health care providers, varying levels of perceived support); treatment (most often a continuous positive airway pressure (CPAP) device); understanding of condition (seeking out their own information); turning point (realization of seriousness of condition); and positive outcomes (improved sleep quality, more energy, increased alertness).

BCT results. The sleep apnea diagnosis and treatment BCT participants consisted of 14 community member partners from underserved neighborhoods that work with 2040 Partners for Health.

On the basis of the AI themes, the group focused on framing sleep apnea as a chronic medical condition that can be treated and on letting people know that treatment improves symptoms. The group created messages that emphasized this treatment–symptom link and encouraged patients to discuss sleep issues with their health providers. The resulting main messages were (1) sleep is an important part of health and well-being; (2) poor sleep can lead to numerous health issues and poor quality of life; and (3) if you are not sleeping well, talk to your doctor. The group designed a simple brochure and poster that could be disseminated to community members and patients and used as a tool to help guide discussions with care providers.

Summary of All 5 BCTs

A total of 63 community members participated in the 5 BCTs. Table 4 describes the types of community members that participated in each BCT. Table 5 shows the number of meetings and the duration of each BCT, along with a description of the resulting messages and materials.

Table 4. Description of BCT Participants

Topic	Community Participants (N)	BCT Participant Description
Rural access to mental health support	14	Residents of rural eastern Colorado; aged 20s-70s; farmers, ranchers, teachers, business manager, students, local behavioral health care center directors; most were members of the HPRN CAC.
Urban access to mental health support	12	Residents from underserved urban neighborhoods in the northeast metro Denver area; aged 30s-70s; mostly black and Hispanic or Latino.
Chronic pain management	12	Residents of Denver metro area, mostly retirees with former careers in real estate appraisal, administration, nursing, accounting, retail management, business training performance consulting, surgical technician, community activist/organizing, and engineering; members of the CaReNet PAC; about one-quarter had direct experience with chronic pain.
PCMH implementation	11	Health professionals experienced in PCMH. Medical assistants, registered nurse, physician assistant, physician, practice facilitator, and representatives of relevant professional organizations, including the Colorado Society of Medical Assistants, Colorado Center for Nursing Excellence, and Colorado Health Institute.
Sleep apnea diagnosis and treatment	14	Residents from underserved urban neighborhoods; approximately half were black, one-quarter Hispanic or Latino, and one-quarter non-Hispanic white; aged 40-75; half had direct experience with sleep apnea.

Abbreviations: BCT, boot camp translation; CaReNet PAC, Colorado Research Network Patient Advisory Council; HPRN CAC, High Plains Research Network Community Advisory Council; PCMH, patient-centered medical home.

Table 5. BCT Process and Results

Topic	BCT Process/ Duration	BCT Final Products and Messages
Rural access to mental health support	<ul style="list-style-type: none"> • Number of meetings: 10 • Number of phone calls: 0 (met every month for 2 hours instead of short conference calls) • Number of months: 8 	<p>Posters and flyers carrying the message “Somebody Cares...Talk!”</p>
Urban access to mental health support	<ul style="list-style-type: none"> • Number of meetings: 3 • Number of phone calls: 3 • Number of months: 7 	<p>Messages pertaining to community responsibility/permission to ask; “Be the Other Person” theme.</p> <p>Changing Our Mental and Emotional Trajectory (COMET) community-based intervention that uses a 5-point conversational version of a patient health questionnaire (with 2 additional optional questions) to address mental and emotional health needs before crisis; aims to foster social connectedness and conversations to support mental health.</p>
Chronic pain management	<ul style="list-style-type: none"> • Number of meetings: 4 • Number of phone calls: 10 • Number of months: 9 	<p>Messages: (1) create goals that are more important to you than your pain experiences; (2) you can’t always go it alone—find people who will help you be who you were before your pain; and (3) try, try, try; you have permission to try more than one strategy.</p> <p>Materials: Chronic Pain Management Roadmap to Success and cover letter paper, both to be distributed to primary care practices and community settings.</p>

Topic	BCT Process/ Duration	BCT Final Products and Messages
PCMH implementation	<ul style="list-style-type: none"> • Number of meetings: 3 • Number of phone calls: 3 (plus 2 email assignments) • Number of months: 6 	<p>Main messages: “Change isn’t coming. Change is here”; “That was then. This is now”; “Engage all team members”; and “Thinking of retiring? What kind of practice will you leave?”</p> <p>Materials: brochure, slide presentation, short storyboard video to reach near-retirement providers and precontemplative practices; expanded messages on sense of duty to patients, trust, key roles, openness to change, and timeliness.</p>
Sleep apnea diagnosis and treatment	<ul style="list-style-type: none"> • Number of meetings: 3 • Number of phone calls: 4 • Number of months: 5 	<p>Key messages: Sleep is an important part of health and well-being. Poor sleep can lead to numerous health issues and poor quality of life. If you are not sleeping well, talk to your doctor.</p> <p>Materials: Brochure and poster to help guide conversations with care provider or as stand-alone products.</p>

Abbreviations: BCT, boot camp translation; PCMH, patient-centered medical home.

Aim 2: Identify Essential Components of the AI/BCT Model

Individually, AI and BCT have their own established methods and techniques, which are described and accessible elsewhere. This study tested the *combination* of these strategies and aimed to identify essential components and special considerations or techniques that are required to use AI and BCT together. We identified 5 essential components of the combined AI/BCT model:

1. *Select topics suitable for AI.* AI requires stories that contain elements of success. Identification of priority health topics in communities can start with broad terms, but focusing on specifics will require the help of academic partners. As lists are refined with the modified Delphi method,¹³ the feasibility of the topics becomes an important consideration. For example, does the community believe that finding stories of success will be difficult? If so, the topic might not work. Does the topic have an existing significant evidence base that is relevant to the community partners? If so, community-academic partnerships should opt to use the traditional BCT process alone. Scope is important to consider as well. Priority community topics that are beyond the scope of AI/BCT include large community issues such as drug prices and making health insurance accessible. Topics that are typically a good fit for AI are locally relevant (high prevalence and priority) and feasible for a community-level intervention.

Another important step in determining whether a topic is a good fit for AI is whether success can be clearly defined. For example, the AI/BCT on chronic pain management began with the broad topic of chronic pain. After discussion, the team specified a focus on the management of pain. Success was defined as managing pain in a way that “allows you to do most of what you want to do on most days of the week.”

2. *In AI interviews, focus on what worked.* Interviewers should be trained in the AI approach. Learning what worked can be challenging, especially for researchers trained in problem-focused approaches. Having 2 interviewers at each interview can help ensure that data are complete and capture elements of success. Within the AI data collection component, we also found that individual interviews delivered more robust stories of success than small groups. Group interviews are not recommended.
3. *Find the right qualitative analyst.* The entire AI/BCT research team does not need to be skilled in AI data analysis; however, the researcher leading the analysis of the AI data should have advanced qualitative analysis skills. Coding, identifying thematic reviews, and organizing results require an analyst who can remain in the “what worked” frame of

mind. Identifying themes and organizing data for BCT requires an analytic lens that comes from a solid understanding of both AI and BCT.

4. *Plan for adequate time and an adequate team.* Researchers using AI/BCT should allow a minimum of 4 months to code, analyze, and organize the AI interview data. The analyst works with a team, particularly in the early stages of reviewing transcripts and creating a coding system. This coding team should include at least 1 interviewer if the analyst did not participate in interviews. Coding analyst teams should include others with any specific expertise to shed light on terms or procedures, if needed. For example, the PCMH implementation AI/BCT coding team included a physician to provide insights and clarifications that only a practitioner with a medical degree could offer.
5. *Present AI data during BCT.* AI findings are incorporated into the BCT process as the new, locally generated evidence base for the selected topic. We tested and confirmed the value of a 2-part educational presentation at the BCT kick-off meeting, which is a slight modification of traditional BCT. First, a topic expert gives a presentation on what is known about the topic. This is followed by a presentation on the AI process and results, including success themes. The BCT facilitation team and the AI data analyst must be able to explain and promote the local relevance of the AI data and the scientific rigor used to collect and analyze the data.

Aim 3: Produce an AI/BCT Training Program for Patients, Health Professionals, and Researchers

To disseminate the combined AI/BCT method, we created a curriculum and a 1.5-day training program designed to be accessible to academic researchers, community members, and other health professionals. The curriculum includes didactic sessions on BCT, traditional versus research use of AI, selecting an AI topic, analysis, and logistics (budgets, teams, timelines). Interactive discussions and role-playing are included to allow trainees to select an AI topic, develop an AI question and interview guide, review examples of coded AI datasets, and participate in a mock BCT kick-off meeting (which includes the presentation of AI data and initial brainstorming about messages). See the Appendix for the AI/BCT Training Agenda.

We held one full training in Denver, Colorado. Trainees included 11 academic researchers and 3 community member health professionals. Two trainees were from out of

state. An additional abbreviated training was attended by 30 people at the 2016 Community Engaged Research Conference in Washington, DC.

In a post-training evaluation, 100% of the participants agreed that AI/BCT could help them partner with communities in research, and 89% agreed that the training taught them skills to use AI/BCT successfully in research. Fifteen-month follow-up showed a variety of benefits from the training and experiences with AI/BCT. Reports from trainees cited the following advantages: (1) increased use of strength- or asset-based techniques in project proposals; (2) improved knowledge of community-based participatory research; (3) ability to include AI/BCT in proposals to various funders; and (4) incorporation of the process into a diabetes prevention project for Hispanic/Latino adolescents in a northern Colorado community.

DISCUSSION

Context for Study Results

First, geographic context is important. We conducted our Appreciative Inquiry/Boot Camp Translation (AI/BCT) methods study in urban and rural communities and practices in Colorado. Colorado, a western state with diverse communities, is suitable for investigating a methodology that seeks to develop evidence and solutions to health issues and concerns. The participants in our rural-focused AI/BCTs were farmers, ranchers, schoolteachers, and small business owners from rural communities across eastern Colorado. These “blue highways” communities are often forgotten in translational, patient-centered outcomes research.¹ Our urban Colorado communities contain a rich mix of racial and ethnic groups that were represented in the urban AI/BCTs. We believe that our successful development and application of the AI/BCT method in these different communities can be replicated in other states.

Second, the research context into which our AI/BCT method fits deserves comment. The framing of patient-centered outcomes research has brought into national focus the importance of research outcomes that matter most to patients. However, not only the outcomes but also the context of where research is conducted is important to patients. Successful access to mental health support is a complex, contextual health issue, and stigma and workforce issues vary from one community to another. Solutions developed and promulgated at a national level often use a top-down, barrier-focused approach that does not take advantage of patient resourcefulness and local community assets. The AI/BCT method is grounded in the Communities of Solution^{27, 28} framework, which values community-generated, relevant approaches. The community- and patient-sourced aspect of the evidence is unique to AI/BCT. Unlike BCT, in which participants are translating national guideline-based evidence into locally relevant interventions, AI/BCT participants translate evidence sourced from their own communities.

AI is just beginning to be applied in the health arena; however, much of the focus of this work is on the organization of health care.²⁹⁻³¹ We believed that AI could provide a method for

uncovering local community members' and patients' solutions to their own health concerns, in effect, generating patient-centered evidence for what works.

Uptake of Study Results

AI/BCT occupies an important niche in the patient-centered outcomes research spectrum, and the interest in and reviews of our training programs suggest that this method has the potential for broad uptake. The uniform agreement of our training participants that AI/BCT could help them partner with communities in research demonstrates this potential.

We are also encouraged by early efforts to build the method into research proposals. One of these proposals focuses on the need for early identification of children with autism spectrum disorder—this would be an ideal application of the AI/BCT method. We believe that many other clinical syndromes exist for which early identification and diagnosis are hampered by a lack of understanding or awareness of symptoms and of how to alert medical professionals to the presence of these early symptoms. The AI/BCT method can be brought to bear on the early identification and treatment of these syndromes.

To date we are not aware of any proposals using the AI/BCT method that have been funded. As with BCT, one limitation is that grant reviewers are sometimes reluctant to fund research in which the specific interventions to be tested are developed in the initial stage of the research. This reluctance creates an unfortunate 2-step process whereby funding must first be sought for the development of an AI/BCT intervention and then for testing the intervention. We have been encouraging an approach whereby researchers seeking funding describe in their proposals the broad outlines of the potential intervention. We believe that as studies testing BCT-generated interventions are reported in the literature, this funding concern will decrease.

In addition to publications and presentations related to our work on this project, we are planning additional trainings on the AI/BCT method. These trainings have been a very successful method of disseminating our BCT method to local and national researchers and communities, and we anticipate similar dissemination potential for the AI/BCT method.

Subpopulation Considerations

AI/BCT, like BCT, is designed to produce solutions to health issues that are relevant to specific communities and populations. Our 5 AI/BCTs focused on rural farming and ranching communities, urban black and Hispanic and Latino communities, and underserved urban communities in Colorado. The ground-up approach of AI/BCT makes it especially relevant for finding solutions to health concerns that patients in specific communities face.

Study Limitations

Time and resources limited the number of AI/BCTs that we could implement. We look forward to future work that will further test the AI/BCT method. We believe that the method is generalizable to many patient populations and communities.

Limitations of the AI/BCT method

As discussed in the Results section, our work suggests that AI/BCT does not lend itself to every health concern or topic. Where evidence already exists that is suitable for application to a community or population, BCT remains the preferred method of translating that evidence into interventions that can be readily applied or taken up by a unique community or population. Health topics that involve policy also do not lend themselves to AI/BCT.

We confirmed through our process of topic selection that certain steps are important to refining a topic for AI/BCT. These include refining the scope, defining success, and ensuring that enough success stories can be found in the community.

Finally, not every researcher has access to the skills required by the AI/BCT method. A research team that seeks to implement AI/BCT must include expertise in qualitative interviews and analysis as well as the facilitation skills required for BCT. This need must be considered before a researcher or team decides to use the method.

Future Research

On the basis of the 5 AI/BCT implementations conducted in this project, we believe that the method is ready for use by academic and community or patient partners on other health

topics, within the limitations noted. We encourage others to seek funding to support application of the method. Treatment seeking and access (as shown in several of our AI/BCTs) may be especially fruitful topics, as local context can greatly influence what is successful.

As this AI/BCT method is applied more broadly, we look forward to the development of further understanding of its key components and limitations. For example, while the BCT process has been used successfully with Spanish-speaking communities, do any populations or communities or researchers find the combined AI/BCT method difficult because of language or cultural barriers? AI/BCT has been especially well suited to engaging Colorado communities that wish to address health topics for which evidence is lacking or unsuitable for application to their specific community. In the future, we anticipate applying the method to additional topics and communities, and plan to continue to train and track the efforts of others who wish to use the method in their communities.

CONCLUSIONS

Through our process of implementing 5 Appreciative Inquiry/Boot Camp Translations (AI/BCTs), we have demonstrated the feasibility and promise of AI/BCT to fill gaps in evidence to address locally relevant community and patient health concerns and issues. We distilled key components of the process: Ensure that selected topics are suitable for AI/BCT, focus on what worked for AI interviews, select the right qualitative analyst, and take care in the presentation of AI data during BCT.

We tested AI/BCT across 5 different topics in rural, urban, and suburban populations that included diverse racial and ethnic groups. The AI/BCT method was effective in producing culturally tailored interventions for all implementations across the 5 topics. In both the brief and extended training sessions, the AI/BCT method was viewed as relevant to engaging diverse communities and populations.

Our primary limitation is related to the relatively small number of AI/BCT implementations. Lessons regarding the method are still to be uncovered through more applications of AI/BCT. Nevertheless, we believe we have gained enough experience to justify broadly disseminating the method via training workshops and sessions.

In conclusion, AI/BCT addresses an important gap in patient-centered outcomes research, namely, the generation of locally relevant evidence and interventions to address health topics for which such evidence is either lacking or not applicable. We look forward to disseminating the method widely and learning from the experience of our own and others' broad use of it.

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APPENDIX

Appreciative Inquiry and Boot Camp Translation Training AGENDA

Day 1

8:00am – 4:30pm

7:30 – 8:00am

Hot Breakfast Buffet
(pancakes, pork green chili, fruit, coffee, and more)

Welcome, Review Agenda/Goals, Logistics

Introductions

8:00 – 10:15am

Boot Camp Translation Background

Traditional use of AI vs AI in research

Selecting a Topic for AI: *Based on what you know so far, what topics would you like to explore using AI?*

10:15 – 10:30am

Break

10:30 – 12:15pm

AI Topic Ideas and Discussion

Developing good AI questions

12:15 – 1:00PM

Buffet Lunch

Let's Practice!

1:00 – 2:50pm

COMET Example

Turning AI Stories into Usable Data: Analyzing data for BCT

2:50 – 3:10pm

Break

3:10 – 4:30pm

Turning AI Stories into Usable Data: "Big Data Meetings"

Thoughts and Questions

Wrap Up

Day 2

8:00am – 2:00pm

8:00 – 8:15am

Welcome and Overview of the Day

8:15 – 11:45am

Mock Boot Camp Translation Kick-Off Meeting using Chronic Pain AI Data
(includes break)

11:45 – 12noon

Reactions and Questions

12noon – 12:45pm

Buffet Lunch & Continued Discussion

(Continue discussion of morning mock meeting.)

12:45 – 1:15pm

AIBCT Logistics: What, who, how much do you need to do AIBCT?

1:15 – 2:00pm

▪ Q&A and Celebration

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